



GSMGPRS Nortel BSS V16 Product Requirements

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1 Change History

Issue	Date	Author	Comments
1.0	18 Dec 2008	IBM	Released

2 Outstanding Issues

Number	Date	Description	Planned Resolution
None			

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3 Vendor Measurement Scope

The table below lists the vendor OM groups that are in scope for this tech pack module, broken down by network element, together with their corresponding tech pack KPI group.

Vendor Measurement	Tech Pack KPI Group
Bearer - Mapped with FRAMR.PCU&"/"&Framer	
FRAMR	Bearer.Nortel.GSM.Frame_Relay_utilisation
BSC - Mapped with BSC.BSC	
BSC	BSC.Nortel.GSM.A_Interface
BSC	BSC.Nortel.GSM.BSC_Active_passive_chain
BSC	BSC.Nortel.GSM.BSS_OMCR_Link
BSC	BSC.Nortel.GSM.GPRS_Suspend_Resume
BSC	BSC.Nortel.GSM.Handovers_EFR_AMR_speech
BSC	BSC.Nortel.GSM.Handovers_Required_SDCCH
BSC	BSC.Nortel.GSM.Handovers_Required_TCH
BSC	BSC.Nortel.GSM.Handovers
BSC	BSC.Nortel.GSM.LCS_Observations
BSC	BSC.Nortel.GSM.Overload_situation
BSC	BSC.Nortel.GSM.PCM_unavailability_and_fault
BSC	BSC.Nortel.GSM.Request_and_ImmAss_per_causes
BSC	BSC.Nortel.GSM.SDCCH_allocation
BSC	BSC.Nortel.GSM.SICD_Load
BSC	BSC.Nortel.GSM.Signalling_connections
BSC	BSC.Nortel.GSM.Signalling_release

BSC	BSC.Nortel.GSM.Signalling_Resources
BSC	BSC.Nortel.GSM.TCH_resources
BSC	BSC.Nortel.GSM.Traffic_release_per_causes
BSC	BSC.Nortel.GSM.VGCS
Cell - Mapped with BTS.cellIdentity	
BTS	Cell.Nortel.GSM.Abis_DS0
BTS	Cell.Nortel.GSM.Abis_interface.AMR
BTS	Cell.Nortel.GSM.Abis_TRAU
BTS	Cell.Nortel.GSM.AGPRS_interface
BTS	Cell.Nortel.GSM.Assignment_AMR
BTS	Cell.Nortel.GSM.Assignment_FR
BTS	Cell.Nortel.GSM.Assignment_HR
BTS	Cell.Nortel.GSM.Assignment
BTS	Cell.Nortel.GSM.CCCH_Monitoring
BTS	Cell.Nortel.GSM.Cell_Load_AMR
BTS	Cell.Nortel.GSM.Cell_Load
BTS	Cell.Nortel.GSM.Channel_Activated
BTS	Cell.Nortel.GSM.Channel_Allocation
BTS	Cell.Nortel.GSM.Codec.AMR_Control
BTS	Cell.Nortel.GSM.Codec.AMR_Duration
BTS	Cell.Nortel.GSM.Codec.AMR_Recv_Frames
BTS	Cell.Nortel.GSM.Directed_Retry_Handovers
BTS	Cell.Nortel.GSM.EDGE_on_PCU
BTS	Cell.Nortel.GSM.EGPRS.PDTCH_Resources
BTS	Cell.Nortel.GSM.EGPRS.Radio_Link_Control

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BTS	Cell.Nortel.GSM.Establish_Indication_Per_Phases
BTS	Cell.Nortel.GSM.GPRS_EDGE
BTS	Cell.Nortel.GSM.GPRS.BSSGP_Virtual_Connection
BTS	Cell.Nortel.GSM.GPRS.DL_QoS
BTS	Cell.Nortel.GSM.GPRS.MultiSlot_request
BTS	Cell.Nortel.GSM.GPRS.Radio_Resource
BTS	Cell.Nortel.GSM.GPRS.Suspend_Resume
BTS	Cell.Nortel.GSM.GPRS.Temporary_Block_Flow
BTS	Cell.Nortel.GSM.GPRS.UL_QoS
BTS	Cell.Nortel.GSM.Handovers_AMR
BTS	Cell.Nortel.GSM.Handovers_dualband_mobile
BTS	Cell.Nortel.GSM.Handovers_filtered
BTS	Cell.Nortel.GSM.Handovers_InterBSS_Direct_Retry
BTS	Cell.Nortel.GSM.Handovers_InterBSS_SDCCH
BTS	Cell.Nortel.GSM.Handovers_InterBSS_TCH
BTS	Cell.Nortel.GSM.Handovers_IntraBSS_Direct_Retry
BTS	Cell.Nortel.GSM.Handovers_IntraBSS_SDCCH
BTS	Cell.Nortel.GSM.Handovers_IntraBSS_TCH
BTS	Cell.Nortel.GSM.Handovers_IntraBts_SDCCH
BTS	Cell.Nortel.GSM.Handovers_IntraBts_TCH
BTS	Cell.Nortel.GSM.Handovers_Required_SDCCH
BTS	Cell.Nortel.GSM.Handovers_Required_TCH
BTS	Cell.Nortel.GSM.Handovers_V12
BTS	Cell.Nortel.GSM.Handovers
BTS	Cell.Nortel.GSM.Immediate_assignment_rejected_per_causes
BTS	Cell.Nortel.GSM.Immediate_assignment
BTS	Cell.Nortel.GSM.Interference
BTS	Cell.Nortel.GSM.Layer_1_management_SDCCH
BTS	Cell.Nortel.GSM.Layer_1_management_TCH

BTS	Cell.Nortel.GSM.Layer_1_management
BTS	Cell.Nortel.GSM.LCS_Observations
BTS	Cell.Nortel.GSM.Mobile_8W
BTS	Cell.Nortel.GSM.Mobile_Power
BTS	Cell.Nortel.GSM.Paging_requests
BTS	Cell.Nortel.GSM.Path_Balance
BTS	Cell.Nortel.GSM.PCH_AGCH
BTS	Cell.Nortel.GSM.PCU_Throughput
BTS	Cell.Nortel.GSM.PDTCH_resources
BTS	Cell.Nortel.GSM.RACH_access
BTS	Cell.Nortel.GSM.Radio_Frames
BTS	Cell.Nortel.GSM.Request_and_ImmAss_per_causes
BTS	Cell.Nortel.GSM.RX_level_and_Quality
BTS	Cell.Nortel.GSM.SDCCH_allocation
BTS	Cell.Nortel.GSM.Signalling_Phase_Duration
BTS	Cell.Nortel.GSM.Signalling_release_per_causes
BTS	Cell.Nortel.GSM.Signalling_release
BTS	Cell.Nortel.GSM.SMS_service
BTS	Cell.Nortel.GSM.TCH_allocation.AMR
BTS	Cell.Nortel.GSM.TCH_allocation.SAIC
BTS	Cell.Nortel.GSM.TCH_connection.AMR
BTS	Cell.Nortel.GSM.TCH_FR_Resources
BTS	Cell.Nortel.GSM.TCH_HR_Resources
BTS	Cell.Nortel.GSM.TCH_Queueing
BTS	Cell.Nortel.GSM.TCH_Resources

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BTS	Cell.Nortel.GSM.Temporary_Obs.Abis_level2
BTS	Cell.Nortel.GSM.Temporary_Obs.Abis_Traffic
BTS	Cell.Nortel.GSM.Temporary_Obs.Abis_unavailability
BTS	Cell.Nortel.GSM.Time_Advance
BTS	Cell.Nortel.GSM.Traffic_release_per_causes
BTS	Cell.Nortel.GSM.Traffic_release.AMR
BTS	Cell.Nortel.GSM.Transmit_Burst
BTS	Cell.Nortel.GSM.VGCS_VBS
BTS	Cell.Nortel.GSM.Wireless_Priority_Service
Common_Control_Channel - Mapped with CCH.cellIdentity &"/"& CCH	
CCH	Common_Control_Channel.Nortel.GSM.GPRS.Packet_Control_Unit
CCH	Common_Control_Channel.Nortel.GSM.GPRS.Traffic_and_QoS
Interference	Common_Control_Channel.Nortel.GSM.Temporary_Obs.Interference
LAPD - Mapped with LAPD.BSC &"/"& LAPD	
LAPD	LAPD.Nortel.GSM.Abis_interface_errors
LAPD	LAPD.Nortel.GSM.Paging
Neighbour - Mapped with ADJ.cellIdentity&"-"&ADJ.cellIdentityADJ	
ADJ	Neighbour.Nortel.GSM.AMR_handovers
ADJ	Neighbour.Nortel.GSM.Handovers_per_causes
ADJ	Neighbour.Nortel.GSM.Handovers
ADJ	Neighbour.Nortel.GSM.Neighbour_Cells
NSVC - Mapped with NVC.NVC	
NVC	NSVC.Nortel.GSM.GPRS_EDGE
OMC - Mapped with OMC_R.OMCID	
OMC_R	OMC.Nortel.GSM.System_stats.Q3_CMIS
OMC_R	OMC.Nortel.GSM.System_stats.Q3_Notification_FTAM
OMC_R	OMC.Nortel.GSM.System_stats.SCSE
OMC_R	OMC.Nortel.GSM.System_stats.Sybase

OMC_R	OMC.Nortel.GSM.System_stats.UNIX
PCM_BSC - Mapped with PCM.BSC &"/"& PCM	
PCM	PCM_BSC.Nortel.GSM.Paging_and_traffic
PCM	PCM_BSC.Nortel.GSM.PCM_unavailability_and_fault
Processor - Mapped with CPUE.BSC &"_"& CPUEID or LPR.sdoname&"/"&BSC &"/LPR-"& LPR or PBK.sdoname&"/"&BSC &"/"& BSM &"/"& BTS &"/PBK-"& PBK or CC.BSC &"_"& ID or CEM.BSC &"_"& ID or CPUM.BSC &"_"& CPUMID or OMU.BSC &"_"& ID or TMU.BSC &"_"& ID	
CC	Processor.Nortel.GSM.Load.CC
CEM	Processor.Nortel.GSM.Load.CEM_IN_and_TCU
CPUE	Processor.Nortel.GSM.Load.CPUE
CPUM	Processor.Nortel.GSM.Load.CPUM
LPR	Processor.Nortel.GSM.Load.Logical_processor
OMU	Processor.Nortel.GSM.Load.OMU
PBK	Processor.Nortel.GSM.Load.Pblock
TMU	Processor.Nortel.GSM.Load.TMU
SICD - Mapped with SICD.BSC &"/"& SICD	
SICD	SICD.Nortel.GSM.Load
SICD	SICD.Nortel.GSM.Overload_Rejection
Signalling_Link - Mapped with SignallingLink.NodeID&"/"&LinkID	
SignallingLink	Signalling_Link.Nortel.GSM.Temporary_Obs.MSU
SignallingLink	Signalling_Link.Nortel.GSM.Temporary_Obs.SS7_level2
TRX - Mapped with TMA.cellIdentity &"/"& TMA	
TMA	TRX.Nortel.GSM.AMR
TMA	TRX.Nortel.GSM.BSS_Handover
TMA	TRX.Nortel.GSM.Channel_Assignment
TMA	TRX.Nortel.GSM.EGPRS.BEP_8PSK_and_GMSK

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TMA	TRX.Nortel.GSM.EGPRS.Link_adaptation
TMA	TRX.Nortel.GSM.EGPRS.Preempted_Channel
TMA	TRX.Nortel.GSM.EGPRS.RLC_DL_per_MCS
TMA	TRX.Nortel.GSM.EGPRS.RLC_UL_per_MCS
TMA	TRX.Nortel.GSM.GPRS_EDGE
TMA	TRX.Nortel.GSM.GPRS.Temporary_Block_Flow
TMA	TRX.Nortel.GSM.RLC
TMA	TRX.Nortel.GSM.SDCCH_Allocation
TMA	TRX.Nortel.GSM.TCH_Allocation
TMA	TRX.Nortel.GSM.TDMA_ASCII
TMA	TRX.Nortel.GSM.TDMA_Interference
TMA	TRX.Nortel.GSM.TDMA_Layer1
TMA	TRX.Nortel.GSM.TDMA_Layer2
TMA	TRX.Nortel.GSM.TDMA_Release
TMA	TRX.Nortel.GSM.TDMA
TMA	TRX.Nortel.GSM.Tx_Power_Overboost
TRZ - Mapped with TRZ.cellIdentity & "/" & TRZ	
TRZ	TRZ.Nortel.GSM.Abis_DS0
TRZ	TRZ.Nortel.GSM.Codec.AMR_Control
TRZ	TRZ.Nortel.GSM.Codec.AMR_Duration
TRZ	TRZ.Nortel.GSM.Codec.AMR_Recv_Frames
TRZ	TRZ.Nortel.GSM.EGPRS.PDTCH_Resources
TRZ	TRZ.Nortel.GSM.Layer_1_management_SDCCH
TRZ	TRZ.Nortel.GSM.Layer_1_management_TCH
TRZ	TRZ.Nortel.GSM.Layer_1_management
TRZ	TRZ.Nortel.GSM.PDTCH_resources
TRZ	TRZ.Nortel.GSM.RX_level_and_Quality
TRZ	TRZ.Nortel.GSM.SDCCH_allocation
TRZ	TRZ.Nortel.GSM.TCH_allocation.AMR

TRZ	TRZ.Nortel.GSM.TCH_allocation.SAIC
TRZ	TRZ.Nortel.GSM.TCH_connection.AMR
TRZ	TRZ.Nortel.GSM.TCH_FR_Resources
TRZ	TRZ.Nortel.GSM.TCH_HR_Resources
TRZ	TRZ.Nortel.GSM.TCH_resources
TRZ	TRZ.Nortel.GSM.Time_Advance
TRZ	TRZ.Nortel.GSM.Wireless_Priority_Service
TSCB - Mapped with TSCB.BSC & "/" & TSCB	
TSCB	TSCB.Nortel.GSM.Load_V12

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4 Tech Pack Prerequisites

This section lists the Tech Pack modules that the current Tech Pack is dependent on.

- Neutral Core GOM
- Neutral GSM BSS/NSS GOM
- Neutral GPRS/UMTS CN GOM
- Neutral GPRS BSS GOM
- Neutral UMTS UTRAN GOM

5 Network Model

This section describes any network objects that are defined in this technology pack module, in terms of their configuration attributes.

5.1.1 Bearer details

In the network hierarchy, the immediate parent of the Bearer object is PCU.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
Bearer_Id	A unique identifier for the Bearer.	Y		FRAMR.PCU&"/"&Framer
Relationship Attributes				
SGSN_Id	A unique identifier for the SGSN.	Y	Y	"Populated by customer"
PCU_Id	A unique identifier for the PCU.	Y	Y	FRAMR.PCU
Region_Id	Region associated with the Bearer.	Y	Y	FRAMR.REGION_ID
Network_Id	Network associated with the Bearer.	Y	Y	FRAMR.NETWORK_ID
Configuration Attributes				
Bearer_Name	A user friendly name preferably unique for the Bearer.			FRAMR.PCU&"/"&Framer

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Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
CIR	Designed Committed Information Rate.			"Populated by customer"
Node_Id	A unique identifier for the Node.			FRAMR.PCU
Node_Name	A user friendly name preferably unique for the Node.			FRAMR.PCU
Node_Type	Type of Node.			"PCU"
Vendor	Manufacturer of the Bearer			"Nortel"

5.1.2 BS details

In the network hierarchy, the immediate parent of the BS object is BSC.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
BS_Id	A unique identifier for the BS.	Y		BTS.BSC &"/"& BSM &"/"& BTS
Relationship Attributes				
SGSN_Id	A unique identifier for the SGSN.	Y	Y	"Populated by customer"
BSC_Id	The BSC that controls this BS.	Y	Y	BTS.BSC
MSC_Id	A unique identifier for the MSC.	Y	Y	lookup("nc_bsc","msc_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), BSC)
Region_Id	Region associated with the BS.	Y	Y	BTS.REGION_ID
Network_Id	Network associated with the BS.	Y	Y	BTS.NETWORK_ID
Configuration Attributes				

BS_Name	A user friendly name preferably unique for the BS (site).			BTS.siteName
BS_Version	Hardware/Software version of the BS.			"V16"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Cell_Group	The identifier for the Cell Group Area this object belongs to.			"No mapping"
Vendor	Manufacturer of the BS			"Nortel"

5.1.3 BSC details

In the network hierarchy, the immediate parents of the BSC object are: SGSN and MSC.

This object is used for Data Availability tracking

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
BSC_Id	A unique identifier for the BSC.	Y		BSC.BSC
Relationship Attributes				
SGSN_Id	A unique identifier for the SGSN.	Y	Y	"Populated by customer"
MSC_Id	The MSC to which this BSC is connected.	Y	Y	lookup("nc_bsc","msc_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), BSC)
Region_Id	Region associated with the BSC.	Y	Y	BSC.REGION_ID

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Network_Id	Network associated with the BSC.	Y	Y	BSC.NETWORK_ID
Configuration Attributes				
BSC_Name	A user friendly name preferably unique for the BSC.			BSC.bscName
BSC_Version	Hardware/Software version of the BSC.			"V16"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Vendor	Manufacturer of the BSC			"Nortel"

5.1.4 BSM details

In the network hierarchy, the immediate parent of the BSM object is BSC.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
BSM_Id	BTS Site Manager	Y		BSM.BSC &"/"& BSM
Relationship Attributes				
BSC_Id	BSC Identifier, parent object of the BSM	Y	Y	BSM.BSC
MSC_Id	The MSC to which this BSM is connected.	Y	Y	"Populated by customer"
Region_Id	Region associated with the BSM.	Y	Y	BSM.REGION_ID
Network_Id	Network associated with the BSM.	Y	Y	BSM.NETWORK_ID
Configuration Attributes				
BSM_Name	BTS Site Manager name			BSM.BSM
Vendor	Manufacturer of the BSM			"Nortel"

5.1.5 Cell details

In the network hierarchy, the immediate parents of the Cell object are: PCU, Routing_Area, Registration_Area, BS and LAC.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
Cell_Id	A unique identifier for the Cell.	Y		BTS.cellIdentity
Relationship Attributes				
PCU_Id	A unique identifier for the PCU.	Y	Y	"No mapping"
NSVC_Id	A unique identifier for the NSVC.	Y	Y	"No mapping"
Routing_Area_Id	A unique identifier for the Routing_Area.	Y	Y	BTS.locationAreaCode & "/" & "Populated by customer"
SGSN_Id	A unique identifier for the SGSN.	Y	Y	"Populated by customer"
Registration_Area_Id	A unique identifier for the Registration_Area.	Y	Y	"Populated by customer"
BS_Id	A unique identifier for the BS at which the Cell is located. The BS at which the cell is located.	Y	Y	BTS.BSC & "/" & BSM & "/" & BTS
LAC_Id	The Location Area Code encompassing the Cell.	Y	Y	BTS.locationAreaCode
BSC_Id	A unique identifier for the BSC.	Y	Y	BTS.BSC
MSC_Id	A unique identifier for the MSC.	Y	Y	lookup("nc_bsc", "msc_id", utime(START_DATE & START_TIME, "%d %b %Y %R"), BSC)

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Region_Id	Region associated with the Cell.	Y	Y	BTS.REGION_ID
Network_Id	Network associated with the Cell.	Y	Y	BTS.NETWORK_ID
GPRS_Cell_Id	A unique identifier for the Cell.	Y	Y	"No mapping"
UMTS_Cell_Id	A unique identifier for the Cell.	Y	Y	"No mapping"
Configuration Attributes				
Cell_Name	A user friendly name preferably unique for the Cell.			BTS.cellName
Cell_Type	Is the cell omni_directional, or a sector, or micro/pico/macro/umbrella cell, etc.			"Sectored"
Defined_TRX	Number of defined TRX belonging to the cell.			BTS.CELL_1700_0_MAX + CELL_1701_0_MAX
Defined_TCH	Number of defined TCH channels of the Cell.			BTS.CELL_1700_0_MAX
Defined_CCH	Number of defined CCH channels for the Cell.			BTS.CELL_1701_0_MAX
Max_Power	The bs_tx_pwr_max configuration attribute.			"Populated by customer"
Segment_Id	A unique identifier for the Segment.			"Populated by customer"
Cell_Version	Hardware/Software version of the Cell.			"V16"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Cell_Description	Description of Cell.			"Populated by customer"
NSVC_CN_Id	A unique identifier for the NSVC CN.			"Populated by customer"
BVC_Id	A unique identifier for the			"Populated by customer"

	BVC.			
Defined_PDCH	Designated Packet Data Channel.			"Populated by customer"
Dedicated_PDC H	Dedicated Packet Data Channel.			"Populated by customer"
UTRAN_Absolute_Radio_Freq_UL	UL UTRAN absolute Radio Frequency Channel number.			"No mapping"
UTRAN_Absolute_Radio_Freq_DL	DL UTRAN absolute Radio Frequency Channel number.			"No mapping"
Primary_Scrambling_Code	Primary DL scrambling code.			"No mapping"
Primary_Comm on_Pilot_Ch_Power	Primary CPICH channel power.			"No mapping"
Primary_Sync_Ch_Power	Primary synchronisation channel power, DL.			"No mapping"
Secondary_Sync_Ch_Power	Secondary synchronisation channel power, DL.			"No mapping"
BCH_Power	Broadcast channel power.			"Populated by customer"
Cell_Group	The identifier for the Cell Group Area this object belongs to.			"No mapping"
Vendor	Manufacturer of the Cell			"Nortel"

5.1.6 Common_Control_Channel details

In the network hierarchy, the immediate parent of the Common_Control_Channel object is Cell.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
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Primary Identifier				
CCCH_Id	A unique identifier for the CCCH.	Y		CCH.cellIdentity &"/"& CCH
Relationship Attributes				
Cell_Id	A unique identifier for the cell to which the CCCH belongs.	Y	Y	CCH.cellIdentity
TRX_Id	A unique identifier for the TRX to which the CCCH belongs.	Y	Y	"Populated by customer"
BS_Id	A unique identifier for the BS.	Y	Y	CCH.BSC &"/"& BSM &"/"& BTS
BSC_Id	A unique identifier for the BSC.	Y	Y	CCH.BSC
MSC_Id	A unique identifier for the MSC.	Y	Y	lookup("nc_cell","msc_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
Region_Id	Region associated with the CCCH.	Y	Y	CCH.REGION_ID
Network_Id	Network associated with the CCCH.	Y	Y	CCH.NETWORK_ID
LAC_Id	A unique identifier for the LAC.	Y	Y	lookup("nc_cell","lac_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
Configuration Attributes				
CCCH_Name	A user friendly name preferably unique for the CCCH.			CCH.cellIdentity &"/"& CCH
TSL_Id	A unique identifier for the TSL to which the CCCH belongs.			"Populated by customer"
Channel_Type	Type of Channel.			"SDCCH"
Channel_Number	Designated Channel number.			CCH.CCH
Cell_Group	The identifier for the Cell Group Area this object			"No mapping"

	belongs to.			
Vendor	Manufacturer of the Common_Control_Channel			"Nortel"

5.1.7 LAC details

In the network hierarchy, the immediate parent of the LAC object is MSC.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
LAC_Id	A unique identifier for the LAC.	Y		TRZ.locationAreaCode
Relationship Attributes				
MSC_Id	The MSC which controls this Location Area Code.	Y	Y	lookup("nc_cell","msc_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
Region_Id	Region associated with the LAC.	Y	Y	TRZ.REGION_ID
Network_Id	Network associated with the LAC.	Y	Y	TRZ.NETWORK_ID
Configuration Attributes				
LAC_Name	A user friendly name preferably unique for the LAC.			TRZ.locationAreaCode
Vendor	Manufacturer of the LAC			"Nortel"

5.1.8 LAPD details

In the network hierarchy, the immediate parent of the LAPD object is BSC.

Attribute Name	Description	Read-Only	Time-Tracke	Mapping
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		?	d?	
Primary Identifier				
LAPD_Id	A unique identifier for the LAPD.	Y		LAPD.BSC &"/"& LAPD
Relationship Attributes				
SGSN_Id	A unique identifier for the SGSN.	Y	Y	"Populated by customer"
BS_Id	A unique identifier for the BS, at the BS end of LAPD link.	Y	Y	"Populated by customer"
BSC_Id	A unique identifier for the BSC, at the BSC end of LAPD link.	Y	Y	LAPD.BSC
MSC_Id	A unique identifier for the MSC.	Y	Y	lookup("nc_bsc","msc_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), BSC)
Region_Id	Region associated with the LAPD.	Y	Y	LAPD.REGION_ID
Network_Id	Network associated with the LAPD.	Y	Y	LAPD.NETWORK_ID
Configuration Attributes				
LAPD_Name	A user friendly name preferably unique for the LAPD.			LAPD.BSC &"/"& LAPD
LAPD_Version	Hardware/Software version of the LAPD.			lookup("nc_bsc","bsc_version",utime(START_DATE & START_TIME,"%d %b %Y %R"), BSC)
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Vendor	Manufacturer of the LAPD			"Nortel"

5.1.9 Neighbour details

In the network hierarchy, the immediate parent of the Neighbour object is Cell.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
Neighbour_Id	A unique identifier for the Neighbour.	Y		ADJ.cellIdentity&"-"&ADJ.cellIdent ityADJ
Relationship Attributes				
Source_Cell_Id	A unique identifier for the Cell_Id of the Cell that is handling calls.	Y	Y	ADJ.cellIdentity
Configuration Attributes				
Neighbour_Na me	A user friendly name preferably unique for the Neighbour.			ADJ.cellIdentity&"-"&ADJ.cellIdent ityADJ
Target_Cell_Id	A unique identifier for the Cell_Id of the Cell that is receiving handed-over calls.			"Populated by customer"
Source_Cell_T ype	Type of Source Cell.			lookup("nc_cell","cell_type",utime(S TART_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
Target_Cell_Ty pe	Type of Target Cell.			"Populated by customer"
Source_Cell_V ersion	Hardware/Software version of the Source Cell.			lookup("nc_cell","cell_version",utim e(START_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
Target_Cell_Ve rsion	Hardware/Software version of the Target Cell.			"Populated by customer"
Source_Cell_V endor	Manufacturer of the Source Cell.			"Nortel"
Target_Cell_Ve ndor	Manufacturer of the Target Cell.			"Nortel"

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Source_Cell_Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Target_Cell_Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Target_Cell_Position	Position of Target Cell.			ADJ.ADJ
Source_Cell_Group	The identifier for the Cell Group Area this source cell belongs to.			"No mapping"
Vendor	Manufacturer of the Neighbour			"Nortel"

5.1.10 Network details

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
Network_Id	A unique identifier for the Network.	Y		BSC.NETWORK_ID
Configuration Attributes				
Network_Name	A user friendly name preferably unique for the Network.			"Populated by the customer"
Network_Type	Type of Network (e.g. GSM-900, GSM-1800 or GSM-1900).			"Populated by the customer"
Default_Link_Speed	The default speed of SS7 Signalling Links in this network.			"No mapping"
Vendor	Manufacturer of the Network			"Nortel"

5.1.11 NSVC details

In the network hierarchy, the immediate parents of the NSVC object are: SGSN, PCU and Bearer.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
NSVC_Id	A unique identifier for the NSVC.	Y		NVC.NVC
Relationship Attributes				
SGSN_Id	A unique identifier for the SGSN.	Y	Y	"No mapping"
PCU_Id	A unique identifier for the PCU.	Y	Y	NVC.PCU
Bearer_Id	A unique identifier for the Bearer.	Y	Y	NVC.PCU & "/" & "Populated by customer"
DLCI_Id	A unique identifier for the DLCI.	Y	Y	"Populated by customer"
Region_Id	Region associated with the NSVC.	Y	Y	"Populated by customer"
Network_Id	Network associated with the NSVC.	Y	Y	"Populated by customer"
Configuration Attributes				
NSVC_Name	A user friendly name preferably unique for the NSVC.			NVC.NVC
NSE_Id	A unique identifier for the NSE.			"Populated by customer"
NSE_Name	A user friendly name preferably unique for the NSE.			"Populated by customer"
CIR	Committed Information Rate of the NSVC.			"Populated by customer"

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DLCI_CN_Id	A unique identifier for the DLCI CN.			"Populated by customer"
Bearer_CN_Id	A unique identifier for the Bearer CN.			"Populated by customer"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Vendor	Manufacturer of the NSVC			"Nortel"

5.1.12 OMC details

In the network hierarchy, the immediate parent of the OMC object is Network.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
OMC_Id	The unique identifier for the OMC	Y		OMC_R.OMCID
Relationship Attributes				
Network_Id	The subsystem network_id managed by the OMC	Y	Y	"PLMN"
Region_Id	The subsystem region_id managed by the OMC	Y	Y	"Populated by customer"
Configuration Attributes				
OMC_Name	The user friendly name for the OMC			OMC_R.OMCID
OMC_Type	The type of OMC			"OMC-R"
OMC_Version	The OMC system version			"V16"
Technology	The subsystem technology managed by the OMC			"GSM"
Vendor	Manufacturer of the OMC			"Nortel"

5.1.13 PCM_BSC details

In the network hierarchy, the immediate parent of the PCM_BSC object is BSC.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
PCM_Id	PCM Circuit Identifier	Y		PCM.BSC &"/"& PCM
Relationship Attributes				
Region_Id	Region associated with the PCM.	Y	Y	PCM.REGION_ID
BSC_Id	BSC Identifier, parent object of the PCM	Y	Y	PCM.BSC
Network_Id	Network identifier	Y	Y	PCM.NETWORK_ID
BS_Id	The BS associated with this object.	Y	Y	"Populated by customer"
Configuration Attributes				
PCM_Name	PCM name identifier			PCM.BSC &"/"& PCM
BSC_Name	BSC Name			PCM.bscName
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Vendor	Manufacturer of the PCM_BSC			"Nortel"

5.1.14 Processor details

In the network hierarchy, the immediate parent of the Processor object is Region.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
Processor_Id	A unique identifier for the Processor.	Y		CPUE.BSC &"_"& CPUEID or LPR.sdoname&"/"&BSC

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				&"/LPR-"& LPR or PBK.sdoname&"/"&BSC &"/"& BSM &"/"& BTS &"/PBK-"& PBK or CC.BSC &"_"& ID or CEM.BSC &"_"& ID or CPUM.BSC &"_"& CPUMID or OMU.BSC &"_"& ID or TMU.BSC &"_"& ID
Relationship Attributes				
Region_Id	Region associated with the Processor.	Y	Y	CPUE.REGION_ID
Network_Id	Network associated with the Processor.	Y	Y	CPUE.NETWORK_ID
Configuration Attributes				
Processor_Name	A user friendly name preferably unique for the Processor.			CPUE.BSC &"_"& CPUEID or LPR.sdoname&"/"&BSC &"/LPR-"&LPR or PBK.sdoname&"/"&BSC &"/"& BSM &"/"& BTS &"/PBK-"& PBK or CC.BSC &"_"& ID or CEM.BSC &"_"& ID or CPUM.BSC &"_"& CPUMID or OMU.BSC &"_"& ID ot TMU.BSC &"_"& ID
Processor_Type	Type of Processor.			"CC" or "CEM" or "CPUE" or "CPUM" or "PBK" or "LPR" or "OMU" or "TMU"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Node_Id	This is the identifier for the network element containing the Processor.			LPR.sdoname&"/"&BSC or PBK.sdoname&"/"&BSC &"/"& BSM &"/"& BTS or CPUE.SDONAME &"/"& BSC
Node_Name	A user friendly name preferably unique for the Node.			LPR.sdoname&"/"&BSC or PBK.sdoname&"/"&BSC &"/"& BSM &"/"&BTS or CPUE.bscName
Node_Type	The type of the network element containing the Processor.			"PCU" or "BTS" or "BSC"
Processor_Versi	Hardware/Software version			"Populated by customer"

on	of the Processor.			
Vendor	Manufacturer of the Processor			"Nortel"

5.1.15 Region details

In the network hierarchy, the immediate parent of the Region object is Network.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
Region_Id	Region associated with the network object.	Y		BSC.REGION_ID
Relationship Attributes				
Network_Id	Network associated with the Region.	Y	Y	BSC.NETWORK_ID
Configuration Attributes				
Region_Name	A user friendly name preferably unique for the Region.			"Populated by the customer"
Vendor	Manufacturer of the Region			"Nortel"

5.1.16 SICD details

In the network hierarchy, the immediate parent of the SICD object is BSC.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
SICD_Id	Signalling Interface Control LAPD identifier (card in the BSC)	Y		SICD.BSC & "/" & SICD

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Relationship Attributes				
BSC_Id	BSC Identifier, parent object of the SICD Card	Y	Y	SICD.BSC
Network_Id	Network Identifier	Y	Y	SICD.NETWORK_ID
Region_Id	Region associated with the SICD.	Y	Y	SICD.REGION_ID
Configuration Attributes				
SICD_Name	SICD name identifier			SICD.BSC &"/"& SICD
BSC_Name	BSC Name			SICD.bscName
Vendor	Manufacturer of the SICD			"Nortel"

5.1.17 Signalling_Link details

In the network hierarchy, the immediate parent of the Signalling_Link object is Signalling_LinkSet.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
SS7_Link_Id	A unique identifier for the SS7 Link.	Y		SignallingLink.NodeID&"/"&LinkID
Relationship Attributes				
SS7_LinkSet_I d	The Node (MSC or HLR) that this SS7 Link is connected to (at this end).	Y	Y	"Populated by customer"
SS7_Point_Id	A unique identifier for the SS7 Point.	Y	Y	"Populated by customer"
Region_Id	Region associated with the SS7 Link.	Y	Y	SignallingLink.REGION_ID
Network_Id	Network associated with the SS7 Link.	Y	Y	SignallingLink.NETWORK_ID
Configuration Attributes				
SS7_Link_Nam e	A user friendly name preferably unique for the SS7 Link.			SignallingLink.NodeID&"/"&LinkID

Node_Name	The name for the network element that the SS7 Link is connected to (at this end).			lookup("nc_bsc","bsc_name",utime(START_DATE & START_TIME,"%d %b %Y %R"), BSC)
Node_Id	The Node (MSC or HLR) that this SS7 Link is connected to (at this end).			SignallingLink.NodeID
Data_Rate	The SS7 Link speed in bits per second (bit/s).			"Populated by customer"
Node_Type	The type of the network element that the SS7 Link is connected to at this end.			"BSC"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Adjacent_Node_Id	The Adjacent Node that this SS7 Link is connected from (at the other end).			"Populated by customer"
Vendor	Manufacturer of the Signalling_Link			"Nortel"

5.1.18 TRX details

In the network hierarchy, the immediate parent of the TRX object is Cell.

Attribute Name	Description	Read-Only ?	Time-Tracked?	Mapping
Primary Identifier				
TRX_Id	A unique identifier for the TRX.	Y		TMA.cellIdentity &"/"& TMA
Relationship Attributes				
Cell_Id	The cell to which the TRX belongs.	Y	Y	TMA.cellIdentity
BS_Id	A unique identifier for the	Y	Y	TMA.BSC &"/"& BSM &"/"& BTS

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	BS.			
BSC_Id	A unique identifier for the BSC.	Y	Y	TMA.BSC
LAC_Id	A unique identifier for the LAC.	Y	Y	lookup("nc_cell","lac_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
MSC_Id	A unique identifier for the MSC.	Y	Y	lookup("nc_cell","msc_id",utime(START_DATE & START_TIME,"%d %b %Y %R"), cellIdentity)
Region_Id	Region associated with the TRX.	Y	Y	TMA.REGION_ID
Network_Id	Network associated with the TRX.	Y	Y	TMA.NETWORK_ID
Configuration Attributes				
TRX_Name	A user friendly name preferably unique for the TRX.			TMA.cellIdentity & "/" & TMA
Frequency_Group_Id	Frequency group of the TRX.		Y	"Populated by customer"
Frequency_Id	Frequency of the TRX.			"Populated by customer"
Frequency_Hopping_Group_Id	Frequency hopping group of the TRX.			"Populated by customer"
TRX_Type	TRX type, for example Normal or Extended.			"Populated by customer"
TRX_Version	Hardware/Software version of the TRX.			"V16"
Technology	Technology of the network/element (e.g. GSM, GPRS, UMTS).			"GSM"
Cell_Group	The identifier for the Cell Group Area this object belongs to.			"No mapping"
Vendor	Manufacturer of the TRX			"Nortel"

5.1.19 TRZ details

In the network hierarchy, the immediate parent of the TRZ object is Cell.

Attribute Name	Description	Read-Only ?	Time-Tracke d?	Mapping
Primary Identifier				
TRZ_Id	Transceiver Zone Identifier	Y		TRZ.cellIdentity &"/"& TRZ
Relationship Attributes				
Cell_Id	CELL Identifier, parent object of the TRZ	Y	Y	TRZ.cellIdentity
BS_Id	BTS Identifier	Y	Y	TRZ.BSC &"/"& BSM &"/"& BTS
BSM_Id	BTS Site Manager Identifier	Y	Y	TRZ.BSC &"/"& BSM
BSC_Id	BSC Identifier	Y	Y	TRZ.BSC
LAC_Id	Location Area Code Identifier	Y	Y	TRZ.locationAreaCode
Network_Id	Network Identifier	Y	Y	TRZ.NETWORK_ID
Region_Id	Region associated with the TRZ.	Y	Y	TRZ.REGION_ID
Configuration Attributes				
TRZ_Name	Transceiver Zone name			TRZ.cellIdentity &"/"& TRZ
Cell_Name	Cell Name			TRZ.cellName
Cell_Group	The identifier for the Cell Group Area this object belongs to.			"No mapping"
Vendor	Manufacturer of the TRZ			"Nortel"

5.1.20 TSCB details

In the network hierarchy, the immediate parent of the TSCB object is BSC.

Attribute	Description	Read-	Time-	Mapping
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Name		Only ?	Tracke d?	
Primary Identifier				
TSCB_Id	Transcoder Signalling board	Y		TSCB.BSC & "/" & TSCB
Relationship Attributes				
BSC_Id	BSC Identifier, parent object of the TSCB	Y	Y	TSCB.BSC
Network_Id	Network Identifier	Y	Y	TSCB.NETWORK_ID
Region_Id	Region associated with the TSCB.	Y	Y	TSCB.REGION_ID
Configuration Attributes				
TSCB_Name	TSCB name identifier			TSCB.BSC & "/" & TSCB
Vendor	Manufacturer of the TSCB			"Nortel"

6 Busy Hours

This section lists the busy hours which are defined for the technology pack module.

Each of the busy hours listed can be referenced within this document by way of a busy hour acronym, which is included in the table below.

Object	Busy Hour	Defining KPI	Acronym
BSC	Nortel_BSC_TC_Avg_Use_Ccts_Busy_Hour	BSC.Nortel.A_Interface.tcAveragedUsedMoy	ntbtcaubh
BSC	Nortel_BSC_SCCP_Avg_Use_Ccts_Busy_Hour	BSC.Nortel.Signalling_connections.sccpAveragedUsedMoy	ntbsccpabh
Cell	Nortel_Cell_TCH_FR_Traffic_Busy_Hour	Cell.Nortel.TCH_FR_Resources.TCH_FR_Traffic	nttchfrbh
Cell	Nortel_Cell_SDCCH_Traffic_Busy_Hour	Cell.Nortel.SDCCH_allocation.sdcchAveragedUsedMoy	ntscdchbh
Cell	Nortel_Cell_TCH_Traffic_Busy_Hour	Cell.Nortel.TCH_Resources.TCH_Traffic	nttchbh

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7 Performance Indicators

This section describes the performance indicators (both one-to-one counter mappings, and complex KPIs) that are defined in this technology pack module, grouped by the network object to which they relate, as follows:

- [Bearer performance indicators.](#)
- [BSC performance indicators.](#)
- [Cell performance indicators.](#)
- [Common_Control_Channel performance indicators.](#)
- [LAPD performance indicators.](#)
- [Neighbour performance indicators.](#)
- [NSVC performance indicators.](#)
- [OMC performance indicators.](#)
- [PCM_BSC performance indicators.](#)
- [Processor performance indicators.](#)
- [SICD performance indicators.](#)
- [Signalling_Link performance indicators.](#)
- [TRX performance indicators.](#)
- [TRZ performance indicators.](#)
- [TSCB performance indicators.](#)

7.1 Bearer Performance Indicators

This section shows the key performance indicators and other counters for the Bearer object, divided into the following sub-sections:

- [Bearer.Nortel.GSM.Frame_Relay_utilisation](#)

7.1.1 Bearer.Nortel.GSM.Frame_Relay_utilisation

Frame relay statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
rxBytes	ACCUMULATION	INT8	Number of bytes received on the link by the Framer	FRAMR.FRAMR_15070_0_CUM	Sum

rxFrames	ACCUMULATION	INT8	Number of frames received on the link interface by the Framer	FRAMR.FRAMR_15071_0_CUM	Sum
rxTotalLinkUtil	INTENSITY	FLOAT	Average total link utilization, based on the computation of the total number of bytes received on the link	FRAMR.FRAMR_15072_0_CUM	Average, tot, min, max
txBytes	ACCUMULATION	INT8	Number of bytes transmitted to the link by the Framer	FRAMR.FRAMR_15070_1_CUM	Sum
txFrames	ACCUMULATION	INT8	Number of frames transmitted to the link interface by the Framer	FRAMR.FRAMR_15071_1_CUM	Sum

7.2 BSC Performance Indicators

This section shows the key performance indicators and other counters for the BSC object, divided into the following sub-sections:

- [BSC.Nortel.GSM.A_Interface](#)
- [BSC.Nortel.GSM.BSC_Active_passive_chain](#)
- [BSC.Nortel.GSM.BSS_OMCR_Link](#)
- [BSC.Nortel.GSM.GPRS_Suspend_Resume](#)
- [BSC.Nortel.GSM.Handovers_EFR_AMR_speech](#)
- [BSC.Nortel.GSM.Handovers_Required_SDCCH](#)
- [BSC.Nortel.GSM.Handovers_Required_TCH](#)
- [BSC.Nortel.GSM.Handovers](#)
- [BSC.Nortel.GSM.LCS_Observations](#)
- [BSC.Nortel.GSM.Overload_situation](#)
- [BSC.Nortel.GSM.PCM_unavailability_and_fault](#)
- [BSC.Nortel.GSM.Request_and_ImmAss_per_causes](#)
- [BSC.Nortel.GSM.SDCCH_allocation](#)
- [BSC.Nortel.GSM.SICD_Load](#)
- [BSC.Nortel.GSM.Signalling_connections](#)

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- [BSC.Nortel.GSM.Signalling_release](#)
- [BSC.Nortel.GSM.Signalling_Resources](#)
- [BSC.Nortel.GSM.TCH_resources](#)
- [BSC.Nortel.GSM.Traffic_release_per_causes](#)
- [BSC.Nortel.GSM.VGCS](#)

7.2.1 BSC.Nortel.GSM.A_Interface

A interface statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
aInputMessage	ACCUMULATION	INT8	Number of BSSAP messages received	BSC.BSC_1107_0_CUM	Sum, ntbsscpabh, ntbtaubh
aMessageErroneousRate	INTENSITY	FLOAT	Rate of erroneous messages on the A interface	BSC.BSC_8568_0_AVG	Average, ntbsscpabh, ntbtaubh, tot, min, max
aMessageErrors	ACCUMULATION	INT8	Number of erroneous BSSAP messages received	BSC.BSC_1109_0_CUM	Sum, ntbsscpabh, ntbtaubh
aNonTransparentDown	ACCUMULATION	INT8	Number of BSSMAP messages received	BSC.BSC_1503_0_CUM	Sum, ntbsscpabh, ntbtaubh
aNonTransparentUp	ACCUMULATION	INT8	Number of BSSMAP messages sent	BSC.BSC_1502_0_CUM	Sum, ntbsscpabh, ntbtaubh
aOutputMessage	ACCUMULATION	INT8	Number of BSSAP messages sent	BSC.BSC_1108_0_CUM	Sum, ntbsscpabh, ntbtaubh
aTransparentDown	ACCUMULATION	INT8	Number of DTAP messages received	BSC.BSC_1501_0_CUM	Sum, ntbsscpabh,

					ntbtcaubh
aTransparentUp	ACCUMULATION	INT8	Number of DTAP messages sent	BSC.BSC_1500_0_CUM	Sum, ntbsccpabh, ntbtcaubh
dataNtRateFbTcbConfNotAllowed	ACCUMULATION	INT8	Number of fallbacks from a data rate to other data rates for non allowed TCB configuration cause	BSC.BSC_1172_1_CUM	Sum, ntbsccpabh, ntbtcaubh
dataNtRateFbTcbResLack	ACCUMULATION	INT8	Number of fallbacks from a data rate to other data rates for TCB lack of resources cause	BSC.BSC_1172_0_CUM	Sum, ntbsccpabh, ntbtcaubh
lbInputMessage	ACCUMULATION	INTEGER	Number of DTAP messages received	BSC.BSC_1107_1_CUM	Sum, ntbsccpabh, ntbtcaubh
lbMessageErrors	ACCUMULATION	INTEGER	Number of erroneous DTAP messages received	BSC.BSC_1109_1_CUM	Sum, ntbsccpabh, ntbtcaubh
lbOutputMessage	ACCUMULATION	INTEGER	Number of DTAP messages sent	BSC.BSC_1108_1_CUM	Sum, ntbsccpabh, ntbtcaubh
tcAllocated	ACCUMULATION	INT8	Number of terrestrial circuits allocated	BSC.BSC_1094_0_CUM	Sum, ntbsccpabh, ntbtcaubh
tcAveragedUsedCum	INTENSITY	INTEGER	Cummulative	BSC.BSC_1095_0_	Average,

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		ER	number of terrestrial circuits used	CUM	ntbsccpabh, ntbtcaubh, tot, min, max
tcAveragedUsedEch	ACCUMULATION	INT8	Number of samples for terrestrial circuits used	BSC.BSC_1095_0_NBS	Sum, ntbsccpabh, ntbtcaubh
tcAveragedUsedMax	ACCUMULATION	INT8	Maximum number of terrestrial circuits used	BSC.BSC_1095_0_MAX	Constant, ntbsccpabh, ntbtcaubh
tcAveragedUsedMoy	INTENSITY	FLOAT	Average number of terrestrial circuits used	BSC.BSC_1095_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max

7.2.2 BSC.Nortel.GSM.BSC_Active_passive_chain

Passive chain messages statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
chainStandByResponse	ACCUMULATION	INT8	-Obsolete in V15.1- Number of passive chain response messages	BSC.BSC_1122_0_CUM	Sum, ntbsccpabh, ntbtcaubh
chainStandByUpdate	ACCUMULATION	INT8	-Obsolete in V15.1- Number of passive chain update messages	BSC.BSC_1121_0_CUM	Sum, ntbsccpabh, ntbtcaubh

7.2.3 BSC.Nortel.GSM.BSS_OMCR_Link

BSS - OMCR link statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
omcLinkSwitchOver	ACCUMULATION	INT8	Number of link	BSC.BSC_1115_0_CUM	Sum,

r	TION		changeovers	UM	ntbsccpabh, ntbtcaubh
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7.2.4 BSC.Nortel.GSM.GPRS_Suspend_Resume

GPRS EDGE Suspend and Resume message statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
agprsResumeNack	ACCUMULATION	INT8	Number of PCU MS resume nack received by the BSC from the PCU	BSC.BSC_2074_0_CUM	Sum, ntbsccpabh, ntbtcaubh
agprsResumeRequest	ACCUMULATION	INT8	Number of PCU MS resume messages sent by the BSC to the PCU	BSC.BSC_2073_0_CUM	Sum, ntbsccpabh, ntbtcaubh
agprsSuspendNack	ACCUMULATION	INT8	Number of PCU MS suspend nack received by the BSC from the PCU	BSC.BSC_2072_0_CUM	Sum, ntbsccpabh, ntbtcaubh
agprsSuspendRequest Messages	ACCUMULATION	INT8	Number of PCU MS suspend messages sent by the BSC to the PCU	BSC.BSC_2071_1_CUM	Sum, ntbsccpabh, ntbtcaubh
agprsSuspendRequestProcedures	ACCUMULATION	INT8	Number of PCU MS suspend procedures triggered by the BSC to the PCU	BSC.BSC_2071_0_CUM	Sum, ntbsccpabh, ntbtcaubh

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7.2.5 BSC.Nortel.GSM.Handovers_EFR_AMR_speech

EFR and AMR speech handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrSpeechAlgoFallback	ACCUMULATION	INT8	Number of handovers or assignments in which the initial request in EFR speech algorithm is degraded into FR speech algorithm for AMR calls	BSC.BSC_1206_1_CUM	Sum, ntbsecpabh, ntbtaubh
speechAlgoFallbackCtm	ACCUMULATION	INT8	-Obsolete in V15.1- Number of handovers or assignments in which the initial request in AMR speech algorithm is degraded into FR or EFR speech algorithm for AMR calls	BSC.BSC_1206_2_CUM	Sum, ntbsecpabh, ntbtaubh
speechAlgoFallback	ACCUMULATION	INT8	Number of handovers and assignment for which the initial request in EFR speech algorithm is degraded into FR speech algorithm	BSC.BSC_1206_0_CUM	Sum, ntbsecpabh, ntbtaubh

7.2.6 BSC.Nortel.GSM.Handovers_Required_SDCCH

SDCCH handovers execution in BSS

KPI	Type	Data Type	Description	Derivation	Aggregation
hoInInterSdcchExecutionBs	INTENSITY	FLOA	BSC execution	BSC.BSC_8561_0_	Average,

cFailRate	TY	T	failure rate of incoming inter handovers on SDCCH	AVG	ntbsccpabh, ntbtcaubh, tot, min, max
hoInInterSdcchSelectionBscFailRate	INTENSITY	FLOAT	BSC selection failure rate of incoming inter handovers on SDCCH	BSC.BSC_8559_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max
hoInIntraSdcchExecutionBscFailRate	INTENSITY	FLOAT	BSC execution failure rate of incoming intra handovers on SDCCH	BSC.BSC_8563_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max
hoOutFirstSuccessSdcchRatio	INTENSITY	FLOAT	BSC ratio of successful outgoing handovers on SDCCH after first attempt	BSC.BSC_8567_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max
hoOutInterSdcchExecutionBscFailRate	INTENSITY	FLOAT	BSC execution failure rate of outgoing inter handovers on SDCCH	BSC.BSC_8565_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max
hoOutSdcchBscGlobalFailRate	INTENSITY	FLOAT	BSC global failure rate of outgoing handovers on SDCCH	BSC.BSC_8551_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max
hoOutSdcchExecutionBscFailRate	INTENSITY	FLOAT	BSC execution failure rate of	BSC.BSC_8557_0_AVG	Average, ntbsccpabh

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			outgoing handovers on SDCCH		h, ntbtcab h, tot, min, max
hoOutSdcchrequestBscRatio	INTENSITY	FLOAT	BSC ratio of outgoing handover requests on SDCCH	BSC.BSC_8553_0_AVG	Average, ntbscpab h, nbtcaub h, tot, min, max
hoOutSdcchSelectionBscFailRate	INTENSITY	FLOAT	BSC selection failure rate of outgoing handovers on SDCCH	BSC.BSC_8555_0_AVG	Average, ntbscpab h, nbtcaub h, tot, min, max

7.2.7 BSC.Nortel.GSM.Handovers_Required_TCH

TCH handovers execution in BSS

KPI	Type	Data Type	Description	Derivation	Aggregation
hoInInterTchExecutionBscFailRate	INTENSITY	FLOAT	BSC execution failure rate of incoming inter handovers on TCH	BSC.BSC_8560_0_AVG	Average, ntbscpab h, nbtcaub h, tot, min, max
hoInInterTchSelectionBscFailRate	INTENSITY	FLOAT	BSC selection failure rate of incoming inter handovers on TCH	BSC.BSC_8558_0_AVG	Average, ntbscpab h, nbtcaub h, tot, min, max
hoInIntraTchExecutionBscFailRate	INTENSITY	FLOAT	BSC execution failure rate of incoming intra handovers on TCH	BSC.BSC_8562_0_AVG	Average, ntbscpab h, nbtcaub h, tot, min, max
hoOutFirstSuccessTchRate	INTENSITY	FLOAT	BSC ratio of	BSC.BSC_8566_0_AVG	Average,

io	TY	T	successful outgoing handovers on TCH after first attempt	VG	ntbsccpab h, ntbtcaubh, tot, min, max
hoOutInterTchExecutionB scFailRate	INTENSI TY	FLOA T	BSC execution failure rate of outgoing inter handovers on TCH	BSC.BSC_8564_0_A VG	Average, ntbsccpab h, ntbtcaubh, tot, min, max
hoOutTchBscGlobalFailR ate	INTENSI TY	FLOA T	BSC global failure rate of outgoing handovers on TCH	BSC.BSC_8550_0_A VG	Average, ntbsccpab h, ntbtcaubh, tot, min, max
hoOutTchExecutionBscFa ilRate	INTENSI TY	FLOA T	BSC execution failure rate of outgoing handovers on TCH	BSC.BSC_8556_0_A VG	Average, ntbsccpab h, ntbtcaubh, tot, min, max
hoOutTchRequestBscRati o	INTENSI TY	FLOA T	BSC ratio of outgoing handover requests on TCH	BSC.BSC_8552_0_A VG	Average, ntbsccpab h, ntbtcaubh, tot, min, max
hoOutTchSelectionBscFai lRate	INTENSI TY	FLOA T	BSC selection failure rate of outgoing handovers on TCH	BSC.BSC_8554_0_A VG	Average, ntbsccpab h, ntbtcaubh, tot, min, max

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7.2.8 BSC.Nortel.GSM.Handovers

Handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
bscHoSuccessIncomingTch	ACCUMULATION	INT8	-Obsolete in V15- Number of incoming handovers on TCH executed with success in the BSS	BSC.BSC_9512_0_CUM	Sum, ntbsccpabh, ntbtcaubh
bscHoSuccessOutgoingTch	ACCUMULATION	INT8	-Obsolete in V15- Number of outgoing handovers on TCH executed with success in the BSS	BSC.BSC_9511_0_CUM	Sum, ntbsccpabh, ntbtcaubh
hoInExecutionBscSdcch	ACCUMULATION	INT8	-Obsolete in V15- Number of incoming handovers on SDCCH executed in the BSS	BSC.BSC_8609_0_CUM	Sum, ntbsccpabh, ntbtcaubh
hoInExecutionBscTch	ACCUMULATION	INT8	-Obsolete in V15- Number of incoming handovers on TCH executed in the BSS	BSC.BSC_8608_0_CUM	Sum, ntbsccpabh, ntbtcaubh
hoOutExecutionBscSdcch	ACCUMULATION	INT8	-Obsolete in V15- Number of outgoing handovers on SDCCH executed in the BSS	BSC.BSC_8607_0_CUM	Sum, ntbsccpabh, ntbtcaubh
hoOutExecutionBscTch	ACCUMULATION	INT8	-Obsolete in V15- Number of outgoing handovers on TCH executed in	BSC.BSC_8606_0_CUM	Sum, ntbsccpabh, ntbtcaubh

			the BSS		
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7.2.9 BSC.Nortel.GSM.LCS_Observations

LCS observation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
msPositioningMsAssistedGPS	ACCUMULATION	INTEGER	Number of MS supporting MS assisted GPS	BSC.BSC_2063_0_CUM	Sum, ntbsscpabh, ntbtaubh
msPositioningMsBasedGPS	ACCUMULATION	INTEGER	Number of MS supporting MS based GPS	BSC.BSC_2063_1_CUM	Sum, ntbsscpabh, ntbtaubh
msPositioningMsConventionalGPS	ACCUMULATION	INTEGER	Number of MS supporting MS conventional GPS	BSC.BSC_2063_2_CUM	Sum, ntbsscpabh, ntbtaubh

7.2.10 BSC.Nortel.GSM.Overload_situation

Overload statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
aintOverloadRejectedOpIncomingExtHoReq	ACCUMULATION	INT8	Number of rejected incoming external handover requests due to overload situation	BSC.BSC_1506_1_CUM	Sum, ntbsscpabh, ntbtaubh
aintOverloadRejectedOpPageReq	ACCUMULATION	INT8	Number of rejected	BSC.BSC_1506_0_CUM	Sum, ntbsscpabh

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			paging requests due to overload situation		h, ntbzcaubh
aintOverLoadRejectedOpPerformLocationReq	ACCUMULATION	INT8	Number of perform location requests due to overload situation	BSC.BSC_1506_4_CUM	Sum, ntbsccpabh, nbtzcaubh
aintOverLoadRejectedOpVbsVgcAssignment	ACCUMULATION	INT8	Number of rejected incoming external handover requests due to overload situation	BSC.BSC_1506_3_CUM	Sum, ntbsccpabh, nbtzcaubh
aintOverLoadRejectedOpVbsVgcsSetup	ACCUMULATION	INT8	Number of rejected incoming external handover requests due to overload situation	BSC.BSC_1506_2_CUM	Sum, ntbsccpabh, nbtzcaubh
e3OverloadRejectedOpChannelReq	ACCUMULATION	INT8	Number of rejected channel requests due to overload situation	BSC.BSC_1507_1_CUM	Sum, ntbsccpabh, nbtzcaubh
e3OverloadRejectedOpEstablishInd	ACCUMULATION	INT8	Number of rejected establish indication messages due to overload situation	BSC.BSC_1507_2_CUM	Sum, ntbsccpabh, nbtzcaubh
e3OverloadRejectedOpHoReq	ACCUMULATION	INT8	Number of rejected handover	BSC.BSC_1507_3_CUM	Sum, ntbsccpabh,

			requests due to overload situation		ntbtcaubh
e3OverloadRejectedOpPagingReq	ACCUMULATION	INT8	Number of rejected paging requests due to overload situation	BSC.BSC_1507_0_CUM	Sum, ntbsscpabh, ntbtcaubh
e3OverloadRejectedOpPagingReqReject	ACCUMULATION	INT8	Number of rejected paging request rejections caused by an overloaded cell	BSC.BSC_1507_4_CUM	Sum, ntbsscpabh, ntbtcaubh
e3OverloadRejectedOpSmsCb	ACCUMULATION	INT8	Number of rejected sms-cb messages due to overload situation	BSC.BSC_1507_5_CUM	Sum, ntbsscpabh, ntbtcaubh
overLoadRejChannelReq	ACCUMULATION	INT8	-Obsolete in V15.1- Number of channel requests rejected due to generalized overload	BSC.BSC_8758_0_CUM	Sum, ntbsscpabh, ntbtcaubh
overLoadRejPagingReq	ACCUMULATION	INT8	-Obsolete in V15.1- Number of paging requests rejected due to generalized overload	BSC.BSC_8759_0_CUM	Sum, ntbsscpabh, ntbtcaubh

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7.2.11 BSC.Nortel.GSM.PCM_unavailability_and_fault

PCM unavailability statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
peminseconds	INTENSITY	FLOAT	PCM unavailability in the BSS in seconds	BSC.BSC_8700_0_AVG	Average, ntbccpabh, ntbtaubh, tot, min, max

7.2.12 BSC.Nortel.GSM.Request_and_ImmAss_per_causes

Channel request and assignment in BSS statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
bscOtherThanPaging	ACCUMULATION	INT8	Number of signaling channels allocated in the BSS for access other than paging	BSC.BSC_8605_0_CUM	Sum, ntbccpabh, ntbtaubh
bscPagingResponse	ACCUMULATION	INT8	Number of signaling channels allocated in the BSS for replies to paging	BSC.BSC_8604_0_CUM	Sum, ntbccpabh, ntbtaubh
pagingFilteredByBsc	ACCUMULATION	INT8	Number of paging requests filtered by the BSC 3000	BSC.BSC_1508_0_CUM	Sum, ntbccpabh, ntbtaubh

7.2.13 BSC.Nortel.GSM.SDCCH_allocation

SDCCH allocation in BSS statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
bscSdcchAllocated	ACCUMULATION	INT8	Total number of SDCCHs	BSC.BSC_8610_0_CUM	Sum, ntbccpabh

			allocated in the BSS		h, ntbtaubh
bscSdcchAveragedUsedMoy	INTENSITY	FLOAT	Average number of SDCCHs used in the BSS	BSC.BSC_8600_0_AVG	Average, ntbsecpab h, ntbtaubh, tot, min, max

7.2.14 BSC.Nortel.GSM.SICD_Load

Signalling Interface control (LAPD) card load in a BSC

KPI	Type	Data Type	Description	Derivation	Aggregation
cardSynthLoadSicdCum	ACCUMULATION	INT8	Cummulative synthetic load of all SICD boards in this BSC	BSC.c1835_0_CUM_groupkpi	Sum, ntbsecpab h, ntbtaubh
cardSynthLoadSicdEch	ACCUMULATION	INT8	Number of samples, synthetic load of all SICD boards in this BSC	BSC.c1835_0_NBS_groupkpi	Sum, ntbsecpab h, ntbtaubh
cardSynthLoadSicdMax	INTENSITY	INTEGER	Maximum synthetic load of all SICD boards in this BSC	BSC.c1835_0_MAX_groupkpi	Constant, ntbsecpab h, ntbtaubh, tot, min, max
cardSynthLoadSicdMoy	INTENSITY	FLOAT	Average synthetic load of all SICD boards in this BSC	BSC.c1835_0_AVG_groupkpi	Average, ntbsecpab h, ntbtaubh, tot, min, max
prLoadSicdCum	ACCUMULATION	INT8	Cummulative load	BSC.c1400_0_CUM_	Sum,

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	TION		of all SICD boards in this BSC	groupkpi	ntbsccpabh, ntbtcaubh
prLoadSicdEch	ACCUMULATION	INT8	Number of samples, load of all SICD boards in this BSC	BSC.c1400_0_NBS_groupkpi	Sum, ntbsccpabh, ntbtcaubh
prLoadSicdMax	INTENSITY	INTEGER	Maximum load of all SICD boards in this BSC	BSC.c1400_0_MAX_groupkpi	Constant, ntbsccpabh, ntbtcaubh, tot, min, max
prLoadSicdMoy	INTENSITY	FLOAT	Average load of all SICD boards in this BSC	BSC.c1400_0_AVG_groupkpi	Average, ntbsccpabh, ntbtcaubh, tot, min, max

7.2.15 BSC.Nortel.GSM.Signalling_connections

Signalling connection statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
sccpAllocatedLcs	ACCUMULATION	INT8	Number of SCCP connections established for SSN LCS	BSC.BSC_1104_1_CUM	Sum, ntbsccpabh, ntbtcaubh
sccpAllocated	ACCUMULATION	INT8	Number of SCCP connections established for SSN BSSMAP	BSC.BSC_1104_0_CUM	Sum, ntbsccpabh, ntbtcaubh
sccpAveragedUsedCum	ACCUMULATION	INT8	Cumulative number of SCCP connections established	BSC.BSC_1105_0_CUM	Sum, ntbsccpabh, ntbtcaubh

sccpAveragedUsedEch	ACCUMULATION	INT8	Number of samples, number of SCCP connections established	BSC.BSC_1105_0_NBS	Sum, ntbsscpabh, nbtcaubh
sccpAveragedUsedMax	INTENSITY	INTEGER	Maximum number of SCCP connections established	BSC.BSC_1105_0_MAX	Constant, ntbsscpabh, nbtcaubh, tot, min, max
sccpAveragedUsedMoy	INTENSITY	FLOAT	Average number of SCCP connections established	BSC.BSC_1105_0_AVG	Average, ntbsscpabh, nbtcaubh, tot, min, max
sccpResourceFailureRatio	INTENSITY	FLOAT	Ratio of SCCP failure	BSC.BSC_8569_0_AVG	Average, ntbsscpabh, nbtcaubh, tot, min, max
sccpRessourceFailureBscRefusalLcs	ACCUMULATION	INT8	Number of SCCP connections with SSN LCS, refused by the BSC	BSC.BSC_1106_3_CUM	Sum, ntbsscpabh, nbtcaubh
sccpRessourceFailureBscRefusal	ACCUMULATION	INT8	Number of SCCP connections refused by the BSC	BSC.BSC_1106_1_CUM	Sum, ntbsscpabh, nbtcaubh
sccpRessourceFailureLcs	ACCUMULATION	INT8	Number of SCCP	BSC.BSC_1106_2_CUM	Sum, ntbsscpabh

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			connections with SSN LCS, refused by the MSC or the local SCCP layer		h, ntbtcabuh
sccpRessourceFailure	ACCUMULATION	INT8	Number of SCCP connections refused by the MSC or the local SCCP layer	BSC.BSC_1106_0_CUM	Sum, ntbsscpabh, nbtcaubh

7.2.16 BSC.Nortel.GSM.Signalling_release

SCCP release statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
signallingReleaseNoBtsBadDataInd	ACCUMULATION	INT8	Number of SCCP releases before HANDOVER REQUEST acknowledging: Incorrect DATA INDICATION received	BSC.BSC_1162_27_CUM	Sum, ntbsscpabh, nbtcaubh
signallingReleaseNoBts	ACCUMULATION	INT8	Number of releases while the communication is in -signalling phase- and no cell yet associated to the communication	BSC.BSC_1752_0_CUM	Sum, ntbsscpabh, nbtcaubh
signallingReleaseNoBtsOthers	ACCUMULATION	INT8	Number of SCCP releases before HANDOVER REQUEST	BSC.BSC_1162_28_CUM	Sum, ntbsscpabh, nbtcaubh

			acknowledging: Other cases		
signallingReleaseNoBtsReset	ACCUMULATION	INT8	Number of SCCP releases before HANDOVER REQUEST acknowledging: Reset	BSC.BSC_1162_ 1_CUM	Sum, ntbsccpab h, ntbtcaubh
signallingReleaseNoBtsSccp DataRefusal	ACCUMULATION	INT8	Number of SCCP releases before HANDOVER REQUEST acknowledging: SCCP DATA REFUSAL received	BSC.BSC_1162_ 3_CUM	Sum, ntbsccpab h, ntbtcaubh
signallingReleaseNoBtsSccp DiscInd	ACCUMULATION	INT8	Number of SCCP releases before HANDOVER REQUEST acknowledging: SCCP disconnection	BSC.BSC_1162_ 0_CUM	Sum, ntbsccpab h, ntbtcaubh
signallingReleaseNoBtsTscRel	ACCUMULATION	INT8	Number of SCCP releases before HANDOVER REQUEST acknowledging: TscRel elapse	BSC.BSC_1162_ 26_CUM	Sum, ntbsccpab h, ntbtcaubh

7.2.17 BSC.Nortel.GSM.Signalling_Resources

BSS signalling resources statistics

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KPI	Type	Data Type	Description	Derivation	Aggregation
bscEstabIndicSignalling	ACCUMULATION	INT8	Number of signalling channels allocated in the BSS for access	BSC.BSC_9510_0_CUM	Sum, ntbsscpabh, ntbtaubh

7.2.18 BSC.Nortel.GSM.TCH_resources

TCH resource allocation and usage in BSS

KPI	Type	Data Type	Description	Derivation	Aggregation
bscAllocationFailureTchFrSeizureInclHo	ACCUMULATION	INT8	TCH allocation failures at bsc level	BSC.BSC_8640_0_CUM	Sum, ntbsscpabh, ntbtaubh
bscAttemptedTchFrSeizureInclHo	ACCUMULATION	INT8	Total TCH seizure attempts (including handovers) at BSC level	BSC.BSC_8639_0_CUM	Sum, ntbsscpabh, ntbtaubh
bscAttemptedTchFrSeizureNotInclHo	ACCUMULATION	INT8	Total TCH seizure attempts (not including handovers) at BSC	BSC.BSC_8637_0_CUM	Sum, ntbsscpabh, ntbtaubh
bscTchAveragedUsed	INTENSITY	FLOAT	-Obsolete in V15.1- Average number of TCHs used in the BSS	BSC.BSC_8614_0_AVG	Average, ntbsscpabh, ntbtaubh, tot, min, max
bscTchAveragedUsedPrimoAllocationMoy	INTENSITY	FLOAT	Average number of TCH/FR used in the BSS for call reestablishmen	BSC.BSC_8602_0_AVG	Average, ntbsscpabh, ntbtaubh, tot, min, max

			ts		
bscTchFrAllocatedAllocation	ACCUMULATION	INT8	Total number of TCH/FR allocated in the BSS for traffic	BSC.BSC_8613_0_CUM	Sum, ntbsscpabh, ntbtaubh
bscTchFrAllocatedOverflowAllocation	ACCUMULATION	INT8	Total number of TCH/FR allocated in the BSS because of SDCCH unavailability	BSC.BSC_8611_0_CUM	Sum, ntbsscpabh, ntbtaubh
bscTchFrAllocatedPrimoAllocation	ACCUMULATION	INT8	Total number of TCH/FR allocated in the BSS for call reestablishments	BSC.BSC_8612_0_CUM	Sum, ntbsscpabh, ntbtaubh
bscTchFrAveragedUsedOverflowAllocationMoy	INTENSITY	FLOAT	Average number of TCH/FR used in the BSS because of SDCCH unavailability	BSC.BSC_8601_0_AVG	Average, ntbsscpabh, ntbtaubh, tot, min, max
bscTchFrAveragedUsedTchAllocationMoy	INTENSITY	FLOAT	Average number of TCH/FR used in the BSS for traffic	BSC.BSC_8603_0_AVG	Average, ntbsscpabh, ntbtaubh, tot, min, max

7.2.19 BSC.Nortel.GSM.Traffic_release_per_causes

BSS traffic release statistics

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KPI	Type	Data Type	Description	Derivation	Aggregation
bscClearRequestTraffic	ACCUMULATION	INT8	G14 consolidated at bsc level	BSC.BSC_8644_0_CUM	Sum, ntbccpabh, ntbtaubh

7.2.20 BSC.Nortel.GSM.VGCS

BSS Voice Group Call Service (VGCS) statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
vgcsAccessGrant	ACCUMULATION	INT8	Number of BSC acceptations of VGCS talking requests issued by the BTS	BSC.BSC_1504_0_CUM	Sum, ntbccpabh, ntbtaubh
vgcsMscReject	ACCUMULATION	INT8	Number of MSC refusals on VGCS talking requests issued by the BTS	BSC.BSC_1505_0_CUM	Sum, ntbccpabh, ntbtaubh
vgcsRejectRate	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of VGCS MSC reject on the BSC	BSC.BSC_8900_0_AVG	Average, ntbccpabh, ntbtaubh, tot, min, max

7.3 Cell Performance Indicators

This section shows the key performance indicators and other counters for the Cell object, divided into the following sub-sections:

- [Cell.Nortel.GSM.Abis_DS0](#)
- [Cell.Nortel.GSM.Abis_interface.AMR](#)
- [Cell.Nortel.GSM.Abis_TRAU](#)
- [Cell.Nortel.GSM.AGPRS_interface](#)
- [Cell.Nortel.GSM.Assignment_AMR](#)
- [Cell.Nortel.GSM.Assignment_FR](#)
- [Cell.Nortel.GSM.Assignment_HR](#)
- [Cell.Nortel.GSM.Assignment](#)
- [Cell.Nortel.GSM.CCCH_Monitoring](#)

- [Cell.Nortel.GSM.Cell_Load_AMR](#)
- [Cell.Nortel.GSM.Cell_Load](#)
- [Cell.Nortel.GSM.Channel_Activated](#)
- [Cell.Nortel.GSM.Channel_Allocation](#)
- [Cell.Nortel.GSM.Codec.AMR_Control](#)
- [Cell.Nortel.GSM.Codec.AMR_Duration](#)
- [Cell.Nortel.GSM.Codec.AMR_Recv_Frames](#)
- [Cell.Nortel.GSM.Directed_Retry_Handovers](#)
- [Cell.Nortel.GSM.EDGE_on_PCU](#)
- [Cell.Nortel.GSM.EGPRS.PDTCH_Resources](#)
- [Cell.Nortel.GSM.EGPRS.Radio_Link_Control](#)
- [Cell.Nortel.GSM.Establish_Indication_Per_Phases](#)
- [Cell.Nortel.GSM.GPRS_EDGE](#)
- [Cell.Nortel.GSM.GPRS.BSSGP_Virtual_Connection](#)
- [Cell.Nortel.GSM.GPRS.DL_QoS](#)
- [Cell.Nortel.GSM.GPRS.MultiSlot_request](#)
- [Cell.Nortel.GSM.GPRS.Radio_Resource](#)
- [Cell.Nortel.GSM.GPRS.Suspend_Resume](#)
- [Cell.Nortel.GSM.GPRS.Temporary_Block_Flow](#)
- [Cell.Nortel.GSM.GPRS.UL_QoS](#)
- [Cell.Nortel.GSM.Handovers_AMR](#)
- [Cell.Nortel.GSM.Handovers_dualband_mobile](#)
- [Cell.Nortel.GSM.Handovers_filtered](#)
- [Cell.Nortel.GSM.Handovers_InterBSS_Direct_Retry](#)
- [Cell.Nortel.GSM.Handovers_InterBSS_SDCCH](#)
- [Cell.Nortel.GSM.Handovers_InterBSS_TCH](#)
- [Cell.Nortel.GSM.Handovers_IntraBSS_Direct_Retry](#)
- [Cell.Nortel.GSM.Handovers_IntraBSS_SDCCH](#)
- [Cell.Nortel.GSM.Handovers_IntraBSS_TCH](#)
- [Cell.Nortel.GSM.Handovers_IntraBts_SDCCH](#)
- [Cell.Nortel.GSM.Handovers_IntraBts_TCH](#)
- [Cell.Nortel.GSM.Handovers_Required_SDCCH](#)
- [Cell.Nortel.GSM.Handovers_Required_TCH](#)
- [Cell.Nortel.GSM.Handovers_V12](#)
- [Cell.Nortel.GSM.Handovers](#)
- [Cell.Nortel.GSM.Immediate_assignment_rejected_per_causes](#)
- [Cell.Nortel.GSM.Immediate_assignment](#)
- [Cell.Nortel.GSM.Interference](#)
- [Cell.Nortel.GSM.Layer_1_management_SDCCH](#)
- [Cell.Nortel.GSM.Layer_1_management_TCH](#)
- [Cell.Nortel.GSM.Layer_1_management](#)

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- [Cell.Nortel.GSM.LCS_Observations](#)
- [Cell.Nortel.GSM.Mobile_8W](#)
- [Cell.Nortel.GSM.Mobile_Power](#)
- [Cell.Nortel.GSM.Paging_requests](#)
- [Cell.Nortel.GSM.Path_Balance](#)
- [Cell.Nortel.GSM.PCH_AGCH](#)
- [Cell.Nortel.GSM.PCU_Throughput](#)
- [Cell.Nortel.GSM.PDTCH_resources](#)
- [Cell.Nortel.GSM.RACH_access](#)
- [Cell.Nortel.GSM.Radio_Frames](#)
- [Cell.Nortel.GSM.Request_and_ImmAss_per_causes](#)
- [Cell.Nortel.GSM.RX_level_and_Quality](#)
- [Cell.Nortel.GSM.SDCCH_allocation](#)
- [Cell.Nortel.GSM.Signalling_Phase_Duration](#)
- [Cell.Nortel.GSM.Signalling_release_per_causes](#)
- [Cell.Nortel.GSM.Signalling_release](#)
- [Cell.Nortel.GSM.SMS_service](#)
- [Cell.Nortel.GSM.TCH_allocation.AMR](#)
- [Cell.Nortel.GSM.TCH_allocation.SAIC](#)
- [Cell.Nortel.GSM.TCH_connection.AMR](#)
- [Cell.Nortel.GSM.TCH_FR_Resources](#)
- [Cell.Nortel.GSM.TCH_HR_Resources](#)
- [Cell.Nortel.GSM.TCH_Queueing](#)
- [Cell.Nortel.GSM.TCH_Resources](#)
- [Cell.Nortel.GSM.Temporary_Obs.Abis_level2](#)
- [Cell.Nortel.GSM.Temporary_Obs.Abis_Traffic](#)
- [Cell.Nortel.GSM.Temporary_Obs.Abis_unavailability](#)
- [Cell.Nortel.GSM.Time_Advance](#)
- [Cell.Nortel.GSM.Traffic_release_per_causes](#)
- [Cell.Nortel.GSM.Traffic_release.AMR](#)
- [Cell.Nortel.GSM.Transmit_Burst](#)
- [Cell.Nortel.GSM.VGCS_VBS](#)
- [Cell.Nortel.GSM.Wireless_Priority_Service](#)

7.3.1 Cell.Nortel.GSM.Abis_DS0

ABIS DSO statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allocatedAbisJokerTs CellCum	ACCUMULATION	INT8	Cumulative number of joker DS0 TS allocated on the Abis interface	BTS.CELL_2003_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

allocatedAbisJokerTs CellEch	ACCUMULATION	INT8	Number of samples, number of joker DS0 TS allocated on the Abis interface	BTS.CELL_2003_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
allocatedAbisJokerTs CellMax	INTENSITY	INT8	Maximum number of joker DS0 TS allocated on the Abis interface	BTS.CELL_2003_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
allocatedAbisJokerTs CellMoy	INTENSITY	FLOAT	Average number of joker DS0 TS allocated on the Abis interface	BTS.CELL_2003_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
allocatedAbisJokerTS EdgeCum	ACCUMULATION	INT8	Cumulative number of joker DS0 TS allocated on the Abis interface.	BTS.CELL_2001_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
allocatedAbisJokerTS EdgeEch	ACCUMULATION	INT8	Number of samples, number of joker DS0 TS allocated on the Abis interface.	BTS.CELL_2001_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
allocatedAbisJokerTS EdgeMax	INTENSITY	INT8	Maximum number of joker DS0 TS allocated on the Abis interface.	BTS.CELL_2001_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
allocatedAbisJokerTS	INTENSITY	FLOAT	Average number	BTS.CELL_2001_0_	Average,

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EdgeMoy		T	of joker DS0 TS allocated on the Abis interface.	AVG	ntcsdcchbh, ntctchbh, ntctchfrbh , tot, min, max
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7.3.2 Cell.Nortel.GSM.Abis_interface.AMR

Abis interface statistics for AMR related calls

KPI	Type	Data Type	Description	Derivation	Aggregation
amrDownlinkNoDataFrames	ACCUMULATION	INT8	Number of no data frames received or sent on the Abis interface on the downlink for AMR calls	BTS.CELL_1983_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
amrUplinkNoDataFrames	ACCUMULATION	INT8	Number of no data frames received or sent on the Abis interface on the uplink for AMR calls	BTS.CELL_1983_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

7.3.3 Cell.Nortel.GSM.Abis_TRAU

TRAU statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
abisTrauFrameCorrected	ACCUMULATION	INT8	Number of frames TRAU downlink corrected	BTS.CELL_1718_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
abisTrauFrameDlReceived	ACCUMULATION	INT8	Number of frames TRAU downlink received	BTS.CELL_1717_0_CUM	Sum, ntcsdcchbh, ntctchbh,

					ntetchfrbh
abisTrauFrameMuted	ACCUMULATION	INT8	Number of frames TRAU downlink that cannot be corrected	BTS.CELL_1719_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
dlMutedAbisTrauFrameRate	INTENSITY	FLOAT	Quality of downlink Abis TRAU frame	BTS.CELL_8628_0_AVG	Average, ntsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
pcmErrCorrEfficiency	INTENSITY	FLOAT	Correction rate of downlink Abis TRAU frame	BTS.CELL_8629_0_AVG	Average, ntsdcchbh, ntetchbh, ntetchfrbh, tot, min, max

7.3.4 Cell.Nortel.GSM.AGPRS_interface

AGPRS interface statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
dyAgprsAvgLoadCriterion	INTENSITY	FLOAT	Average number of iteration samples for pcuDyAgprsLoadCriterionCum	BTS.CELL_15076_0_AVG	Average, ntsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
dyAgprsAvgNbTimeslots	INTENSITY	FLOAT	Average number of requested modifications of the	BTS.CELL_15075_1_AVG	Average, ntsdcchbh,

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			number of allocated Agprs TS in the corresponding cell.		ntctchbh, ntctchfrbh, tot, min, max
dyAgprsMaxLoadCriterion	INTENSITY	INTEGER	Maximum value of Agprs load criterion	BTS.CELL_1 5076_1_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
dyAgprsMaxNbTimeslots	INTENSITY	INTEGER	Maximum number of Agprs timeslots allocated to the cell by the BSC	BTS.CELL_1 5075_3_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
dyAgprsMinNbTimeslots	INTENSITY	INTEGER	Minimum number of Agprs timeslots allocated to the cell by the BSC	BTS.CELL_1 5075_2_MIN	Minimum, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
dyAgprsNbModif	ACCUMULATION	INT8	Number of modification of Agprs timeslots allocated in the cell	BTS.CELL_1 5075_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pcuAgprsJokerNbofBlocksDn	ACCUMULATION	INT8	Number of TRAU EDGE data blocks sent on the Agprs Joker channels in the DL direction	BTS.CELL_1 5119_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pcuAgprsJokerNbofBlocksUp	ACCUMULATION	INT8	Total number of TRAU EDGE data blocks sent on the Agprs Joker channels	BTS.CELL_1 5128_0_CUM	Sum, ntesdcchbh, ntctchbh,

			in the UL direction		ntctchfrbh
pcuAgprsMainNbofBlocksDn	ACCUMULATION	INT8	Total number of TRAU data blocks and control blocks (GPRS or EGPRS) sent on the AgprsMain channels in the DL direction	BTS.CELL_1 5110_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pcuAgprsMainNbofBlocksUp	ACCUMULATION	INT8	Total number of TRAU EDGE data blocks sent on the AgprsMain channels in the UL direction	BTS.CELL_1 5127_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pcuDyAgprsLoadCriterionCum	ACCUMULATION	INT8	Cumulative number of iteration samples for pcuDyAgprsLoadCriterionCum	BTS.CELL_1 5076_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pcuDyAgprsLoadCriterionNbs	ACCUMULATION	INT8	Number of samples, number of iteration samples for pcuDyAgprsLoadCriterionCum	BTS.CELL_1 5076_0_NBS	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pcuDyAgprsNbTimeslotsCum	ACCUMULATION	INT8	Cumulative number of requested modifications of the number of allocated Agprs TS in the corresponding cell.	BTS.CELL_1 5075_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pcuDyAgprsNbTimeslotsNbs	ACCUMULATION	INT8	No of samples, number of requested modifications of the number of allocated	BTS.CELL_1 5075_1_NBS	Sum, ntcsdcchbh, ntctchbh,

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			Agprs TS in the corresponding cell.		ntctchfrbh
pcuDynAgprsJokerAvgNbTimeslot	INTENSITY	FLOAT	Average Agprs Joker timeslots allocated to the cell by the BSC	BTS.CELL_15118_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pcuDynAgprsJokerCumNbTimeslot	ACCUMULATION	INT8	Cumulative Agprs Joker timeslots allocated to the cell by the BSC	BTS.CELL_15118_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
pcuDynAgprsJokerMaxNbTimeslot	INTENSITY	INTEGER	Maximum Agprs Joker timeslots allocated to the cell by the BSC	BTS.CELL_15118_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pcuDynAgprsJokerMinNbTimeslot	INTENSITY	INTEGER	Minimum Agprs Joker timeslots allocated to the cell by the BSC	BTS.CELL_15118_0_MIN	Minimum, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pcuDynAgprsJokerNbsNbTimeslot	ACCUMULATION	INT8	Number of samples, Agprs Joker timeslots allocated to the cell by the BSC	BTS.CELL_15118_0_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

7.3.5 Cell.Nortel.GSM.Assignment_AMR

AMR calls assignment statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrTchAssignFailure	ACCUMULATION	INT8	Number of Failures of the Dedicated Channel Assignment Procedure for AMR full rate TCH	BTS.CELL_1904_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
amrFrTchAssignRequest	ACCUMULATION	INT8	Number of Request of the Dedicated Channel Assignment Procedure for AMR full rate TCH	{amrFrTchSuccessfully Assigned} + {amrFrTchAssignFailure}	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
amrFrTchSuccessfullyAssigned	ACCUMULATION	INT8	Number of Successful AMR full rate TCH assignments for any kind of mobile	BTS.CELL_1903_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
amrHrTchAssignFailure	ACCUMULATION	INT8	Number of Failures of the Dedicated Channel Assignment Procedure for AMR half rate TCH	BTS.CELL_1904_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
amrHrTchAssignRequest	ACCUMULATION	INT8	Number of Request of the Dedicated Channel Assignment	{amrHrTchSuccessfully Assigned} + {amrHrTchAssignFailure}	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

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			Procedure for AMR half rate TCH		h
amrHrTchSuccessfullyAssigned	ACCUMULATION	INT8	Number of Successful AMR half rate TCH assignments for any kind of mobile	BTS.CELL_1903_1_CUM	Sum, ntesdecbh, ntetchbh, ntetchfrbh
bsPowerDecControlAmrFr	ACCUMULATION	INT8	Number of BS decrement power control ordered by the L1m for AMR full rate TCH	BTS.CELL_1915_0_CUM	Sum, ntesdecbh, ntetchbh, ntetchfrbh
bsPowerIncControlAmrFr	ACCUMULATION	INT8	Number of BS increment power control ordered by the L1m for AMR full rate TCH	BTS.CELL_1914_0_CUM	Sum, ntesdecbh, ntetchbh, ntetchfrbh
downlinkPowerCtrlMaxTchAmrFrCum	ACCUMULATION	INT8	Cumulative amount of time the downlink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1906_0_CUM	Sum, ntesdecbh, ntetchbh, ntetchfrbh
downlinkPowerCtrlMaxTchAmrFrEch	ACCUMULATION	INT8	No of samples, amount of time the downlink power control was running	BTS.CELL_1906_0_NBS	Sum, ntesdecbh, ntetchbh, ntetchfrbh

			at the maximum level for the busy full rate AMR TCHs		
downlinkPowerCtrlMaxTchAmrFrMax	INTENSITY	FLOAT	Maximum amount of time the downlink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1906_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
downlinkPowerCtrlMaxTchAmrFrMoy	INTENSITY	FLOAT	Average amount of time the downlink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1906_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
downlinkPowerCtrlMaxTchAmrHrCum	ACCUMULATION	INT8	Amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1918_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
downlinkPowerCtrlMaxTch	ACCUMULATION	INT8	No. of	BTS.CELL_1918_0_N	Sum,

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AmrHrEch	ATTENTION		samples, amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	BS	ntcsdcbh, ntctchbh, ntctchfrbh
downlinkPowerCtrlMaxTchAmrHrMax	INTENSITY	FLOAT	Maximum amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1918_0_MAX	Constant, ntcscdcbh, ntctchbh, ntctchfrbh, tot, min, max
downlinkPowerCtrlMaxTchAmrHrMoy	INTENSITY	FLOAT	Average amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1918_0_AVG	Average, ntcscdcbh, ntctchbh, ntctchfrbh, tot, min, max
msPowerDecControlAmrFr	ACCUMULATION	INT8	Number of MS decrement power control ordered by the L1m for AMR full rate TCH	BTS.CELL_1913_0_CUM	Sum, ntcscdcbh, ntctchbh, ntctchfrbh
msPowerIncControlAmrFr	ACCUMULATION	INT8	Number of MS	BTS.CELL_1912_0_CUM	Sum, ntcscdcbh

			increment power control ordered by the L1m for AMR full rate TCH		bh, ntctchbh, ntctchfrbh
timingAdvanceAmrFrAvg	INTENSITY	FLOAT	Average timing advance values for AMR full rate calls in the cell	BTS.CELL_1917_0_CUM	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
timingAdvanceAmrFrMax	INTENSITY	FLOAT	Maximum timing advance values for AMR full rate calls in the cell	BTS.CELL_1917_1_CUM	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
timingAdvanceAmrHrAvg	INTENSITY	FLOAT	Average timing advance values for AMR half rate calls in the cell	BTS.CELL_1929_0_CUM	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
timingAdvanceAmrHrMax	INTENSITY	FLOAT	Maximum timing advance values for AMR half rate calls in the cell	BTS.CELL_1929_1_CUM	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot,

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					min, max
uplinkPowerCtrlMaxTchA mrFrCum	ACCUMUL ATION	INT8	Cumulative amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1907_0_C UM	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
uplinkPowerCtrlMaxTchA mrFrEch	ACCUMUL ATION	INT8	No of samples, amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1907_0_N BS	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
uplinkPowerCtrlMaxTchA mrFrMax	INTENSITY	FLO AT	Maximum amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1907_0_M AX	Constant , ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
uplinkPowerCtrlMaxTchA mrFrMoy	INTENSITY	FLO AT	Average amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	BTS.CELL_1907_0_A VG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max

uplinkPowerCtrlMaxTchA mrHrCum	ACCUMUL ATION	INT8	Amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1919_0_C UM	Sum, ntcsdech bh, ntctchbh, ntctchfrb h
uplinkPowerCtrlMaxTchA mrHrEch	ACCUMUL ATION	INT8	Amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1919_0_N BS	Sum, ntcsdech bh, ntctchbh, ntctchfrb h
uplinkPowerCtrlMaxTchA mrHrMax	INTENSITY	FLO AT	Amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1919_0_M AX	Average, ntcsdech bh, ntctchbh, ntctchfrb h, tot, min, max
uplinkPowerCtrlMaxTchA mrHrMoy	INTENSITY	INT8	Amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	BTS.CELL_1919_0_A VG	Average, ntcsdech bh, ntctchbh, ntctchfrb h, tot, min, max

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7.3.6 Cell.Nortel.GSM.Assignment_FR

TCH full rate activation for data service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelActivateTchFrDataNT12000	ACCUMULATION	INT8	Number of TCH/FR activation for non-transparent data service with a 12000 b/s transmission rate	BTS.CELL_1707_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataNT14500	ACCUMULATION	INT8	Number of TCH/FR activation for non-transparent data service with a 14500 b/s transmission rate	BTS.CELL_1707_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataNT6000	ACCUMULATION	INT8	Number of TCH/FR activation for non-transparent data service with a 6000 b/s transmission rate	BTS.CELL_1707_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataT1200	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service with a 1200 b/s transmission rate	BTS.CELL_1705_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataT14400	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service with a 14400 b/s transmission rate	BTS.CELL_1705_6_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataT16	ACCUMULATION	INT8	Number of TCH/FR	BTS.CELL_1705_0_CUM	Sum, ntesdcchbh

			activation for transparent data service with a 1200/75 b/s transmission rate		h, ntetchbh, ntetchfrbh
channelActivateTchFrDataT2400	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service with a 2400 b/s transmission rate	BTS.CELL_1705_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataT4800	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service with a 4800 b/s transmission rate	BTS.CELL_1705_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataT600	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service with a 600 b/s transmission rate	BTS.CELL_1705_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchFrDataT9600	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service with a 9600 b/s transmission rate	BTS.CELL_1705_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActTchFrDataNT	ACCUMULATION	INT8	Number of TCH/FR activation for non-transparent data service	BTS.CELL_1710_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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channelActTchFrDataT	ACCUMULATION	INT8	Number of TCH/FR activation for transparent data service	BTS.CELL_1709_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
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7.3.7 Cell.Nortel.GSM.Assignment_HR

TCH half rate activation for data service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelActivateTchHrDataNT6000	ACCUMULATION	INT8	Number of channel activation for non transparent data service on half rate TCH.	BTS.CELL_1708_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchHrDataT1200	ACCUMULATION	INT8	Number of channel activation for transparent data service on half rate TCH with a 1200 b/s transmission rate.	BTS.CELL_1706_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchHrDataT16	ACCUMULATION	INT8	Number of channel activation for transparent data service on half rate TCH	BTS.CELL_1706_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchHrDataT2400	ACCUMULATION	INT8	Number of channel activation for transparent data service on half rate TCH with a 2400 b/s transmission rate	BTS.CELL_1706_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateTchHrData	ACCUMULATION	INT8	Number of	BTS.CELL_1706_4	Sum,

taT4800	TION		channel activation for transparent data service on half rate TCH with a 4800 b/s transmission rate	_CUM	ntcsdcchb h, ntctchbh, ntctchfrbh
channelActivateTchHrDataT600	ACCUMULATION	INT8	Number of channel activation for transparent data service on half rate TCH with a 600 b/s transmission rate.	BTS.CELL_1706_1_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
channelActTchHrDataNT	ACCUMULATION	INT8	Number of TCH/HR activation for non-transparent data service	BTS.CELL_1712_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
channelActTchHrDataT	ACCUMULATION	INT8	Number of TCH/HR activation for transparent data service	BTS.CELL_1711_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

7.3.8 Cell.Nortel.GSM.Assignment

Channel assignment statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
assignFailure	ACCUMULATION	INT8	Number of ASSIGN FAILURE messages received on TCH	BTS.CELL_1055_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

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assignFailureOthers	ACCUMULATION	INT8	Number of emission of ASSIGNMENT FAILURE messages on the A interface: Cause other than modification from a SDCCH channel to a TCH or a preempted PDTCH channel	BTS.CELL_1842_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
assignFailureSdcchToTchChannel	ACCUMULATION	INT8	Number of emission of ASSIGNMENT FAILURE messages on the Ainterface: Modification from an SDCCH channel to a TCH or a preempted PDTCH channel	BTS.CELL_1842_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
assignRequestCtm	ACCUMULATION	INT8	-Obsolete in V15.1- Number of assignment request messages received	BTS.CELL_1841_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
assignRequestOthers	ACCUMULATION	INT8	Number of assignment request messages received: Cause other than modification from a SDCCH channel to a TCH or a preempted PDTCH channel	BTS.CELL_1841_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
assignRequestSdcchToTchChannel	ACCUMULATION	INT8	Number of assignment request messages received: modification	BTS.CELL_1841_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

			from a SDCCH channel to a TCH or a preempted PDTCH channel		
assignToOtherBandOrZone	ACCUMULATION	INT8	Number of direct allocations of TCHs in the second band (or zone) of a dualband (or concentric or dual--coupling) cell	BTS.CELL_1799_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelActivateTchFrDataNtHscsd	ACCUMULATION	INT8	-Obsolete in V15.1- Number of channel activation for non transparent data service on TCH/FR	BTS.CELL_1729_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelActivateTchFrDataTHscsd	ACCUMULATION	INT8	-Obsolete in V15.1- Number of channel activation for transparent data service on TCH/FR	BTS.CELL_1728_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
directTchDualBandRate	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of dualband mobile direct allocations of the TCHs in a dualband cell used	BTS.CELL_8028_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
directTchRate	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of direct allocations of the TCHs used	BTS.CELL_8027_0_AVG	Average, ntesdcchbh, ntctchbh,

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					ntetchfrbh , tot, min, max
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7.3.9 Cell.Nortel.GSM.CCCH_Monitoring

CCCH monitoring statistics.

KPI	Type	Data Type	Description	Derivation	Aggregation
rach7FCount	ACCUMULATION	INTEGER	Number of decoded random access received by the BTS from the MS with the value 7F.	BTS.CCCH0_1615_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
rach7FCountTs2	ACCUMULATION	INTEGER	Number of decoded random access received by the BTS from the MS with the value 7F TS2.	BTS.CCCH2_1615_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
rach7FCountTs4	ACCUMULATION	INTEGER	Number of decoded random access received by the BTS from the MS with the value 7F TS4.	BTS.CCCH4_1615_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
rach7FCountTs6	ACCUMULATION	INTEGER	Number of decoded random access received by the BTS from the MS with the value 7F TS6.	BTS.CCCH6_1615_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh

7.3.10 Cell.Nortel.GSM.Cell_Load_AMR

AMR cell load statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrCellLoadStateModif	ACCUMULATION	INT8	Number of cell	BTS.CELL_1936_0	Sum,

ication	TION		load state change	_CUM	ntcsdechb h, ntctchbh, ntctchfrbh
amrCellLoadStateOverevaluated	ACCUMULATION	INT8	AMR cell load overevaluated	BTS.CELL_1939_0_CUM	Sum, ntcsdechb h, ntctchbh, ntctchfrbh
amrCellLoadStateUnderevaluated	ACCUMULATION	INT8	AMR cell load underevaluated	BTS.CELL_1938_0_CUM	Sum, ntcsdechb h, ntctchbh, ntctchfrbh
amrFilteredBusyTchRatioCum	ACCUMULATION	FLOAT	Cumulative value of the filtered busy TCH ratio	BTS.CELL_1937_0_CUM	Sum, ntcsdechb h, ntctchbh, ntctchfrbh
amrFilteredBusyTchRatioEch	ACCUMULATION	INT8	Number of samples, value of the filtered busy TCH ratio	BTS.CELL_1937_0_NBS	Sum, ntcsdechb h, ntctchbh, ntctchfrbh
amrFilteredBusyTchRatioMax	INTENSITY	FLOAT	Maximum value of the filtered busy TCH ratio	BTS.CELL_1937_0_MAX	Constant, ntcsdechb h, ntctchbh, ntctchfrbh , tot, min, max
amrFilteredBusyTchRatioMoy	INTENSITY	FLOAT	Average value of the filtered busy TCH ratio	BTS.CELL_1937_0_AVG	Average, ntcsdechb h, ntctchbh, ntctchfrbh , tot, min,

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					max
amrHrModeDuration	ACCUMULATION	INT8	Number of periods of 10 s where the cell load is greater than 0	BTS.CELL_1935_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.11 Cell.Nortel.GSM.Cell_Load

Cell load statistics - Synthetic statistic

KPI	Type	Data Type	Description	Derivation	Aggregation
btsLoad	INTENSITY	FLOAT	Cell load	BTS.CELL_9600_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.12 Cell.Nortel.GSM.Channel_Activated

Channel activation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelActivateDataNonTransparentFullRate	ACCUMULATION	INT8	-Obsolete in V15.1- Number of Full-Rate channels activated for non-transparent	BTS.CELL_1628_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelActivateDataTransparentFullRate	ACCUMULATION	INT8	-Obsolete in V15.1- Number of Full-Rate channels activated for transparent messages	BTS.CELL_1627_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

channelActivateSignallingFullRate	ACCUMULATION	INT8	Number of Full-Rate channels activated for signaling	BTS.CELL_1629_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateSignallingHalfRate	ACCUMULATION	INT8	Number of Half-Rate channels activated for signaling	BTS.CELL_1629_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateSpeechAmrFullRate	ACCUMULATION	INT8	Number of channels activated for speech: AMR Full Rate Algorithm	BTS.CELL_1197_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateSpeechAmrHalfRate	ACCUMULATION	INT8	Number of channels activated for speech: AMR Half Rate Algorithm	BTS.CELL_1197_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateSpeechEnhancedFullRate	ACCUMULATION	INT8	Number of channels activated for speech: Enhanced Full Rate Algorithm	BTS.CELL_1197_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
channelActivateSpeechFullRate	ACCUMULATION	INT8	Number of channels activated for speech: Full Rate Algorithm	BTS.CELL_1197_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

7.3.13 Cell.Nortel.GSM.Channel_Allocation

Channel allocation request statistics

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KPI	Type	Data Type	Description	Derivation	Aggregation
channelRequestExtended	ACCUMULATION	INT8	Number of channel allocation requests for mobiles over 35 km (extended zone)	BTS.CELL_1702_0_CUM	Sum, ntsdcchb h, ntctchbh, ntctchfrbh
channelRequestExtRate	INTENSITY	FLOAT	-Obsolete in V15.1- Channel request extended ratio	BTS.CELL_8811_0_AVG	Average, ntsdcchb h, ntctchbh, ntctchfrbh, tot, min, max
channelRequest	ACCUMULATION	INT8	Number of channel allocation requests	BTS.CELL_1748_0_CUM	Sum, ntsdcchb h, ntctchbh, ntctchfrbh

7.3.14 Cell.Nortel.GSM.Codec.AMR_Control

Codec-Change control for AMR calls

KPI	Type	Data Type	Description	Derivation	Aggregation
amrReversalPhaseFailure	ACCUMULATION	INT8	Number of CMI/CMR reverse phase procedure failure for AMR calls	BTS.CELL_1988_0_CUM	Sum, ntsdcchb h, ntctchbh, ntctchfrbh
decAmrFrDownModif	ACCUMULATION	INT8	Number of Codec decrement modifications for full rate AMR in downlink	BTS.CELL_1985_1_CUM	Sum, ntsdcchb h, ntctchbh, ntctchfrbh
decAmrFrUpModif	ACCUMULATION	INT8	Number of Codec decrement modifications for full rate AMR in uplink	BTS.CELL_1984_1_CUM	Sum, ntsdcchb h, ntctchbh, ntctchfrbh

decAmrHrDownModif	ACCUMULATION	INT8	Number of Codec decrement modifications for half rate AMR in downlink	BTS.CELL_1987_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
decAmrHrUpModif	ACCUMULATION	INT8	Number of Codec decrement modifications for half rate AMR in uplink	BTS.CELL_1986_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
incAmrFrDownModif	ACCUMULATION	INT8	Number of Codec increment modifications for full rate AMR in downlink	BTS.CELL_1985_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
incAmrFrUpModif	ACCUMULATION	INT8	Number of Codec increment modifications for full rate AMR in uplink	BTS.CELL_1984_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
incAmrHrDownModif	ACCUMULATION	INT8	Number of Codec increment modifications for half rate AMR in downlink	BTS.CELL_1987_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
incAmrHrUpModif	ACCUMULATION	INT8	Number of Codec increment modifications for half rate AMR in uplink	BTS.CELL_1986_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

7.3.15 Cell.Nortel.GSM.Codec.AMR_Duration

Codec-Type use duration for AMR calls

KPI	Type	Data Type	Description	Derivation	Aggregation
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amrFrDownlinkCode c102	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 10.2 has been applied on the downlink for full rate AMR	BTS.CELL_1977_3_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrDownlinkCode c475	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 4.75 has been applied on the downlink for full rate AMR	BTS.CELL_1977_0_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrDownlinkCode c59	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the downlink for full rate AMR	BTS.CELL_1977_1_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrDownlinkCode c67	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the downlink for full rate AMR	BTS.CELL_1977_2_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrUplinkCodec1 02	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 10.2 has been applied on the uplink for full rate AMR	BTS.CELL_1975_3_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrUplinkCodec4 75	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 4.75 has been applied on the uplink for full rate AMR	BTS.CELL_1975_0_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrUplinkCodec5 9	ACCUMULA TION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the uplink for full rate AMR	BTS.CELL_1975_1_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

amrFrUplinkCodec67	ACCUMULATION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the uplink for full rate AMR	BTS.CELL_1975_2_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
amrHrDownlinkCodec475	ACCUMULATION	INT8	Number of 40ms periods during which Codec 4.75 has been applied on the downlink for half rate AMR	BTS.CELL_1978_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
amrHrDownlinkCodec59	ACCUMULATION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the downlink for half rate AMR	BTS.CELL_1978_1_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
amrHrDownlinkCodec67	ACCUMULATION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the downlink for half rate AMR	BTS.CELL_1978_2_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
amrHrUplinkCodec475	ACCUMULATION	INT8	Number of 40ms periods during which Codec 4.75 has been applied on the uplink for half rate AMR	BTS.CELL_1976_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
amrHrUplinkCodec59	ACCUMULATION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the uplink for half rate AMR	BTS.CELL_1976_1_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
amrHrUplinkCodec67	ACCUMULATION	INT8	Number of 40ms	BTS.CELL_1976_2_CUM	Sum,

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7	TION		periods during which Codec 6.7 has been applied on the uplink for half rate AMR	CUM	ntcsdcchb h, ntctchbh, ntctchfrbh
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7.3.16 Cell.Nortel.GSM.Codec.AMR_Recv_Frames

Codec-Received speech frames for AMR calls

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrBadSpeechFramesC odec102	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 10.2	BTS.CELL_1979_3 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrBadSpeechFramesC odec475	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 4.75	BTS.CELL_1979_0 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrBadSpeechFramesC odec59	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 5.9	BTS.CELL_1979_1 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrBadSpeechFramesC odec67	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 6.7	BTS.CELL_1979_2 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrValidSpeechFrames Codec102	ACCUMULATION	INT8	Received speech frames AMR FR	BTS.CELL_1980_3 _CUM	Sum, ntcsdcchb

			at Codec 10.2		h, ntctchbh, ntctchfrbh
amrFrValidSpeechFrames Codec475	ACCUMULA TION	INT8	Received speech frames AMR FR at Codec 4.75	BTS.CELL_1980_0 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrValidSpeechFrames Codec59	ACCUMULA TION	INT8	Received speech frames AMR FR at Codec 5.9	BTS.CELL_1980_1 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrFrValidSpeechFrames Codec67	ACCUMULA TION	INT8	Received speech frames AMR FR at Codec 6.7	BTS.CELL_1980_2 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrHrBadSpeechFrames Codec475	ACCUMULA TION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 4.75	BTS.CELL_1981_0 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrHrBadSpeechFrames Codec59	ACCUMULA TION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 5.9	BTS.CELL_1981_1 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
amrHrBadSpeechFrames Codec67	ACCUMULA TION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for	BTS.CELL_1981_2 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

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			half rate AMR at Codec 6.7		
amrHrValidSpeechFramesCodec475	ACCUMULATION	INT8	Received speech frames AMR HR at Codec 4.75	BTS.CELL_1982_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrHrValidSpeechFramesCodec59	ACCUMULATION	INT8	Received speech frames AMR HR at Codec 5.9	BTS.CELL_1982_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrHrValidSpeechFramesCodec67	ACCUMULATION	INT8	Received speech frames AMR HR at Codec 6.7	BTS.CELL_1982_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

7.3.17 Cell.Nortel.GSM.Directed_Retry_Handovers

Directed retry handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
directedRetryUnsuccessfulNoBts	ACCUMULATION	INT8	Number of unsuccessful directed retry handovers because the list of eligible cells is empty	BTS.CELL_1620_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

7.3.18 Cell.Nortel.GSM.EDGE_on_PCU

GPRS Edge on PCU statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuEdgeDn8PskDowngradedGmskUsf	ACCUMULATION	INT8	Number of EDGE 8-PSK radio blocks downgraded in	BTS.CELL_15255_0_CUM	Sum, ntesdcchbh, ntetchbh,

			GMSK due to multiplexing in the UL with a GPRS MS		nttchfrbh
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7.3.19 Cell.Nortel.GSM.EDGE.PDTCH_Resources

PDTCH resources for EDGE service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allocatedEdgeTsCellCum	ACCUMULATION	INT8	Cumulative number of PDTCH allocated for EDGE services to the PCU	BTS.CELL_2002_1_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh
allocatedEdgeTsCellEch	ACCUMULATION	INT8	Number of samples, number of PDTCH allocated for EDGE services to the PCU	BTS.CELL_2002_1_NBS	Sum, ntesdcchbh, nttchbh, nttchfrbh
allocatedEdgeTsCellMax	INTENSITY	INT8	Maximum number of PDTCH allocated for EDGE services to the PCU	BTS.CELL_2002_1_MAX	Constant, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max
allocatedEdgeTsCellMoy	INTENSITY	FLOAT	Average number of PDTCH allocated for EDGE services to the PCU	BTS.CELL_2002_1_AVG	Average, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max

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allocatedEdgeTsCum	ACCUMULATION	INT8	Cumulative number of PDTCH available and preempted for EDGE services	BTS.CELL_2000_1_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
allocatedEdgeTsEch	ACCUMULATION	INT8	Number of samples, number of available PDTCH for EDGE allocated to the PCU	BTS.CELL_2000_1_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
allocatedEdgeTsMax	INTENSITY	INT8	Maximum number of available PDTCH for EDGE allocated to the PCU	BTS.CELL_2000_1_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
allocatedEdgeTsMoy	INTENSITY	FLOAT	Average number of available PDTCH for EDGE allocated to the PCU	BTS.CELL_2000_1_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
preemptedEdgeTsCell Cum	ACCUMULATION	INT8	Cumulative number of available PDTCH for EDGE services preempted by circuit calls	BTS.CELL_2002_2_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
preemptedEdgeTsCell Ech	ACCUMULATION	INT8	Number of samples, number of available PDTCH for EDGE services preempted by circuit calls	BTS.CELL_2002_2_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
preemptedEdgeTsCell Max	INTENSITY	INT8	Maximum number of	BTS.CELL_2002_2_MAX	Constant, ntesdcchb

			available PDTCH for EDGE services preempted by circuit calls		h, ntctchbh, ntctchfrbh, tot, min, max
preemptedEdgeTsCellMoy	INTENSITY	FLOAT	Average number of available PDTCH for EDGE services preempted by circuit calls	BTS.CELL_2002_2_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
preemptedEdgeTsCum	ACCUMULATION	INT8	Cumulative number of available PDTCH for EDGE services preempted by circuit calls	BTS.CELL_2000_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
preemptedEdgeTsEch	ACCUMULATION	INT8	Number of samples, number of available PDTCH for EDGE services preempted by circuit calls	BTS.CELL_2000_2_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
preemptedEdgeTsMax	INTENSITY	INT8	Maximum number of available PDTCH for EDGE services preempted by circuit calls	BTS.CELL_2000_2_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
preemptedEdgeTsMoy	INTENSITY	FLOAT	Average number of available PDTCH for EDGE services preempted by	BTS.CELL_2000_2_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh

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			circuit calls		, tot, min, max
totalNumberOfEdgeTsCellCum	ACCUMULATION	INT8	Cumulative number of PDTCH available and preempted for EDGE services (all configured PDTCH not preempted for circuit calls and available for EDGE)	BTS.CELL_2002_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
totalNumberOfEdgeTsCellEch	ACCUMULATION	INT8	Number of samples, number of PDTCH available and preempted for EDGE services (all configured PDTCH not preempted for circuit calls and available for EDGE)	BTS.CELL_2002_0_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
totalNumberOfEdgeTsCellMax	INTENSITY	INT8	Maximum number of PDTCH available and preempted for EDGE services (all configured PDTCH not preempted for circuit calls and available for EDGE)	BTS.CELL_2002_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
totalNumberOfEdgeTsCellMoy	INTENSITY	FLOAT	Average number of PDTCH available and preempted for EDGE services	BTS.CELL_2002_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh

			(all configured PDTCH not pre-empted for circuit calls and available for EDGE)		, tot, min, max
totalNumberOfEdgeTsCum	ACCUMULATION	INT8	Cumulative number of available PDTCH for EDGE (all configured PDTCH not pre-empted for circuit calls and available for EDGE)	BTS.CELL_2000_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
totalNumberOfEdgeTsEch	ACCUMULATION	INT8	Number of samples, number of available PDTCH for EDGE (all configured PDTCH not pre-empted for circuit calls and available for EDGE)	BTS.CELL_2000_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
totalNumberOfEdgeTsMax	INTENSITY	FLOAT	Maximum number of available PDTCH for EDGE (all configured PDTCH not pre-empted for circuit calls and available for EDGE)	BTS.CELL_2000_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
totalNumberOfEdgeTs	INTENSITY	FLOAT	Average number	BTS.CELL_2000_0_	Average,

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sMoy		T	of available PDTCH for EDGE (all configured PDTCH not pre-empted for circuit calls and available for EDGE)	AVG	ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
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7.3.20 Cell.Nortel.GSM.EGPRS.Radio_Link_Control

EGPRS related Radio Link Control statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuEdgeCell15114s0	ACCUMULATION	INT8	Spare counter, 0 by default	BTS.CELL_15114_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
pcuEdgeCell15115s0	ACCUMULATION	INT8	- Obsolete in V16 - Spare counter, 0 by default	BTS.CELL_15115_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
pcuEdgeCell15116s0	ACCUMULATION	INT8	Spare counter, 0 by default	BTS.CELL_15116_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
pcuEdgeCell15117s0	ACCUMULATION	INT8	Spare counter, 0 by default	BTS.CELL_15117_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
pcuEdgeCell15120s0	ACCUMULATION	INT8	Spare counter, 0 by default	BTS.CELL_15120_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
pcuEdgeCell15121s0	ACCUMULATION	INT8	Spare counter, 0	BTS.CELL_1512	Sum,

	TION		by default	1_0_CUM	ntesdcchb h, ntetchbh, ntetchfrbh
pcuEdgeCell15125s0	ACCUMULA TION	INT8	Spare counter, 0 by default	BTS.CELL_1512 5_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuEdgeCell15126s0	ACCUMULA TION	INT8	Spare counter, 0 by default	BTS.CELL_1512 6_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuEdgeDnAvgUsefulData PerCell	INTENSITY	FLOA T	Average bytes of all the RLC EDGE data blocks sent for the first time (i.e. fresh block)	BTS.CELL_1511 3_0_AVG	Average, ntesdcchb h, ntetchbh, ntetchfrbh , tot, min, max
pcuEdgeDnCumUsefulData PerCell	ACCUMULA TION	INT8	Cumulative bytes of all the RLC EDGE data blocks sent for the first time (i.e. fresh block)	BTS.CELL_1511 3_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuEdgeDnNbsUsefulData PerCell	ACCUMULA TION	INT8	Number of samples, in bytes of all the RLC EDGE data blocks sent for the first time (i.e. fresh block)	BTS.CELL_1511 3_0_NBS	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuEdgeDnUsefulDataDura tionPerCell	ACCUMULA TION	INT8	Cumulated times in multiples of	BTS.CELL_1512 4_0_CUM	Sum, ntesdcchb h,

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			20ms where the pipes for DL EGPRS TBF are in -verbose-state-		nttchbh, nttchfrbh
pcuEdgeDowngradedTbfAvg	INTENSITY	FLOAT	Average EGPRS TBF downgraded in GPRS	BTS.CELL_15111_0_AVG	Average, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max
pcuEdgeDowngradedTbf	ACCUMULATION	INT8	Cumulative number of EGPRS TBF downgraded in GPRS	BTS.CELL_15111_0_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh
pcuEdgeDowngradedTbfNbs	ACCUMULATION	INT8	Number of samples, EGPRS TBF downgraded in GPRS	BTS.CELL_15111_0_NBS	Sum, ntesdcchbh, nttchbh, nttchfrbh
pcuEdgeTbfEstReq	ACCUMULATION	INT8	Number of EGPRS TBF establishment requests.	BTS.CELL_15122_0_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh
pcuEdgeUpAvgUsefulDataPerCell	INTENSITY	FLOAT	Average bytes of all the RLC EDGE data blocks received for the first time (i.e. fresh block) on a pipe	BTS.CELL_15112_0_AVG	Average, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max
pcuEdgeUpCumUsefulDataPerCell	ACCUMULATION	INT8	Cumulative size in bytes of all the RLC EDGE data blocks received for the first time (i.e. fresh block) on a pipe	BTS.CELL_15112_0_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh

pcuEdgeUpNbsUsefulDataPerCell	ACCUMULATION	INT8	Number of samples, in bytes of all the RLC EDGE data blocks received for the first time (i.e. fresh block) on a pipe	BTS.CELL_15112_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pcuEdgeUpUsefulDataDurationPerCell	ACCUMULATION	INT8	Accumulated times in multiples of 20ms where the pipes for UL EGPRS TBF are in -verbose-state	BTS.CELL_15123_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pcuOctetsDataDnSig	ACCUMULATION	INT8	Cumulative size (in bytes) of all the LLC DL PDU with GMM signaling (T bit equals 0) in the BSSGP DLUNITDATA PDU received by the BVC (SGSN to PCU)	BTS.CELL_15115_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.21 Cell.Nortel.GSM.Establish_Indication_Per_Phases

ESTABLISH INDICATION message statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allEstabIndicSignalling	ACCUMULATION	INT8	Total number of establishment indications received for call initialization	BTS.CELL_8016_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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estabIndicSignallingEmergency	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for urgent calls	BTS.CELL_1193_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingImsiDetach	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for IMSI detachments	BTS.CELL_1193_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingLocUpdate	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for location updates	BTS.CELL_1193_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingMo	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for mobile originating calls	BTS.CELL_1193_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignalling	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received	BTS.CELL_1750_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingPagingRes	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for paging requests	BTS.CELL_1193_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

estabIndicSignallingPiggybacked	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase with notification message piggybacked	BTS.CELL_1193_8_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingReEstab	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for call reestablishments	BTS.CELL_1193_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingShortMsg	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for short messages	BTS.CELL_1193_6_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSignallingSuppService	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for other services	BTS.CELL_1193_7_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
estabIndicSigPhase1	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for Phase I mobiles	BTS.CELL_1195_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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estabIndicSigPhase1Ratio	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of establishment indications for a phase 1 MS	BTS.CELL_8709_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
estabIndicSigPhase2	ACCUMULATION	INT8	Number of ESTABLISH INDICATION messages in establishment phase received for Phase II mobiles	BTS.CELL_1196_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
estabIndicSigPhase2Ratio	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of establishment indications for a phase 2 MS	BTS.CELL_8710_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
locUpRate	INTENSITY	FLOAT	-Obsolete in V15.1- Location update rate	BTS.CELL_8809_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pagingResponseDegradation	INTENSITY	FLOAT	-Obsolete in V15.1- Paging without response ratio	BTS.CELL_8810_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.22 Cell.Nortel.GSM.GPRS_EDGE

GPRS Edge statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
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dwMultiSlotRequest5	ACCUMULATION	INT8	Cumulative number of uplink or/and downlink radio resources assignment on PACCH for a mobile whose multislot class requires 5 (or more) downlink timeslots	BTS.CELL_15030_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuMSCtxNormalRelease	ACCUMULATION	INT8	Number of MS Context which are normally released in the CELL	BTS.CELL_15259_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuMSCtxReleaseDueToMobility	ACCUMULATION	INT8	Cumulative number of MS context released due to mobility	BTS.CELL_15261_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuMSCtxReleaseDueToSuspend	ACCUMULATION	INT8	Number of MS Context release in the CELL due to Suspend procedure	BTS.CELL_15260_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuMSCtxRelease	ACCUMULATION	INT8	Number of MS Context release in the CELL	BTS.CELL_15258_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuNaccPccc	ACCUMULATION	INT8	Number of PCCC messages sent after a successful SI download to the MS	BTS.CELL_15257_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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pcuNaccPccn	ACCUMULATION	INT8	Number of PCCN messages received for the first time in the cell	BTS.CELL_15256_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuOutgoingCellReselInTransfer	ACCUMULATION	INT8	Cumulative number of successful LLC transfer, following a cell reselection	BTS.CELL_15262_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuPfcNrtRequestedDnMbrGTThres	ACCUMULATION	INT8	Number of NRT PFC creations requested by SGSN with a MBR DL greater or equal than a threshold	BTS.CELL_15267_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuPfcNrtRequestedUpMbrGTThres	ACCUMULATION	INT8	Number of NRT PFC creations requested by SGSN with a MBR UL greater or equal than a threshold	BTS.CELL_15268_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuPfcRequested	ACCUMULATION	INT8	Number of PFC creations requested by SGSN	BTS.CELL_15263_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuPfcRtAcceptedDnUnreserved	ACCUMULATION	INT8	Number of RT PFC creations accepted by PCU (i.e. not downgraded in NRT) BUT the GBR DL was not available during at least two consecutive throughput estimation periods	BTS.CELL_15270_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

pcuPfcRtAccepted	ACCUMULATION	INT8	Number of RT PFC creations accepted by PCU (i.e. Not downgraded in NRT)	BTS.CELL_15269_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuPfcRtAcceptedUpUnserved	ACCUMULATION	INT8	Number of RT PFC creations accepted by PCU (that is, not downgraded in NRT) BUT the GBR UL was not available during at least two consecutive throughput estimation periods	BTS.CELL_15271_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuPfcRtRequestedDnGbrGTThres	ACCUMULATION	INT8	Number of RT PFC creations requested by SGSN with a GBR DL greater or equal than a threshold	BTS.CELL_15265_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuPfcRtRequested	ACCUMULATION	INT8	Number of RT PFC creations requested by SGSN	BTS.CELL_15264_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
pcuPfcRtRequestedUpGbrGTThres	ACCUMULATION	INT8	Number of RT PFC creations requested by SGSN with a GBR UL greater or equal than a threshold	BTS.CELL_15266_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh

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7.3.23 Cell.Nortel.GSM.GPRS.BSSGP_Virtual_Connection

GPRS service-Virtual Connection statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
bvcFlowControlRequests	ACCUMULATION	INT8	Number of FLOW-CONTROL-BVC PDUs sent by the BVC	BTS.CELL_15010_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
llcDiscardedOctets	ACCUMULATION	INT8	Cumulative amount of the all the bytes discarded in the BVC	BTS.CELL_15012_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
llcDiscardedPdu	ACCUMULATION	INT8	Number of LLC-DISCARDED PDUs sent by the BVC	BTS.CELL_15012_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msFlowControlRequests	ACCUMULATION	INT8	Number of FLOW-CONTROL-MS PDUs sent by the BVC	BTS.CELL_15010_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msFlushLLRequest	ACCUMULATION	INT8	Flush-LL PDUs relative to the BVC sent from the SGSN to the PCU	BTS.CELL_15014_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
octetsDataDn	ACCUMULATION	INT8	Number of bytes received by the BVC in DL-UNIT-DATA PDUs	BTS.CELL_15005_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
octetsDataUp	ACCUMULATION	INT8	Number of bytes sent by the BVC in the UL-UNIT-DATA PDUs	BTS.CELL_15005_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

pduDataDn	ACCUMULATION	INT8	Number of UNIT-DATA PDUs received downlink by the BVC	BTS.CELL_15004_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
pduDataUp	ACCUMULATION	INT8	Number of UNIT-DATA PDUs sent uplink by the BVC	BTS.CELL_15004_1_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh

7.3.24 Cell.Nortel.GSM.GPRS.DL_QoS

** This KPI group is obsolete in V16 ** GPRS service-Downlink quality of service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
dnTbfBronzeRejectedForMinTput	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of bronze users. downlink allocations rejected due to the admittance control	BTS.CELL_15079_3_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
dnTbfBronzeSatisfactBet5090pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of bronze users. downlink allocations with a satisfaction rate equal or more than 50%and strictly less than 90%	BTS.CELL_15079_1_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh

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dnTbfBronzeSatisfactLess50pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of bronze users. downlink allocations with a satisfaction rate strictly less than 50%	BTS.CELL_15079_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
dnTbfBronzeSatisfactMore90pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of bronze users. downlink allocations with a satisfaction rate equal or better than 90%	BTS.CELL_15079_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
dnTbfGoldRejectedForMinTput	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of gold users. downlink allocations rejected due to the admittance control	BTS.CELL_15077_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
dnTbfGoldSatisfactBet5090pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of gold users. downlink allocations with a satisfaction rate equal or more than 50% and strictly less than 90%	BTS.CELL_15077_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
dnTbfGoldSatisfactLess50pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative	BTS.CELL_15077_2_CUM	Sum, ntesdcchbh,

			number of gold users. downlink allocations with a satisfaction rate strictly less than 50%		ntetchbh, ntetchfrbh
dnTbfGoldSatisfactMore90pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of gold users. downlink allocations with a satisfaction rate equal or better than 90%	BTS.CELL_15077_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnTbfSilverRejectedForMinTput	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of silver users. downlink allocations rejected due to the admittance control	BTS.CELL_15078_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnTbfSilverSatisfactBet5090pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of silver users. downlink allocations with a satisfaction rate equal or more than 50%and strictly less than 90%	BTS.CELL_15078_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnTbfSilverSatisfactLess50pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative	BTS.CELL_15078_2_CUM	Sum, ntesdcchbh,

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			number of silver users. downlink allocations with a satisfaction rate strictly less than 50%		ntctchbh, ntctchfrbh
dnTbfSilverSatisfactMore90pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of silver users. downlink allocations with a satisfaction rate equal or better than 90%	BTS.CELL_15078_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

7.3.25 Cell.Nortel.GSM.GPRS.MultiSlot_request

GPRS service-multislot request statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
dnMultiSlotRequest1	ACCUMULATION	INT8	-Renamed in V15.1 dnMultiSlotRequest 1- Cumulative number of uplink and/or downlink radio resource assignments for a mobile whose multislot class requires 1 downlink timeslot	BTS.CELL_15030_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
dnMultiSlotRequest2	ACCUMULATION	INT8	-Renamed in V15.1 dnMultiSlotRequest 2- Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 2	BTS.CELL_15030_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

			downlink timeslots		
dnMultiSlotRequest 3	ACCUMULA TION	INT8	-Renamed in V15.1 dnMultiSlotRequest 3- Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 3 downlink timeslots	BTS.CELL_15030_3 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
dnMultiSlotRequest 4	ACCUMULA TION	INT8	-Renamed in V15.1 dnMultiSlotRequest 4- Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 4 and more than 4 downlink timeslots	BTS.CELL_15030_4 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
dwMultiSlotReques t1	ACCUMULA TION	INT8	Cumulative number of uplink and/or downlink radio resource assignments for a mobile whose multislot class requires 1 downlink timeslot	BTS.CELL_15030_1 _CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
dwMultiSlotReques t2	ACCUMULA TION	INT8	Cumulative number of uplink and/or downlink radio	BTS.CELL_15030_2 _CUM	Sum, ntcsdcchb h,

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			resource assignments on PACCH for a mobile whose multislot class requires up to 2 downlink timeslots		ntctchbh, ntctchfrbh
dwMultiSlotRequest3	ACCUMULATION	INT8	Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 3 downlink timeslots	BTS.CELL_15030_3_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
dwMultiSlotRequest4	ACCUMULATION	INT8	Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 4 and more than 4 downlink timeslots	BTS.CELL_15030_4_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
upMultiSlotRequest1	ACCUMULATION	INT8	Cumulative number of uplink and/or downlink radio resource assignments for a mobile whose multislot class requires 1 uplink timeslot	BTS.CELL_15028_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
upMultiSlotRequest2	ACCUMULATION	INT8	Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a	BTS.CELL_15028_2_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

			mobile whose multislot class requires up to 2 uplink timeslots		
upMultiSlotRequest 3	ACCUMULATION	INT8	Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 3 uplink timeslots	BTS.CELL_15028_3_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
upMultiSlotRequest 4	ACCUMULATION	INT8	Cumulative number of uplink and/or downlink radio resource assignments on PACCH for a mobile whose multislot class requires up to 4 and more than 4 uplink timeslots	BTS.CELL_15028_4_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

7.3.26 Cell.Nortel.GSM.GPRS.Radio_Resource

GPRS service-radio resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
AvgDlThroughput	INTENSITY	FLOAT	Average value of Downlink radio throughput calculated by the flow control algorithm (without the lie factor)	BTS.CELL_15007_1_AVG	Average, ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max

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MaxDlThroughput	INTENSITY	FLOAT	Maximum value of Downlink radio throughput calculated by the flow control algorithm. (No longer relevant at the PCU level, it is always set to 0.)	BTS.CELL_15008_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
octetDiscarded	ACCUMULATION	INT8	Number of times octets discarded because the number of received PDUs exceeds the bucket size	BTS.CELL_15007_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.27 Cell.Nortel.GSM.GPRS.Suspend_Resume

GPRS/EGPRS suspend and resume procedure statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
resumeFailureAfterHOInterBSC	ACCUMULATION	INT8	Number of times the BSC does not perform a GPRS Resume proc	BTS.CELL_2068_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
resumeFailureAfterHOInterRA	ACCUMULATION	INT8	Number of times the BSC does not perform a GPRS Resume proc	BTS.CELL_2068_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
resumeSuccess	ACCUMULATION	INT8	Number of successful resume procedures	BTS.CELL_2067_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
suspendRequest	ACCUMULATION	INT8	Number of GPRS suspension request messages received by the	BTS.CELL_2066_0_CUM	Sum, ntesdcchbh, ntctchbh,

			BSC		ntetchfrbh
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7.3.28 Cell.Nortel.GSM.GPRS.Temporary_Block_Flow

GPRS service-Temporary Block Flow (TBF) statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
dlTBFAallocFailure	ACCUMULATION	INT8	Number of downlink allocation failures	BTS.CELL_15031_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dlTBFRadioFailure	ACCUMULATION	INT8	Number of downlink radio link failures	BTS.CELL_15031_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnTbfReleases	ACCUMULATION	INT8	Number of downlink TBFs released	BTS.CELL_15033_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
FirstDIUnitDataFrame	ACCUMULATION	INT8	First Downlink Unit Data Frame	BTS.CELL_15031_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
fullDuplexTbfEstablishment	ACCUMULATION	INT8	Total number of full duplex temporary block flow (TBF) established	BTS.CELL_15032_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
PDANWithUIReq	ACCUMULATION	INT8	Number of Packet DownlinkAck/Nack with Uplink Request	BTS.CELL_15034_0_CUM	Sum, ntesdcchbh, ntetchbh,

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					ntetchfrbh
ulsecondPhaseAllocFailure	ACCUMULATION	INT8	Number of second phase uplink allocation failures	BTS.CELL_15032_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
ulsecondPhaseRadioFailure	ACCUMULATION	INT8	Number of second phase uplink radio link failures	BTS.CELL_15036_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfReleases	ACCUMULATION	INT8	Number of uplink TBFs released	BTS.CELL_15033_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

7.3.29 Cell.Nortel.GSM.GPRS.UL_QoS

GPRS service-Uplink quality of service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
upTbfBronzeRejectedForMinTput	ACCUMULATION	INT8	Cumulative number of bronze users. uplink allocations rejected due to the admittance control	BTS.CELL_15062_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfBronzeSatisfactBet5090pCent	ACCUMULATION	INT8	Cumulative number of bronze users. uplink allocations with a satisfaction rate equal or more than 50% and strictly less than 90%	BTS.CELL_15062_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfBronzeSatisfactLes	ACCUMULATION	INT8	Cumulative	BTS.CELL_15062_	Sum,

s50pCent	TION		number of bronze users. uplink allocations with a satisfaction rate strictly less than 50%	4_CUM	ntcsdcchb h, ntetchbh, ntetchfrbh
upTbfBronzeSatisfactMore90pCent	ACCUMULATION	INT8	Cumulative number of bronze users. uplink allocations with a satisfaction rate equal or better than 90%	BTS.CELL_15061_1_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
upTbfGoldRejectedForMinTput	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of gold users. uplink allocations rejected due to the admittance control	BTS.CELL_15029_4_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
upTbfGoldSatisfactBet5090pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of gold users. uplink allocations with a satisfaction rate equal or more than 50% and strictly less than 90%	BTS.CELL_15029_2_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
upTbfGoldSatisfactLess50pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative	BTS.CELL_15029_3_CUM	Sum, ntcsdcchb h,

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			number of gold users. uplink allocations with a satisfaction rate strictly less than 50%		ntctchbh, ntctchfrbh
upTbfGoldSatisfactMore90pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of gold users. uplink allocations with a satisfaction rate equal or better than 90%	BTS.CELL_15029_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
upTbfSilverRejectedForMinTput	ACCUMULATION	INT8	Cumulative number of silver users. uplink allocations rejected due to the admittance control	BTS.CELL_15060_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
upTbfSilverSatisfactBet5090pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of silver users. uplink allocations with a satisfaction rate equal or more than 50% and strictly less than 90%	BTS.CELL_15034_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
upTbfSilverSatisfactLess50pCent	ACCUMULATION	INT8	Cumulative number of silver users. uplink allocations with a satisfaction rate strictly less than 50%	BTS.CELL_15062_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
upTbfSilverSatisfactMore90pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative	BTS.CELL_15031_4_CUM	Sum, ntcsdcchbh,

			number of silver users. uplink allocations with a satisfaction rate equal or better than 90%		ntetchbh, ntetchfrbh
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7.3.30 Cell.Nortel.GSM.Handovers_AMR

AMR calls handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
$\overline{\%_amrFrHoSuccessIntraCellTch}$	PERCENTAGE	FLOAT	Percentage number of successful Intracell full rate handovers for the cell, by an AMR mobile	$100 * \frac{\{amrFrHoSuccessIntraCellTch\}}{\{amrFrHoRequestIntraCellTch\}}$	Average, ntsdcchbh, ntetchbh, ntetchfrbh
$\overline{\%_amrFrHoSuccessOutgoingTch}$	PERCENTAGE	FLOAT	Percentage number of successful outgoing classic handovers from the cell (AMR	$100 * \frac{\{amrFrHoSuccessOutgoingTch\}}{\{amrFrHoRequestOutgoingTch\}}$	Average, ntsdcchbh, ntetchbh, ntetchfrbh

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			FR)		
$\overline{\%_amrFrToHrHoSuccessIntraCellTch}$	PERCENTAGE	FLOAT	Percentage number of successful Intracell full rate to half rate handovers for the cell, by an AMR mobile	$100 * \frac{\{amrFrToHrHoSuccessIntraCellTch\}}{\{amrFrToHrHoRequestIntraCellTch\}}$	Average, ntsdcchbh, ntctchbh, ntctchfrbh
$\overline{\%_amrHrHoSuccessOutgoingTch}$	PERCENTAGE	FLOAT	Percentage number of successful outgoing classic handovers from the cell (AMR HR)	$100 * \frac{\{amrHrHoSuccessOutgoingTch\}}{\{amrHrHoRequestOutgoingTch\}}$	Average, ntsdcchbh, ntctchbh, ntctchfrbh
$\overline{\%_amrHrToFrHoSuccessIntraCellTch}$	PERCENTAGE	FLOAT	Percentage number of successful Intracell half rate to full rate handovers for the cell, by an	$100 * \frac{\{amrHrToFrHoSuccessIntraCellTch\}}{\{amrHrToFrHoRequestIntraCellTch\}}$	Average, ntsdcchbh, ntctchbh, ntctchfrbh

			AMR mobile		
alarmAmrHrToFrDownHoRequiredTch	ACCUMULATION	INT8	Number of half rate to full rate alarms in AMR downlink required handovers in the cell	BTS.CELL_1951_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
alarmAmrHrToFrUpHoRequiredTch	ACCUMULATION	INT8	Number of half rate to full rate alarms in AMR uplink required handovers in the cell	BTS.CELL_1951_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrHoExecutionIntraCellTch	ACCUMULATION	INT8	Number of Intracell full rate handover executions for the cell, by an AMR mobile	BTS.CELL_1954_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrHoRequestIntraCellTch	ACCUMULATION	INT8	Number	BTS.CELL_1953_0_CUM	Sum,

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h	TION		of Intracell full rate handove r requests for the cell, by an AMR mobile		ntcsdcch bh, ntetchbh, ntetchfrb h
amrFrHoRequestOutgoingT ch	ACCUMULA TION	INT8	Number of outgoi ng handove rs (intra/ inter_bs s) requests by a full rate AMR MS	BTS.CELL_1952_0_CUM	Sum, ntcsdcch bh, ntetchbh, ntetchfrb h
amrFrHoSuccessIntraCellTc h	ACCUMULA TION	INT8	Number of successf ul Intracell full rate handove rs for the cell, by an AMR mobile	BTS.CELL_1955_0_CUM	Sum, ntcsdcch bh, ntetchbh, ntetchfrb h
amrFrHoSuccessOutgoingT ch	ACCUMULA TION	INT8	Number of successf ul outgoi ng classic handove rs from the cell	BTS.CELL_1780_1_CUM	Sum, ntcsdcch bh, ntetchbh, ntetchfrb h

			(AMR FR)		
amrFrToHrHoExecutionIntraCellTch	ACCUMULATION	INT8	Number of Intracell full rate to half rate handovers for the cell, by an AMR mobile	BTS.CELL_1954_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrToHrHoRequestIntraCellTch	ACCUMULATION	INT8	Number of Intracell full rate to half rate handover requests for the cell, by an AMR mobile	BTS.CELL_1953_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrToHrHoSuccessIntraCellTch	ACCUMULATION	INT8	Number of successful Intracell full rate to half rate handovers for	BTS.CELL_1955_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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			the cell, by an AMR mobile		
amrHrHoRequestOutgoingTch	ACCUMULATION	INT8	Number of outgoing handovers (intra/inter_bs s) requests by a half rate AMR MS	BTS.CELL_1952_1_CUM	Sum, ntsdcchbh, ntetchbhb, ntetchfrbh
amrHrHoSuccessOutgoingTch	ACCUMULATION	INT8	Number of successful outgoing classic handovers from the cell (AMR HR)	BTS.CELL_1780_2_CUM	Sum, ntsdcchbh, ntetchbhb, ntetchfrbh
amrHrToFrHoExecutionIntraCellTch	ACCUMULATION	INT8	Number of Intracell half rate to full rate handover executions for the cell, by an AMR mobile	BTS.CELL_1954_2_CUM	Sum, ntsdcchbh, ntetchbhb, ntetchfrbh
amrHrToFrHoRequestIntra	ACCUMULATION	INT8	Number	BTS.CELL_1953_2_CUM	Sum,

CellTch	TION		of Intracell half rate to full rate handovers requests for the cell, by an AMR mobile		ntcsdcchbh, ntetchbh, ntetchfrbh
amrHrToFrHoSuccessIntraCellTch	ACCUMULATION	INT8	Number of successful Intracell half rate to full rate handovers for the cell, by an AMR mobile	BTS.CELL_1955_2_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
amrQualityFrDownHoRequiredTch	ACCUMULATION	INT8	Number of AMR Quality full rate downlink required handovers in the cell	BTS.CELL_1950_3_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
amrQualityFrUpHoRequiredTch	ACCUMULATION	INT8	Number of AMR Quality	BTS.CELL_1950_2_CUM	Sum, ntcsdcchbh,

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			full rate uplink required handovers in the cell		ntetchbh, ntetchfrbh
amrQualityHrDownHoRequiredTch	ACCUMULATION	INT8	Number of AMR Quality half rate downlink required handovers in the cell	BTS.CELL_1951_3_CUM	Sum, ntesdcch bh, ntetchbh, ntetchfrbh
amrQualityHrUpHoRequiredTch	ACCUMULATION	INT8	Number of AMR Quality half rate uplink required handovers in the cell	BTS.CELL_1951_2_CUM	Sum, ntesdcch bh, ntetchbh, ntetchfrbh
capacityFrToHrHoRequiredTch	ACCUMULATION	INT8	Number of the capacity of full rate to half rate required handovers in the cell	BTS.CELL_1950_4_CUM	Sum, ntesdcch bh, ntetchbh, ntetchfrbh
intracellAmrFrDownHoRequiredTch	ACCUMULATION	INT8	Number of Intracell AMR full rate downlink required	BTS.CELL_1950_1_CUM	Sum, ntesdcch bh, ntetchbh, ntetchfrbh

			handovers in the cell		
intracellAmrFrUpHoRequiredTch	ACCUMULATION	INT8	Number of Intracell AMR full rate uplink required handovers in the cell	BTS.CELL_1950_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.31 Cell.Nortel.GSM.Handovers_dualband_mobile

Dualband mobile handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoSuccessOutgoingEbandEbandMsDualb	PERCENTAGE	FLOAT	Percentage number of successful outgoing handovers for dualband mobiles from the	$100 * \frac{\{\text{hoSuccessOutgoingEbandEbandMsDualb}\}}{\{\text{hoRequestOutgoingEbandEbandMsDualb}\}}$	Average, ntesdcchbh, ntctchbh, ntctchfrbh

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			second frequency band to the same frequency band of the network		
$\bar{\%_hoSuccessOutgoingEbandMbandMsDualb}$	PERCENT AGE	FL O A T	Percentage number of successful outgoing handovers for dualband mobiles from the second frequency band to the main frequency band of the network	$100 * \frac{\{hoSuccessOutgoingEbandMbandMsDualb\}}{\{hoRequestOutgoingEbandMbandMsDualb\}}$	Average, ntsdc chbh, ntctchbh, ntctchf rbh
$\bar{\%_hoSuccessOutgoingMbandMband}$	PERCENT AGE	FL O A	Percentage	$100 * \{hoSuccessOutgoingMbandMband\}$	Average,

MsDualb		T	number of successful outgoing handovers for dualband mobiles from the main frequency band to the same frequency band of the network	dMbandMsDualb}/{hoRequestOutgoingMbandMbandMsDualb}	ntcsdchbh, ntctchbh, ntctchfrbh
hoExecutionOutgoingEbandEbandMsDualb	ACCUMULATION	INT 8	Number of outgoing handover executions by dualband mobiles for	BTS.CELL_1791_0_CUM	Sum, ntcsdchbh, ntctchbh, ntctchfrbh

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			the cell from the second frequency band to the same frequency band of the network		
hoExecutionOutgoingEbandMbandMsDualb	ACCUMULATION	INT8	Number of outgoing handover executions by dualband mobiles for the cell from the second frequency band to the main frequency band of the	BTS.CELL_1792_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchf rbh

			netwo rk		
hoExecutionOutgoingMbandEband MsDualb	ACCUMU LATION	INT 8	Numb er of outgoi ng hando ver execut ions by dualba nd mobil es for the cell from the main freque ncy band to the secon d freque ncy band of the netwo rk	BTS.CELL_1789_0_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh
hoExecutionOutgoingMbandMband MsDualb	ACCUMU LATION	INT 8	Numb er of outgoi ng hando ver execut ions	BTS.CELL_1790_0_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh

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			by dualband mobiles for the cell from the main frequency band to the same frequency band of the network		
hoRequestOutgoingEbandEbandMsDualb	ACCUMULATION	INT8	Number of outgoing handovers requested by dualband mobiles from the second frequency band to the same frequency band	BTS.CELL_1784_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchf rbh

			of the netwo rk		
hoRequestOutgoingEbandMbandMs Dualb	ACCUMU LATION	INT 8	Numb er of outgoi ng hando vers reques ted by dualba nd mobil es from the secon d freque ncy band to the main freque ncy band of the netwo rk	BTS.CELL_1785_0_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh
hoRequestOutgoingMbandMbandMs Dualb	ACCUMU LATION	INT 8	Numb er of outgoi ng hando vers reques ted by dualba nd	BTS.CELL_1783_0_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh

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			mobiles from the main frequency band to the same frequency band of the network		
hoSuccessOutgoingEbandEbandMsDualb	ACCUMULATION	INT8	Number of successful outgoing handovers for dualband mobiles from the second frequency band to the same frequency band of the network	BTS.CELL_1787_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchf rbh
hoSuccessOutgoingEbandMbandMs	ACCUMU	INT	Numb	BTS.CELL_1788_0_CUM	Sum,

Dualband	ACCUMULATION	8	Number of successful outgoing handovers for dualband mobiles from the second frequency band to the main frequency band of the network	BTS.CELL_1786_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchf rbh
hoSuccessOutgoingMbandMbandMsDualband	ACCUMULATION	8	Number of successful outgoing handovers for dualband mobiles	BTS.CELL_1786_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchf rbh

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			from the main frequency band to the same frequency band of the network		
requestedHandoverForDualBandMSFromMainBand	ACCUMULATION	INT 8	<ul style="list-style-type: none"> - Obsolete in V15.1 - Number of requested handovers by dualband MSs from main frequency band 	BTS.CELL_8100_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
requestedHandoverForDualBandMSFromSecondBand	ACCUMULATION	INT 8	<ul style="list-style-type: none"> - Obsolete in V15.1 - Number of requested handovers 	BTS.CELL_8102_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

			by dualband MSs from second frequency band		
requestedHandoverForDualBandMS ToMainBand	ACCUMULATION	INT 8	- Obsol ete in V15.1 - Numb er of reques ted hando vers by dualba nd MSs to main freque ncy band	BTS.CELL_8101_0_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh
requestedHandoverForDualBandMS ToSecondBand	ACCUMULATION	INT 8	- Obsol ete in V15.1 - Numb er of reques ted hando	BTS.CELL_8103_0_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh

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			vers by dualba nd MSs to secon d freque ncy band		
requestedHandoverForDualBandMS ToSecondVersusMainBand	INTENSIT Y	FL OA T	Ratio of numbe r of reques ted hando vers by dualba nd MSs to secon d freque ncy band to the numbe r of reques ted hando ver for dualba nd MS to main freque ncy band	BTS.CELL_8104_0_AVG	Averag e, ntcsdc chbh, ntctchb h, ntctchf rbh, tot, min, max

7.3.32 Cell.Nortel.GSM.Handovers_filtered

Filtered handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
capacityHoFiltered	ACCUMULATION	INT8	Number of capacity intracell handovers filtered	BTS.CELL_1933_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
qualityHoFiltered	ACCUMULATION	INT8	Number of quality intracell handovers filtered	BTS.CELL_1932_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

7.3.33 Cell.Nortel.GSM.Handovers_InterBSS_Direct_Retry

Inter BSS handover due to directed retry statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoExecutionOutgoingInterBssForDirectedRetry	PERCENTAGE	FLOAT	Percentage number of successful outgoing inter BSS handover from the cell for	$100 * \frac{\text{\{hoSuccessOutgoingInterBssForDirectedRetry\}}}{\text{\{hoExecutionOutgoingInterBssForDirectedRetry\}}}$	Average, ntesdcchbh, ntetchbh, ntetchfrbh

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			directed retry reason		
hoExecutionOutgoingInterBssForDirectedRetry	ACCUMULATION	INT 8	Number of outgoing inter BSS handover execution attempts from the cell for directed retry reason	BTS.CELL_1066_1_CUM	Sum, ntsdccbhbh, ntctchbh, ntctchfrbh
hoSuccessOutgoingInterBssForDirectedRetry	ACCUMULATION	INT 8	Number of successful outgoing inter BSS handover from the cell for directed retry reason	BTS.CELL_1068_1_CUM	Sum, ntsdccbhbh, ntctchbh, ntctchfrbh

7.3.34 Cell.Nortel.GSM.Handovers_InterBSS_SDCCH

SDCCH-Inter BSS handovers statistics

KPI	Type	Data Ty	Description	Derivation	Aggregation
-----	------	---------	-------------	------------	-------------

		pe			
$\bar{\%_hoSuccessIncomingInterBssSdcch}$	PERCENT AGE	FL OAT	Percent age number of successful incoming inter-bss handovers on SDCCH	$100 * \frac{\{hoSuccessIncomingInterBssSdcch\}}{\{hoRequestIncomingInterBssSdcch\}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh
$\bar{\%_hoSuccessOutgoingFirstInterSdcch}$	PERCENT AGE	FL OAT	Percent age number of successful outgoing inter-bss handovers on SDCCH after first attempt	$100 * \frac{\{hoSuccessOutgoingFirstInterSdcch\}}{\{hoRequestOutgoingInterBssSdcch\}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh
$\bar{\%_hoSuccessOutgoingInterBssSdcch}$	PERCENT AGE	FL OAT	Percent age number of successful outgoing inter-bss handovers on	$100 * \frac{\{hoSuccessOutgoingInterBssSdcch\}}{\{hoRequestOutgoingInterBssSdcch\}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh

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			SDCCH		
hoExecutionIncomingInterBssSdcch	ACCUMULATION	INT8	Number of incoming inter-bss handovers on SDCCH executed	BTS.CELL_1147_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoExecutionOutgoingInterBssSdcch	ACCUMULATION	INT8	Number of outgoing inter handovers on SDCCH executed	BTS.CELL_1141_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoFailureIncomingInterBssSdcchChannelActivateNack	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on SDCCH with cause receipt from the BTS of a CHANNEL ACTIVATE NACK message, which	BTS.CELL_1761_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

			have been refused		
hoFailureIncomingInterBssSdc chCICIncompatible	ACCUMU LATION	IN T8	Number of incomin g inter BSS handov er requests , on SDCCH with cause CIC and speech coding algorith m incomp atible OR target cell and speech coding algorith m incomp atible OR CIC and channel mode incomp atible OR target	BTS.CELL_1761_5_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

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			cell and channel mode incompatible AND no possible fallback		
hoFailureIncomingInterBssSdcchHoNotAllowed	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on SDCCH with cause incoming handover not allowed in the cell, which have been refused	BTS.CELL_1761_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoFailureIncomingInterBssSdcchRadioLack	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on SDCCH with cause lack of	BTS.CELL_1761_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

			radio resources, which have been refused		
hoFailureIncomingInterBssSdcchTchnAckTimerExp	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on SDCCH with cause expiration of TCHnAck timer, which have been refused	BTS.CELL_1761_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoFailureIncomingInterBssSdcchTerrestLack	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on SDCCH with cause	BTS.CELL_1761_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

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			lack of terrestrial resources, which have been refused		
hoFailureOutgoingInterBssSdcchHoNotAllowed	ACCUMULATION	INT8	Number of outgoing inter BSS handover requests, on SDCCH with cause incoming handover not allowed in the cell, which have been refused	BTS.CELL_1765_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoFailureOutgoingInterBssSdcchOtherCase	ACCUMULATION	INT8	Number of outgoing inter BSS handover requests, on SDCCH with cause .every	BTS.CELL_1765_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

			other cases., which have been refused		
hoFailureOutgoingInterBssSdcchRadioLack	ACCUMULATION	INT8	Number of outgoing inter BSS handover requests , on SDCCH with cause lack of radio resources, which have been refused	BTS.CELL_1765_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoFailureOutgoingInterBssSdcchT7TimerExp	ACCUMULATION	INT8	Number of outgoing inter BSS handover requests , on SDCCH with cause T7 timer	BTS.CELL_1765_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

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			expirati on, which have been refused		
hoFailureOutgoingInterBssSdc chTerrestLack	ACCUMU LATION	IN T8	Number of outgoin g inter BSS handov er requests , on SDCCH with cause lack of terrestri al resourc es, which have been refused	BTS.CELL_1765_1_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh
hoRequestIncomingInterBssSd cch	ACCUMU LATION	IN T8	Number of incomin g inter- bss handov ers on SDCCH requeste d	BTS.CELL_1145_0_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh
hoRequestOutgoingInterBssSd cch	ACCUMU LATION	IN T8	Number of outgoin g inter- bss handov ers on	BTS.CELL_1151_0_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh

			SDCCH requeste d		
hoSuccessIncomingInterBssSd cch	ACCUMU LATION	IN T8	Number of successf ul incomin g inter- bss handov ers on SDCCH	BTS.CELL_1149_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoSuccessOutgoingFirstInterS dcch	ACCUMU LATION	IN T8	Number of successf ul outgoin g inter- bss handov ers on SDCCH after first attempt	BTS.CELL_1153_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoSuccessOutgoingInterBssSd cch	ACCUMU LATION	IN T8	Number of successf ul outgoin g inter- bss handov ers on SDCCH	BTS.CELL_1143_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessIncomingInterBss SdcchOtherCases	ACCUMU LATION	IN T8	Number of	BTS.CELL_1775_1_CUM	Sum, ntesdc

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			refusals to accept an incoming inter-bss handover on SDCCH in the cell with cause .every other cases.		chbh, ntetchbh, ntetchf rbh
hoUnsuccessIncomingInterBssSdcchTimerExp	ACCUMULATION	INT8	Number of refusals to accept an incoming inter-bss handover on SDCCH in the cell with cause timer expiration	BTS.CELL_1775_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoUnsuccessOutgoingInterBssNAttemptSdcch	ACCUMULATION	INT8	Number of unsuccessful outgoing inter handovers on SDCCH	BTS.CELL_1170_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh

			to a non-heading cell without reestablishment in the serving cell		
hoUnsuccessOutgoingInterCellSdcchOtherCases	ACCUMULATION	INT8	Number of refusals to accept an outgoing inter-cell handover on SDCCH in the cell with cause .every other cases.	BTS.CELL_1771_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoUnsuccessOutgoingInterCellSdcchReturnOldChannel	ACCUMULATION	INT8	Number of refusals to accept an outgoing inter-cell handover on	BTS.CELL_1771_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

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			SDCCH in the cell with cause mobile returns to the old channel		
hoUnsuccessOutgoingInterCellSdcchT3103TimerExp	ACCUMULATION	INT8	Number of refusals to accept an outgoing inter-cell handover on SDCCH in the cell with cause T3103 (respectively T3107) timer expiration for V12 (respectively V11)	BTS.CELL_1771_1_CUM	Sum, ntesdchbh, ntetchbh, ntetchf rbh
hoUnsuccessReestOutgoingInterBssSdcch	ACCUMULATION	INT8	Number of unsuccessful outgoing inter-bss handov	BTS.CELL_1159_0_CUM	Sum, ntesdchbh, ntetchbh, ntetchf rbh

			ers on SDCCH for which the communication has been re-established on starting channel		
Tot_hoFailureIncomingInterBssSdcch	ACCUMULATION	INT8	Total number of incoming inter BSS handover requests, on SDCCH which has been refused	{hoFailureIncomingInterBssSdcchRadioLack} + {hoFailureIncomingInterBssSdcchTerrestLack} + {hoFailureIncomingInterBssSdcchHoNotAllowed} + {hoFailureIncomingInterBssSdcchChannelActivateNack} + {hoFailureIncomingInterBssSdcchTchnAckTimerExp} + {hoFailureIncomingInterBssSdcchCICIncompatible}	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
Tot_hoFailureOutgoingInterBssSdcch	ACCUMULATION	INT8	Total number of outgoing inter BSS handover requests, on SDCCH which	{hoFailureOutgoingInterBssSdcchRadioLack} + {hoFailureOutgoingInterBssSdcchTerrestLack} + {hoFailureOutgoingInterBssSdcchHoNotAllowed} + {hoFailureOutgoingInterBssSdcchT7TimerExp} + {hoFailureOutgoingInterBssSdcchOtherCase}	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

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			has been refused.		
Tot_hoUnsuccessIncomingInterBSSDcch	ACCUMULATION	INT8	Total number of refusals to accept an incoming inter-bss handover on SDCCH in the cell	{hoUnsuccessIncomingInterBssSdcchOtherCases} + {hoUnsuccessIncomingInterBssSdcchTimerExp}	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
Tot_hoUnsuccessOutgoingInterCellSdcch	ACCUMULATION	INT8	Total number of refusals to accept an outgoing inter-cell handover on SDCCH in the cell	{hoUnsuccessOutgoingInterCellSdcchReturnOldChannel} + {hoUnsuccessOutgoingInterCellSdcchOtherCases} + {hoUnsuccessOutgoingInterCellSdcchT3103TimerExp}	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

7.3.35 Cell.Nortel.GSM.Handovers_InterBSS_TCH

TCH-Inter BSS handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoSuccessIncomingInterBs	PERCENTAGE	FL OA	Percentage	100 * {hoSuccessIncomingInterBss}/	Average,

s		T	number of successful incoming inter-bss handovers on TCH	{hoRequestIncomingInterBss}	ntcsdc chbh, ntctchbh, ntctchf rbh
$\bar{\%_hoSuccessOutgoingFirstInter}$	PERCENT AGE	FL OAT	Percentage number of successful outgoing inter-bss handovers on TCH after first attempt	$100 * \frac{\{hoSuccessOutgoingFirstInter\}}{\{hoRequestOutgoingInterBss\}}$	Average, ntcsc chbh, ntctchbh, ntctchf rbh
$\bar{\%_hoSuccessOutgoingInterBs}$	PERCENT AGE	FL OAT	Percentage number of successful outgoing inter-bss handovers on TCH except those after	$100 * \frac{\{hoSuccessOutgoingInterBss\}}{\{hoRequestOutgoingInterBss\}}$	Average, ntcsc chbh, ntctchbh, ntctchf rbh

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			first attempt		
hoExecutionIncomingInterBss	ACCUMULATION	INT 8	Number of incoming inter-bss handovers on TCH execution attempts	BTS.CELL_1072_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoExecutionOutgoingInterBss	ACCUMULATION	INT 8	Number of outgoing inter-bss handovers on TCH executed	BTS.CELL_1066_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoFailureIncomingInterBssTchChannelActivateNack	ACCUMULATION	INT 8	Number of incoming inter BSS handover requests, on TCH with cause receipt from the BTS of a CHANNEL ACTIVATE NACK	BTS.CELL_1760_3_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

			message , which have been refused		
hoFailureIncomingInterBssTo hCICIncompatible	ACCUMU LATION	INT 8	Number of incomin g inter BSS handove r requests , on TCH with cause CIC and speech coding algorith m incompa tible OR target cell and speech coding algorith m incompa tible OR CIC and channel mode incompa tible OR target cell and channel	BTS.CELL_1760_5_CUM	Sum, ntcsdc chbh, ntctchb h, ntctchf rbh

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			mode incompatible AND no possible fallback		
hoFailureIncomingInterBssTchHoNotAllowed	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on TCH with cause incoming handover not allowed in the cell, which have been refused	BTS.CELL_1760_2_CUM	Sum, ntesdchbh, ntctchbh, ntctchf rbh
hoFailureIncomingInterBssTchRadioLack	ACCUMULATION	INT8	Number of incoming inter BSS handover requests, on TCH with cause lack of radio resources, which	BTS.CELL_1760_0_CUM	Sum, ntesdchbh, ntctchbh, ntctchf rbh

			have been refused		
hoFailureIncomingInterBssTchTchnAckTimerExp	ACCUMULATION	INT 8	Number of incoming inter BSS handover requests, on TCH with cause expiration of TCHnAck timer, which have been refused	BTS.CELL_1760_4_CUM	Sum, ntesdc chbh, ntctchbh, ntctchf rbh
hoFailureIncomingInterBssTchTerrestLack	ACCUMULATION	INT 8	Number of incoming inter BSS handover requests, on TCH with cause lack of terrestrial resource	BTS.CELL_1760_1_CUM	Sum, ntesdc chbh, ntctchbh, ntctchf rbh

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			s, which have been refused		
hoFailureOutgoingInterBssTchHoNotAllowed	ACCUMULATION	INT 8	Number of outgoing inter BSS handover requests, on TCH with cause incoming handover not allowed in the cell, which have been refused	BTS.CELL_1764_2_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoFailureOutgoingInterBssTchIncompatible	ACCUMULATION	INT 8	Number of outgoing inter BSS handover requests, on TCH with cause CIC and speech coding algorithm incompat	BTS.CELL_1764_5_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

			tible OR target cell and speech coding algorith m incompa tible OR CIC and channel mode incompa tible OR target cell and channel mode incompa tible AND no possible fallback , which have been refused		
hoFailureOutgoingInterBssTc hOtherCases	ACCUMU LATION	INT 8	Number of outgoi ng inter BSS handove r requests , on TCH with cause every	BTS.CELL_1764_4_CUM	Sum, ntsdc chbh, ntctchb h, ntctchf rbh

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			other cases, which have been refused		
hoFailureOutgoingInterBssTchRadioLack	ACCUMULATION	INT 8	Number of outgoing inter BSS handover requests, on TCH with cause lack of radio resources, which have been refused	BTS.CELL_1764_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoFailureOutgoingInterBssTchT7TimerExp	ACCUMULATION	INT 8	Number of outgoing inter BSS handover requests, on TCH with cause T7 timer expiration, which have been refused	BTS.CELL_1764_3_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

hoFailureOutgoingInterBssTchTerrestLack	ACCUMULATION	INT 8	Number of outgoing inter BSS handover requests, on TCH with cause lack of terrestrial resources, which have been refused	BTS.CELL_1764_1_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoRequestIncomingInterBss	ACCUMULATION	INT 8	Number of incoming inter-bss handovers on TCH requested	BTS.CELL_1070_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoRequestOutgoingInterBss	ACCUMULATION	INT 8	Number of outgoing inter-bss handovers on TCH requested	BTS.CELL_1076_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

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hoSuccessIncomingInterBss	ACCUMULATION	INT 8	Number of successful incoming inter-bss handovers on TCH	BTS.CELL_1074_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoSuccessOutgoingFirstInter	ACCUMULATION	INT 8	Number of successful outgoing inter-bss handovers on TCH after first attempt	BTS.CELL_1078_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoSuccessOutgoingInterBss	ACCUMULATION	INT 8	Number of successful outgoing inter-bss handovers on TCH except those after first attempt	BTS.CELL_1068_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoUnsuccessIncomingInterBss TchOtherCases	ACCUMULATION	INT 8	Number of refusals to accept an	BTS.CELL_1774_1_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf

			incoming inter-bss handover on TCH in the cell with cause .every other cases.		rbh
hoUnsuccessIncomingInterBssTchTimerExp	ACCUMULATION	INT 8	Number of refusals to accept an incoming inter-bss handover on TCH in the cell with cause timer expiration	BTS.CELL_1774_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoUnsuccessOutgoingInterBssNAttemptTch	ACCUMULATION	INT 8	Number of unsuccessful outgoing inter handovers on TCH to a non-	BTS.CELL_1169_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

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			heading cell without reestablishment in the serving cell		
hoUnsuccessOutgoingInterCellTchOtherCases	ACCUMULATION	INT 8	Number of refusals to accept an outgoing inter-cell handover on TCH in the cell with cause .every other cases.	BTS.CELL_1770_2_CUM	Sum, ntesdc chbh, ntctchbh, ntctchf rbh
hoUnsuccessOutgoingInterCellTchReturnOldChannel	ACCUMULATION	INT 8	Number of refusals to accept an outgoing inter-cell handover on TCH in the cell with cause mobile returns to the old	BTS.CELL_1770_0_CUM	Sum, ntesdc chbh, ntctchbh, ntctchf rbh

			channel		
hoUnsuccessOutgoingInterCellTchT3103TimerExp	ACCUMULATION	INT 8	Number of refusals to accept an outgoing inter-cell handover on TCH in the cell with cause T3103 (respectively T3107) timer expiration for V12 (respectively V11)	BTS.CELL_1770_1_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh
hoUnsuccessReestOutgoingInterBssTch	ACCUMULATION	INT 8	Number of unsuccessful outgoing inter-bss handovers on TCH for which the commu	BTS.CELL_1136_0_CUM	Sum, ntsdc chbh, ntctchbh, ntctchf rbh

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			<p>nication has been re-established on starting channel</p>		
Tot_hoFailureIncomingInterBssTch	ACCUMULATION	INT 8	<p>Total number of incoming inter BSS handover requests, on TCH which has been refused</p>	<p>{hoFailureIncomingInterBssTchRadioLack} + {hoFailureIncomingInterBssTchTerrestLack} + {hoFailureIncomingInterBssTchHoNotAllowed} + {hoFailureIncomingInterBssTchChannelActivateNack} + {hoFailureIncomingInterBssTchTchnAckTimerExp} + {hoFailureIncomingInterBssTchCICIncompatible}</p>	<p>Sum, ntesdc chbh, ntctchbh, ntctchf rbh</p>
Tot_hoFailureOutgoingInterBssTch	ACCUMULATION	INT 8	<p>Total number of outgoing inter BSS handover requests, on TCH which has been refused.</p>	<p>{hoFailureOutgoingInterBssTchRadioLack} + {hoFailureOutgoingInterBssTchTerrestLack} + {hoFailureOutgoingInterBssTchHoNotAllowed} + {hoFailureOutgoingInterBssTchT7TimerExp} + {hoFailureOutgoingInterBssTchOtherCases} + {hoFailureOutgoingInterBssTchIncompatible}</p>	<p>Sum, ntesdc chbh, ntctchbh, ntctchf rbh</p>
Tot_hoUnsuccessIncomingInterBSSTch	ACCUMULATION	INT 8	<p>Total number of refusals to accept an</p>	<p>{hoUnsuccessIncomingInterBssTchOtherCases} + {hoUnsuccessIncomingInterBssTchTimerExp}</p>	<p>Sum, ntesdc chbh, ntctchbh, ntctchf rbh</p>

			incoming inter-bss handover on TCH in the cell		
Tot_hoUnsuccessOutgoingInterCellTch	ACCUMULATION	INT 8	Total number of refusals to accept an outgoing inter-cell handover on TCH in the cell	{hoUnsuccessOutgoingInterCellTchReturnOldChannel} + {hoUnsuccessOutgoingInterCellTchOtherCases} + {hoUnsuccessOutgoingInterCellTchT3103TimerExp}	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

7.3.36 Cell.Nortel.GSM.Handovers_IntraBSS_Direct_Retry

Intra BSS handover due to directed retry statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoSuccessOutgoingIntraBssForDirectedRetry	PERCENTAGE	FLOAT	Percentage number of successful outgoing intra	100 * {hoSuccessOutgoingIntraBssForDirectedRetry} / {hoExecutionOutgoingIntraBssForDirectedRetry}	Average, ntsdccchbh, ntctchbh, ntctchfrbh

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			BSS handov er from the cell for directe d retry reason		
hoExecutionOutgoingIntraBss ForDirectedRetry	ACCUMUL ATION	INT 8	Numbe r of outgoi ng intra BSS handov er executi on attemp ts from the cell for directe d retry reason	BTS.CELL_1065_1_CUM	Sum, ntcsdec hbh, ntetchb h, ntetchfr bh
hoSuccessOutgoingIntraBssFo rDirectedRetry	ACCUMUL ATION	INT 8	Numbe r of succes sful outgoi ng intra BSS handov er from the cell for directe d retry reason	BTS.CELL_1067_1_CUM	Sum, ntcsdec hbh, ntetchb h, ntetchfr bh

7.3.37 Cell.Nortel.GSM.Handovers_IntraBSS_SDCCH

SDCCH-Intra BSS handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
$\bar{\%_hoSuccessIncomingIntraBssSdcch}$	PERCENT AGE	FLOAT	Percent age number of successful incoming intra-bss handovers on SDCCH	$100 * \frac{\{hoSuccessIncomingIntraBssSdcch\}}{\{Nortel.Handovers_InterBSS_SDCCH.hoRequestIncomingInterBssSdcch\}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh
$\bar{\%_hoSuccessOutgoingFirstIntraSdcch}$	PERCENT AGE	FLOAT	Percent age number of successful outgoing intra-bss handovers on SDCCH after first attempt	$100 * \frac{\{hoSuccessOutgoingFirstIntraSdcch\}}{\{hoRequestOutgoingIntraBssSdcch\}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh
$\bar{\%_hoSuccessOutgoingIntraBssSdcch}$	PERCENT AGE	FLOAT	Percent age number of successful	$100 * \frac{\{hoSuccessOutgoingIntraBssSdcch\}}{\{hoRequestOutgoingIntraBssSdcch\}}$	Average, ntesdcchbh, ntetch

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			ul outgoi g intra- bss handov ers on SDCCH		bh, ntetchf rbh
hoExecutionIncomingIntraBss Sdcch	ACCUMU LATION	IN T8	Number of incomin g intra- bss handov ers on SDCCH executi on attempt	BTS.CELL_1146_0_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh
hoExecutionOutgoingIntraBss Sdcch	ACCUMU LATION	IN T8	Number of outgoi g intra- bss handov ers on SDCCH execute d	BTS.CELL_1140_0_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh
hoFailureIncomingIntraBssSdc chChannelActivateNack	ACCUMU LATION	IN T8	Number of incomin g intra BSS handov er requests , on SDCCH with cause receipt from the BTS of a	BTS.CELL_1759_2_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh

			CHAN NEL ACTIV ATE NACK messag e, which have been refused		
hoFailureIncomingIntraBssSdc chHoNotAllowed	ACCUMU LATION	IN T8	Number of incomin g intra BSS handov er requests , on SDCCH with cause incomin g handov er not allowed in the cell, which have been refused	BTS.CELL_1759_1_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoFailureIncomingIntraBssSdc chRadioLack	ACCUMU LATION	IN T8	Number of incomin g intra BSS handov	BTS.CELL_1759_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf

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			er requests , on SDCCH with cause lack of radio resources, which have been refused		rbh
hoFailureIncomingIntraBssSdcchTchnAckTimerExp	ACCUMULATION	INT8	Number of incoming intra BSS handover requests , on SDCCH with cause expiration of TCHnAck timer, which have been refused	BTS.CELL_1759_3_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoFailureOutgoingIntraBssSdcchChannelActivateNack	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests , on SDCCH	BTS.CELL_1763_2_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

			with cause receipt from the BTS of a CHAN NEL ACTIV ATE NACK messag e, which have been refused		
hoFailureOutgoingIntraBssSdc chHoNotAllowed	ACCUMU LATION	IN T8	Number of outgoin g intra BSS handov er requests , on SDCCH with cause incomin g handov er not allowed in the cell, which have been refused	BTS.CELL_1763_1_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh

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hoFailureOutgoingIntraBssSdcchRadioLack	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests , on SDCCH with cause lack of radio resources, which have been refused	BTS.CELL_1763_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoFailureOutgoingIntraBssSdcchTchnAckTimerExp	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests , on SDCCH with cause expiration of TCHnAck timer, which have been refused	BTS.CELL_1763_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoRequestIncomingIntraBssSdcch	ACCUMULATION	INT8	Number of incoming intra-	BTS.CELL_1144_0_CUM	Sum, ntesdcchbh, ntetch

			bss handov ers on SDCCH requeste d		bh, ntetchf rbh
hoRequestOutgoingIntraBssSd cch	ACCUMU LATION	IN T8	Number of outgoi ng intra- bss handov ers on SDCCH requeste d	BTS.CELL_1150_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoSuccessIncomingIntraBssSd cch	ACCUMU LATION	IN T8	Number of successf ul incomi ng intra- bss handov ers on SDCCH	BTS.CELL_1148_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoSuccessOutgoingFirstIntraS dcch	ACCUMU LATION	IN T8	Number of successf ul outgoi ng intra- bss handov ers on SDCCH after first attempt	BTS.CELL_1152_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

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hoSuccessOutgoingIntraBssSdcch	ACCUMULATION	INT8	Number of successful outgoing intra-bss handovers on SDCCH	BTS.CELL_1142_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoUnsuccessIncomingIntraCellSdcchReturnOldChannel	ACCUMULATION	INT8	Number of refusals to accept an incoming intra-BSS handover on SDCCH in the cell with cause mobile returns to the old channel (HAND OVER FAILURE before T3103 (respectively T3107) timer expiration for V12 (respect	BTS.CELL_1773_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

			ively V11))		
hoUnsuccessIncomingIntraCell SdcchT3103TimerExp	ACCUMU LATION	IN T8	Number of refusals to accept an incomin g intra- BSS handov er on SDCCH in the cell with cause receipt from the BTS of a CHAN NEL ACTIV ATE NACK messag e	BTS.CELL_1773_1_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessOutgoingIntraBss NAttemptSdcch	ACCUMU LATION	IN T8	Number of unsucce ssful outgoin g intra handov ers on SDCCH to a non-	BTS.CELL_1168_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

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			heading cell without reestabl ishment in the serving cell		
hoUnsuccessOutgoingIntraCell SdcchReturnOldChannel	ACCUMU LATION	IN T8	Number of refusals to accept an outgoin g Intra- BSS handov er on SDCCH in the cell with cause mobile returns to the old channel (HAND OVER FAILU RE before T3103 (respect ively T3107) timer expirati on for V12 (respect ively V11))	BTS.CELL_1769_0_CUM	Sum, ntcsdc chbh, ntetch bh, ntetchf rbh

hoUnsuccessOutgoingIntraCellSdcchT3103TimerExp	ACCUMULATION	INT8	Number of refusals to accept an outgoing Intra-BSS handover on SDCCH in the cell with cause receipt from the BTS of a CHANNEL ACTIVATED NACK message	BTS.CELL_1769_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
hoUnsuccessReestIncomingInt raBssSdcch	ACCUMULATION	INT8	Number of unsuccessful incoming intra-bss handovers on SDCCH for which the	BTS.CELL_1160_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

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			commu nication has been re- establis hed on starting channel		
hoUnsuccessReestOutgoingIntraBssSdcch	ACCUMULATION	INT8	Number of unsuccessful outgoing intra-bss handovers on SDCCH for which the communication has been re-established on starting channel	BTS.CELL_1158_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
Tot_hoFailureIncomingIntraBssSdcch	ACCUMULATION	INT8	Total number of incoming intra BSS handover requests, on SDCCH which has been refused.	{hoFailureIncomingIntraBssSdcchRadioLack} + {hoFailureIncomingIntraBssSdcchHoNotAllowed} + {hoFailureIncomingIntraBssSdcchChannelActivateNack} + {hoFailureIncomingIntraBssSdcchTchnAckTimerExp}	Sum, ntesdcchbh, ntetchbh, ntetchf rbh

Tot_hoUnsuccessOutgoingIntraCellSdcch	ACCUMULATION	INT8	Total number of refusals to accept an outgoing Intra-BSS handover on SDCCH in the cell	{hoUnsuccessOutgoingIntraCellSdcchReturnOldChannel}+ {hoUnsuccessOutgoingIntraCellSdcchT3103TimerExp}	Sum, ntesdcchbh, ntetchbh, ntetchf rbh
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7.3.38 Cell.Nortel.GSM.Handovers_IntraBSS_TCH

TCH-Intra BSS handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoSuccessIncomingIntraBss	PERCENTAGE	FLOAT	Percentage number of successful incoming intra-bss handovers on TCH	$100 * \frac{\text{hoSuccessIncomingIntraBss}}{\text{hoRequestIncomingIntraBss}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh
%_hoSuccessIncomingIntraBssTchMsDualb	PERCENTAGE	FLOAT	Percentage number of successful incoming intra BSS handovers on TCH	$100 * \frac{\text{hoSuccessIncomingIntraBssTchMsDualb}}{\text{hoRequestIncomingIntraBssTchMsDualb}}$	Average, ntesdcchbh, ntetchbh, ntetchf rbh

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			for dualband mobiles		rbh
$\bar{\%_hoSuccessOutgoingFirstIntra}$	PERCENT AGE	FL OA T	Percentage number of successful outgoing intra-bss handovers on TCH after first attempt	$100 * \frac{\{hoSuccessOutgoingFirstIntra\}}{\{hoRequestOutgoingIntraBss\}}$	Avera ge, ntesdc chbh, ntetch bh, ntetchf rbh
$\bar{\%_hoSuccessOutgoingIntraBss}$	PERCENT AGE	FL OA T	Percentage number of successful outgoing intra-bss handovers on TCH	$100 * \frac{\{hoSuccessOutgoingIntraBss\}}{\{hoRequestOutgoingIntraBss\}}$	Avera ge, ntesdc chbh, ntetch bh, ntetchf rbh
hoExecutionIncomingIntraBss	ACCUMU LATION	IN T8	Number of incoming intra-bss handovers on TCH execution attempts	BTS.CELL_1071_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoExecutionIncomingIntraBssTchMsDualb	ACCUMU LATION	IN T8	Number of incoming intra BSS handovers on TCH execution attempts for dualband mobiles	BTS.CELL_1794_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoExecutionOutgoingIntraBss	ACCUMU LATION	IN T8	Number of outgoing intra-bss handovers on TCH executed	BTS.CELL_1065_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf

					rbh
hoFailureIncomingIntraBssTchChannelActivateNack	ACCUMULATION	INT8	Number of incoming intra BSS handover requests, on TCH with cause receipt from the BTS of a CHANNEL ACTIVATE NACK message, which have been refused	BTS.CELL_1758_2_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoFailureIncomingIntraBssTchHoNotAllowed	ACCUMULATION	INT8	Number of incoming intra BSS handover requests, on TCH with cause incoming handover not allowed in the cell, which have been refused	BTS.CELL_1758_1_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoFailureIncomingIntraBssTchIncompatible	ACCUMULATION	INT8	Number of incoming intra BSS handover requests,	BTS.CELL_1758_4_CUM	Sum, ntesdc chbh, ntetch bh,

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			on TCH with cause target cell and speech coding algorithm incompatible OR target cell and channel mode incompatible AND no possible fallback		ntetchf rbh
hoFailureIncomingIntraBssTchRadioLack	ACCUMULATION	INT8	Number of incoming intra BSS handover requests, on TCH with cause lack of radio resources, which have been refused	BTS.CELL_1758_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoFailureIncomingIntraBssTchTchnAckTimerExp	ACCUMULATION	INT8	Number of incoming intra BSS handover requests, on TCH with cause expiration of TCHnAck timer, which have been refused	BTS.CELL_1758_3_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

hoFailureOutgoingIntraBssTchChannelActivateNack	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests, on TCH with cause receipt from the BTS of a CHANNEL ACTIVATION message, which have been refused	BTS.CELL_1762_2_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoFailureOutgoingIntraBssTchHoNotAllowed	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests, on TCH with cause incoming handover not allowed in the cell, which have been refused	BTS.CELL_1762_1_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoFailureOutgoingIntraBssTchIncompatible	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests, on TCH with cause	BTS.CELL_1762_4_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh

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			expiration of TCHnAck timer, which have been refused		
hoFailureOutgoingIntraBssTchRadioLack	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests, on TCH with cause lack of radio resources, which have been refused	BTS.CELL_1762_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoFailureOutgoingIntraBssTchTchnAckTimerExp	ACCUMULATION	INT8	Number of outgoing intra BSS handover requests, on TCH with cause expiration of TCHnAck timer, which have been refused	BTS.CELL_1762_3_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoRequestIncomingIntraBss	ACCUMULATION	INT8	Number of incoming intra-bss handovers on TCH requested	BTS.CELL_1069_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoRequestIncomingIntraBssTchMsDualb	ACCUMULATION	INT8	Number of incoming	BTS.CELL_1793_0_CUM	Sum, ntesdc

			intra BSS handovers on TCH requested by dualband mobiles		chbh, ntetchbh, ntetchf rbh
hoRequestOutgoingIntraBss	ACCUMULATION	INT8	Number of outgoing intra-bss handovers on TCH requested	BTS.CELL_1075_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoSuccessIncomingIntraBss	ACCUMULATION	INT8	Number of successful incoming intra-bss handovers on TCH	BTS.CELL_1073_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoSuccessIncomingIntraBssTchMsDualb	ACCUMULATION	INT8	Number of successful incoming intra BSS handovers on TCH for dualband mobiles	BTS.CELL_1795_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh
hoSuccessOutgoingFirstIntra	ACCUMULATION	INT8	Number of successful outgoing intra-bss handovers on TCH after first attempt	BTS.CELL_1077_0_CUM	Sum, ntesdc chbh, ntetchbh, ntetchf rbh

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hoSuccessOutgoingIntraBss	ACCUMULATION	INT8	Number of successful outgoing intra-bss handovers on TCH	BTS.CELL_1067_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessIncomingIntraCellTchReturnOldChannel	ACCUMULATION	INT8	Number of refusals to accept an incoming intra-BSS handover on TCH in the cell with cause mobile returns to the old channel (HANDOVER FAILURE before T3103 (respectively T3107) timer expiration for V12 (respectively V11))	BTS.CELL_1772_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessIncomingIntraCellTchT3103TimerExp	ACCUMULATION	INT8	Number of refusals to accept an incoming intra-BSS handover on TCH in the cell with cause receipt from the BTS of a CHANNE	BTS.CELL_1772_1_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

			L ACTIVAT E NACK message		
hoUnsuccessOutgoingIntraBs sNAttemptTch	ACCUMU LATION	IN T8	Number of unsuccessf ul outgoing intra handovers on TCH to a non- heading cell without reestablish ment in the serving cell	BTS.CELL_1167_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessOutgoingIntraCe llTchReturnOldChannel	ACCUMU LATION	IN T8	Number of failures to execute intra-BSS handover from cell on TCH in the cell with cause mobile returns to the channel (HANDO VER FAILURE before T3103 (respective lyT3107) timer	BTS.CELL_1768_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

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			expiration for V12 (respective ly V11))		
hoUnsuccessOutgoingIntraCellTchT3103TimerExp	ACCUMULATION	INT8	Number of refusals to accept an outgoing Intra-BSS handover on TCH in the cell with cause receipt from the BTS of a CHANNEL ACTIVATION NACK message	BTS.CELL_1768_1_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessReestIncomingIntraBssTch	ACCUMULATION	INT8	Number of unsuccessful incoming intra-bss handovers on TCH with reestablishment in the serving cell	BTS.CELL_1137_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
hoUnsuccessReestOutgoingIntraBssTch	ACCUMULATION	INT8	Number of unsuccessful outgoing intra-bss handovers on TCH for which the communication has	BTS.CELL_1135_0_CUM	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

			been re-established on starting channel		
requestedInIntraBscHandoverForDualBandMSRate	INTENSITY	FL OAT	Ratio of requested incoming intra-bsc handovers for dualband	BTS.CELL_8114_0_AVG	Average, ntesdc chbh, ntetch bh, ntetchf rbh, tot, min, max
Tot_hoFailureIncomingIntraBssTch	ACCUMULATION	INT8	Total number of incoming intra BSS handover requests, on TCH which has been refused.	{hoFailureIncomingIntraBssTchRadioLack} + {hoFailureIncomingIntraBssTchHoNotAllowed} + {hoFailureIncomingIntraBssTchChannelActivateNack} + {hoFailureIncomingIntraBssTchTchnAckTimerExp} + {hoFailureIncomingIntraBssTchIncompatible}	Sum, ntesdc chbh, ntetch bh, ntetchf rbh
Tot_hoUnsuccessOutgoingIntraCellTch	ACCUMULATION	INT8	Total number of refusals to accept an outgoing Intra-BSS handover on TCH in the cell	{hoUnsuccessOutgoingIntraCellTchReturnOldChannel} + {hoUnsuccessOutgoingIntraCellTchT3103TimerExp}	Sum, ntesdc chbh, ntetch bh, ntetchf rbh

7.3.39 Cell.Nortel.GSM.Handovers_IntraBts_SDCCH

SDCCH-Intra BTS handovers statistics

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KPI	Type	Data Type	Description	Derivation	Aggregation
$\frac{\text{hoSuccessIntraBtsSdcch}}{\text{hoRequestIntraBtsSdcch}} \times 100$	PERCENTAGE	FLOAT	Percentage number of successful intra-bts handovers on SDCCH	$100 * \frac{\text{hoSuccessIntraBtsSdcch}}{\text{hoRequestIntraBtsSdcch}}$	Average , ntesdcchbh, ntetchbh , ntetchfrbh
hoExecutionIntraBtsSdcch	ACCUMULATION	INT8	Number of intra-bts handovers on SDCCH executed	BTS.CELL_1155_0_CUM	Sum, ntesdcchbh, ntetchbh , ntetchfrbh
hoFailureIntraBtsSdcchChannelActivateNack	ACCUMULATION	INT8	Number of refusals to accept an intra-cell handover on SDCCH in the cell with cause receipt from the BTS of a CHANNEL ACTIVATE NACK message	BTS.CELL_1757_1_CUM	Sum, ntesdcchbh, ntetchbh , ntetchfrbh
hoFailureIntraBtsSdcchRadioLink	ACCUMULATION	INT8	Number of refusals to accept an intra-cell	BTS.CELL_1757_0_CUM	Sum, ntesdcchbh, ntetchbh ,

			handover in the cell on SDCCH with cause lack of radio resources		ntetchfr bh
hoFailureIntraBtsSdcchTchnAckTimerExp	ACCUMULATION	INT 8	Number of refusals to accept an intra-cell handover on TCH in the cell with cause expiration of TCHnAck timer	BTS.CELL_1757_2_CUM	Sum, ntesdcch bh, ntetchbh , ntetchfr bh
hoRequestIntraBtsSdcch	ACCUMULATION	INT 8	Number of intra- bts handovers on SDCCH requested	BTS.CELL_1154_0_CUM	Sum, ntesdcch bh, ntetchbh , ntetchfr bh
hoSuccessIntraBtsSdcch	ACCUMULATION	INT 8	Number of successful intra-bts handovers on SDCCH	BTS.CELL_1156_0_CUM	Sum, ntesdcch bh, ntetchbh , ntetchfr bh
hoUnsuccessReestIntraBtsSdcch	ACCUMULATION	INT 8	Number of	BTS.CELL_1157_0_CUM	Sum, ntesdcch

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			unsuccessful intra-bts handovers on SDCCH for which the communication has been re-established on starting channel		bh, ntctchbh, ntctchfrbh
t3107ExpIntraBtsHoSdcch	ACCUMULATION	INT 8	Number of t3107 time-out elapse: Intra-bts handover on SDCCH	BTS.CELL_8018_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
Tot_hoFailureIntraBtsSdcch	ACCUMULATION	INT 8	Total number of refusals to accept an intra-cell handover on SDCCH in the cell	{hoFailureIntraBtsSdcchRadioLack} + {hoFailureIntraBtsSdcchChannelActivateNack} + {hoFailureIntraBtsSdcchTchnAckTimerExp}	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.40 Cell.Nortel.GSM.Handovers_IntraBts_TCH

SDCCH-Intra BTS handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoSuccessIntraBtsMsDualb	PERCENTAGE	FLOAT	Percentage number	100 * {hoSuccessIntraBtsMsDualb} /	Average, ntesdcc

			of successful intra-bts handovers on TCH for dualband mobiles	{hoRequestIntraBtsMsDualb}	hbm, ntctchbm, ntctchfrbm
%_hoSuccessIntraBts	PERCENTAGE	FLOAT	Percentage number of successful intra-bts handovers on TCH	$100 * \{hoSuccessIntraBts\} / \{hoRequestIntraBts\}$	Average, ntcsdcmhbm, ntctchbm, ntctchfrbm
%_hoSuccessTieringTchLargeToSmallPattern	PERCENTAGE	FLOAT	Percentage number of tiering handover successes: Handover from large pattern to small pattern	$100 * \{hoSuccessTieringTchLargeToSmallPattern\} / \{Nortel.Handovers_Required_TCH.hoRequiredTchTieringLargeToSmallPattern\}$	Average, ntcsdcmhbm, ntctchbm, ntctchfrbm
%_hoSuccessTieringTchSmallToLargePattern	PERCENTAGE	FLOAT	Percentage number of	$100 * \{hoSuccessTieringTchSmallToLargePattern\} / \{Nortel.Handovers_Required$	Average, ntcsdcmhbm,

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			tiering handover successes: Handover from small pattern to large pattern	_TCH.hoRequiredTchTieringSmallToLargePattern}	ntetchbh, ntetchfrbh
hoBtsRejected	ACCUMULATION	INT 8	Number of handover requirements which are not treated by the BSC because the ping-pong handover configuration is not allowed	BTS.CELL_1782_0_CUM	Sum, ntesdecbh, ntetchbh, ntetchfrbh
hoExecutionIntraBtsMsDualb	ACCUMULATION	INT 8	Number of intra-bts handovers on TCH executed for dualband mobiles	BTS.CELL_1797_0_CUM	Sum, ntesdecbh, ntetchbh, ntetchfrbh
hoExecutionIntraBts	ACCUMULATION	INT 8	Number of intra-	BTS.CELL_1082_0_CUM	Sum, ntesdec

			bts handove rs on TCH executed		hbh, nttchb h, nttchfr bh
hoFailureIntraBtsTchChannel ActivateNack	ACCUMU LATION	INT 8	Number of refusals to accept an intra- cell handove r on TCH in the cell with cause receipt from the BTS of a CHANN EL ACTIV ATE NACK message	BTS.CELL_1756_1_CUM	Sum, ntcsdec hbh, nttchb h, nttchfr bh
hoFailureIntraBtsTchRadioLac k	ACCUMU LATION	INT 8	Number of refusals to accept an intra- cell handove r in the cell on TCH with cause lack of radio	BTS.CELL_1756_0_CUM	Sum, ntcsdec hbh, nttchb h, nttchfr bh

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			resources		
hoFailureIntraBtsTchTchnAckTimerExp	ACCUMULATION	INT 8	Number of refusals to accept an intra-cell handover on TCH in the cell with cause expiration of TCHnAck timer	BTS.CELL_1756_2_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
hoFailureTieringTchNorrLargeToSmallPattern	ACCUMULATION	INT 8	Number of tiering handover failures due to lack of radio resources: Handover from large pattern to small pattern	BTS.CELL_1801_0_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
hoFailureTieringTchNorrSmallToLargePattern	ACCUMULATION	INT 8	Number of tiering handover failures due to lack of radio resources:	BTS.CELL_1801_1_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh

			Handover from small pattern to large pattern		
hoInInterBtsFailRateDualBandMS	INTENSITY	FLOAT	- Obsolete in V15.1- Failure rate for inter-bts handovers for dualband MSs	BTS.CELL_8115_0_AVG	Average, ntsdccbhb, ntctchbh, ntctchfrbh, tot, min, max
hoIntraBtsFailRateDualBandMS	INTENSITY	FLOAT	- Obsolete in V15.1- Failure rate of intra-bts handovers for dualband MSs	BTS.CELL_8113_0_AVG	Average, ntsdccbhb, ntctchbh, ntctchfrbh, tot, min, max
hoIntraBtsFailRateTchTieringLargeToSmallPattern	INTENSITY	FLOAT	Failure rate of cell tiering from large pattern to small pattern	BTS.CELL_8110_0_AVG	Average, ntsdccbhb, ntctchbh, ntctchfrbh, tot, min, max

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hoIntraBtsFailRateTchTiering SmallToLargePattern	INTENSITY	FLOAT	Failure rate of cell tiering from small pattern to large pattern	BTS.CELL_8111_0_AVG	Average, ntesdcc hbh, ntetchbh, ntetchfrbh, tot, min, max
hoRequestIntraBtsMsDualb	ACCUMULATION	INT 8	Number of intra-bts handovers on TCH requested by dualband mobiles	BTS.CELL_1796_0_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
hoRequestIntraBts	ACCUMULATION	INT 8	Number of intra-bts handovers on TCH requested	BTS.CELL_1081_0_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
hoSuccessIntraBtsMsDualb	ACCUMULATION	INT 8	Number of successful intra-bts handovers on TCH for dualband mobiles	BTS.CELL_1798_0_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
hoSuccessIntraBts	ACCUMULATION	INT 8	Number of successf	BTS.CELL_1083_0_CUM	Sum, ntesdcc hbh,

			ul intra-bts handovers on TCH		ntetchbh, ntetchfrbh
hoSuccessTieringTchLargeToSmallPattern	ACCUMULATION	INT 8	Number of tiering handover successes: Handover from large pattern to small pattern	BTS.CELL_1802_0_CUM	Sum, ntesdec h, ntetchbh, ntetchfrbh
hoSuccessTieringTchSmallToLargePattern	ACCUMULATION	INT 8	Number of tiering handover successes: Handover from small pattern to large pattern	BTS.CELL_1802_1_CUM	Sum, ntesdec h, ntetchbh, ntetchfrbh
hoUnsuccessReestIntraBtsTch	ACCUMULATION	INT 8	Number of unsuccessful intra-bts handovers on TCH for	BTS.CELL_1134_0_CUM	Sum, ntesdec h, ntetchbh, ntetchfrbh

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			which the communication has been re-established on starting channel		
requestedIntraBtsHandoverForDualBandMSRate	INTENSITY	FLOAT	- Obsolete in V15.1- Ratio of requested intra-bts handovers by dualband MSs	BTS.CELL_8112_0_AVG	Average, ntesdecbbh, ntetchbh, ntetchfrbh, tot, min, max
t3107expIntraBtsHoTch	ACCUMULATION	INT8	Number of t3107 time-out elapse: Intra-bts handover on TCH	BTS.CELL_8019_0_CUM	Sum, ntesdecbbh, ntetchbh, ntetchfrbh
Tot_hoFailureIntraBtsTch	ACCUMULATION	INT8	Total number of refusals to accept an intra-cell handover on TCH in the cell	{hoFailureIntraBtsTchRadioLack} + {hoFailureIntraBtsTchChannelActivateNack} + {hoFailureIntraBtsTchTchnAckTimerExp}	Sum, ntesdecbbh, ntetchbh, ntetchfrbh

7.3.41 Cell.Nortel.GSM.Handovers_Required_SDCCH

SDCCH required handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
hoInSdcchExecutionFailMaxRate	INTENSITY	FLOAT	Maximum execution failure rate of incoming handovers on SDCCH	BTS.CELL_8511_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
hoInSdcchExecutionFailRate	INTENSITY	FLOAT	Execution failure rate of incoming handovers on SDCCH	BTS.CELL_8011_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
hoInSdcchSelectionFailMaxRate	INTENSITY	FLOAT	Maximum selection failure rate of incoming handovers on SDCCH	BTS.CELL_8509_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
hoInSdcchSelectionFailRate	INTENSITY	FLOAT	Selection failure rate of incoming handovers on SDCCH	BTS.CELL_8009_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
hoOutSdcchExecutionFailMaxRate	INTENSITY	FLOAT	Maximum execution failure rate of outgoing handovers	BTS.CELL_8507_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh

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			on SDCCH		h, tot, min, max
hoOutSdcchExecutionFailRate	INTENSITY	FLO AT	Execution failure rate of outgoing handovers on SDCCH	BTS.CELL_8007 _0_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchFirstAttemptSuccess MinRatio	INTENSITY	FLO AT	Minimum ratio of successful outgoing handovers on SDCCH after first attempt	BTS.CELL_8513 _0_MIN	Minimu m, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchFirstAttemptSuccess Ratio	INTENSITY	FLO AT	Ratio of successful outgoing handovers on SDCCH after first attempt	BTS.CELL_8013 _0_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchGlobalFailRate	INTENSITY	FLO AT	Global failure rate of outgoing handovers on SDCCH	BTS.CELL_8001 _0_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchMaxFailRate	INTENSITY	FLO AT	Maximum global failure rate of outgoing handovers on SDCCH	BTS.CELL_8501 _0_MAX	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchReestRatio	INTENSITY	FLO AT	-Obsolete in V15.1- Ratio of re- established	BTS.CELL_8023 _0_AVG	Average, ntcsdcch bh, ntctchbh,

			outgoing handovers on SDCCH		ntctchfrb h, tot, min, max
hoOutSdcchRequestMaxRatio	INTENSITY	FLO AT	Maximum ratio of outgoing handover requests on SDCCH	BTS.CELL_8503 _0_MAX	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchRequestRatio	INTENSITY	FLO AT	Ratio of outgoing handover requests on SDCCH	BTS.CELL_8003 _0_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchSelectionFailMaxRate	INTENSITY	FLO AT	Maximum selection failure rate of outgoing handovers on SDCCH	BTS.CELL_8505 _0_MAX	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoOutSdcchSelectionFailRate	INTENSITY	FLO AT	Selection failure rate of outgoing handovers on SDCCH	BTS.CELL_8005 _0_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
hoRequiredSdcchCapture	ACCUMULATION	INT8	Number of handovers on SDCCH required: Microcell capture	BTS.CELL_1139 _6_CUM	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h

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hoRequiredSdcchDistance	ACCUMULATION	INT8	Number of handovers on SDCCH required: Distance	BTS.CELL_1139_4_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchDownlinkQuality	ACCUMULATION	INT8	Number of handovers on SDCCH required: Loss of Downlink quality	BTS.CELL_1139_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchDownlinkStrength	ACCUMULATION	INT8	Number of handovers on SDCCH required: Loss of Downlink power	BTS.CELL_1139_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchInterBtsOm	ACCUMULATION	INT8	Number of handovers on SDCCH required: Forced handover OAM	BTS.CELL_1139_13_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchIntraBtsDownlink	ACCUMULATION	INT8	Number of intra-bts handovers on SDCCH required: Loss of Downlink quality	BTS.CELL_1139_9_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchIntraBtsOm	ACCUMULATION	INT8	Number of intra-bts handovers on SDCCH required: TRX out of service OAM	BTS.CELL_1139_7_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

hoRequiredSdcchIntraBtsUplink	ACCUMULATION	INT8	Number of intra-bts handovers on SDCCH required: Loss of Uplink quality	BTS.CELL_1139_8_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcch	ACCUMULATION	INT8	Number of handovers on SDCCH required	BTS.CELL_1777_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchPowerBudget	ACCUMULATION	INT8	Number of handovers on SDCCH required: Power budget	BTS.CELL_1139_5_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchTieringLargeToSmallPattern	ACCUMULATION	INT8	Number of handovers on SDCCH required: Tiering handover from large pattern to small pattern	BTS.CELL_1139_15_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchTieringSmallToLargePattern	ACCUMULATION	INT8	Number of handovers on SDCCH required: Tiering handover from small pattern to	BTS.CELL_1139_16_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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			large pattern		
hoRequiredSdcchTraffic	ACCUMULATION	INT8	Number of handovers on SDCCH required: Traffic	BTS.CELL_1139_14_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchUplinkQuality	ACCUMULATION	INT8	Number of handovers on SDCCH required: Loss of Uplink quality	BTS.CELL_1139_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoRequiredSdcchUplinkStrength	ACCUMULATION	INT8	Number of handovers on SDCCH required: Loss of Uplink power	BTS.CELL_1139_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
t3103ExpSdcch	ACCUMULATION	INT8	Number of t3103 time-out elapse: Handover on SDCCH	BTS.CELL_8021_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
Tot_hoRequiredSdcch	ACCUMULATION	INT8	Total number of handovers on SDCCH required	{hoRequiredSdcch} + {hoRequiredSdcchUplinkStrength} + {hoRequiredSdcchDownlinkStrength} + {hoRequiredSdcchUplinkQuality} + {hoRequiredSdcchDownlinkQuality} + {hoRequiredSdcchDistance} +	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

				{hoRequiredSdcc hPowerBudget} + {hoRequiredSdcc hCapture} + {hoRequiredSdcc hIntraBtsOm} + {hoRequiredSdcc hIntraBtsUplink} + {hoRequiredSdcc hIntraBtsDownlin k} + {hoRequiredSdcc hInterBtsOm} + {hoRequiredSdcc hTraffic} + {hoRequiredSdcc hTieringLargeTo SmallPattern} + {hoRequiredSdcc hTieringSmallTo LargePattern}	
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7.3.42 Cell.Nortel.GSM.Handovers_Required_TCH

TCH required handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
g11	ACCUMULATION	INT8	-Obsolete in V15.1-Handover attempts	BTS.CELL_8041_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
g12	ACCUMULATION	INT8	-Obsolete in V15.1-Handovers	BTS.CELL_8042_0_CUM	Sum, ntesdcchbh, ntetchbh,

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			successful at cell level		ntetchfrbh
hoInTchExecutionFailMaxRate	INTENSITY	FLOAT	Maximum execution failure rate of incoming handovers on TCH	BTS.CELL_8510_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoInTchExecutionFailRate	INTENSITY	FLOAT	Execution failure rate of incoming handovers on TCH	BTS.CELL_8010_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoInTchSelectionFailMaxRate	INTENSITY	FLOAT	Maximum selection failure rate of incoming handovers on TCH	BTS.CELL_8508_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoInTchSelectionFailRate	INTENSITY	FLOAT	Selection failure rate of incoming handovers on TCH	BTS.CELL_8008_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutExecutionFailMaxRate	INTENSITY	FLOAT	Maximum execution failure rate of outgoing handovers on TCH	BTS.CELL_8506_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutTchExecutionFailRate	INTENSITY	FLO	Executio	BTS.CELL_8006_0_A	Average,

		AT	n failure rate of outgoing handovers on TCH	VG	ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutTchFirstAttemptSuccessMinRatio	INTENSITY	FLOAT	Minimum ratio of successful outgoing handovers on TCH after first attempt	BTS.CELL_8512_0_MIN	Minimum, ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutTchFirstAttemptSuccessRatio	INTENSITY	FLOAT	Ratio of successful outgoing handovers on TCH after first attempt	BTS.CELL_8012_0_AVG	Average, ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutTchGlobalFailRate	INTENSITY	FLOAT	Global failure rate of outgoing handovers on TCH	BTS.CELL_8000_0_AVG	Average, ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutTchMaxFailRate	INTENSITY	FLOAT	Maximum global failure rate of outgoing handovers on TCH	BTS.CELL_8500_0_MAX	Constant, ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
hoOutTchReestRatio	INTENSITY	FLO	-Obsolete	BTS.CELL_8022_0_A	Average,

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		AT	in V15.1- Ratio of re- establishe d outgoing handover s on TCH	VG	ntcsdcch bh, ntetchbh, ntetchfrb h, tot, min, max
hoOutTchRequestMaxRatio	INTENSITY	FLO AT	Maximu m ratio of outgoing handover requests on TCH	BTS.CELL_8502_0_M AX	Constant, ntcsdcch bh, ntetchbh, ntetchfrb h, tot, min, max
hoOutTchRequestRatio	INTENSITY	FLO AT	Ratio of outgoing handover requests on TCH	BTS.CELL_8002_0_A VG	Average, ntcsdcch bh, ntetchbh, ntetchfrb h, tot, min, max
hoOutTchSelectionFailMaxRat e	INTENSITY	FLO AT	Maximu m selection failure rate of outgoing handover s on TCH	BTS.CELL_8504_0_M AX	Constant, ntcsdcch bh, ntetchbh, ntetchfrb h, tot, min, max
hoOutTchSelectionFailRate	INTENSITY	FLO AT	Selection failure rate of outgoing handover s on TCH	BTS.CELL_8004_0_A VG	Average, ntcsdcch bh, ntetchbh, ntetchfrb h, tot, min, max
hoRequiredTchCapture	ACCUMULA TION	INT8	Number of handover s on TCH required: Microcell	BTS.CELL_1138_6_C UM	Sum, ntcsdcch bh, ntetchbh, ntetchfrb h

			capture		
hoRequiredTchDirectedRetry	ACCUMULATION	INT8	Number of directed retry handovers on TCH required	BTS.CELL_1138_10_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchDistance	ACCUMULATION	INT8	Number of handovers on TCH required: Distance	BTS.CELL_1138_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchDownlinkQuality	ACCUMULATION	INT8	Number of handovers on TCH required: Loss of Downlink quality	BTS.CELL_1138_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchDownlinkStrength	ACCUMULATION	INT8	Number of handovers on TCH required: Loss of Downlink power	BTS.CELL_1138_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchInterBtsOm	ACCUMULATION	INT8	Number of handovers on TCH required: Forced handover OAM	BTS.CELL_1138_13_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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hoRequiredTchIntraBtsDownlink	ACCUMULATION	INT8	Number of intra-bts handovers on TCH required: Loss of Downlink quality	BTS.CELL_1138_9_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchIntraBtsOm	ACCUMULATION	INT8	Number of intra-bts handovers on TCH required: TRX out of service OAM	BTS.CELL_1138_7_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchIntraBtsUplink	ACCUMULATION	INT8	Number of intra-bts handovers on TCH required: Loss of Uplink quality	BTS.CELL_1138_8_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTch	ACCUMULATION	INT8	Number of handovers on TCH required	BTS.CELL_1776_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchPowerBudgetQuality	ACCUMULATION	INT8	Number of handovers on TCH required: Power budget	BTS.CELL_1138_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchTdmaClass0	ACCUMULATION	INT8	Intra-cell handover into a	BTS.CELL_1138_11_CUM	Sum, ntesdcchbh,

			class 0 TDMA for downlink power level or distance for a multi-class cell (concentric cell...) (only for HO_REQUIRED_TCH)		ntetchbh, ntetchfrbh
hoRequiredTchTdmaClass1	ACCUMULATION	INT8	Number of intra-bts handovers on TCH required (concentric cell): Class 1 TDMA	BTS.CELL_1138_12_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchTieringLargeToSmallPattern	ACCUMULATION	INT8	Number of handovers on TCH required: Tiering handover from large pattern to small pattern	BTS.CELL_1138_15_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchTieringSmallTo	ACCUMULATION	INT8	Number	BTS.CELL_1138_16_	Sum,

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LargePattern	TION		of handovers on TCH required: Tiering handover from small pattern to large pattern	CUM	ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchTraffic	ACCUMULATION	INT8	Number of handovers on TCH required: Traffic	BTS.CELL_1138_14_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchUplinkQuality	ACCUMULATION	INT8	Number of handovers on TCH required: Loss of Uplink quality	BTS.CELL_1138_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoRequiredTchUplinkStrength	ACCUMULATION	INT8	Number of handovers on TCH required: Loss of Uplink power	BTS.CELL_1138_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
t3103ExpTch	ACCUMULATION	INT8	Number of t3103 time-out elapse: Handover on TCH	BTS.CELL_8020_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
Tot_hoRequiredTch	ACCUMULATION	INT8	Total number of handover	{hoRequiredTchUplinkStrength} + {hoRequiredTchDownlinkStrength} +	Sum, ntesdcchbh, ntetchbh,

			son TCH required	{hoRequiredTchUplink Quality} + {hoRequiredTchDownl inkQuality} + {hoRequiredTchDistan ce} + {hoRequiredTchPower BudgetQuality} + {hoRequiredTchCaptur e} + {hoRequiredTchIntraBt sOm} + {hoRequiredTchIntraBt sUplink} + {hoRequiredTchIntraBt sDownlink} + {hoRequiredTchDirect edRetry} + {hoRequiredTchTdma Class0} + {hoRequiredTchTdma Class1} + {hoRequiredTchInterBt sOm} + {hoRequiredTchTraffic } {hoRequiredTchTierin gLargeToSmallPattern } {hoRequiredTchTierin gSmallToLargePattern }	ntetchfrb h
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7.3.43 Cell.Nortel.GSM.Handovers_V12

Data migration purposes. The kpi group in V12 is Handovers.

KPI	Type	Data Type	Description	Derivation	Aggregation
hoIndicationNotTreated	ACCUMULA	INTEG	-Obsolete in	BTS.CELL_1166_0	Sum,

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TmtBtwHo	TION	ER	V15.1- Number of handover requests not processed: TmtBtwHo in-progress	_CUM	ntcsdcchbh, ntctchbh, ntctchfrbh
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7.3.44 Cell.Nortel.GSM.Handovers

Handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
_%_hoSuccessHandoverTCH	PERCENTAGE	FLOAT	Percent age number of successful requested handovers in the cell on TCH	$100 * (\{hoSuccessOutgoingTch\} + \{hoSuccessIncomingTch\}) / \{Nortel.Handovers_Required_TCH.hoRequiredTch\}$	Average, ntcsdcchbh, ntctchbh, ntctchfrbh
_%_hoSuccessOutgoingMbandEbandMsDualb	PERCENTAGE	FLOAT	Percent age number of successful outgoing handovers for dualband mobiles from the main	$100 * \{hoSuccessOutgoingMbandEbandMsDualb\} / \{hoRequestOutgoingMbandEbandMsDualb\}$	Average, ntcsdcchbh, ntctchbh, ntctchfrbh

			frequency band to the second frequency band of the network		
faultyPaBcchWithFrequencyHopping	INTENSITY	FLOAT	- Obsolete in V15.1- Outgoing handovers on TCH versus incoming handover on TCH	BTS.CELL_8817_0_AVG	Average, ntesdccbhbh, ntctchbh, ntctchfrbh, tot, min, max
hoIndicationNotTreatedTchokc	ACCUMULATION	INT8	Number of handover requests not processed: TCHokc in-progress	BTS.CELL_1165_0_CUM	Sum, ntesdccbhbh, ntctchbh, ntctchfrbh
hoOutTchExecutionBscFailRa	INTENSITY	FLO	BSC	BTS.CELL_8556_0_AVG	Average

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te		AT	executi on failure rate of outgoi g handov ers on TC		, ntesdcc hbh, ntetchb h, ntetchfr bh, tot, min, max
hoRequestOutgoingMbandEb andMsDualb	ACCUMUL ATION	INT 8	Numbe r of outgoi g handov ers request ed by dualba nd mobile s from the main frequen cy band to the second frequen cy band of the networ k	BTS.CELL_1208_0_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchfr bh
hoSuccessIncomingTch	ACCUMUL ATION	INT 8	Numbe r of success ful incomi ng handov ers in the cell	BTS.CELL_1781_0_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchfr bh
hoSuccessOutgoingMbandEb	ACCUMUL	INT	Numbe	BTS.CELL_1209_0_CUM	Sum,

andMsDualb	ATION	8	r of success ful outgoi g handov ers for dualba nd mobile s from the main frequen cy band to the second frequen cy band of the networ k	ntcsdec hbh, ntctchb h, ntctchfr bh
hoSuccessOutgoingTch	ACCUMUL ATION	INT 8	Numbe r of success ful outgoi g classic handov ers from the cell	Sum, ntcsdec hbh, ntctchb h, ntctchfr bh

7.3.45 Cell.Nortel.GSM.Immediate_assignment_rejected_per_causes

Immediate assignment rejected statistics

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KPI	Type	Data Type	Description	Derivation	Aggregation
immediateAssignmentRejectChannelActNack	ACCUMULATION	INT8	Number of immediate assignments rejected: CHANNEL ACTIVATION received	BTS.CELL_1161_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentRejectChannelActTimmack	ACCUMULATION	INT8	Number of immediate assignments rejected: Time-out elapse	BTS.CELL_1161_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentRejectOthers	ACCUMULATION	INT8	Number of immediate assignments rejected: Other cases	BTS.CELL_1161_7_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentRejectOverload	ACCUMULATION	INT8	Number of immediate assignments rejected: Traffic overload	BTS.CELL_1161_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentRejectRadioRes	ACCUMULATION	INT8	Number of immediate assignments rejected: Lack of radio resource	BTS.CELL_1161_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentRejectTimingAdv	ACCUMULATION	INT8	Number of immediate assignments rejected: Excessive timing advance	BTS.CELL_1161_6_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentRejectTraffic	ACCUMULATION	INT8	Number of	BTS.CELL_116	Sum,

Msc	TION	immediate assignments rejected: Traffic with MSC interrupted	1_0_CUM	ntcsdcchb h, ntctchbh, ntctchfrb h
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7.3.46 Cell.Nortel.GSM.Immediate_assignment

Immediate assignment statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
faultyTxBech	INTENSITY	FLOAT	-Obsolete in V15.1- Immediate Assignment procedure No Response rate	BTS.CELL_8814_0_AVG	Average, ntcscchb h, ntctchbh, ntctchfrbh , tot, min, max
immAssignDeletedRate	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of immediate assign messages discarded	BTS.CELL_8904_0_AVG	Average, ntcscchb h, ntctchbh, ntctchfrbh , tot, min, max
immAssignDualBandMSRate	INTENSITY	FLOAT	Ratio of number of establishments of dualband MSs to number of establishments of phase 1 and 2 MSs	BTS.CELL_8105_0_AVG	Average, ntcscchb h, ntctchbh, ntctchfrbh , tot, min, max
immediateAssignmentMultiband	ACCUMULATION	INT8	Number of immediate assignments for multiband	BTS.CELL_1207_0_CUM	Sum, ntcscchb h, ntctchbh,

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			mobiles		ntctchfrbh
immediateAssignmentRejection	ACCUMULATION	INT8	Number of immediate assignments rejected	BTS.CELL_1751_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
immediateAssignmentRejectionRatio	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of rejected immediate assignments	BTS.CELL_8712_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
immediateAssignmentSuccess	ACCUMULATION	INT8	Number of successful immediate assignments	BTS.CELL_1749_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.47 Cell.Nortel.GSM.Interference

Interference statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelAveragedIdlePerInterfBand0Cum	ACCUMULATION	INT8	Cummulative number of free channels in interference band No.0	BTS.CELL_1619_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand0Ech	ACCUMULATION	INT8	Number of samples, number of free channels in interference band No.0	BTS.CELL_1619_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand0Max	INTENSITY	INTEGER	Maximum number of free channels in interference band No.0	BTS.CELL_1619_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh

					h, tot, min, max
channelAveragedIdlePerInterfBand0Moy	INTENSITY	FLOAT	Average number of free channels in interference band No.0	BTS.CELL_1619_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand1Cum	ACCUMULATION	INT8	Cummulative number of free channels in interference band No.1	BTS.CELL_1619_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand1Ech	ACCUMULATION	INT8	Number of samples, number of free channels in interference band No.1	BTS.CELL_1619_1_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand1Max	INTENSITY	INTEGER	Maximum number of free channels in interference band No.1	BTS.CELL_1619_1_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand1Moy	INTENSITY	FLOAT	Average number of free channels in interference band No.1	BTS.CELL_1619_1_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand2Cum	ACCUMULATION	INT8	Cummulative number of free	BTS.CELL_1619_2_CUM	Sum, ntesdcchbh

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			channels in interference band No.2		h, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand2Ech	ACCUMULATION	INT8	Number of samples, number of free channels in interference band No.2	BTS.CELL_1619_2_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand2Max	INTENSITY	INTEGER	Maximum number of free channels in interference band No.2	BTS.CELL_1619_2_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand2Moy	INTENSITY	FLOAT	Average number of free channels in interference band No.2	BTS.CELL_1619_2_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand3Cum	ACCUMULATION	INT8	Cummulative number of free channels in interference band No.3	BTS.CELL_1619_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand3Ech	ACCUMULATION	INT8	Number of samples, number of free channels in interference band No.3	BTS.CELL_1619_3_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand3Max	INTENSITY	INTEGER	Maximum number of free channels in interference band No.3	BTS.CELL_1619_3_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot,

					min, max
channelAveragedIdlePerInterfBand3Moy	INTENSITY	FLOAT	Average number of free channels in interference band No.3	BTS.CELL_1619_3_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand4Cum	ACCUMULATION	INT8	Cummulative number of free channels in interference band No.4	BTS.CELL_1619_4_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand4Ech	ACCUMULATION	INT8	Number of samples, number of free channels in interference band No.4	BTS.CELL_1619_4_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelAveragedIdlePerInterfBand4Max	INTENSITY	INTEGER	Maximum number of free channels in interference band No.4	BTS.CELL_1619_4_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
channelAveragedIdlePerInterfBand4Moy	INTENSITY	FLOAT	Average number of free channels in interference band No.4	BTS.CELL_1619_4_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.48 Cell.Nortel.GSM.Layer_1_management_SDCCH

SDCCH related Layer 1 Management statistics

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KPI	Type	Data Type	Description	Derivation	Aggregation
connectionDurationSdcchCum	ACCUMULATION	INT8	Cumulative connection duration of SDCCHs	BTS.CELL_1603_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
connectionDurationSdcchEch	ACCUMULATION	INT8	No of samples, connection duration of SDCCHs	BTS.CELL_1603_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
connectionDurationSdcchMax	INTENSITY	INTEGER	Maximum connection duration of SDCCHs	BTS.CELL_1603_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
connectionDurationSdcchMoy	INTENSITY	FLOAT	Average connection duration of SDCCHs	BTS.CELL_1603_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
downlinkPowerCtrlMaxSdcchCum	ACCUMULATION	INT8	Cumulative duration of maximum Downlink power use on busy SDCCHs	BTS.CELL_1601_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
downlinkPowerCtrlMaxSdcchEch	ACCUMULATION	INT8	No of samples, duration of maximum Downlink power use on busy SDCCHs	BTS.CELL_1601_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
downlinkPowerCtrlMaxSdcchMax	INTENSITY	INTEGER	Maximum duration of maximum	BTS.CELL_1601_0_MAX	Constant, ntesdcchbh,

			Downlink power use on busy SDCCHs		nttchbh, nttchfrbh, tot, min, max
downlinkPowerCtrlMaxSdcchMoy	INTENSITY	FLOAT	Average duration of maximum Downlink power use on busy SDCCHs	BTS.CELL_1601_0_AVG	Average, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max
relativeTimeDLPowerCtrlMaxSdcch	INTENSITY	FLOAT	Ratio of maximum Downlink power use on SDCCHs	BTS.CELL_8052_0_AVG	Average, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max
relativeTimeULPowerCtrlMaxSdcch	INTENSITY	FLOAT	Ratio of maximum Uplink power use on SDCCHs	BTS.CELL_8053_0_AVG	Average, ntesdcchbh, nttchbh, nttchfrbh, tot, min, max
uplinkPowerCtrlMaxSdcchCum	ACCUMULATION	INT8	Cumulative duration of maximum uplink power use on busy SDCCHs	BTS.CELL_1602_0_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh
uplinkPowerCtrlMaxSdcchEch	ACCUMULATION	INT8	No of samples, duration of maximum uplink power use on busy SDCCHs	BTS.CELL_1602_0_NBS	Sum, ntesdcchbh, nttchbh, nttchfrbh

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uplinkPowerCtrlMaxSdchMax	INTENSITY	INTEGER	Maximum duration of maximum Uplink power use on busy SDCCHs	BTS.CELL_1602_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
uplinkPowerCtrlMaxSdchMoy	INTENSITY	FLOAT	Average duration of maximum Uplink power use on busy SDCCHs	BTS.CELL_1602_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.49 Cell.Nortel.GSM.Layer_1_management_TCH

TCH related Layer 1 Management statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
connectionDurationTchCum	ACCUMULATION	INT8	Cumulative connection duration of TCH/FRs or preempted PDTCHs	BTS.CELL_1600_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
connectionDurationTchEch	ACCUMULATION	INT8	No of samples, connection duration of TCH/FRs or preempted PDTCHs	BTS.CELL_1600_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
connectionDurationTchMax	INTENSITY	INTEGER	Maximum connection duration of TCH/FRs or preempted PDTCHs	BTS.CELL_1600_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
connectionDurationTchMoy	INTENSITY	FLOAT	Average connection duration of TCH/FRs or preempted	BTS.CELL_1600_0_AVG	Average, ntesdcchbh, ntctchbh,

			PDTCHs		ntetchfrbh , tot, min, max
downlinkPowerCtrlMax TchCum	ACCUMULA TION	INT8	Cumulative duration of maximum Downlink power use on busy TCH/ FRs or preempted PDTCHs	BTS.CELL_1198_ 0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
downlinkPowerCtrlMax TchEch	ACCUMULA TION	INT8	Number of samples, duration of maximumDownli nk power use on busy TCH/FRs or preempted PDTCHs	BTS.CELL_1198_ 0_NBS	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
downlinkPowerCtrlMax TchMax	INTENSITY	INTEG ER	Maximum duration of maximum Downlink power use on busy TCH/ FRs or preempted PDTCHs	BTS.CELL_1198_ 0_MAX	Constant, ntcsdcchb h, ntetchbh, ntetchfrbh , tot, min, max
downlinkPowerCtrlMax TchMoy	INTENSITY	FLOA T	Average duration of maximum Downlink power use on busy TCH/ FRs or preempted PDTCHs	BTS.CELL_1198_ 0_AVG	Average, ntcsdcchb h, ntetchbh, ntetchfrbh , tot, min, max
faultyPaWithPwrcDI	INTENSITY	FLOA T	-Obsolete in V15.1- Maximum downlink power used on TCH versus maximum uplink power used	BTS.CELL_8815_ 0_AVG	Constant, ntcsdcchb h, ntetchbh, ntetchfrbh , tot, min,

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			on TCH		max
relativeTimeDLPowerCtrlMaxTch	INTENSITY	FLOAT	Ratio of maximum Downlink power use on TCHs	BTS.CELL_8050_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
relativeTimeULPowerCtrlMaxTch	INTENSITY	FLOAT	Ratio of maximum Uplink power use on TCHs	BTS.CELL_8051_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
uplinkPowerCtrlMaxTchCum	ACCUMULATION	INT8	Cumulative duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	BTS.CELL_1199_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
uplinkPowerCtrlMaxTchEch	ACCUMULATION	INT8	Number of samples, duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	BTS.CELL_1199_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
uplinkPowerCtrlMaxTchMax	INTENSITY	INTEGER	Maximum duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	BTS.CELL_1199_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
uplinkPowerCtrlMaxTchMoy	INTENSITY	FLOAT	Average duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	BTS.CELL_1199_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min,

					max
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7.3.50 Cell.Nortel.GSM.Layer_1_management

General Layer 1 Management statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
bsPowerDecControlAmrHr	ACCUMULATION	INT8	Number of BS decrement power control ordered by the L1m for AMR half rate TCH	BTS.CELL_1927_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
bsPowerIncControlAmrHr	ACCUMULATION	INT8	Number of BS increment power control ordered by the L1m for AMR half rate TCH	BTS.CELL_1926_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
CIUplinkAmrFr	ACCUMULATION	INT8	Total of the uplink C/I received from the L1m, for AMR full rate calls	BTS.CELL_1916_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
CIUplinkAmrHr	ACCUMULATION	INT8	Total of the uplink C/I received from the L1M	BTS.CELL_1928_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
CIUplinkFr	ACCUMULATION	INT8	Total of the uplink C/I received from the L1m, for a non AMR channel	BTS.CELL_1905_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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downgradedL1mModeOnClassmark	ACCUMULATION	INT8	Number of times the BTS detects a bad content in the start measurement or in the classmark change request messages	BTS.CELL_2025_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msLostMeasurementsAmrFr	ACCUMULATION	INT8	Number of MS measurement messages not received by the BTS for a AMR full rate call	BTS.CELL_1930_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msLostMeasurementsAmrHr	ACCUMULATION	INT8	Number of MS measurement messages not received by the BTS for a AMR half rate call	BTS.CELL_1931_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msLostMeasurements	ACCUMULATION	INT8	Number of MS measurement messages not received	BTS.CELL_1622_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msPowerDecControlAmrHr	ACCUMULATION	INT8	Number of MS decrement power control ordered by the L1m for AMR half rate TCH	BTS.CELL_1925_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
msPowerIncControlAmrHr	ACCUMULATION	INT8	Number of MS increment power control ordered by the L1m for AMR half rate TCH	BTS.CELL_1924_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
RxLevDownlinkAmrFr	ACCUMULATION	INT8	Number of downlink RXLEV received from the L1m for	BTS.CELL_1908_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

			AMR full rate TCH		
RxLevDownlinkAmrHr	ACCUMULATION	INT8	Number of downlink RXLEV received from the L1m for AMR half rate TCH	BTS.CELL_1920_0 _CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
RxLevUplinkAmrFr	ACCUMULATION	INT8	Number of uplink RXLEV received from the L1m for AMR full rate TCH	BTS.CELL_1909_0 _CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
RxLevUplinkAmrHr	ACCUMULATION	INT8	Number of uplink RXLEV received from the L1m for AMR half rate TCH	BTS.CELL_1921_0 _CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
RxQualDownlinkAmrFr	ACCUMULATION	INT8	Number of downlink RXQUAL received from the L1m for AMR full rate TCH	BTS.CELL_1910_0 _CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
RxQualDownlinkAmrHr	ACCUMULATION	INT8	Number of downlink RXQUAL received from the L1m for AMR half rate TCH	BTS.CELL_1922_0 _CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
RxQualUplinkAmrFr	ACCUMULATION	INT8	Number of uplink	BTS.CELL_1911_0 _CUM	Sum, ntcsdcchb

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			RXQUAL received from the L1m for AMR full rate TCH		h, ntctchbh, ntctchfrbh
RxQualUplinkAmrHr	ACCUMULATION	INT8	Number of uplink RXQUAL received from the L1m for AMR half rate TCH	BTS.CELL_1923_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.51 Cell.Nortel.GSM.LCS_Observations

LCS observation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
lcsPerformLocationRequest	ACCUMULATION	INTEGER	Number of location procedure requested	BTS.CELL_2080_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPerformLocationSuccesses	ACCUMULATION	INTEGER	Number of successful location procedure	BTS.CELL_2081_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPositioningAbortAGPS	ACCUMULATION	INTEGER	Number of positioning aborts per location type	BTS.CELL_2086_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPositioningAbortInterBssHo	ACCUMULATION	INTEGER	Number of positioning requests aborted due to Inter BSS handover	BTS.CELL_2083_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPositioningAbortMsLoss	ACCUMULATION	INTEGER	Number of positioning requests aborted	BTS.CELL_2083_0_CUM	Sum, ntesdcchbh,

			due to MS loss		ntetchbh, ntetchfrbh
lcsPositioningAbortOther	ACCUMULATION	INTEGER	Number of positioning requests aborted due to other reasons	BTS.CELL_2083_3_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
lcsPositioningAbortTANMR	ACCUMULATION	INTEGER	Number of positioning aborts per location type	BTS.CELL_2086_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
lcsPositioningAbortTimeout	ACCUMULATION	INTEGER	Number of positioning requests aborted due to timeout	BTS.CELL_2083_1_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
lcsPositioningAbortUTDOA	ACCUMULATION	INTEGER	Number of positioning aborts per location type	BTS.CELL_2086_2_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
lcsPositioningRejectAGPS	ACCUMULATION	INTEGER	Number of positioning rejects per location type	BTS.CELL_2087_1_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
lcsPositioningRejectMethodNotSupp	ACCUMULATION	INTEGER	Number of positioning requests rejected because positioning procedure not supported	BTS.CELL_2084_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
lcsPositioningRejectOther	ACCUMULATION	INTEGER	Number of	BTS.CELL_2084_	Sum,

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	TION	ER	positioning requests rejected due to other radio related events	1_CUM	ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningRejectTANMR	ACCUMULATION	INTEGER	Number of positioning rejects per location type	BTS.CELL_2087_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningRejectUTDOA	ACCUMULATION	INTEGER	Number of positioning rejects per location type	BTS.CELL_2087_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningRequestAGPS	ACCUMULATION	INTEGER	Number of positioning requests per location type	BTS.CELL_2082_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningRequestTANMR	ACCUMULATION	INTEGER	Number of positioning requests per location type	BTS.CELL_2082_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningRequestUTDOA	ACCUMULATION	INTEGER	Number of positioning requests per location type	BTS.CELL_2082_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningResetAGPS	ACCUMULATION	INTEGER	Number of positioning reset per location type	BTS.CELL_2088_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
lcsPositioningResetIntraBssHo	ACCUMULATION	INTEGER	Number of positioning requests rejected due to intra BSS handover	BTS.CELL_2085_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

lcsPositioningResetOther	ACCUMULATION	INTEGER	Number of positioning requests reset due to other radio related events	BTS.CELL_2085_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPositioningResetTANMR	ACCUMULATION	INTEGER	Number of positioning reset per location type	BTS.CELL_2088_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPositioningResetTimeout	ACCUMULATION	INTEGER	Number of positioning requests reset because supervision timer expired	BTS.CELL_2085_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
lcsPositioningResetUTDOA	ACCUMULATION	INTEGER	Number of positioning reset per location type	BTS.CELL_2088_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.52 Cell.Nortel.GSM.Mobile_8W

8W power mobile statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoSuccessIncomingInterBss8W	PERCENTAGE	FLOAT	Percentage number of successful incoming inter_bss handovers received by the cell, for MS 8W only	$100 * \frac{\{hoSuccessIncomingInterBss8W\}}{\{hoRequestIncomingInterBss8W\}}$	Average, ntesdcchbh, ntctchbh,

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					ntctc hfrbh
$\bar{\%_hoSuccessIncomingIntraBss8W}$	PERCENTAGE	FLOAT	Percentage number of successful incoming intra_bss handovers received by the cell, for MS 8W only	$100 * \frac{\{hoSuccessIncomingIntraBss8W\}}{\{hoSuccessIncomingIntraBss8W\}}$	Average, ntc sd cchbh, ntctc hbh, ntctc hfrbh
$_ \%_hoSuccessIntraBts8W$	PERCENTAGE	FLOAT	Percentage number of successful intra_cell handovers for the cell, for MS 8W	$100 * \frac{\{hoSuccessIntraBts8W\}}{\{hoRequestIntraBts8W\}}$	Average, ntc sd cchbh, ntctc hbh, ntctc hfrbh
$\bar{\%_hoSuccessOutgoingInterBss8W}$	PERCENTAGE	FLOAT	Percentage number of successful outgoing inter_bss handovers from the cell for MS 8W	$100 * \frac{\{hoSuccessOutgoingInterBss8W\}}{\{hoRequestOutgoingInterBss8W\}}$	Average, ntc sd cchbh, ntctc hbh, ntctc hfrbh
$\bar{\%_hoSuccessOutgoingInterBssSdcch8W}$	PERCENTAGE	FLOAT	Percentage number of successful outgoing inter_bss handovers from the cell for MS 8W	$100 * \frac{\{hoSuccessOutgoingInterBssSdcch8W\}}{\{hoRequestOutgoingInterBssSdcch8W\}}$	Average, ntc sd cchbh, ntctc hbh, ntctc hfrbh
$\bar{\%_hoSuccessOutgoingIntraBss8W}$	PERCENTAGE	FLOAT	Percentage number of successful outgoing intra_bss handovers from the cell for MS 8W	$100 * \frac{\{hoSuccessOutgoingIntraBss8W\}}{\{hoRequestOutgoingIntraBss8W\}}$	Average, ntc sd cchbh,

					ntctc hbbh, ntctc hfrbh
%_hoSuccessOutgoingIntra BssSdcch8W	PERCE NTAGE	FL OAT	Percentage number of successful outgoing intra_bss handovers from the cell for MS 8W	100 * {hoSuccessOutgoingIntraBssSdcch8W }/ {hoRequestOutgoingIntraBssSdcch8W }	Aver age, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
attemptedTchFrSeizures8W	ACCUM ULATION	INT 8	Number of attempts of assignation of a TCH full rate or a preempted PDTCH for MS 8W.	BTS.CELL_2036_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
estabIndicSignallingEmerg ency8W	ACCUM ULATION	INT 8	Number of receipts of an ESTABLISHMENT_INDI CATION message in call establishment phase (on SDCCH, or on TCH in primo allocation (call re- establishment) or on overflowing), for MS 8W only	BTS.CELL_2054_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
estabIndicSigPhase28W	ACCUM ULATION	INT 8	Number of receipt of an ESTABLISHMENT_INDI CATION message in call establishment phase (on SDCCH, or on TCH in primo allocation (call re- establishment) or on overflowing) for a phase I	BTS.CELL_2055_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh

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			MS 8W		
hoRequestIncomingInterBs s8W	ACCUM ULATIO N	INT 8	Number of incoming inter_bss handover requests received by the cell, for MS 8W	BTS.CELL_2041_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoRequestIncomingIntraBs s8W	ACCUM ULATIO N	INT 8	Number of incoming intra_bss handover requests received by the cell, for MS 8W	BTS.CELL_2040_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoRequestIntraBts8W	ACCUM ULATIO N	INT 8	Number of intra_cell handover requests for the cell, by MS 8W only	BTS.CELL_2046_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoRequestOutgoingInterBs s8W	ACCUM ULATIO N	INT 8	Number of outgoing inter_bss handover requests from the cell	BTS.CELL_2045_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoRequestOutgoingInterBs sSdcch8W	ACCUM ULATIO N	INT 8	Number of outgoing inter_bss handover requests from the cell	BTS.CELL_2051_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoRequestOutgoingIntraBs	ACCUM	INT	Number of outgoing	BTS.CELL_2044_0	Sum,

s8W	ULATIO N	8	intra_bss handover requests from the cell	_CUM	ntcsd cchbh , ntetc hbbh, ntetc hfrbh
hoRequestOutgoingIntraBs sSdcch8W	ACCUM ULATIO N	INT 8	Number of successful outgoing inter_bss handovers from the cell for MS 8W only	BTS.CELL_2050_0 _CUM	Sum, ntcsd cchbh , ntetc hbbh, ntetc hfrbh
hoSuccessIncomingInterBs s8W	ACCUM ULATIO N	INT 8	Number of successful incoming inter_bss handovers received by the cell, for MS 8W only	BTS.CELL_2043_0 _CUM	Sum, ntcsd cchbh , ntetc hbbh, ntetc hfrbh
hoSuccessIncomingIntraBs s8W	ACCUM ULATIO N	INT 8	Number of successful incoming intra_bss handovers received by the cell, for MS 8W only	BTS.CELL_2042_0 _CUM	Sum, ntcsd cchbh , ntetc hbbh, ntetc hfrbh
hoSuccessIntraBts8W	ACCUM ULATIO N	INT 8	Number of successful intra_cell handovers for the cell, for MS 8W	BTS.CELL_2047_0 _CUM	Sum, ntcsd cchbh , ntetc hbbh, ntetc

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					hfrbh
hoSuccessOutgoingInterBs s8W	ACCUM ULATIO N	INT 8	Number of successful outgoing inter_bss handovers from the cell for MS 8W	BTS.CELL_2039_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoSuccessOutgoingInterBs sSdcch8W	ACCUM ULATIO N	INT 8	Number of successful outgoing inter_bss handovers from the cell for MS 8W	BTS.CELL_2049_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoSuccessOutgoingIntraBs s8W	ACCUM ULATIO N	INT 8	Number of successful outgoing intra_bss handovers from the cell for MS 8W	BTS.CELL_2038_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoSuccessOutgoingIntraBs sSdcch8W	ACCUM ULATIO N	INT 8	Number of successful outgoing intra_bss handovers from the cell for MS 8W	BTS.CELL_2048_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoUnsuccessOutgoingInter CellTchReturnOldChannel 8W	ACCUM ULATIO N	INT 8	Number of refusals to accept an outgoing inter- cell handover on TCH in the cell with cause mobile returns to the old channel	BTS.CELL_2057_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoUnsuccessOutgoingInter	ACCUM	INT	Number of refusals to	BTS.CELL_2057_1	Sum,

CellTchT3103TimerExp8w	ULATI ON	8	accept an outgoing inter-cell handover on TCH in the cell with cause T3103 (respectively T3107) timer expiration for V12 (respectively V11)	_CUM	ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoUnsuccessOutgoingIntraBSSTchT3103TimerExp8w	ACCUM ULATI ON	INT 8	-Renamed in V15.1 hoUnsuccessOutgoingIntraCellTchT3103TimerExp8w- Number of failures to execute intra-bss handover from the cell for MS 8W only	BTS.CELL_2056_1 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoUnsuccessOutgoingIntraCellTchReturnOldChannel8W	ACCUM ULATI ON	INT 8	Number of failures to execute intra-bss handover from the cell for MS 8W only	BTS.CELL_2056_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
hoUnsuccessOutgoingIntraCellTchT3103TimerExp8w	ACCUM ULATI ON	INT 8	Number of failures to execute intra-bss handover from the cell for MS 8W only	BTS.CELL_2056_1 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
msClassSensitivityToggle	INTENS ITY	INT EG ER	Value of the msPowerClass Toggle parameter	BTS.CELL_2035_0 _CUM	Aver age, ntcsd cchbh , ntctc hbbh,

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					ntctc hfrbh , tot, min, max
signallingAbnormalRelease Cell8w	ACCUM ULATIO N	INT 8	Number of abnormal releases while the communication is in .signalling. phase and cell associated to the communication, for MS 8W only.	BTS.CELL_2058_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
signallingReleaseBts8W	ACCUM ULATIO N	INT 8	Number of releases while the communication is in -signalling- phase and cell associated to the communication, for MS 8W only	BTS.CELL_2052_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
signallingReleaseBtsT3107 CircDown8W	ACCUM ULATIO N	INT 8	Number of releases while the communication is in -signalling- phase and cell associated to the communication, for MS 8W only	BTS.CELL_2052_1 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
successfulTchFrSeizures8 W	ACCUM ULATIO N	INT 8	Number of successful TCH full rate or preempted PDTCH assignments for MS 8W.	BTS.CELL_2037_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh, ntctc hfrbh
trafficAbnormalRelease8w	ACCUM ULATIO N	INT 8	Number of abnormal releases while the communication is in -traffic- phase, for MS 8W only.	BTS.CELL_2059_0 _CUM	Sum, ntcsd cchbh , ntctc hbbh,

					nttc hfrbh
trafficRelease8W	ACCUMULATION	INT8	Number of releases while the communication is in traffic phase, for MS 8W only	BTS.CELL_2053_0_CUM	Sum, ntcsd cchbh , nttc hbh, nttc hfrbh

7.3.53 Cell.Nortel.GSM.Mobile_Power

Mobile power control statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
bsPowerDecControl	ACCUMULATION	INT8	Number of BS decrement power controls ordered by the Layer One Management	BTS.CELL_1808_0_CUM	Sum, ntcsdcchbh, nttchbh, nttchfrbh
bsPowerIncControl	ACCUMULATION	INT8	Number of BS increment power controls ordered by the Layer One Management	BTS.CELL_1807_0_CUM	Sum, ntcsdcchbh, nttchbh, nttchfrbh
bsPwrcDecPerChannel	INTENSITY	FLOAT	-Obsolete in V15.1- Average of BS decrement power controls per channel	BTS.CELL_8908_0_AVG	Average, ntcsdcchbh, nttchbh, nttchfrbh , tot, min, max
bsPwrcIncPerChannel	INTENSITY	FLOAT	-Obsolete in V15.1- Average of BS increment	BTS.CELL_8907_0_AVG	Average, ntcsdcchbh,

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			power controls per channel		ntctchbh, ntctchfrbh, tot, min, max
msPowerDecControl	ACCUMULATION	INT8	Number of MS decrement power controls ordered by the Layer One Management	BTS.CELL_1806_0_CUM	Sum, ntcscchbh, ntctchbh, ntctchfrbh
msPowerIncControl	ACCUMULATION	INT8	Number of MS increment power controls ordered by the Layer One Management	BTS.CELL_1805_0_CUM	Sum, ntcscchbh, ntctchbh, ntctchfrbh
msPwrcDecPerChannel	INTENSITY	FLOAT	-Obsolete in V15.1- Average of MS decrement power controls per channel	BTS.CELL_8906_0_AVG	Average, ntcscchbh, ntctchbh, ntctchfrbh, tot, min, max
msPwrcIncPerChannel	INTENSITY	FLOAT	-Obsolete in V15.1- Average of MS increment power controls per channel	BTS.CELL_8905_0_AVG	Average, ntcscchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.54 Cell.Nortel.GSM.Paging_requests

Paging request statistics.

KPI	Type	Data Type	Description	Derivation	Aggregation
pchMoreWaitCell	ACCUMULATION	INT8	Number of paging requests served after more than two waits for all the cells.	BTS.CCCH0_8731_0_CUM	Sum, ntcscchbh, ntctchbh, ntctchfrbh
pchMoreWait	ACCUMULATION	INT8	Number of paging messages	BTS.CCCH0_1031_0_CUM	Sum, ntcscchbh

			sent with more than two slots delay.		h, ntctchbh, ntctchfrbh
pchMoreWaitTs2	ACCUMULATION	INT8	Number of paging messages sent with more than two slots delay (TS2).	BTS.CCCH2_1031_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pchMoreWaitTs4	ACCUMULATION	INT8	Number of paging messages sent with more than two slots delay (TS4).	BTS.CCCH4_1031_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pchMoreWaitTs6	ACCUMULATION	INT8	Number of paging messages sent with more than two slots delay (TS6).	BTS.CCCH6_1031_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pchNoWaitCell	ACCUMULATION	INT8	Number of paging requests immediately served for all the cells.	BTS.CCCH0_8728_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pchNoWait	ACCUMULATION	INT8	Number of paging messages sent without delay.	BTS.CCCH0_1028_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pchNoWaitRatio	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of the immediately served paging requests.	BTS.CCH_8704_0_AVG	Average, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchNoWaitTs2	ACCUMULATION	INT8	Number of	BTS.CCCH2_1028_0	Sum,

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	TION		paging messages sent without delay (TS2).	_CUM	ntcsdcchb h, ntctchbh, ntctchfrbh
pchNoWaitTs4	ACCUMULATION	INT8	Number of paging messages sent without delay (TS4).	BTS.CCCH4_1028_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchNoWaitTs6	ACCUMULATION	INT8	Number of paging messages sent without delay (TS6).	BTS.CCCH6_1028_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchOneWaitCell	ACCUMULATION	INT8	Number of paging requests served after one wait for all the cells.	BTS.CCCH0_8729_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchOneWait	ACCUMULATION	INT8	Number of paging messages sent with one slot delay.	BTS.CCCH0_1029_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchOneWaitTs2	ACCUMULATION	INT8	Number of paging messages sent with one slot delay (TS2).	BTS.CCCH2_1029_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchOneWaitTs4	ACCUMULATION	INT8	Number of paging messages sent with one slot delay (TS4).	BTS.CCCH4_1029_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchOneWaitTs6	ACCUMULATION	INT8	Number of paging messages sent with one slot delay (TS6).	BTS.CCCH6_1029_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
pchQueuePagesDiscarded	ACCUMULATION	INT8	Number of paging messages	BTS.CCCH0_1605_0_CUM	Sum, ntcsdcchb

			queued up not transmitted.		h, ntetchbh, ntetchfrbh
pchQueuePagesDiscardedTs2	ACCUMULATION	INT8	Number of paging messages queued up not transmitted (TS2).	BTS.CCCH2_1605_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pchQueuePagesDiscardedTs4	ACCUMULATION	INT8	Number of paging messages queued up not transmitted (TS4).	BTS.CCCH4_1605_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pchQueuePagesDiscardedTs6	ACCUMULATION	INT8	Number of paging messages queued up not transmitted (TS6).	BTS.CCCH6_1605_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pchTwoWaitCell	ACCUMULATION	INT8	Number of paging requests served after two waits for all the cells.	BTS.CCCH0_8730_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pchTwoWait	ACCUMULATION	INT8	Number of paging messages sent with two slots delay.	BTS.CCCH0_1030_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pchTwoWaitTs2	ACCUMULATION	INT8	Number of paging messages sent with two slots delay (TS2).	BTS.CCCH2_1030_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pchTwoWaitTs4	ACCUMULATION	INT8	Number of paging messages sent with two	BTS.CCCH4_1030_0_CUM	Sum, ntesdcchbh,

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			slots delay (TS4).		ntctchbh, ntctchfrbh
pchTwoWaitTs6	ACCUMULATION	INT8	Number of paging messages sent with two slots delay (TS6).	BTS.CCCH6_1030_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

7.3.55 Cell.Nortel.GSM.Path_Balance

Path balance statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pathBalanceCum	ACCUMULATION	INT8	Cumulative path balance for all the communications on TCH full rate channel or preempted PDTCH on the BCCH TDMA	BTS.CELL_1816_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pathBalanceEch	ACCUMULATION	INT8	No of samples, path balance for all the communications on TCH full rate channel or preempted PDTCH on the BCCH TDMA	BTS.CELL_1816_0_NBS	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
pathBalanceMax	INTENSITY	INT8	Maximum path balance for all the communications on TCH full rate channel or preempted PDTCH on the BCCH TDMA	BTS.CELL_1816_0_MAX	Constant, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pathBalanceMoy	INTENSITY	FLOAT	Average path balance for all the communications on	BTS.CELL_1816_0_AVG	Average, ntcsdcchbh,

			TCH full rate channel or preempted PDTCH on the BCCH TDMA		ntctchbh, ntctchfrbh, tot, min, max
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7.3.56 Cell.Nortel.GSM.PCH_AGCH

PCH and AGCH statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pchAveragedQueueLengthCell	INTENSITY	FLOAT	Average number of waiting messages in PAGCH queue for all the cells	BTS.CCCH0_8734_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchAveragedQueueLengthCum	ACCUMULATION	INT8	Cumulative number of messages waiting in queue for transmission on PCH-AGCH	BTS.CCCH0_1604_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthEch	ACCUMULATION	INT8	No of samples, number of messages waiting in queue for transmission on PCH-AGCH	BTS.CCCH0_1604_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthMax	INTENSITY	INTEGER	Maximum number of messages waiting in queue for transmission on PCH-AGCH	BTS.CCCH0_1604_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

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pchAveragedQueueLengthMoy	INTENSITY	FLOAT	Average number of messages waiting in queue for transmission on PCH-AGCH	BTS.CCCH0_1604_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchAveragedQueueLengthTs2Cum	ACCUMULATION	INT8	Cumulative number of messages waiting in queue for transmission on PCH-AGCH (TS2)	BTS.CCCH2_1604_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthTs2Ech	ACCUMULATION	INT8	No of samples, number of messages waiting in queue for transmission on PCH-AGCH (TS2)	BTS.CCCH2_1604_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthTs2Max	INTENSITY	INTEGER	Maximum number of messages waiting in queue for transmission on PCH-AGCH (TS2)	BTS.CCCH2_1604_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchAveragedQueueLengthTs2Moy	INTENSITY	FLOAT	Average number of messages waiting in queue for transmission on PCH-AGCH (TS2)	BTS.CCCH2_1604_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchAveragedQueueLengthTs4Cum	ACCUMULATION	INT8	Cumulative number of messages waiting in queue for transmission on PCH-AGCH (TS4)	BTS.CCCH4_1604_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

pchAveragedQueueLengthTs4Ech	ACCUMULATION	INT8	No of samples, number of messages waiting in queue for transmission on PCH-AGCH (TS4)	BTS.CCCH4_1604_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthTs4Max	INTENSITY	INTEGER	Maximum number of messages waiting in queue for transmission on PCH-AGCH (TS4)	BTS.CCCH4_1604_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchAveragedQueueLengthTs4Moy	INTENSITY	FLOAT	Average number of messages waiting in queue for transmission on PCH-AGCH (TS4)	BTS.CCCH4_1604_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
pchAveragedQueueLengthTs6Cum	ACCUMULATION	INT8	Cumulative number of messages waiting in queue for transmission on PCH-AGCH (TS6)	BTS.CCCH6_1604_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthTs6Ech	ACCUMULATION	INT8	No of samples, number of messages waiting in queue for transmission on PCH-AGCH (TS6)	BTS.CCCH6_1604_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pchAveragedQueueLengthTs6Max	INTENSITY	INTEGER	Maximum number of messages	BTS.CCCH6_1604_0_MAX	Constant, ntesdcchbh,

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			waiting in queue for transmission on PCH-AGCH (TS6)		nttchbh, nttchfrbh, tot, min, max
pchAveragedQueueLengthTs6Moy	INTENSITY	FLOAT	Average number of messages waiting in queue for transmission on PCH-AGCH (TS6)	BTS.CCCH6_1604_0_AVG	Average, nttcdchbh, nttchbh, nttchfrbh, tot, min, max
pchQueuePagesDiscardedCell	ACCUMULATION	INT8	Number of pagings discarded in the PAGCH queue for all the cells	BTS.CCCH0_8735_0_CUM	Sum, nttcdchbh, nttchbh, nttchfrbh

7.3.57 Cell.Nortel.GSM.PCU_Throughput

PCU throughput statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuDLThroughputCum	ACCUMULATION	INT8	Cumulated size in bytes of all the GPRS RLC data blocks sent for the first time (i.e. fresh block) on a pipe	BTS.CELL_15007_1_CUM	Sum, nttcdchbh, nttchbh, nttchfrbh
pcuDLThroughputNbs	ACCUMULATION	INT8	Cumulated time in multiple of 20ms where the MS is in GPRS DL data transfer.	BTS.CELL_15007_1_NBS	Sum, nttcdchbh, nttchbh, nttchfrbh
pcuDnPreEstWithLLCFrame Transmitted	ACCUMULATION	INT8	Number of DL TBF pre-established and effectively	BTS.CELL_15195_0_CUM	Sum, nttcdchbh, nttchbh,

			used for the transmission of a DL-UNIT DATA received from the SGSN.		ntetchfrbh
pcuUpPipeGreater22kbps	ACCUMULATION	INT8	Number of times a throughput equal or greater than 22 kbps is reached in uplink direction by an MS in the cell.	BTS.CELL_15194_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuUpThroughputAvg	INTENSITY	FLOAT	Average bytes of all the RLC GPRS data blocks received for the first time on a pipe (ie fresh block)	BTS.CELL_15193_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
pcuUpThroughputCum	ACCUMULATION	INT8	Cumulative bytes of all the RLC GPRS data blocks received for the first time on a pipe (ie fresh block)	BTS.CELL_15193_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pcuUpThroughputNbs	ACCUMULATION	INT8	No of samples, bytes of all the RLC GPRS data blocks received for the first time on a pipe (ie	BTS.CELL_15193_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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			fresh block)		
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7.3.58 Cell.Nortel.GSM.PDTCH_resources

PDTCH resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_successful_assignments_MsDualb	PERCENTAGE	FLOAT	Percentage successful assignments for dualband mobiles	$100 * \frac{\{\text{successfulTchFrSeizuresMsDualb}\}}{\{\text{attemptedTchFrSeizuresMsDualb}\}}$	Average , ntsdcchbh, ntctchbh , ntctchfrbh
%_successful_assignments	PERCENTAGE	FLOAT	Percentage successful assignments	$100 * \frac{\{\text{successfulTchFrSeizures}\}}{\{\text{attemptedTchFrSeizures}\}}$	Average , ntsdcchbh, ntctchbh , ntctchfrbh
allocatedCircuitTsCellCum	ACCUMULATION	INT8	Cumulative number of activated and non activated circuit TS for traffic in circuit mode in the inner or the	BTS.CELL_1821_0_CUM	Sum, ntsdccbh, ntctchbh , ntctchfrbh

			outer zone of the cell		
allocatedCircuitTsCellEch	ACCUMULATION	INT8	Number of samples, number of activated and non activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell	BTS.CELL_1821_0_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
allocatedCircuitTsCellMax	INTENSITY	INT8	Maximum number of activated and non activated circuit TS for traffic in circuit	BTS.CELL_1821_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

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			mode in the inner or the outer zone of the cell		
allocatedCircuitTsCellMoy	INTENSITY	FLOAT	Average number of activated and non activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell	BTS.CELL_1821_0_AV G	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
allocatedCircuitTsCum	ACCUMULATION	INT8	Cumulative number of activated and non activated circuit TS for traffic in circuit mode in the inner or	BTS.CELL_1812_0_CU M	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh

			the outer zone of the cell		
allocatedCircuitTsEch	ACCUMULATION	INT8	No of sample s, number of activate d and non activate d circuit TS for traffic in circuit mode in the inner or the outer zone of the cell	BTS.CELL_1812_0_NB S	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh
allocatedCircuitTsMax	INTENSITY	INTEGER	Maxim um number of activate d and non activate d circuit TS for traffic in circuit	BTS.CELL_1812_0_MA X	Constan t, ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max

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			mode in the inner or the outer zone of the cell		
allocatedCircuitTsMoy	INTENSITY	FLOAT	Average number of activated and non activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell	BTS.CELL_1812_0_AV G	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
allocatedPacketTsCellCum	ACCUMULATION	INT8	Cumulative number of TS allocations for packet mode in the cell	BTS.CELL_1822_0_CU M	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh
allocatedPacketTsCellEch	ACCUMULATION	INT8	Number of samples, number of TS	BTS.CELL_1822_0_NB S	Sum, ntcsdcch bh, ntctchbh , ntctchfr

			allocations for packet mode in the cell		bh
allocatedPacketTsCellMax	INTENSITY	INT8	Maximum number of TS allocations for packet mode in the cell	BTS.CELL_1822_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allocatedPacketTsCellMoy	INTENSITY	FLOAT	Average number of TS allocations for packet mode in the cell	BTS.CELL_1822_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allocatedPacketTsCum	ACCUMULATION	INT8	Cumulative number of TS allocations for packet mode in the cell	BTS.CELL_1813_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
allocatedPacketTsEch	ACCUMULATION	INT8	No of sample	BTS.CELL_1813_0_NBS	Sum, ntsdcch

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			s, number of TS allocati ons for packet mode in the cell		bh, ntctchbh , ntctchfr bh
allocatedPacketTsMax	INTENSITY	INTE GER	Maxim um number of TS allocati ons for packet mode in the cell	BTS.CELL_1813_0_MA X	Constan t, ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
allocatedPacketTsMoy	INTENSITY	FLOA T	Averag e number of TS allocati ons for packet mode in the cell	BTS.CELL_1813_0_AV G	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
assignFailureRateDualBandMS h	INTENSITY	FLOA T	- Obsolet e in V15.1- Ratio of TCH or preeem pted PDTC H assign ment failures for	BTS.CELL_8026_0_AV G	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max

			dualband MS		
assignFailureRate	INTENSITY	FLOAT	- Obsolete in V15.1- Ratio of TCH or preempted PDTC H assignment failures	BTS.CELL_8711_0_AVG	Average , ntsdcchbh, ntctchbh , ntctchfrbh, tot, min, max
attemptedTchFrSeizuresMsDualb	ACCUMULATION	INT8	Number of attempts of assignment of a TCH/FR or a preempted PDTC H for dualband mobiles	BTS.CELL_1715_0_CUM	Sum, ntsdcchbh, ntctchbh , ntctchfrbh
attemptedTchFrSeizures	ACCUMULATION	INT8	Number of TCH/FR or preempted PDTC H	BTS.CELL_1049_0_CUM	Sum, ntsdcchbh, ntctchbh , ntctchfrbh

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			assignment requests		
g13	ACCUMULATION	INT8	- Obsolete in V15.1- Successful TCH or preempted PDTC H assignments at cell level	BTS.CELL_8043_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
gprsPreemptionNack	ACCUMULATION	INT8	Number of GPRS preemption failures (requests nacked by the PCU)	BTS.CELL_1815_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
gprsPreemption	ACCUMULATION	INT8	Number of GPRS preemption successes	BTS.CELL_1814_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
successfulTchFrSeizuresMsDualb	ACCUMULATION	INT8	Number of successful TCH/F R or a	BTS.CELL_1716_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfr

			preempted PDTC H assignments for dualband mobiles		bh
successfulTchFrSeizures	ACCUMULATION	INT8	Number of TCH/F R or a preempted PDTC H successfully assigned	BTS.CELL_1050_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
t3107ExpAssign	ACCUMULATION	INT8	Number of t3107 time-out elapse: Changing from SDCC H to TCH or preempted PDTC H	BTS.CELL_8017_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
totalNumberOfPacketTsCellCum	ACCUMULATION	INT8	Cumulative	BTS.CELL_1822_1_CUM	Sum, ntesdcch

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			number of PDTC H configu red on the cell		bh, ntctchbh , ntctchfr bh
totalNumberOfPacketTsCellEch	ACCUMUL ATION	INT8	Numbe r of sample s, number of PDTC H configu red on the cell	BTS.CELL_1822_1_NB S	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh
totalNumberOfPacketTsCellMax	INTENSITY	INT8	Maxim um number of PDTC H configu red on the cell	BTS.CELL_1822_1_MA X	Constan t, ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
totalNumberOfPacketTsCellMo y	INTENSITY	FLOA T	Averag e number of PDTC H configu red on the cell	BTS.CELL_1822_1_AV G	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
totalNumberOfPacketTsCum	ACCUMUL ATION	INT8	Cumula tive number of PDTC	BTS.CELL_1813_1_CU M	Sum, ntcsdcch bh, ntctchbh ,

			H configu red on the cell		ntctchfr bh
totalNumberOfPacketTsEch	ACCUMUL ATION	INT8	No of sample, number of PDTC H configu red on the cell	BTS.CELL_1813_1_NB S	Sum, ntcsdch bh, ntctchbh , ntctchfr bh
totalNumberOfPacketTsMax	INTENSITY	INTE GER	Maxim um number of PDTC H configu red on the cell	BTS.CELL_1813_1_MA X	Constan t, ntcsdch bh, ntctchbh , ntctchfr bh, tot, min, max
totalNumberOfPacketTsMoy	INTENSITY	FLOA T	Averag e number of PDTC H configu red on the cell	BTS.CELL_1813_1_AV G	Average , ntcsdch bh, ntctchbh , ntctchfr bh, tot, min, max
totalNumberOfPacketTsUsedForCircuitCellCum	ACCUMUL ATION	INT8	Cumula tive number of PDTC	BTS.CELL_1822_2_CU M	Sum, ntcsdch bh, ntctchbh ,

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			H preemp ted		ntetchfr bh
totalNumberOfPacketTsUsedForCircuitCellEch	ACCUMULATION	INT8	Number of samples, number of PDTC H preemp ted	BTS.CELL_1822_2_NBS	Sum, ntesdcch bh, ntetchbh , ntetchfr bh
totalNumberOfPacketTsUsedForCircuitCellMax	INTENSITY	FLOAT	Maximum number of PDTC H preemp ted	BTS.CELL_1822_2_MAX	Constant, ntesdcch bh, ntetchbh , ntetchfr bh, tot, min, max
totalNumberOfPacketTsUsedForCircuitCellMoy	INTENSITY	FLOAT	Average number of PDTC H preemp ted	BTS.CELL_1822_2_AVG	Average , ntesdcch bh, ntetchbh , ntetchfr bh, tot, min, max
totalNumberOfPacketTsUsedForCircuitCum	ACCUMULATION	INT8	Cumulative number of PDTC H preemp ted	BTS.CELL_1813_2_CUM	Sum, ntesdcch bh, ntetchbh , ntetchfr bh
totalNumberOfPacketTsUsedForCircuitEch	ACCUMULATION	INT8	No of sample	BTS.CELL_1813_2_NBS	Sum, ntesdcch

			s, number of PDTC H preemp ted		bh, ntctchbh , ntctchfr bh
totalNumberOfPacketTsUsedForCircuitMax	INTENSITY	INTEGER	Maximum number of PDTC H preemp ted	BTS.CELL_1813_2_MAX	Constant, ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
totalNumberOfPacketTsUsedForCircuitMoy	INTENSITY	FLOAT	Average number of PDTC H preemp ted	BTS.CELL_1813_2_AVG	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max

7.3.59 Cell.Nortel.GSM.RACH_access

RACH access statistics.

KPI	Type	Data Type	Description	Derivation	Aggregation
rachAccessCountCell	ACCUMULATION	INT8	Number of random accesses transmitted to the BSC for all the cells.	BTS.CCCH0_8727_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

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rachAccessCount	ACCUMULATION	INT8	Number of decoded RACH access forwarded to the BSC.	BTS.CCCH0_1027_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachAccessCountTs2	ACCUMULATION	INT8	Number of decoded RACH access forwarded to the BSC (TS2).	BTS.CCCH2_1027_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachAccessCountTs4	ACCUMULATION	INT8	Number of decoded RACH access forwarded to the BSC (TS4).	BTS.CCCH4_1027_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachAccessCountTs6	ACCUMULATION	INT8	Number of decoded RACH access forwarded to the BSC (TS6).	BTS.CCCH6_1027_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachBusyCountCell	ACCUMULATION	INT8	Number of decoded random accesses received by the BTS from the MS for all the cells.	BTS.CCCH0_8726_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachBusyCount	ACCUMULATION	INT8	Number of decoded RACH access from the mobiles.	BTS.CCCH0_1026_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachBusyCountTs2	ACCUMULATION	INT8	Number of decoded RACH access from the mobiles(TS2).	BTS.CCCH2_1026_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachBusyCountTs4	ACCUMULATION	INT8	Number of decoded RACH access from the mobiles(TS4).	BTS.CCCH4_1026_0_CUM	Sum, ntesdcchbh, ntetchbh,

					ntetchfrbh
rachBusyCountTs6	ACCUMULATION	INT8	Number of decoded RACH access from the mobiles(TS6).	BTS.CCCH6_1026_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachNonDecodedAvLevelCell	INTENSITY	FLOAT	Average level on non decoded RACHs for all the cells.	BTS.CCCH0_8733_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
rachNonDecodedAvLevelCum	ACCUMULATION	INT8	Cumulative level of non-decoded RACH access.	BTS.CCCH0_1033_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachNonDecodedAvLevelEch	ACCUMULATION	INT8	Number of samples, level of non-decoded RACH access.	BTS.CCCH0_1033_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rachNonDecodedAvLevelMax	INTENSITY	INTEGER	Maximum level of non-decoded RACH access.	BTS.CCCH0_1033_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
rachNonDecodedAvLevelMoy	INTENSITY	FLOAT	Average level of non-decoded RACH access.	BTS.CCCH0_1033_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max

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rachNonDecodedAvLevelTs2Cum	ACCUMULATION	INT8	Cumulative level of non-decoded RACH access (TS2).	BTS.CCCH2_1033_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
rachNonDecodedAvLevelTs2Ech	ACCUMULATION	INT8	Number of samples, level of non-decoded RACH access (TS2).	BTS.CCCH2_1033_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
rachNonDecodedAvLevelTs2Max	INTENSITY	INTEGER	Maximum level of non-decoded RACH access (TS2).	BTS.CCCH2_1033_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
rachNonDecodedAvLevelTs2Moy	INTENSITY	FLOAT	Average level of non-decoded RACH access (TS2).	BTS.CCCH2_1033_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
rachNonDecodedAvLevelTs4Cum	ACCUMULATION	INT8	Cumulative level of non-decoded RACH access (TS4).	BTS.CCCH4_1033_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
rachNonDecodedAvLevelTs4Ech	ACCUMULATION	INT8	Number of samples, level of non-decoded RACH access (TS4).	BTS.CCCH4_1033_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
rachNonDecodedAvLevelTs4Max	INTENSITY	INTEGER	Maximum level of non-decoded RACH access (TS4).	BTS.CCCH4_1033_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

rachNonDecodedAvLevelTs4Moy	INTENSITY	FLOAT	Average level of non-decoded RACH access (TS4).	BTS.CCCH4_1033_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
rachNonDecodedAvLevelTs6Cum	ACCUMULATION	INT8	Cumulative level of non-decoded RACH access (TS6).	BTS.CCCH6_1033_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
rachNonDecodedAvLevelTs6Ech	ACCUMULATION	INT8	Number of samples, level of non-decoded RACH access (TS6).	BTS.CCCH6_1033_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
rachNonDecodedAvLevelTs6Max	INTENSITY	INTEGER	Maximum level of non-decoded RACH access (TS6).	BTS.CCCH6_1033_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
rachNonDecodedAvLevelTs6Moy	INTENSITY	FLOAT	Average level of non-decoded RACH access (TS6).	BTS.CCCH6_1033_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max

7.3.60 Cell.Nortel.GSM.Radio_Frames

Radio frames statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
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ecuActivation	ACCUMULATION	INT8	Number of erroneous frames	BTS.CELL_1721_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
ecuEfficiency	INTENSITY	FLOAT	-Obsolete in V15.1- Rate of uplink radio frame improved by ECU	BTS.CELL_8627_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
radioFrameUIReceived	ACCUMULATION	INT8	Number of radio frames uplink received	BTS.CELL_1720_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.61 Cell.Nortel.GSM.Request_and_ImmAss_per_causes

Channel request and assignment statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelRequestCause000	ACCUMULATION	INT8	Number of channel allocation requests: Cause 000	BTS.CELL_1191_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelRequestCause001	ACCUMULATION	INT8	Number of channel allocation requests: Cause 001	BTS.CELL_1191_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelRequestCause010	ACCUMULATION	INT8	Number of channel allocation requests: Cause 010	BTS.CELL_1191_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelRequestCause011	ACCUMULATION	INT8	Number of channel allocation	BTS.CELL_1191_3_CUM	Sum, ntesdcchbh,

			requests: Cause 011		ntetchbh, ntetchfrbh
channelRequestCause100	ACCUMULATION	INT8	Number of channel allocation requests: Cause 100	BTS.CELL_1191_4_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
channelRequestCause101	ACCUMULATION	INT8	Number of channel allocation requests: Cause 101	BTS.CELL_1191_5_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
channelRequestCause110	ACCUMULATION	INT8	Number of channel allocation requests: Cause 110	BTS.CELL_1191_6_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
channelRequestCause111	ACCUMULATION	INT8	Number of channel allocation requests: Cause 111	BTS.CELL_1191_7_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentFailureRatio	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of immediate assignment failures	BTS.CELL_8708_0_AVG	Average, ntcsdcchbh, ntetchbh, ntetchfrbh, tot, min, max
immediateAssignmentSuccessCause000	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 000	BTS.CELL_1192_0_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause001	ACCUMULATION	INT8	Number of successful	BTS.CELL_1192_1_CUM	Sum, ntcsdcchbh

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			immediate assignments: Cause 001		h, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause010	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 010	BTS.CELL_1192_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause011	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 011	BTS.CELL_1192_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause100	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 100	BTS.CELL_1192_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause101	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 101	BTS.CELL_1192_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause110	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 110	BTS.CELL_1192_6_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
immediateAssignmentSuccessCause111	ACCUMULATION	INT8	Number of successful immediate assignments: Cause 111	BTS.CELL_1192_7_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
pagingResponse	ACCUMULATION	INT8	Number of signaling channels allocated for replies to paging	BTS.CELL_1730_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
uplinkFreeUplinkReply	ACCUMULATION	INT8	Number of uplink free	BTS.CELL_2060_0_CUM	Sum, ntesdcchbh

			messages sent by the BSC indicating in the uplink request access that the MS shall perform the uplink reply procedure.		h, ntctchbh, ntctchfrbh
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7.3.62 Cell.Nortel.GSM.RX_level_and_Quality

Receiver level and quality statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
averageDLRxLev	INTENSITY	FLOAT	Average downlink RxLev in dBm	BTS.CELL_8623_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
averageDLRxQual	INTENSITY	FLOAT	Average downlink RxQual in BER	BTS.CELL_8625_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
averageULRxLev	INTENSITY	FLOAT	Average uplink RxLev in dBm	BTS.CELL_8624_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
averageULRxQual	INTENSITY	FLOAT	Average uplink	BTS.CELL_8626_0_	Average,

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		T	RxQual in BER	AVG	ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max
faultyPaWithoutPwr cDI	INTENSITY	FLOA T	-Obsolete in V15.1- Balanced link budget	BTS.CELL_8816_0_ AVG	Average, ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max
rxLevDownLink	ACCUMULA TION	INT8	Sum of Downlink signal strength measurements	BTS.CELL_1623_0_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
rxLevUpLink	ACCUMULA TION	INT8	Sum of Uplink signal strength measurements	BTS.CELL_1624_0_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
rxQualDownLink	ACCUMULA TION	INT8	Sum of Downlink signal quality measurements	BTS.CELL_1625_0_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
rxQualUpLink	ACCUMULA TION	INT8	Sum of Uplink signal quality measurements	BTS.CELL_1626_0_ CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

7.3.63 Cell.Nortel.GSM.SDCCH_allocation

SDCCH allocation statistics

KPI	Type	Data Type	Description	Derivation	Aggregat ion
allSdcchAllocatedTimeC ellCum	INTENSITY	INTEG ER	Cumulative allocation	BTS.CELL_1831_ 0_CUM	Average, ntcsdcchb

			duration of all SDCCH resources		h, ntctchbh, ntctchfrbh, tot, min, max
allSdcchAllocatedTimeCellEch	INTENSITY	INTEGER	Number of samples allocation duration of all SDCCH resources	BTS.CELL_1831_0_NBS	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allSdcchAllocatedTimeCellMax	INTENSITY	INTEGER	Maximum allocation duration of all SDCCH resources	BTS.CELL_1831_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allSdcchAllocatedTimeCellMoy	INTENSITY	FLOAT	Average allocation duration of all SDCCH resources	BTS.CELL_1831_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allSdcchAllocatedTimeCum	ACCUMULATION	INT8	Cummulative allocation duration of all SDCCH resources	BTS.CELL_1060_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
allSdcchAllocatedTimeEch	ACCUMULATION	INT8	Number of sample, allocation duration of all SDCCH resources	BTS.CELL_1060_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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allSdcchAllocatedTimeMax	INTENSITY	INTEGER	Maximum allocation duration of all SDCCH resources	BTS.CELL_1060_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allSdcchAllocatedTimeMo	INTENSITY	FLOAT	Average allocation duration of all SDCCH resources	BTS.CELL_1060_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allSdcchinseconds	INTENSITY	FLOAT	Duration of SDCCH saturation in seconds	BTS.CELL_8702_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
availableScchRate	INTENSITY	FLOAT	-Obsolete in V15.1- SDCCH available rate	BTS.CELL_8911_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
cellSdcchResourceFailureRatio	INTENSITY	FLOAT	Ratio of SDCCH resource failures in the cell	BTS.CELL_8706_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
doubleAllocationRate	INTENSITY	FLOAT	-Obsolete in V15.1- Double allocation	BTS.CELL_8808_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

saturatedSdcchCell	INTENSITY	FLOAT	-Obsolete in V15.1- Saturated cell versus SDCCH	BTS.CELL_8716_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdcchAllocated	ACCUMULATION	INT8	Number of SDCCHs allocated in the zone (concentric cell)	BTS.CELL_1606_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
sdcchAverageConfiguredCellCum	INTENSITY	INTEGER	Cumulative average and maximum numbers of configured SDCCH resource	BTS.CELL_1833_0_CUM	Average, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdcchAverageConfiguredCellEch	INTENSITY	INTEGER	Number of samples of average and maximum numbers of configured SDCCH resource	BTS.CELL_1833_0_NBS	Average, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdcchAverageConfiguredCellMax	INTENSITY	INTEGER	Maximum numbers of configured SDCCH resource	BTS.CELL_1833_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdcchAverageConfiguredCellMoy	INTENSITY	FLOAT	Average and maximum numbers of configured	BTS.CELL_1833_0_AVG	Average, ntesdcchb h, ntctchbh,

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			SDCCH resource		ntetchfrbh, tot, min, max
sdccchAverageConfiguratedCum	ACCUMULATION	INT8	Cumulative numbers of configured SDCCH full rate resource	BTS.CELL_1811_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
sdccchAverageConfiguratedEch	ACCUMULATION	INT8	No of samples, numbers of configured SDCCH full rate resource	BTS.CELL_1811_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
sdccchAverageConfiguratedMax	INTENSITY	INTEGER	Maximum numbers of configured SDCCH full rate resource	BTS.CELL_1811_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
sdccchAverageConfiguratedMoy	INTENSITY	FLOAT	Average numbers of configured SDCCH full rate resource	BTS.CELL_1811_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
sdccchAveragedAvailableCellCum	INTENSITY	INTEGER	Cumulative average number of SDCCH available in the zone	BTS.CELL_1832_0_CUM	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
sdccchAveragedAvailableCellEch	INTENSITY	INTEGER	Number of samples of average number of SDCCH available in the zone	BTS.CELL_1832_0_NBS	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max

sdccchAveragedAvailableCellMax	INTENSITY	INTEGER	Maximum average number of SDCCH available in the zone	BTS.CELL_1832_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
sdccchAveragedAvailableCellMoy	INTENSITY	FLOAT	Average number of SDCCH available in the zone	BTS.CELL_1832_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
sdccchAveragedAvailableCum	ACCUMULATION	INT8	Cummulative number of SDCCH available in the zone (concentric cell)	BTS.CELL_1701_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
sdccchAveragedAvailableEch	ACCUMULATION	INT8	Number of samples, number of SDCCH available in the zone (concentric cell)	BTS.CELL_1701_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
sdccchAveragedAvailableMax	INTENSITY	INTEGER	Maximum number of SDCCH available in the zone (concentric cell)	BTS.CELL_1701_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
sdccchAveragedAvailableMoy	INTENSITY	FLOAT	Average number of SDCCH available in the zone (concentric	BTS.CELL_1701_0_AVG	Average, ntesdcchb h, ntctchbh,

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			cell)		ntctchfrbh , tot, min, max
sdccchAveragedUsedCell Cum	INTENSITY	INTEGER	Cumulative number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1830_ 0_CUM	Average, ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdccchAveragedUsedCell Ech	INTENSITY	INTEGER	Number of samples of SDCCHs used in the zone (concentric cell)	BTS.CELL_1830_ 0_NBS	Average, ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdccchAveragedUsedCell Max	INTENSITY	INTEGER	Maximum number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1830_ 0_MAX	Constant, ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdccchAveragedUsedCell Moy	INTENSITY	FLOAT	Average number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1830_ 0_AVG	Average, ntcsdcchb h, ntctchbh, ntctchfrbh , tot, min, max
sdccchAveragedUsedCum	ACCUMULATION	INT8	Cummulative number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1607_ 0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
sdccchAveragedUsedEch	ACCUMULATION	INT8	Number of samples, number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1607_ 0_NBS	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

sdccchAveragedUsedMax	INTENSITY	INTEGER	Maximum number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1607_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
sdccchAveragedUsedMoy	INTENSITY	FLOAT	Average number of SDCCHs used in the zone (concentric cell)	BTS.CELL_1607_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
sdccchRessourceFailure	ACCUMULATION	INT8	Number of SDCCH allocation failures in the zone (concentric cell)	BTS.CELL_1608_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh

7.3.64 Cell.Nortel.GSM.Signalling_Phase_Duration

Signalling phase duration statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
signallingPhaseDurationCum	ACCUMULATION	INT8	Cumulative time of a signaling channel seizure	BTS.CELL_1044_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
signallingPhaseDurationEch	ACCUMULATION	INT8	Number of samples, time of a signaling channel seizure	BTS.CELL_1044_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh

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signallingPhaseDuration HighCum	ACCUMULATION	INT8	Cumulative time of a signaling channel seizure greater than 25 s	BTS.CELL_1045_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
signallingPhaseDuration HighEch	ACCUMULATION	INT8	Number of samples, time of a signaling channel seizure greater than 25 s	BTS.CELL_1045_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
signallingPhaseDuration HighMax	INTENSITY	INTEGER	Maximum time of a signaling channel seizure greater than 25 s	BTS.CELL_1045_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
signallingPhaseDuration HighMoy	INTENSITY	FLOAT	Average time of a signaling channel seizure greater than 25 s	BTS.CELL_1045_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
signallingPhaseDuration Max	INTENSITY	INTEGER	Maximum time of a signaling channel seizure	BTS.CELL_1044_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
signallingPhaseDuration Moy	INTENSITY	FLOAT	Average time of a signaling channel seizure	BTS.CELL_1044_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max

7.3.65 Cell.Nortel.GSM.Signalling_release_per_causes

Signalling release per causes statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
signallingAbnormalReleaseCell	ACCUMULATION	INT8	Number of abnormal releases while the communication is in -signalling phase- and a cell associated to the communication	BTS.CELL_1778_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsCallClearing	ACCUMULATION	INT8	Number of communications in signaling phase released: CALL CLEARING received	BTS.CELL_1163_12_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsCicRemovalEqptFail	ACCUMULATION	INT8	Number of communications in signaling phase released: CIC out of service (faulty equipment)	BTS.CELL_1163_10_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsClearCommand	ACCUMULATION	INT8	Number of communications in signaling phase released: CLEAR COMMAND received	BTS.CELL_1163_20_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsCnxFailRadioIntFail	ACCUMULATION	INT8	- Obsolete in V16 - Number of communications in signaling	BTS.CELL_1163_13_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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			phase released: Radio interface failure		h
signallingReleaseBtsCnxFailRadioLinkFail	ACCUMULATION	INT8	Number of communications in signaling phase released: Radio link failure	BTS.CELL_1163_14_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsErrorIndDm	ACCUMULATION	INT8	Number of communications in signaling phase released: DM error	BTS.CELL_1163_18_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsErrorIndSeq	ACCUMULATION	INT8	Number of communications in signaling phase released: Sequencing error	BTS.CELL_1163_19_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsErrorIndT200	ACCUMULATION	INT8	Number of communications in signaling phase released: T200 elapse	BTS.CELL_1163_17_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsIncFirstL3	ACCUMULATION	INT8	Number of communications in signaling phase released: Incorrect First L3Msg	BTS.CELL_1163_4_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsOmCicRemoval	ACCUMULATION	INT8	Number of communications in signaling phase released: CIC out of service (OAM)	BTS.CELL_1163_9_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsOmRadioChanBloc	ACCUMULATION	INT8	Number of communication	BTS.CELL_1163_11_CUM	Sum, ntesdcchbh

			s in signaling phase released: Radio channel blocked (OAM)		h, ntctchbh, ntctchfrbh
signallingReleaseBtsOmTsRemoval	ACCUMULATION	INT8	Number of communications in signaling phase released: Ts out of service (OAM)	BTS.CELL_1163_7_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsOthers	ACCUMULATION	INT8	Number of communications in signaling phase released: Other elapse	BTS.CELL_1163_28_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsOverload	ACCUMULATION	INT8	-Obsolete in V15.1- Number of releases while the communication is in -signalling-phase and cell associated to the communication .	BTS.CELL_1163_29_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsReleaseInd	ACCUMULATION	INT8	Number of communications in signaling phase released: RELEASE INDICATION received	BTS.CELL_1163_16_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsResetCirc	ACCUMULATION	INT8	Number of communications in signaling	BTS.CELL_1163_2_CUM	Sum, ntesdcchbh,

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			phase released: Reset circuit downlink		ntetchbh, ntetchfrb h
signallingReleaseBtsReset	ACCUMULA TION	INT8	Number of communication s in signaling phase released: Reset	BTS.CELL_116 3_1_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrb h
signallingReleaseBtsRfResInd	ACCUMULA TION	INT8	Number of communication s in signaling phase released: RF RESOURCE INDICATION received	BTS.CELL_116 3_21_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrb h
signallingReleaseBtsSccpData Refusal	ACCUMULA TION	INT8	Number of communication s in signaling phase released: SCCP DATA REFUSAL received	BTS.CELL_116 3_3_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrb h
signallingReleaseBtsSccpDiscI nd	ACCUMULA TION	INT8	Number of communication s in signaling phase released: SCCP disconnection	BTS.CELL_116 3_0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrb h
signallingReleaseBtsSwitchOv er	ACCUMULA TION	INT8	Number of communication s in signaling phase released: BSC chain switchover	BTS.CELL_116 3_22_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrb h
signallingReleaseBtsT11	ACCUMULA TION	INT8	Number of communication s in signaling phase released: T11 elapse	BTS.CELL_116 3_30_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrb h

signallingReleaseBtsT3101	ACCUMULATION	INT8	Number of communications in signaling phase released: T3101 elapse	BTS.CELL_1163_5_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsT3103	ACCUMULATION	INT8	Number of communications in signaling phase released: T3103 elapse	BTS.CELL_1163_24_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsT3107CircDown	ACCUMULATION	INT8	Number of communications in signaling phase released: T3107 elapse	BTS.CELL_1163_6_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsT8	ACCUMULATION	INT8	Number of communications in signaling phase released: T8 elapse	BTS.CELL_1163_25_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsTmodMs	ACCUMULATION	INT8	Number of communications in signaling phase released: Double TmodMs elapse	BTS.CELL_1163_23_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBtsTsRemovalEqptFail	ACCUMULATION	INT8	Number of communications in signaling phase released: Ts out of service (faulty equipment)	BTS.CELL_1163_8_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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signallingReleaseRatio	INTENSITY	FLOAT	Ratio of the number of communications abnormally released in signalling phase in the cell	BTS.CELL_8713_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
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7.3.66 Cell.Nortel.GSM.Signalling_release

Signalling release statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
signallingReleaseBtsCnxFailRemTransFail	ACCUMULATION	INT8	- Obsolete in V16 - Number of communications in signaling phase released: TCU failure	BTS.CELL_1163_32_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
signallingReleaseBts	ACCUMULATION	INT8	Number of releases while the communication is in signalling phase and cell associated to the communication	BTS.CELL_1753_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
signallingReleaseCellTbcEdge	ACCUMULATION	INT8	Number of releases while the communication is in signalling phase and cell associated to the communication.	BTS.CELL_1163_33_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

7.3.67 Cell.Nortel.GSM.SMS_service

SMS service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
sapi3SessionEstablishment	ACCUMULATION	INT8	Number of SAPI 3 session establishments for SMS	BTS.CELL_1621_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
smsRate	INTENSITY	FLOAT	-Obsolete in V15.1- SMS rate	BTS.CELL_8812_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.68 Cell.Nortel.GSM.TCH_allocation.AMR

TCH allocation for AMR calls statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrAttemptedFrTchSeizure	ACCUMULATION	INTEGER	Number of attempts of assignation of an AMR TCH for any kind of mobile	BTS.CELL_2118_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrAttemptedHrTchSeizure	ACCUMULATION	INTEGER	Number of attempts of assignation of an AMR TCH for any kind of mobile	BTS.CELL_2118_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrTchAllocated	ACCUMULATION	INT8	Number of AMR full rate TCH allocations	BTS.CELL_1900_0_CUM	Sum, ntesdcchbh, ntctchbh,

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					ntetchfrbh
amrFrTchStdAveragedUsedCellCum	ACCUMULATION	INT8	Cumulative number of AMR full rate TCH allocations	BTS.CELL_1934_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrTchStdAveragedUsedCellEch	ACCUMULATION	INT8	Number of samples, number of AMR full rate TCH allocations	BTS.CELL_1934_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrTchStdAveragedUsedCellMax	INTENSITY	INT8	Maximum number of AMR full rate TCH allocations	BTS.CELL_1934_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
amrFrTchStdAveragedUsedCellMoy	INTENSITY	FLOAT	Average number of AMR full rate TCH allocations	BTS.CELL_1934_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
amrFrTchStdAveragedUsedCum	ACCUMULATION	INT8	Cumulative number of AMR full rate TCH allocations	BTS.CELL_1901_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrTchStdAveragedUsedEch	ACCUMULATION	INT8	No of samples, number of AMR full rate TCH allocations	BTS.CELL_1901_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
amrFrTchStdAveragedUsedMax	INTENSITY	INTEGER	Maximum number of AMR full rate TCH allocations	BTS.CELL_1901_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min,

					max
amrFrTchStdAveragedUsedMoy	INTENSITY	FLOAT	Average number of AMR full rate TCH allocations	BTS.CELL_1901_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.69 Cell.Nortel.GSM.TCH_allocation.SAIC

TCH allocation for SAIC mobile statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
saicTchSuccessfullyAssigned	ACCUMULATION	INT8	Number of successful TCH allocations (including preempted PDTCH) to SAIC mobiles	BTS.CELL_2096_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.70 Cell.Nortel.GSM.TCH_connection.AMR

TCH connections for AMR calls statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrTchConnectionDurationCum	ACCUMULATION	INT8	Cumulative duration of the AMR full rate TCH connections	BTS.CELL_1902_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrTchConnectionDurationEch	ACCUMULATION	INT8	No of samples duration of the AMR full rate TCH	BTS.CELL_1902_0_NBS	Sum, ntesdcchbh, ntctchbh,

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			connections		ntctchfrbh
amrFrTchConnectionDurationMax	INTENSITY	FLOAT	Maximum duration of the AMR full rate TCH connections	BTS.CELL_1902_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
amrFrTchConnectionDurationMoy	INTENSITY	FLOAT	Average duration of the AMR full rate TCH connections	BTS.CELL_1902_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
amrHrTchConnectionDurationCum	ACCUMULATION	INT8	Cumulative duration of the AMR half rate TCH connections	BTS.CELL_1902_1_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
amrHrTchConnectionDurationEch	ACCUMULATION	INT8	No of samples duration of the AMR half rate TCH connections	BTS.CELL_1902_1_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
amrHrTchConnectionDurationMax	INTENSITY	FLOAT	Maximum duration of the AMR half rate TCH connections	BTS.CELL_1902_1_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max
amrHrTchConnectionDurationMoy	INTENSITY	FLOAT	Average duration of the AMR half rate TCH connections	BTS.CELL_1902_1_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh, tot, min, max

7.3.71 Cell.Nortel.GSM.TCH_FR_Resources

Full rate TCH resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allocationFailureTchFrSeizureInclHo	ACCUMULATION	INT8	TCH allocation failures at cell level	BTS.CELL_8040_0_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
allTchFrAllocatedTimeCellCum	ACCUMULATION	INT8	Cumulative duration to allocate all TCH/FR and preempted PDTCH resources	BTS.CELL_1823_0_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
allTchFrAllocatedTimeCellEch	INTENSITY	INT8	Maximum duration to allocate all TCH/FR and preempted PDTCH resources	BTS.CELL_1823_0_NBS	Constant, ntesdcc hbh, ntetchbh, ntetchfrbh, tot, min, max
allTchFrAllocatedTimeCellMax	ACCUMULATION	INT8	Number of samples, duration to	BTS.CELL_1823_0_MAX	Sum, ntesdcc hbh, ntetchbh,

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			allocate all TCH/FR and preempted PDTCH resources		ntetchfrbh
allTchFrAllocatedTimeCellMo y	INTENSIT Y	FLO AT	Average duration to allocate all TCH/FR and preempted PDTCH resources	BTS.CELL_1823_0_AV G	Averag e, ntesdec hbh, ntetchb h, ntetchfr bh, tot, min, max
allTchFrAllocatedTimeCum	ACCUMUL ATION	INT8	Cumulati ve duration to allocate all TCH/FR and preempt ed PDTCH resources	BTS.CELL_1057_0_CU M	Sum, ntesdec hbh, ntetchb h, ntetchfr bh
allTchFrAllocatedTimeEch	ACCUMUL ATION	INT8	Number of samples, duration to allocate all TCH/FR and preempt ed PDTCH resources	BTS.CELL_1057_0_NBS	Sum, ntesdec hbh, ntetchb h, ntetchfr bh
allTchFrAllocatedTimeMax	INTENSIT Y	INTE GER	Maximu m duration	BTS.CELL_1057_0_MA X	Constan t, ntesdec

			to allocate all TCH/FR and preempted PDTCH resources		hbb, ntetchbh, ntetchfrbh, tot, min, max
allTchFrAllocatedTimeMoy	INTENSITY	FLOAT	Average duration to allocate all TCH/FR and preempted PDTCH resources	BTS.CELL_1057_0_AVG	Average, ntsdccbhh, ntetchbh, ntetchfrbh, tot, min, max
attemptedTchFrSeizureInclHo	ACCUMULATION	INT8	Total TCH seizure attempts (including handovers) at cell level	BTS.CELL_8039_0_CUM	Sum, ntsdccbhh, ntetchbh, ntetchfrbh
attemptedTchFrSeizureNotInclHo	ACCUMULATION	INT8	Total TCH seizure attempts (not including handovers) at cell level	BTS.CELL_8037_0_CUM	Sum, ntsdccbhh, ntetchbh, ntetchfrbh
faultyTrxNoBcch	INTENSITY	FLOAT	Bad virtual timeslot	BTS.CELL_8813_0_AVG	Average, ntsdccb

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					hbb, ntetchb h, ntetchfr bh, tot, min, max
TCH_FR_Traffic	INTENSITY	FLOAT	TCH FR Traffic	{tchFrAveragedUsedTch AllocationMoy} + {tchFrAveragedUsedPrim oAllocationMoy}	Average, ntesdec hbb, ntetchb h, ntetchfr bh, tot, min, max
tchFrAllocated	ACCUMULATION	INT8	Number of TCH/FR or preempt ed PDTCH allocated in the cell	BTS.CELL_1744_0_CU M	Sum, ntesdec hbb, ntetchb h, ntetchfr bh
tchFrAllocatedOverflowAllocation	ACCUMULATION	INT8	Number of TCH/FR allocated because of SDCCH unavailab ility in the zone (concentri c cell)	BTS.CELL_1609_2_CU M	Sum, ntesdec hbb, ntetchb h, ntetchfr bh
tchFrAllocatedPrimoAllocation	ACCUMULATION	INT8	Number of TCH/FR allocated for call reestablis	BTS.CELL_1609_1_CU M	Sum, ntesdec hbb, ntetchb h, ntetchfr

			hments in the zone (concentri c cell) (primo- allocation)		bh
tchFrAllocatedTchAllocation	ACCUMUL ATION	INT8	Number of TCH/FR or preempte d PDTCH allocated for traffic in the zone (concentri c cell)	BTS.CELL_1609_0_CU M	Sum, ntesdcc hbbh, ntetchb h, ntetchfr bh
tchFrAverageConfiguredCell Cum	ACCUMUL ATION	INT8	Cumulati ve numbers of configurat ed TCH full rate resource	BTS.CELL_1827_0_CU M	Sum, ntesdcc hbbh, ntetchb h, ntetchfr bh
tchFrAverageConfiguredCell Ech	ACCUMUL ATION	INT8	Number of samples, numbers of configurat ed TCH full rate resource	BTS.CELL_1827_0_NBS	Sum, ntesdcc hbbh, ntetchb h, ntetchfr bh
tchFrAverageConfiguredCell Max	INTENSIT Y	INT8	Maximu m	BTS.CELL_1827_0_MA X	Constan t,

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			numbers of configurat ed TCH full rate resource		ntesdcc hbb, ntetchb h, ntetchfr bh, tot, min, max
tchFrAverageConfiguredCell Moy	INTENSIT Y	FLO AT	Average numbers of configurat ed TCH full rate resource	BTS.CELL_1827_0_AV G	Averag e, ntesdcc hbb, ntetchb h, ntetchfr bh, tot, min, max
tchFrAverageConfiguredCum	ACCUMUL ATION	INT8	Cumulati ve numbers of configurat ed TCH full rate resource	BTS.CELL_1810_0_CU M	Sum, ntesdcc hbb, ntetchb h, ntetchfr bh
tchFrAverageConfiguredEch	ACCUMUL ATION	INT8	No of samples, numbers of configurat ed TCH full rate resource	BTS.CELL_1810_0_NBS	Sum, ntesdcc hbb, ntetchb h, ntetchfr bh
tchFrAverageConfiguredMax	INTENSIT Y	INTE GER	Maximu m numbers of configurat ed TCH full rate resource	BTS.CELL_1810_0_MA X	Constan t, ntesdcc hbb, ntetchb h, ntetchfr bh, tot, min,

					max
tchFrAverageConfiguredMo y	INTENSITY	FLOAT	Average numbers of configurat ed TCH full rate resource	BTS.CELL_1810_0_AV G	Averag e, ntcsdcc hbbh, ntetchb h, ntetchfr bh, tot, min, max
tchFrAveragedAvailableCellC um	ACCUMUL ATION	INT8	Cumulati ve number of TCH/FR and preempta ble PDTCH available in multizone cell	BTS.CELL_1825_0_CU M	Sum, ntcsdcc hbbh, ntetchb h, ntetchfr bh
tchFrAveragedAvailableCelle ch	ACCUMUL ATION	INT8	Number of samples, number of TCH/FR and preempta ble PDTCH available in multizone cell	BTS.CELL_1825_0_NBS	Sum, ntcsdcc hbbh, ntetchb h, ntetchfr bh

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tchFrAveragedAvailableCellMax	INTENSITY	INT8	Maximum number of TCH/FR and preemptable PDTCH available in multizone cell	BTS.CELL_1825_0_MAX	Constant, ntesdccbhbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedAvailableCellMo	INTENSITY	FLOAT	Average number of TCH/FR and preemptable PDTCH available in multizone cell	BTS.CELL_1825_0_AVG	Average, ntesdccbhbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedAvailableCum	ACCUMULATION	INT8	Cumulative number of TCH/FR and preemptable PDTCH available in multizone cell	BTS.CELL_1700_0_CUM	Sum, ntesdccbhbh, ntetchbh, ntetchfrbh
tchFrAveragedAvailableEch	ACCUMULATION	INT8	No of samples, number of TCH/FR and preemptable	BTS.CELL_1700_0_NBS	Sum, ntesdccbhbh, ntetchbh, ntetchfrbh

			ble PDTCH available in multizone cell		
tchFrAveragedAvailableMax	INTENSIT Y	INTE GER	Maximu m number of TCH/FR and preempta ble PDTCH available in multizone cell	BTS.CELL_1700_0_MA X	Constan t, ntcsdcc hbbh, ntctchb h, ntctchfr bh, tot, min, max
tchFrAveragedAvailableMoy	INTENSIT Y	FLO AT	Average number of TCH/FR and preempta ble PDTCH available in multizone cell	BTS.CELL_1700_0_AV G	Averag e, ntcsdcc hbbh, ntctchb h, ntctchfr bh, tot, min, max
tchFrAveragedUsedCellCum	ACCUMUL ATION	INT8	Cumulati ve number of TCH/FR or preempte d PDTCH used in	BTS.CELL_1826_0_CU M	Sum, ntcsdcc hbbh, ntctchb h, ntctchfr bh

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			the concentric cell and zone		
tchFrAveragedUsedCellEch	ACCUMULATION	INT8	Number of samples, number of TCH/FR or preempted PDTCH used in the concentric cell and zone	BTS.CELL_1826_0_NBS	Sum, ntesdec hbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedCellMax	INTENSITY	INT8	Maximum number of TCH/FR or preempted PDTCH used in the concentric cell and zone	BTS.CELL_1826_0_MAX	Constant, ntesdec hbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedCellMoy	INTENSITY	FLOAT	Average number of TCH/FR or preempted PDTCH used in the concentric cell and zone	BTS.CELL_1826_0_AVG	Average, ntesdec hbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedCum	ACCUMULATION	INT8	Cumulative	BTS.CELL_1746_0_CU	Sum,

	ATION		ve number of TCH/FR or preempt ed PDTCH used in the concentri c cell and zone	M	ntcsdcc hbbh, ntctchb h, ntctchfr bh
tchFrAveragedUsedEch	ACCUMUL ATION	INT8	No of samples, number of TCH/FR or preempt ed PDTCH used in the concentri c cell and zone	BTS.CELL_1746_0_NBS	Sum, ntcsdcc hbbh, ntctchb h, ntctchfr bh
tchFrAveragedUsedMax	INTENSIT Y	INTE GER	Maximu m number of TCH/FR or preempt ed PDTCH used in the concentri c cell and zone	BTS.CELL_1746_0_MA X	Constan t, ntcsdcc hbbh, ntctchb h, ntctchfr bh, tot, min, max
tchFrAveragedUsedMoy	INTENSIT Y	FLO AT	Average number	BTS.CELL_1746_0_AV G	Averag e,

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			of TCH/FR or preempted PDTCH used in the concentric cell and zone		ntcsdccbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedOverflow AllocationCellCum	ACCUMULATION	INT8	Cumulative number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell)	BTS.CELL_1824_2_CUM	Sum, ntcsdccbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedOverflow AllocationCellEch	ACCUMULATION	INT8	Number of samples, number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell)	BTS.CELL_1824_2_NBS	Sum, ntcsdccbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedOverflow AllocationCellMax	INTENSITY	INT8	Maximum number of TCH/FR used	BTS.CELL_1824_2_MAX	Constant, ntcsdccbh, ntetchbh

			because of SDCCH unavailability in the zone (concentric cell)		h, ntctchfrbh, tot, min, max
tchFrAveragedUsedOverflowAllocationCellMoy	INTENSITY	FLOAT	Average number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell)	BTS.CELL_1824_2_AVG	Average, ntesdccbhbh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedOverflowAllocationCum	ACCUMULATION	INT8	Cumulative number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell)	BTS.CELL_1611_2_CUM	Sum, ntesdccbhbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedOverflowAllocationEch	ACCUMULATION	INT8	No of samples, number of	BTS.CELL_1611_2_NBS	Sum, ntesdccbhbh, ntctchbh

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			TCH/FR used because of SDCCH unavailability in the zone (concentric cell)		h, ntetchfrbh
tchFrAveragedUsedOverflowAllocationMax	INTENSITY	INTEGER	Maximum number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell)	BTS.CELL_1611_2_MAX	Constant, ntesdccbhh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedOverflowAllocationMoy	INTENSITY	FLOAT	Average number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell)	BTS.CELL_1611_2_AVG	Average, ntesdccbhh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedPrimoAllocationCellCum	ACCUMULATION	INT8	Cumulative number of TCH/FR used for call reestablish	BTS.CELL_1824_1_CUM	Sum, ntesdccbhh, ntetchbh, ntetchfrbh

			hments in the zone (concentri c cell) (primo- allocation)		
tchFrAveragedUsedPrimoAllo cationCellEch	ACCUMUL ATION	INT8	Number of samples, number of TCH/FR used for call reestablis hments in the zone (concentri c cell) (primo- allocation)	BTS.CELL_1824_1_NBS	Sum, ntcsdcc hbh, ntctchb h, ntctchfr bh
tchFrAveragedUsedPrimoAllo cationCellMax	INTENSIT Y	INT8	Maximu m number of TCH/FR used for call reestablis hments in the zone (concentri c cell) (primo- allocation)	BTS.CELL_1824_1_MA X	Constan t, ntcsdcc hbh, ntctchb h, ntctchfr bh, tot, min, max
tchFrAveragedUsedPrimoAllo cationCellMoy	INTENSIT Y	FLO AT	Average number	BTS.CELL_1824_1_AV G	Averag e,

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			of TCH/FR used for call reestablis hments in the zone (concentri c cell) (primo- allocation)		ntcsdcc hbh, ntctchb h, ntctchfr bh, tot, min, max
tchFrAveragedUsedPrimoAllo cationCum	ACCUMUL ATION	INT8	Cumulati ve number of TCH/FRu sed for call reestablis hments in the zone (concentri c cell) (primo- allocation)	BTS.CELL_1611_1_CU M	Sum, ntcsdcc hbh, ntctchb h, ntctchfr bh
tchFrAveragedUsedPrimoAllo cationEch	ACCUMUL ATION	INT8	No of samples, number of TCH/FRu sed for call reestablis hments in the zone (concentri c cell) (primo- allocation)	BTS.CELL_1611_1_NBS	Sum, ntcsdcc hbh, ntctchb h, ntctchfr bh
tchFrAveragedUsedPrimoAllo cationMax	INTENSIT Y	INTE GER	Maximu m,	BTS.CELL_1611_1_MA X	Constan t,

			number of TCH/FRu sed for call reestablishments in the zone (concentric cell) (primo-allocation)		ntcsdcc hbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedPrimoAllocationMoy	INTENSITY	FLOAT	Average number of TCH/FRu sed for call reestablishments in the zone (concentric cell) (primo-allocation)	BTS.CELL_1611_1_AVG	Average, ntsdcc hbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedTchAllocationCellCum	ACCUMULATION	INT8	Cumulative number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell)	BTS.CELL_1824_0_CUM	Sum, ntsdcc hbh, ntetchbh, ntetchfrbh

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tchFrAveragedUsedTchAllocationCellEch	ACCUMULATION	INT8	Number of samples, number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell)	BTS.CELL_1824_0_NBS	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
tchFrAveragedUsedTchAllocationCellMax	INTENSITY	INT8	Maximum number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell)	BTS.CELL_1824_0_MAX	Constant, ntesdccbhb, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedTchAllocationCellMoy	INTENSITY	FLOAT	Average number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell)	BTS.CELL_1824_0_AVG	Average, ntesdccbhb, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedTchAllocationCum	ACCUMULATION	INT8	Cumulative number of TCH/FR or	BTS.CELL_1611_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfr

			preempted PDTCH used for traffic in the zone (concentric cell)		bh
tchFrAveragedUsedTchAllocationEch	ACCUMULATION	INT8	No of samples, number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell)	BTS.CELL_1611_0_NBS	Sum, ntesdec hbb, ntetchbh, ntetchfrbh
tchFrAveragedUsedTchAllocationMax	INTENSITY	INTEGER	Maximum number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell)	BTS.CELL_1611_0_MAX	Constant, ntesdec hbb, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedTchAllocationMoy	INTENSITY	FLOAT	Average number of TCH/FR or preempted PDTCH	BTS.CELL_1611_0_AVG	Average, ntesdec hbb, ntetchbh, ntetchfr

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			used for traffic in the zone (concentric cell)		bh, tot, min, max
tchFrRessourceFailure	ACCUMULATION	INT8	Number of TCH/FR and preemptable PDTCH allocation failures in the zone (concentric cell)	BTS.CELL_1613_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.3.72 Cell.Nortel.GSM.TCH_HR_Resources

Half rate TCH resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
TCH_HR_Traffic	INTENSITY	FLOAT	TCH HR Traffic	{tchHrAveragedUsedTchAllocationMoy}	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAllocated	ACCUMULATION	INT8	Number of Half-rate TCH allocations in the cell	BTS.CELL_1745_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchHrAllocatedPrimoAllocati	ACCUMUL	INT8	-	BTS.CELL_1610_1_CUM	Sum,

on	ATION		Obsolet e in V15.1- Numbe r of half rate primo TCH allocati ons		ntesdcch bh, ntctchbh , ntctchfr bh
tchHrAllocatedTchAllocation	ACCUMUL ATION	INT8	Numbe r of half rate TCH allocati ons	BTS.CELL_1610_0_CUM	Sum, ntesdcch bh, ntctchbh , ntctchfr bh
tchHrAllocatedWps	ACCUMUL ATION	INT8	Numbe r of half rate TCH allocati ons for a WPS call	BTS.CELL_1610_1_CUM	Sum, ntesdcch bh, ntctchbh , ntctchfr bh
tchHrAveragedUsedCellCum	ACCUMUL ATION	INT8	Cumula tive allocati on of a half rate TCH or a preemp ted PDTC H	BTS.CELL_1828_0_CUM	Sum, ntesdcch bh, ntctchbh , ntctchfr bh
tchHrAveragedUsedCellEch	ACCUMUL	INT8	Numbe	BTS.CELL_1828_0_NBS	Sum,

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	ATION		r of samples , allocati on of a half rate TCH or a preemp ted PDTC H		ntcsdcch bh, ntctchbh , ntctchfr bh
tchHrAveragedUsedCellMax	INTENSITY	INT8	Maxim um allocati on of a half rate TCH or a preemp ted PDTC H	BTS.CELL_1828_0_MAX	Constan t, ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
tchHrAveragedUsedCellMoy	INTENSITY	FLOA T	Averag e allocati on of a half rate TCH or a preemp ted PDTC H	BTS.CELL_1828_0_AVG	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
tchHrAveragedUsedCum	ACCUMUL ATION	INT8	Cumula tive number of half rate TCH allocati	BTS.CELL_1747_0_CUM	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh

			ons		
tchHrAveragedUsedEch	ACCUMULATION	INT8	Number of samples, number of half rate TCH allocations	BTS.CELL_1747_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedMax	INTENSITY	INTEGER	Maximum number of half rate TCH allocations	BTS.CELL_1747_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAveragedUsedMoy	INTENSITY	FLOAT	Average number of half rate TCH allocations	BTS.CELL_1747_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAveragedUsedNscCellCum	INTENSITY	INT8	Maximum number of half rate TCH allocations	BTS.CELL_1829_0_CUM	Constant, ntesdcchbh, ntctchbh, ntctchfr

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			ons		bh, tot, min, max
tchHrAveragedUsedNscCellEch	ACCUMULATION	INT8	Number of samples , number of half rate TCH allocations	BTS.CELL_1829_0_NBS	Sum, ntesdcchbh, ntctchbh , ntctchfrbh
tchHrAveragedUsedNscCellMax	ACCUMULATION	INT8	Cumulative number of half rate TCH allocations	BTS.CELL_1829_0_MAX	Sum, ntesdcchbh, ntctchbh , ntctchfrbh
tchHrAveragedUsedNscCellMoy	INTENSITY	FLOAT	Average number of half rate TCH allocations	BTS.CELL_1829_0_AVG	Average , ntesdcchbh, ntctchbh , ntctchfrbh, tot, min, max
tchHrAveragedUsedOverflowAllocationCum	ACCUMULATION	INT8	- Obsolete in V15.1- Cumulative number of half rate Overflow allocations	BTS.CELL_1612_2_CUM	Sum, ntesdcchbh, ntctchbh , ntctchfrbh

			ons		
tchHrAveragedUsedOverflowAllocationEch	ACCUMULATION	INT8	- Obsolete in V15.1- No of samples , number of half rate Overflow allocations	BTS.CELL_1612_2_NBS	Sum, ntsdcchbh, ntctchbh , ntctchfrbh
tchHrAveragedUsedOverflowAllocationMax	INTENSITY	INTEGER	- Obsolete in V15.1- Maximum number of half rate Overflow allocations	BTS.CELL_1612_2_MAX	Average , ntsdcchbh, ntctchbh , ntctchfrbh, tot, min, max
tchHrAveragedUsedOverflowAllocationMoy	INTENSITY	FLOAT	- Obsolete in V15.1- Average number of half rate Overflow	BTS.CELL_1612_2_AVG	Average , ntsdcchbh, ntctchbh , ntctchfrbh, tot, min, max

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			allocations		
tchHrAveragedUsedPrimoAllocationCum	ACCUMULATION	INT8	- Obsolete in V15.1- Cumulative number of half rate Primo allocations	BTS.CELL_1612_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedPrimoAllocationEch	ACCUMULATION	INT8	- Obsolete in V15.1- No of samples, number of half rate Primo allocations	BTS.CELL_1612_1_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedPrimoAllocationMax	INTENSITY	INTEGER	- Obsolete in V15.1- Maximum number of half rate Primo allocations	BTS.CELL_1612_1_MAX	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAveragedUsedPrimoAllocationMoy	INTENSITY	FLOAT	- Obsolete in V15.1-	BTS.CELL_1612_1_AVG	Average, ntesdcchbh,

			Average number of half rate Primo allocations		ntctchbh , ntctchfrbh, tot, min, max
tchHrAveragedUsedTchAllocationCum	ACCUMULATION	INT8	Cumulative number of half rate TCH allocations	BTS.CELL_1612_0_CUM	Sum, ntcsdcchbh, ntctchbh , ntctchfrbh
tchHrAveragedUsedTchAllocationEch	ACCUMULATION	INT8	No of samples , number of half rate TCH allocations	BTS.CELL_1612_0_NBS	Sum, ntcsdcchbh, ntctchbh , ntctchfrbh
tchHrAveragedUsedTchAllocationMax	INTENSITY	INTEGER	Maximum number of half rate TCH allocations	BTS.CELL_1612_0_MAX	Constant, ntcsdcchbh, ntctchbh , ntctchfrbh, tot, min, max
tchHrAveragedUsedTchAllocationMoy	INTENSITY	FLOAT	Average number	BTS.CELL_1612_0_AVG	Average , ntcsdcch

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			of half rate TCH allocati ons		bh, ntctchbh , ntctchfr bh, tot, min, max
tchHrAveragedUsedWpsCell Cum	ACCUMUL ATION	INT8	Cumula tive allocati on of a half rate TCH or a preemp ted PDTC H for a WPS call	BTS.CELL_1828_1_CUM	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh
tchHrAveragedUsedWpsCell Ech	ACCUMUL ATION	INT8	Numbe r of samples , allocati on of a half rate TCH or a preemp ted PDTC H for a WPS call	BTS.CELL_1828_1_NBS	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh
tchHrAveragedUsedWpsCell Max	INTENSITY	INT8	Maxim um allocati on of a half rate TCH or	BTS.CELL_1828_1_MAX	Constan t, ntcsdcch bh, ntctchbh , ntctchfr

			a preempted PDTC H for a WPS call		bh, tot, min, max
tchHrAveragedUsedWpsCell Moy	INTENSITY	FLOAT	Average allocation of a half rate TCH or a preempted PDTC H for a WPS call	BTS.CELL_1828_1_AVG	Average , ntesdcch bh, ntctchbh , ntctchfr bh, tot, min, max
tchHrAveragedUsedWpsCum	ACCUMULATION	INT8	Cumulative number of WPS half rate TCH (including PDTC H) allocations	BTS.CELL_1612_1_CUM	Sum, ntesdcch bh, ntctchbh , ntctchfr bh
tchHrAveragedUsedWpsEch	ACCUMULATION	INT8	Number of samples , number	BTS.CELL_1612_1_NBS	Sum, ntesdcch bh, ntctchbh ,

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			of WPS half rate TCH (includi ng PDTC H) allocati ons		ntctchfr bh
tchHrAveragedUsedWpsMax	INTENSITY	INT8	Maxim um number of WPS half rate TCH (includi ng PDTC H) allocati ons	BTS.CELL_1612_1_MAX	Constan t, ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
tchHrAveragedUsedWpsMoy	INTENSITY	FLOA T	Averag e number of WPS half rate TCH (includi ng PDTC H) allocati ons	BTS.CELL_1612_1_AVG	Average , ntcsdcch bh, ntctchbh , ntctchfr bh, tot, min, max
tchHrRessourceFailure	ACCUMUL ATION	INT8	Numbe r of TCH/H R and preemp table PDTC H	BTS.CELL_1614_0_CUM	Sum, ntcsdcch bh, ntctchbh , ntctchfr bh

			allocati on failures in the zone (concen tric cell)		
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7.3.73 Cell.Nortel.GSM.TCH_Queueing

TCh queuing statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
tchAveragedQueueLengthHighPriorityCum	ACCUMULATION	INT8	Cumulative number of TCHs with highest priority queued up	BTS.CELL_1616_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
tchAveragedQueueLengthHighPriorityEch	ACCUMULATION	INT8	No of samples, number of TCHs with highest priority queued up	BTS.CELL_1616_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
tchAveragedQueueLengthHighPriorityMax	INTENSITY	INTEGER	Maximum number of TCHs with highest priority queued up	BTS.CELL_1616_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
tchAveragedQueueLengthHighPriorityMoy	INTENSITY	FLOAT	Average number of TCHs with	BTS.CELL_1616_0_AVG	Average, ntesdcchbh,

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			highest priority queued up		ntctchbh, ntctchfrbh, tot, min, max
tchAveragedQueueLengthOtherPriorityCum	ACCUMULATION	INT8	Cumulative number of TCHs without highest priority queued up	BTS.CELL_1616_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchAveragedQueueLengthOtherPriorityEch	ACCUMULATION	INT8	No of samples, number of TCHs without highest priority queued up	BTS.CELL_1616_1_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchAveragedQueueLengthOtherPriorityMax	INTENSITY	INTEGER	Maximum number of TCHs without highest priority queued up	BTS.CELL_1616_1_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchAveragedQueueLengthOtherPriorityMoy	INTENSITY	FLOAT	Average number of TCHs without highest priority queued up	BTS.CELL_1616_1_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchQueuingDurationHighPriorityCum	ACCUMULATION	INT8	Cumulative waiting time of TCH allocation requests with highest priority	BTS.CELL_1618_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchQueuingDurationHighPriorityEch	ACCUMULATION	INT8	No of samples, waiting time of TCH	BTS.CELL_1618_0_NBS	Sum, ntesdcchbh, ntctchbh,

			allocation requests with highest priority		ntctchfrbh
tchQueuingDurationHighPriorityMax	INTENSITY	INTEGER	Maximum waiting time of TCH allocation requests with highest priority	BTS.CELL_1618_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchQueuingDurationHighPriorityMoy	INTENSITY	FLOAT	Average waiting time of TCH allocation requests with highest priority	BTS.CELL_1618_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchQueuingDurationOtherPriorityCum	ACCUMULATION	INT8	Cumulative waiting time of TCH allocation requests without highest priority	BTS.CELL_1618_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchQueuingDurationOtherPriorityEch	ACCUMULATION	INT8	No of samples, waiting time of TCH allocation requests without highest priority	BTS.CELL_1618_1_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchQueuingDurationOtherPriorityMax	INTENSITY	INTEGER	Maximum waiting time of TCH	BTS.CELL_1618_1_MAX	Constant, ntesdcchbh,

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			allocation requests without highest priority		nttchbh, nttchfrbh, tot, min, max
tchQueuingDurationOtherPriorityMoy	INTENSITY	FLOAT	Average waiting time of TCH allocation requests without highest priority	BTS.CELL_1618_1_AVG	Average, ntsdcchbh, nttchbh, nttchfrbh, tot, min, max
tchQueuingExpirationHighPriority	ACCUMULATION	INT8	Number of TCH allocation requests with highest priority queued up unsatisfied	BTS.CELL_1617_0_CUM	Sum, ntsdcchbh, nttchbh, nttchfrbh
tchQueuingExpirationOtherPriority	ACCUMULATION	INT8	Number of TCH allocation requests without highest priority queued up unsatisfied	BTS.CELL_1617_1_CUM	Sum, ntsdcchbh, nttchbh, nttchfrbh

7.3.74 Cell.Nortel.GSM.TCH_Resources

TCH resources statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allTchinseconds	INTENSITY	FLOAT	Duration of TCH saturation in second	BTS.CELL_8701_0_AVG	Average, ntsdcchbh, nttchbh,

			s		ntetchfrbh, tot, min, max
availableTchRate	INTENSITY	FLOAT	- Obsolete in V15.1-TCH available rate	BTS.CELL_8910_0_AVG	Average, ntesdccbhb, ntetchbh, ntetchfrbh, tot, min, max
btsOverloadDurationCum	ACCUMULATION	INT8	Cumulative duration of the overload situation	BTS.CELL_1714_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
btsOverloadDurationEch	ACCUMULATION	INT8	No of samples, duration of the overload situation	BTS.CELL_1714_0_NBS	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
btsOverloadDurationMax	INTENSITY	INTEGER	Maximum, duration of the overload situation	BTS.CELL_1714_0_MAX	Constant, ntesdccbhb, ntetchbh, ntetchfr

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			n		bh, tot, min, max
btsOverloadDurationMoy	INTENSITY	FLOAT	Average duration of the overload situation	BTS.CELL_1714_0_AVG	Average, ntcsdecbh, ntctchbh, ntctchfrbh, tot, min, max
cellTchResourceFailureRatio	INTENSITY	FLOAT	Ratio of TCH resource failures in the cell	BTS.CELL_8707_0_AVG	Average, ntcsdecbh, ntctchbh, ntctchfrbh, tot, min, max
dataNtRateFbTchConfNotAllowed	ACCUMULATION	INT8	Number of fallbacks from a required data rate to another data rate with cause configuration not allowed	BTS.CELL_1726_1_CUM	Sum, ntcsdecbh, ntctchbh, ntctchfrbh
dataNtRateFbTchResLack	ACCUMULATION	INT8	Number of	BTS.CELL_1726_0_CUM	Sum, ntcsdec

			fallbacks from a required data rate to another data rate with cause lack of resources		hbh, ntctchbh, ntctchfrbh
fallBackNonTransparentTchRate	INTENSITY	FLOAT	- Obsolete in V15.1- Ratio of fallback allocations for non transparent data on full rate TCHs	BTS.CELL_8029_0_AVG	Average, ntesdccbhb, ntctchbh, ntctchfrbh, tot, min, max
globalBlockingRate	INTENSITY	FLOAT	- Obsolete in V15.1- Global blocking rate	BTS.CELL_8807_0_AVG	Average, ntesdccbhb, ntctchbh, ntctchfrbh, tot, min, max

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overUsedCell	INTENSITY	FLOAT	- Obsolete in V15.1- Over-used cell	BTS.CELL_8025_0_AVG	Average, ntesdcc hbh, ntctchbh, ntctchfrbh, tot, min, max
qosCell	INTENSITY	FLOAT	- Obsolete in V15.1- Quality of service of the cell	BTS.CELL_8802_0_AVG	Average, ntesdcc hbh, ntctchbh, ntctchfrbh, tot, min, max
saturatedTchCell	INTENSITY	FLOAT	- Obsolete in V15.1- Saturated cell versus TCH	BTS.CELL_8715_0_AVG	Average, ntesdcc hbh, ntctchbh, ntctchfrbh, tot, min, max
TCH_Traffic	INTENSITY	FLOAT	Total TCH Traffic (FR and HR)	BTS.CELL_1611_0_AVG + CELL_1611_1_AVG + CELL_1612_0_AVG	Average, ntesdcc hbh, ntctchbh, ntctchfrbh, tot, min, max
tchAllocated	ACCUMULATION	INT8	Number of Half-	{Nortel.TCH_HR_Resources.tchHrAllocated} + {Nortel.TCH_FR_Resources.tchFr	Sum, ntesdcc hbh,

			rate and Full-rate TCH allocations in the cell	Allocated}	ntetchbh, ntetchfrbh
tchAllocatedPrimoAllocation	ACCUMULATION	INT8	Number of half rate and full rate primo TCH allocations	{Nortel.TCH_HR_Resources.tchHrAllocatedPrimoAllocation} + {Nortel.TCH_FR_Resources.tchFrAllocatedPrimoAllocation}	Sum, ntesdecbbh, ntetchbh, ntetchfrbh
tchAllocatedTchAllocation	ACCUMULATION	INT8	Number of half rate and full rate TCH allocations	{Nortel.TCH_HR_Resources.tchHrAllocatedTchAllocation} + {Nortel.TCH_FR_Resources.tchFrAllocatedTchAllocation}	Sum, ntesdecbbh, ntetchbh, ntetchfrbh
tchAveragedUsedCum	ACCUMULATION	INT8	Cumulative number of half rate and full rate TCH allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedCum} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedCum}	Sum, ntesdecbbh, ntetchbh, ntetchfrbh
tchAveragedUsedEch	ACCUMU	INT8	Numbe	{Nortel.TCH_HR_Resources.tchH	Sum,

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	LATION		r of sample s, number of half rate and full rate TCH allocati ons	rAveragedUsedEch} + {Nortel.TCH_FR_Resources.tchFr AveragedUsedEch}	ntcsdcc hbh, ntetchb h, ntetchfr bh
tchAveragedUsedMax	INTENSIT Y	INTE GER	Maxim um number of half rate and full rate TCH allocati ons	{Nortel.TCH_HR_Resources.tchH rAveragedUsedMax} + {Nortel.TCH_FR_Resources.tchFr AveragedUsedMax}	Consta nt, ntcsdcc hbh, ntetchb h, ntetchfr bh, tot, min, max
tchAveragedUsedMoy	INTENSIT Y	FLO AT	Averag e number of half rate and full rate TCH allocati ons	{Nortel.TCH_HR_Resources.tchH rAveragedUsedMoy} + {Nortel.TCH_FR_Resources.tchFr AveragedUsedMoy}	Averag e, ntcsdcc hbh, ntetchb h, ntetchfr bh, tot, min, max
tchAveragedUsedOverflowAllocationCum	ACCUMU LATION	INT8	Cumul ative number of half rate and full rate Overflow allocati ons	{Nortel.TCH_HR_Resources.tchH rAveragedUsedOverflowAllocatio nCum} + {Nortel.TCH_FR_Resources.tchFr AveragedUsedOverflowAllocation Cum}	Sum, ntcsdcc hbh, ntetchb h, ntetchfr bh
tchAveragedUsedOverflow	ACCUMU	INT8	No of	{Nortel.TCH_HR_Resources.tchH	Sum,

wAllocationEch	LATION		sample s, number of half rate and full rate Overflow w allocati ons	rAveragedUsedOverflowAllocationEch} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedOverflowAllocationEch}	ntcsdccb h, ntctchb h, ntctchfr bh
tchAveragedUsedOverflowAllocationMax	INTENSITY	INTEGER	Maximum number of half rate and full rate Overflow w allocati ons	{Nortel.TCH_HR_Resources.tchHrAveragedUsedOverflowAllocationMax} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedOverflowAllocationMax}	Constant, ntcsdccb h, ntctchb h, ntctchfr bh, tot, min, max
tchAveragedUsedOverflowAllocationMoy	INTENSITY	FLOAT	Average number of half rate and full rate Overflow w allocati ons	{Nortel.TCH_HR_Resources.tchHrAveragedUsedOverflowAllocationMoy} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedOverflowAllocationMoy}	Average, ntcsdccb h, ntctchb h, ntctchfr bh, tot, min, max
tchAveragedUsedPrimoAllocationCum	ACCUMULATION	INT8	Cumulative number of half rate and full	{Nortel.TCH_HR_Resources.tchHrAveragedUsedPrimoAllocationCum} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedPrimoAllocationCum}	Sum, ntcsdccb h, ntctchb h, ntctchfr

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			rate Primo allocati ons		bh
tchAveragedUsedPrimoAllocationEch	ACCUMULATION	INT8	No of samples, number of half rate and full rate Primo allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedPrimoAllocationEch} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedPrimoAllocationEch}	Sum, ntesdccbh, ntctchbh, ntctchfrbh
tchAveragedUsedPrimoAllocationMax	INTENSITY	INTEGER	Maximum number of half rate and full rate Primo allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedPrimoAllocationMax} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedPrimoAllocationMax}	Constant, ntesdccbh, ntctchbh, ntctchfrbh, tot, min, max
tchAveragedUsedPrimoAllocationMoy	INTENSITY	FLOAT	Average number of half rate and full rate Primo allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedPrimoAllocationMoy} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedPrimoAllocationMoy}	Average, ntesdccbh, ntctchbh, ntctchfrbh, tot, min, max
tchAveragedUsedTchAllocationCum	ACCUMULATION	INT8	Cumulative number of half rate and full rate TCH	{Nortel.TCH_HR_Resources.tchHrAveragedUsedTchAllocationCum} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedTchAllocationCum}	Sum, ntesdccbh, ntctchbh, ntctchfrbh

			allocations		
tchAveragedUsedTchAllocationEch	ACCUMULATION	INT8	No of samples, number of half rate and full rate TCH allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedTchAllocationEch} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedTchAllocationEch}	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
tchAveragedUsedTchAllocationMax	INTENSITY	INTEGER	Maximum number of half rate and full rate TCH allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedTchAllocationMax} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedTchAllocationMax}	Constant, ntesdccbhb, ntetchbh, ntetchfrbh, tot, min, max
tchAveragedUsedTchAllocationMoy	INTENSITY	FLOAT	Average number of half rate and full rate TCH allocations	{Nortel.TCH_HR_Resources.tchHrAveragedUsedTchAllocationMoy} + {Nortel.TCH_FR_Resources.tchFrAveragedUsedTchAllocationMoy}	Average, ntesdccbhb, ntetchbh, ntetchfrbh, tot, min, max
tchOccupancy	INTENSITY	FLOAT	TCH channel occupancy for cell	BTS.CELL_8803_0_AVG	Average, ntesdccbhb, ntetchbh

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					h, ntetchfr bh, tot, min, max
tchRessourceFailure	ACCUMULATION	INT8	Number of TCH/FR and TCH/HR and preemptable PDTC H allocation failures in the zone (concentric cell)	{Nortel.TCH_HR_Resources.tchHrRessourceFailure} + {Nortel.TCH_FR_Resources.tchFrRessourceFailure}	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh

7.3.75 Cell.Nortel.GSM.Temporary_Obs.Abis_level2

Temporary observation category statistics for Abis level2 errors

KPI	Type	Data Type	Description	Derivation	Aggregation
abisLevel2ErrorBadLength	ACCUMULATION	INT8	Number of Abis Level 2 errors: Wrong length	BTS.c5608_12_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorBadRxNr	ACCUMULATION	INT8	Number of Abis Level 2 errors: Wrong NR received	BTS.c5608_9_CUM	Sum, ntcsdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorReqOutState	ACCUMULATION	INT8	Number of Abis Level 2 errors: I frame with PF 1	BTS.c5608_8_CUM	Sum, ntcsdcchbh,

			retransmitted		ntetchbh, ntetchfrbh
abisLevel2ErrorRxDM0	ACCUMULATION	INT8	Number of Abis Level 2 errors: DM received with PF 0	BTS.c5608_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorRxDM1	ACCUMULATION	INT8	Number of Abis Level 2 errors: DM received with PF 1	BTS.c5608_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorRxFRmr	ACCUMULATION	INT8	Number of Abis Level 2 errors: FRMR received	BTS.c5608_10_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorRxNoloImpl	ACCUMULATION	INT8	Number of Abis Level 2 errors: Unknown frame	BTS.c5608_11_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorRxSABme	ACCUMULATION	INT8	Number of Abis Level 2 errors: SABME received	BTS.c5608_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorRxSUP1	ACCUMULATION	INT8	Number of Abis Level 2 errors: SUP received with PF 1	BTS.c5608_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorRxUA0	ACCUMULATION	INT8	Number of Abis Level 2 errors: UA received with PF 0	BTS.c5608_3_CUM	Sum, ntesdcchbh, ntetchbh,

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					ntetchfrbh
abisLevel2ErrorRxUa1	ACCUMULATION	INT8	Number of Abis Level 2 errors: UA received with PF 1	BTS.c5608_2_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorTxN Disc	ACCUMULATION	INT8	Number of Abis Level 2 errors: DISC retransmitted	BTS.c5608_7_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
abisLevel2ErrorTxN Sabme	ACCUMULATION	INT8	Number of Abis Level 2 errors: SABME retransmitted	BTS.c5608_6_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh

7.3.76 Cell.Nortel.GSM.Temporary_Obs.Abis_Traffic

Temporary observation category statistics for Abis traffic

KPI	Type	Data Type	Description	Derivation	Aggregation
abisInputIByte	ACCUMULATION	INT8	Number of I bytes received on sapi RSL	BTS.c5607_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
abisInputIFrame	ACCUMULATION	INT8	Number of I frames received on sapi RSL	BTS.c5603_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
abisInputUiByte	ACCUMULATION	INT8	Number of UI bytes sent on sapi RSL	BTS.c5605_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
abisInputUiFrame	ACCUMULATION	INT8	Number of UI frames received on sapi RSL	BTS.c5601_0_CUM	Sum, ntsdcchbh,

					ntetchbh, ntetchfrbh
abisOutputIByte	ACCUMULATION	INT8	Number of I bytes sent on sapi RSL	BTS.c5606_0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
abisOutputIFrame	ACCUMULATION	INT8	Number of I frames sent on sapi RSL	BTS.c5602_0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
abisOutputUiByte	ACCUMULATION	INT8	Number of UI bytes received on sapi RSL	BTS.c5604_0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
abisOutputUiFrame	ACCUMULATION	INT8	Number of IU frames sent on sapi RSL	BTS.c5600_0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh

7.3.77 Cell.Nortel.GSM.Temporary_Obs.Abis_unavailability

Temporary observation category statistics for Abis unavailability

KPI	Type	Data Type	Description	Derivation	Aggregation
abisUnavailabilityTimeCum	ACCUMULATION	INT8	Cumulative duration of Abis resource unavailability	BTS.c5609_0_CUM	Sum, ntcsdcchb h, ntetchbh, ntetchfrbh
abisUnavailabilityTimeEch	ACCUMULATION	INT8	No. of samples, duration of Abis resource	BTS.c5609_0_ECH	Sum, ntcsdcchb h,

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			unavailability		ntctchbh, ntctchfrbh
abisUnavailabilityTimeMax	INTENSITY	INTEGER	Maximum duration of Abis resource unavailability	BTS.c5609_0_MAX	Constant, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
abisUnavailabilityTimeMoy	INTENSITY	FLOAT	Average duration of Abis resource unavailability	BTS.c5609_0_AVG	Average, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.3.78 Cell.Nortel.GSM.Time_Advance

Timing advance statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
averagedTimingAdvance	INTENSITY	FLOAT	-Obsolete in V15.1- Averaged timing advance measured	BTS.CELL_8909_0_AVG	Average, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
timingAdvanceAverage	INTENSITY	FLOAT	Average timing advance value for the communications in the cell	BTS.CELL_1809_0_CUM	Average, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
timingAdvanceMaximum	ACCUMULATION	INT8	Maximum timing advance value for the communications in the cell	BTS.CELL_1809_1_CUM	Constant, ntcsdcchbh, ntctchbh, ntctchfrbh

7.3.79 Cell.Nortel.GSM.Traffic_release_per_causes

Traffic release per causes statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
callDropTchRatioRadio	INTENSITY	FLOAT	-Obsolete in V15.1- Call drop radio ratio	BTS.CELL_8801_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
callDropTchRatioSystem	INTENSITY	FLOAT	-Obsolete in V15.1- Call drop system ratio	BTS.CELL_8800_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
callDropTrafficRatio	INTENSITY	FLOAT	Ratio of the number of communications abnormally released in traffic phase in the cell	BTS.CELL_8714_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
clearRequestTraffic	ACCUMULATION	INT8	Clear request at cell level	BTS.CELL_8044_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficAbnormalRelease	ACCUMULATION	INT8	Number of abnormal releases while the communication	BTS.CELL_1779_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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			is in -traffic phase-		
trafficReleaseCallClearing	ACCUMULATION	INT8	Number of communications in traffic phase released: CALL CLEARING received	BTS.CELL_1164_12_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficReleaseCicRemovalEqptFail	ACCUMULATION	INT8	Number of communications in traffic phase released: CIC out of service (faulty equipment)	BTS.CELL_1164_10_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficReleaseClearCommand	ACCUMULATION	INT8	Number of communications in traffic phase released: CLEAR COMMAND received	BTS.CELL_1164_20_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficReleaseCnxFailRadioIntFail	ACCUMULATION	INT8	- Obsolete in V16 - Number of communications in traffic phase released: Radio interface failure	BTS.CELL_1164_13_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficReleaseCnxFailRadioLinkFail	ACCUMULATION	INT8	Number of communications in traffic phase released: Radio link failure	BTS.CELL_1164_14_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficReleaseCnxFailRemTransFail	ACCUMULATION	INT8	Number of communications in traffic phase released: TCU failure	BTS.CELL_1164_32_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
trafficReleaseErrorIndDm	ACCUMULATION	INT8	Number of communications in traffic phase released: DM error	BTS.CELL_1164_18_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

trafficReleaseErrorIndSeq	ACCUMULATION	INT8	Number of communications in traffic phase released: Sequencing error	BTS.CELL_1164_19_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseErrorIndT200	ACCUMULATION	INT8	Number of communications in traffic phase released: T200 elapse	BTS.CELL_1164_17_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficRelease	ACCUMULATION	INT8	Number of releases while the communication is in traffic phase.	BTS.CELL_1754_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseOmCicRemoval	ACCUMULATION	INT8	Number of communications in traffic phase released: CIC out of service (OAM)	BTS.CELL_1164_9_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseOmRadioChannelBloc	ACCUMULATION	INT8	Number of communications in traffic phase released: Radio channel blocked (OAM)	BTS.CELL_1164_11_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseOmTsRemoval	ACCUMULATION	INT8	Number of communications in traffic phase released: Ts out of service (OAM)	BTS.CELL_1164_7_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseOthers	ACCUMULATION	INT8	Number of communications in traffic phase	BTS.CELL_1164_28_CUM	Sum, ntesdcchbh,

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			released:Other cases		ntetchbh, ntetchfrbh
trafficReleaseReleaseInd	ACCUMULATION	INT8	Number of communications in traffic phase released: RELEASE INDICATION received	BTS.CELL_1164_16_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseResetCirc	ACCUMULATION	INT8	Number of communications in traffic phase released: Reset circuit downlink	BTS.CELL_1164_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseReset	ACCUMULATION	INT8	Number of communications in traffic phase released: Reset from the MSC	BTS.CELL_1164_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseRfResInd	ACCUMULATION	INT8	Number of communications in traffic phase released: RF RESOURCE INDICATION received	BTS.CELL_1164_21_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseSccpDataRefusal	ACCUMULATION	INT8	Number of communications in traffic phase released: SCCP DATA REFUSAL received	BTS.CELL_1164_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseSccpDiscInd	ACCUMULATION	INT8	Number of communications in traffic phase released: SCCP disconnection	BTS.CELL_1164_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
trafficReleaseSysInfoFail	ACCUMULATION	INT8	Number of communications in traffic phase	BTS.CELL_1164_31_CUM	Sum, ntesdcchbh,

			released: SYS INFO problem		ntetchbh, ntetchfrbh
trafficReleaseT3103	ACCUMULA TION	INT8	Number of communications in traffic phase released: T3103 elapse	BTS.CELL_1164_ 24_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
trafficReleaseT3107Circ Down	ACCUMULA TION	INT8	Number of communications in traffic phase released: T3107 elapse	BTS.CELL_1164_ 6_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
trafficReleaseT8	ACCUMULA TION	INT8	Number of communications in traffic phase released: T8 elapse	BTS.CELL_1164_ 25_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
trafficReleaseTbcEdge	ACCUMULA TION	INT8	Number of releases while the communication is in -traffic- phase	BTS.CELL_1164_ 33_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
trafficReleaseTmodMs	ACCUMULA TION	INT8	Number of communications in traffic phase released: TmodMs elapse	BTS.CELL_1164_ 23_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
trafficReleaseTsRemoval EqptFail	ACCUMULA TION	INT8	Number of communications in traffic phase released: Ts out of service (faulty equipment)	BTS.CELL_1164_ 8_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh

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7.3.80 Cell.Nortel.GSM.Traffic_release.AMR

AMR traffic release statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
trafficReleaseAmrFrLapdmCause	ACCUMULATION	INT8	Number of releases for full rate AMR mobile caused by Lapdm	BTS.CELL_1960_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
trafficReleaseAmrFrOthersCause	ACCUMULATION	INT8	Number of releases for full rate AMR mobile caused by other causes	BTS.CELL_1960_2_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
trafficReleaseAmrFrRadioCause	ACCUMULATION	INT8	Number of releases for full rate AMR mobile caused the radio	BTS.CELL_1960_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
trafficReleaseAmrHrLapdmCause	ACCUMULATION	INT8	Number of releases for half rate AMR mobile caused by Lapdm	BTS.CELL_1961_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
trafficReleaseAmrHrOthersCause	ACCUMULATION	INT8	Number of releases for half rate AMR mobile caused by other causes	BTS.CELL_1961_2_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
trafficReleaseAmrHrRadioCause	ACCUMULATION	INT8	Number of releases for half rate AMR mobile caused the radio	BTS.CELL_1961_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

7.3.81 Cell.Nortel.GSM.Transmit_Burst

- KPI Group Obsolete in V16 - Transmit bursts related statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
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burstToTransmit	ACCUMULATION	INT8	- Obsolete in V16 - Number of bursts that must be transmitted.	BTS.CELL_1817_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
burstToTransmitReq Pwr	ACCUMULATION	INT8	- Obsolete in V16 - Number of bursts that must be transmitted at the required power.	BTS.CELL_1819_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
burstTransmitted	ACCUMULATION	INT8	- Obsolete in V16 - Number of bursts that have been transmitted	BTS.CELL_1818_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
STPMAttenuation	ACCUMULATION	FLOAT	- Obsolete in V16 - Sum of the Smart Transmit Power Management attenuation.	BTS.CELL_1820_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh

7.3.82 Cell.Nortel.GSM.VGCS_VBS

Voice Group Channel Service(VGCS), Voice Broadcast Service (VBS) statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
asciCallInitiationVbs	ACCUMULATION	INT8	Number of VBS (Voice Broadcast Service) call initiations	BTS.CELL_1722_0_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrbh
asciCallInitiationVgcs	ACCUMULATION	INT8	Number of VGCS (Voice Group Call Service) call initiations	BTS.CELL_1722_1_CUM	Sum, ntcsdcchb h, ntctchbh,

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					ntetchfrbh
asciInbandNotification	ACCUMULATION	INT8	Number of inband notifications taken into account	BTS.CELL_1724_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
asciInbandPaging	ACCUMULATION	INT8	Number of inband pagings taken into account	BTS.CELL_1723_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
asciPreemptionPerformed	ACCUMULATION	INT8	Number of preemptions performed on a call in progress in the cell	BTS.CELL_1725_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
asciTalkerHandoverVbs	ACCUMULATION	INT8	Number of handovers performed on the talker side of a VBS call in the cell	BTS.CELL_1800_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
asciTalkerHandoverVgcs	ACCUMULATION	INT8	Number of handovers performed on the talker side of a VGCS call in the cell	BTS.CELL_1800_1_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
deleteIndication	ACCUMULATION	INT8	Number of delete indication messages received	BTS.CELL_1804_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
listenerDetectionExpiry	ACCUMULATION	INT8	At expiration of the listener detection timer, the group call channel is released in the cell	BTS.CELL_2061_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh

7.3.83 Cell.Nortel.GSM.Wireless_Priority_Service

Wireless priority service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
tchFrAllocatedWps	ACCUMULATION	INT8	Number of WPS full rate TCH allocations	BTS.CELL_1609_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedWpsCellCum	ACCUMULATION	INT8	Cumulative number of WPS full rate TCH allocations	BTS.CELL_1824_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedWpsCellEch	ACCUMULATION	INT8	Number of samples, number of WPS full rate TCH allocations	BTS.CELL_1824_3_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedWpsCellMax	INTENSITY	INT8	Maximum number of WPS full rate TCH allocations	BTS.CELL_1824_3_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedWpsCellMoy	INTENSITY	FLOAT	Average number of WPS full rate TCH allocations	BTS.CELL_1824_3_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedWpsCum	ACCUMULATION	INT8	Cumulative number of WPS full rate TCH	BTS.CELL_1611_3_CUM	Sum, ntesdcchbh,

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			allocations		ntetchbh, ntetchfrbh
tchFrAveragedUsedWpsEch	ACCUMULATION	INT8	Number of samples, number of WPS full rate TCH allocations	BTS.CELL_1611_3_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
tchFrAveragedUsedWpsMax	INTENSITY	INT8	Maximum number of WPS full rate TCH allocations	BTS.CELL_1611_3_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
tchFrAveragedUsedWpsMoy	INTENSITY	FLOAT	Average number of WPS full rate TCH allocations	BTS.CELL_1611_3_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
wpsAccessBarringDurationClass0to9	ACCUMULATION	INT8	Duration that access class 0 to 9 has been barred during cell congestion.	BTS.CELL_2013_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
wpsAccessBarringDurationClass11	ACCUMULATION	INT8	Duration that access class 11 has been barred during cell congestion.	BTS.CELL_2013_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
wpsAccessBarringDurationClass12	ACCUMULATION	INT8	Duration that access class 12 has been barred during cell congestion.	BTS.CELL_2013_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
wpsAccessBarringDurationClass13	ACCUMULATION	INT8	Duration that access class 13 has been barred during cell congestion.	BTS.CELL_2013_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

wpsAccessBarringDurationClass14	ACCUMULATION	INT8	Duration that access class 14 has been barred during cell congestion.	BTS.CELL_2013_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
wpsAccessBarringDurationClass15	ACCUMULATION	INT8	Duration that access class 15 has been barred during cell congestion.	BTS.CELL_2013_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WPUBWPSQ	INTENSITY	FLOAT	Average number of WPS half rate TCH allocations	BTS.CELL_2014_0_CUM	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
WQABAND	ACCUMULATION	INT8	Total number of WPS requests removed from the queue	BTS.CELL_2015_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQOVFL1	ACCUMULATION	INT8	Total number of priority 1WPS requests dropped or not allowed	BTS.CELL_2011_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQOVFL2	ACCUMULATION	INT8	Total number of priority 2WPS requests dropped or not allowed	BTS.CELL_2011_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQOVFL3	ACCUMULATION	INT8	Total number of priority 3WPS requests dropped or not allowed	BTS.CELL_2011_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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WQOVFL4	ACCUMULATION	INT8	Total number of priority 4WPS requests dropped or not allowed	BTS.CELL_2011_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQOVFL5	ACCUMULATION	INT8	Total number of priority 5WPS requests dropped or not allowed	BTS.CELL_2011_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQTOUT1	ACCUMULATION	INT8	Total number of priority 1WPS requests dropped when the time spent by WPS request exceeds the maximum queue timer.	BTS.CELL_2012_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQTOUT2	ACCUMULATION	INT8	Total number of priority 2WPS requests dropped when the time spent by WPS request exceeds the maximum queue timer.	BTS.CELL_2012_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQTOUT3	ACCUMULATION	INT8	Total number of priority 3WPS requests dropped when the time spent by WPS request exceeds the maximum queue timer.	BTS.CELL_2012_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQTOUT4	ACCUMULATION	INT8	Total number of priority 4WPS requests dropped when the time spent by WPS request	BTS.CELL_2012_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

			exceeds the maximum queue timer.		
WQTOUT5	ACCUMULATION	INT8	Total number of priority 5WPS requests dropped when the time spent by WPS request exceeds the maximum queue timer.	BTS.CELL_2012_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQUEDHO	ACCUMULATION	INT8	Total number of WPS request removed from the queue	BTS.CELL_2016_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQUEUED1	ACCUMULATION	INT8	Total number of priority 1 queued WPS requests on a priority level basis	BTS.CELL_2010_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQUEUED2	ACCUMULATION	INT8	Total number of priority 2 queued WPS requests on a priority level basis	BTS.CELL_2010_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQUEUED3	ACCUMULATION	INT8	Total number of priority 3 queued WPS requests on a priority level basis	BTS.CELL_2010_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
WQUEUED4	ACCUMULATION	INT8	Total number of priority 4	BTS.CELL_2010_3_CUM	Sum, ntesdcchbh

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			queued WPS requests on a priority level basis		h, ntctchbh, ntctchfrbh
WQUEUED5	ACCUMULATION	INT8	Total number of priority 5 queued WPS requests on a priority level basis	BTS.CELL_2010_4_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.4 Common_Control_Channel Performance Indicators

This section shows the key performance indicators and other counters for the Common_Control_Channel object, divided into the following sub-sections:

- [Common_Control_Channel.Nortel.GSM.GPRS.Packet_Control_Unit](#)
- [Common_Control_Channel.Nortel.GSM.GPRS.Traffic_and_QoS](#)
- [Common_Control_Channel.Nortel.GSM.Temporary_Obs.Interference](#)

7.4.1 Common_Control_Channel.Nortel.GSM.GPRS.Packet_Control_Unit

PCU statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuChannelRequestOnePhase	ACCUMULATION	INT8	Cumulative number of one phase access RACH (Channel Request) received by the PCU in this cell	CCH.CCCH_15190_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
pcuContentionFailureOnePhase	ACCUMULATION	INT8	Cumulative number of failures of the contention resolution procedure in case of one phase access	CCH.CCCH_15192_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

pcuUpTbfImmediateAssignmentOnePhase	ACCUMULATION	INT8	Cumulative number of Immediate Assignment Uplink messages sent by the PCU to establish a one phase access UL TBF in this cell	CCH.CCCH_15191_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
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7.4.2 Common_Control_Channel.Nortel.GSM.GPRS.Traffic_and_QoS

Traffic and quality of service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelRequestCcch	ACCUMULATION	INT8	Total number of RACH (Channel Request) messages received in the PCU in this cell	CCH.CCCH_15059_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnPipebetween11and22k bps	ACCUMULATION	INT8	Number of times a downlink bandwidth, between 1 and 2 timeslots, has been allocated for some mobiles in the cell	CCH.CCCH_15058_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnPipebetween22and33k bps	ACCUMULATION	INT8	Number of times a downlink bandwidth, between 2 and 3 timeslots, has been allocated	CCH.CCCH_15058_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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			for some mobiles in the cell		
dnPipeGreater33kbps	ACCUMULATION	INT8	Number of times a downlink bandwidth, of more than 3 timeslots, has been allocated for some mobiles in the cell	CCH.CCCH_15060_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnPipeLess11kbps	ACCUMULATION	INT8	Number of times a downlink bandwidth, of less than 1 timeslot, has been allocated for some mobiles in the cell	CCH.CCCH_15062_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
dnTbfImmediateAssignment	ACCUMULATION	INT8	Total number of IMMEDIATE ASSIGNMENT messages sent for a downlink TBF establishment from the PCU to the MS	CCH.CCCH_15058_2_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
packetResourceRequest	ACCUMULATION	INT8	Total number of PACKET RESOURCE REQUEST messages received by the PCU from the MS in the second phase of the 2-phase access uplink TBF establishment	CCH.CCCH_15056_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

upPipeGreater11kbps	ACCUMULATION	INT8	Number of times an uplink bandwidth, of more than 1 timeslot, has been allocated for some mobiles in the cell	CCH.CCCH_15062_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upPipeless11kbps	ACCUMULATION	INT8	Number of times an uplink bandwidth, of less than 1 timeslot, has been allocated for some mobiles in the cell	CCH.CCCH_15061_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfBronzeRejectedForMinTput	ACCUMULATION	INTEGER	- Obsolete in V16 - Cumulative number of bronze users uplink allocations rejected due to the admittance control	CCH.CCCH_15062_5_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfBronzeSatisfactBet5090pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of bronze users uplink allocations with a satisfaction rate equal or more than 50%and strictly	CCH.CCCH_15062_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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			less than 90%		
upTbfBronzeSatisfactLess50pCent	ACCUMULATION	INT8	- Obsolete in V16 - Cumulative number of bronze users uplink allocations with a satisfaction rate strictly less than 50%	CCH.CCCH_15062_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfBronzeSatisfactMore90pCent	ACCUMULATION	INTEGER	- Obsolete in V16 - Cumulative number of bronze users uplink allocations with a satisfaction rate equal or better than 90%	CCH.CCCH_15061_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfImmAssigRejectNoPdch	ACCUMULATION	INT8	Total number of UL and DL TBF establishment rejected because the number of MS in transfer is greater or equal to NB_MAX_MS	CCH.CCCH_15058_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfImmediateAssignment	ACCUMULATION	INT8	Total number of IMMEDIATE ASSIGNMENT messages generated by the PCU to the MS in the first phase of the 2-phase access uplink TBF establishment	CCH.CCCH_15058_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
upTbfSilverRejectedForMinTput	ACCUMULATION	INTEGER	- Obsolete in V16 -	CCH.CCCH_15060_1_CUM	Sum, ntesdcchbh

			Cumulative number of silver users uplink allocations rejected due to the admittance control		h, ntctchbh, ntctchfrbh
upTbfSilverSatisfactLess50pCent	ACCUMULATION	INTEGER	- Obsolete in V16 - Cumulative number of silver users uplink allocations with a satisfaction rate strictly less than 50%	CCH.CCCH_15062_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.4.3 Common_Control_Channel.Nortel.GSM.Temporary_Obs.Interference

Temporary observation category statistics for interference level

KPI	Type	Data Type	Description	Derivation	Aggregation
channelIdleLevelCum	ACCUMULATION	INT8	Cumulative interference level on idle channels	Interference.c5000_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelIdleLevelEch	ACCUMULATION	INT8	No of samples, interference level on idle channels	Interference.c5000_0_ECH	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
channelIdleLevelMax	INTENSITY	INTEGER	Maximum interference level on idle channels	Interference.c5000_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh

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					, tot, min, max
channelIdleLevelMoy	INTENSITY	FLOAT	Average interference level on idle channels	Interference.c5000_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.5 LAPD Performance Indicators

This section shows the key performance indicators and other counters for the LAPD object, divided into the following sub-sections:

- [LAPD.Nortel.GSM.Abis_interface_errors](#)
- [LAPD.Nortel.GSM.Paging](#)

7.5.1 LAPD.Nortel.GSM.Abis_interface_errors

Abis interface error statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
abisLevel1ErrorsBad Frame	ACCUMULATION	INT8	Number of LAPD Level 1 errors: Erroneous frame received	LAPD.c1084_0_CUM	Sum, ntbsccpabh, ntbtaubh
abisLevel1ErrorsCrc Error	ACCUMULATION	INT8	Number of LAPD Level 1 errors: CRC error	LAPD.c1084_3_CUM	Sum, ntbsccpabh, ntbtaubh
abisLevel1ErrorsLost Align	ACCUMULATION	INT8	Number of LAPD Level 1 errors: Loss of alignment	LAPD.c1084_4_CUM	Sum, ntbsccpabh, ntbtaubh

7.5.2 LAPD.Nortel.GSM.Paging

- This KPI group is obsolete in V16 - PCU paging message traffic statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
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lapdiFramesDn	ACCUMULATION	INT8	- Obsolete in V16 - Total Number of PS Paging messages sent by the PCU to the BTS on this LAPD link	LAPD.LAPD_15023_1_CUM	Sum, ntbsecpabh, ntbtaubh
lapdiFramesUp	ACCUMULATION	INT8	- Obsolete in V16 - Total Number of CS Paging messages sent by the PCU to the BSC on this LAPD link	LAPD.LAPD_15023_0_CUM	Sum, ntbsecpabh, ntbtaubh
lapduiFramesUp	ACCUMULATION	INT8	- Obsolete in V16 - Total Number of CS Paging messages sent by the PCU to the MS on PACCH	LAPD.LAPD_15024_0_CUM	Sum, ntbsecpabh, ntbtaubh

7.6 Neighbour Performance Indicators

This section shows the key performance indicators and other counters for the Neighbour object, divided into the following sub-sections:

- [Neighbour.Nortel.GSM.AMR_handovers](#)
- [Neighbour.Nortel.GSM.Handovers_per_causes](#)
- [Neighbour.Nortel.GSM.Handovers](#)
- [Neighbour.Nortel.GSM.Neighbour_Cells](#)

7.6.1 Neighbour.Nortel.GSM.AMR_handovers

AMR handovers statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
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hoNCellsExecutionTchAmrFr	ACCUMULATION	INT8	Number of attempts of full rate AMR handover from a central cell to a neighboring one	ADJ.NEIGH_1957_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
hoNCellsExecutionTchAmrHr	ACCUMULATION	INT8	Number of attempts of half rate AMR handover from a central cell to a neighboring one	ADJ.NEIGH_1956_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
hoNCellsRequestOutgoingAmrFr	ACCUMULATION	INT8	Number of full rate AMR handovers requested from a central cell to a neighboring	ADJ.NEIGH_1964_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh

			one		
hoNCellsRequestOutgoingAmrHr	ACCUMULATION	INT8	Number of half rate AMR handovers requested from a central cell to a neighboring one	ADJ.NEIGH_1963_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
hoNCellsUnsuccessTchAmrFrClearCommand	ACCUMULATION	INT8	Number of unsuccessful full rate AMR handovers from a central cell to a neighboring one caused by other causes	ADJ.NEIGH_1959_2_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
hoNCellsUnsuccessTchAmrFrHandoverFailure	ACCUMULATION	INT8	Number of	ADJ.NEIGH_1959_0_CUM	Sum, ntesdccb

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			unsuccessful full rate AMR handovers from a central cell to a neighboring one caused by the mobile returning to the old channel		hbh, ntetchbh, ntetchfrbh
hoNCellsUnsuccessTchAmrFr TimerExpiration	ACCUMULATION	IN T8	Number of unsuccessful full rate AMR handovers from a central cell to a neighboring one caused by the expiration of the T3103 timer	ADJ.NEIGH_1959_1_CUM	Sum, ntesdccbh, ntetchbh, ntetchfrbh
hoNCellsUnsuccessTchAmrH	ACCUMUL	IN	Numbe	ADJ.NEIGH_1958_2_CUM	Sum,

ClearCommand	ACCUMULATION	T8	Number of unsuccessful half rate AMR handovers from a central cell to a neighboring one caused by other causes	ADJ.NEIGH_1958_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh
hoNCellsUnsuccessfulHandoverFailure	ACCUMULATION	T8	Number of unsuccessful half rate AMR handovers from a central cell to a neighboring one caused by the mobile returning to	ADJ.NEIGH_1958_0_CUM	Sum, ntesdccbhb, ntetchbh, ntetchfrbh

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			the old channel		
hoNCellsUnsuccessTchAmrHrTimerExpiration	ACCUMULATION	INT8	Number of unsuccessful half rate AMR handovers from a central cell to a neighboring one caused by the expiration of the T3103 timer	ADJ.NEIGH_1958_1_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
Tot_hoNCellsUnsuccessTchAmrFR	ACCUMULATION	INT8	Total number of unsuccessful full rate AMR handovers from a central cell to a neighboring one	{hoNCellsUnsuccessTchAmrFr HandoverFailure} + {hoNCellsUnsuccessTchAmrFr TimerExpiration} + {hoNCellsUnsuccessTchAmrFr ClearCommand}	Sum, ntesdcc hbh, ntetchbh, ntetchfrbh
Tot_hoNCellsUnsuccessTchAmrHR	ACCUMULATION	INT8	Total number	{hoNCellsUnsuccessTchAmrHr HandoverFailure} +	Sum, ntesdcc

			of unsucc essful half rate AMR handov ers from a central cell to a neighb oring one	{hoNCellsUnsuccessTchAmrHr TimerExpiration} + {hoNCellsUnsuccessTchAmrHr ClearCommand}	hbm, ntctchb h, ntctchf rbh
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7.6.2 Neighbour.Nortel.GSM.Handovers_per_causes

Handover causes statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
%_hoNCellsSuccessOutgoingDirectedRetry	PERCENTAGE	FLOAT	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Directed	100 * {hoNCellsSuccessOutgoingDirectedRetry}/ {hoNCellsRequestOutgoingDirectedRetry}	Average, ntesdccbhm, ntctchbh, ntctchf rbh

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			retry		
$\overline{\%_hoNCellsSuccessOutgoingDistance}$	PERCENT AGE	FL OAT	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Distance	$100 * \frac{\{hoNCellsSuccessOutgoingDistance\}}{\{hoNCellsRequestOutgoingDistance\}}$	Average, ntsdcc hbh, ntctchbh, ntctchf rbh
$\overline{\%_hoNCellsSuccessOutgoingDownlinkQuality}$	PERCENT AGE	FL OAT	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Loss of Downlink quality	$100 * \frac{\{hoNCellsSuccessOutgoingDownlinkQuality\}}{\{hoNCellsRequestOutgoingDownlinkQuality\}}$	Average, ntsdcc hbh, ntctchbh, ntctchf rbh
$\overline{\%_hoNCellsSuccessOutgoingDownlinkStrength}$	PERCENT AGE	FL OAT	Percentage of outgoing intra-bss or inter-bss handover	$100 * \frac{\{hoNCellsSuccessOutgoingDownlinkStrength\}}{\{hoNCellsRequestOutgoingDownlinkStrength\}}$	Average, ntsdcc hbh, ntctchbh, ntctchf rbh

			successes from a central cell to a neighboring one: Loss of Downlink power		
$\frac{\text{hoNCellsSuccessOutgoingInterBtsOm}}{\text{hoNCellsRequestOutgoingInterBtsOm}}$	PERCENT AGE	FL O A T	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Forced handover OAM	$100 * \frac{\text{hoNCellsSuccessOutgoingInterBtsOm}}{\text{hoNCellsRequestOutgoingInterBtsOm}}$	Average, ntesdcc hbh, ntctchbh, ntctchf rbh
$\frac{\text{hoNCellsSuccessOutgoingOthers}}{\text{hoNCellsRequestOutgoingOthers}}$	PERCENT AGE	FL O A T	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a	$100 * \frac{\text{hoNCellsSuccessOutgoingOthers}}{\text{hoNCellsRequestOutgoingOthers}}$	Average, ntesdcc hbh, ntctchbh, ntctchf rbh

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			neighboring one: Other causes		
_ %_hoNCellsSuccessOutgoing	PERCENT AGE	FL OA T	Percentage number of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one	$100 * \frac{\begin{aligned} &\{hoNCellsSuccessOutgoingUplinkStrength\} + \\ &\{hoNCellsSuccessOutgoingDownlinkStrength\} + \\ &\{hoNCellsSuccessOutgoingUplinkQuality\} + \\ &\{hoNCellsSuccessOutgoingDownlinkQuality\} + \\ &\{hoNCellsSuccessOutgoingDistance\} + \\ &\{hoNCellsSuccessOutgoingPowerBudgetQuality\} + \\ &\{hoNCellsSuccessOutgoingDirectedRetry\} + \\ &\{hoNCellsSuccessOutgoingInterBtsOm\} + \\ &\{hoNCellsSuccessOutgoingTraffic\} + \\ &\{hoNCellsSuccessOutgoingOthers\} \end{aligned}}{\begin{aligned} &\{hoNCellsRequestOutgoingUplinkStrength\} + \\ &\{hoNCellsRequestOutgoingDownlinkStrength\} + \\ &\{hoNCellsRequestOutgoingUplinkQuality\} + \\ &\{hoNCellsRequestOutgoingDownlinkQuality\} + \\ &\{hoNCellsRequestOutgoingDistance\} + \\ &\{hoNCellsRequestOutgoingPowerBudgetQuality\} + \\ &\{hoNCellsRequestOutgoingDirectedRetry\} + \\ &\{hoNCellsRequestOutgoingInterBtsOm\} + \\ &\{hoNCellsRequestOutgoingTraffic\} + \\ &\{hoNCellsRequestOutgoingOthers\} \end{aligned}}$	Average, ntsdccbhbh, ntctchbh, ntctchf rbh

				hers})	
$\bar{\%_hoNCellsSuccessOutgoingPowerBudgetQuality}$	PERCENT AGE	FL O A T	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Power Budget	$100 * \frac{\{hoNCellsSuccessOutgoingPowerBudgetQuality\}}{\{hoNCellsRequestOutgoingPowerBudgetQuality\}}$	Average, ntesdcc hbh, ntctchbh, ntctchf rbh
$\bar{\%_hoNCellsSuccessOutgoingTraffic}$	PERCENT AGE	FL O A T	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Traffic	$100 * \frac{\{hoNCellsSuccessOutgoingTraffic\}}{\{hoNCellsRequestOutgoingTraffic\}}$	Average, ntesdcc hbh, ntctchbh, ntctchf rbh
$\bar{\%_hoNCellsSuccessOutgoingUplinkQuality}$	PERCENT AGE	FL O A T	Percentage of outgoing intra-bss or	$100 * \frac{\{hoNCellsSuccessOutgoingUplinkQuality\}}{\{hoNCellsRequestOutgoingUplinkQuality\}}$	Average, ntesdcc hbh, ntctchbh

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			inter-bss handover successes from a central cell to a neighboring one: Loss of Uplink quality		h, ntctchf rbh
$\frac{\text{hoNCellsSuccessOutgoingUplinkStrength}}{\text{hoNCellsRequestOutgoingDirectedRetry}}$	PERCENT AGE	FL O A T	Percentage of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Loss of Uplink power	$100 * \frac{\{\text{hoNCellsSuccessOutgoingUplinkStrength}\}}{\{\text{hoNCellsRequestOutgoingUplinkStrength}\}}$	Average, ntsdccbhbh, ntctchbh, ntctchf rbh
hoNCellsRequestOutgoingDirectedRetry	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a	ADJ.NEIGH_1839_6_CUM	Sum, ntsdccbhbh, ntctchbh, ntctchf rbh

			central cell to a neighboring one: Directed retry		
hoNCellsRequestOutgoingDistance	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a central cell to a neighboring one: Distance	ADJ.NEIGH_1839_4_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchf rbh
hoNCellsRequestOutgoingDownlinkQuality	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts	ADJ.NEIGH_1839_3_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchf rbh

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			from a central cell to a neighboring one: Loss of Downlink quality		
hoNCellsRequestOutgoingDownlinkStrength	ACCUMULATION	INT8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a central cell to a neighboring one: Loss of Downlink power	ADJ.NEIGH_1839_1_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchf rbh
hoNCellsRequestOutgoingInterBtsOm	ACCUMULATION	INT8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts	ADJ.NEIGH_1839_7_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchf rbh

			from a central cell to a neighboring one: Forced handover rOAM		
hoNCellsRequestOutgoingOthers	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a central cell to a neighboring one: Other causes	ADJ.NEIGH_1839_9_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchf rbh
hoNCellsRequestOutgoingPowerBudgetQuality	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss	ADJ.NEIGH_1839_5_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchf rbh

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			handover attempts from a central cell to a neighboring one: Power Budget		
hoNCellsRequestOutgoingTraffic	ACCUMULATION	INT8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a central cell to a neighboring one: Traffic	ADJ.NEIGH_1839_8_CUM	Sum, ntesdccbhbh, ntetchbh, ntetchf rbh
hoNCellsRequestOutgoingUplinkQuality	ACCUMULATION	INT8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a	ADJ.NEIGH_1839_2_CUM	Sum, ntesdccbhbh, ntetchbh, ntetchf rbh

			central cell to a neighboring one: Loss of Uplink quality		
hoNCellsRequestOutgoingUplinkStrength	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover attempts from a central cell to a neighboring one: Loss of Uplink power	ADJ.NEIGH_1839_0_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchf rbh
hoNCellsSuccessOutgoingDirectedRetry	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss	ADJ.NEIGH_1840_6_CUM	Sum, ntesdcc hbh, ntetchb h, ntetchf rbh

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			handover successes from a central cell to a neighboring one: Directed retry		
hoNCellsSuccessOutgoingDistance	ACCUMULATION	INT8	- Obsolete in V15.1- Number of outgoing intra- bss or inter-bss handover successes from a central cell to a neighboring one: Distance	ADJ.NEIGH_1840_4_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
hoNCellsSuccessOutgoingDownlinkQuality	ACCUMULATION	INT8	- Obsolete in V15.1- Number of outgoing intra- bss or inter-bss handover successes from a	ADJ.NEIGH_1840_3_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

			central cell to a neighboring one: Loss of Downlink quality		
hoNCellsSuccessOutgoingDownlinkStrength	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handovers from a central cell to a neighboring one: Loss of Downlink power	ADJ.NEIGH_1840_1_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchf rbh
hoNCellsSuccessOutgoingInterBtsOm	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or	ADJ.NEIGH_1840_7_CUM	Sum, ntesdcc hbh, ntetchbh, ntetchf rbh

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			inter-bss handover successes from a central cell to a neighboring one: Forced handoverOAM		
hoNCellsSuccessOutgoingOthers	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one: Other causes	ADJ.NEIGH_1840_9_CUM	Sum, ntesdcc hbh, ntctchbh, ntctchf rbh
hoNCellsSuccessOutgoingPowerBudgetQuality	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra-bss or inter-bss handove	ADJ.NEIGH_1840_5_CUM	Sum, ntesdcc hbh, ntctchbh, ntctchf rbh

			r succe s from a central cell to a neighbo ring one: Power Budget		
hoNCellsSuccessOutgoingTraf fic	ACCUMU LATION	INT 8	- Obsolet e in V15.1- Number of outgoin g intra- bss or inter-bss handove r succe s from a central cell to a neighbo ring one: Traffic	ADJ.NEIGH_1840_8_CUM	Sum, ntcsdcc hbh, ntetchb h, ntetchf rbh
hoNCellsSuccessOutgoingUpli nkQuality	ACCUMU LATION	INT 8	- Obsolet e in V15.1- Number of outgoin g intra- bss or inter-bss	ADJ.NEIGH_1840_2_CUM	Sum, ntcsdcc hbh, ntetchb h, ntetchf rbh

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			handover successes from a central cell to a neighboring one: Loss of Uplink quality		
hoNCellsSuccessOutgoingUplinkStrength	ACCUMULATION	INT 8	- Obsolete in V15.1- Number of outgoing intra- bss or inter-bss handover successes from a central cell to a neighboring one: Loss of Uplink power	ADJ.NEIGH_1840_0_CUM	Sum, ntcsdccbhbh, ntctchbh, ntctchf rbh
Tot_hoNcellsRequestOutgoing	ACCUMULATION	INT 8	Total number of outgoing intra- bss or inter-bss handover attempts from a	{hoNCellsRequestOutgoingUplinkStrength} + {hoNCellsRequestOutgoingDownlinkStrength} + {hoNCellsRequestOutgoingUplinkQuality} + {hoNCellsRequestOutgoingDownlinkQuality} + {hoNCellsRequestOutgoingDistance} + {hoNCellsRequestOutgoingPo	Sum, ntcsdccbhbh, ntctchbh, ntctchf rbh

			central cell to a neighboring one	werBudgetQuality} + {hoNCellsRequestOutgoingDirectedRetry} + {hoNCellsRequestOutgoingInterBtsOm} + {hoNCellsRequestOutgoingTraffic} + {hoNCellsRequestOutgoingOthers}	
Tot_hoNcellsSuccessOutgoing	ACCUMULATION	INT8	Total number of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one	{hoNCellsSuccessOutgoingUplinkStrength} + {hoNCellsSuccessOutgoingDownlinkStrength} + {hoNCellsSuccessOutgoingUplinkQuality} + {hoNCellsSuccessOutgoingDownlinkQuality} + {hoNCellsSuccessOutgoingDistance} + {hoNCellsSuccessOutgoingPowerBudgetQuality} + {hoNCellsSuccessOutgoingDirectedRetry} + {hoNCellsSuccessOutgoingInterBtsOm} + {hoNCellsSuccessOutgoingTraffic} + {hoNCellsSuccessOutgoingOthers}	Sum, ntcsdccbh, ntctchbh, ntctchf rbh

7.6.3 Neighbour.Nortel.GSM.Handovers

Handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
hoNcellsExecution	ACCUMULATION	INT8	Number of handovers on TCH executed	ADJ.NEIGH_1200_0_CUM	Sum, ntcsdcchbh,

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					ntetchbh, ntetchfrbh
hoNcellsExecutionSd cch	ACCUMULA TION	INT8	Number of handovers on SDCCH executed	ADJ.NEIGH_1202_0_C UM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
hoNcellsUnsuccessSd cchChlR	ACCUMULA TION	INT8	Number of unsuccessful outgoing handovers on SDCCH: Back to old channel	ADJ.NEIGH_1205_0_C UM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
hoNcellsUnsuccessSd cchOther	ACCUMULA TION	INT8	Number of unsuccessful outgoing handovers on SDCCH: Other cases	ADJ.NEIGH_1205_2_C UM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
hoNcellsUnsuccessSd cchTimer	ACCUMULA TION	INT8	Number of unsuccessful outgoing handovers on SDCCH: Time- out elapse	ADJ.NEIGH_1205_1_C UM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
hoNcellsUnsuccessTc hChlR	ACCUMULA TION	INT8	Number of unsuccessful outgoing handovers on TCH: Back to old channel	ADJ.NEIGH_1204_0_C UM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
hoNcellsUnsuccessTc hOther	ACCUMULA TION	INT8	Number of unsuccessful outgoing handovers on TCH: Other cases	ADJ.NEIGH_1204_2_C UM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
hoNcellsUnsuccessTc hTimer	ACCUMULA TION	INT8	Number of unsuccessful outgoing handovers on	ADJ.NEIGH_1204_1_C UM	Sum, ntesdcchb h, ntetchbh,

			TCH: Time-out elapse		nttchfrbh
Tot_hoNcellsUnsuccessSdch	ACCUMULATION	INT8	Total number of unsuccessful outgoing handovers on SDCCH	{hoNcellsUnsuccessSdchChlR} + {hoNcellsUnsuccessSdchTimer} + {hoNcellsUnsuccessSdchOther}	Sum, ntesdcchbh, nttchbh, nttchfrbh
Tot_hoNcellsUnsuccessTch	ACCUMULATION	INT8	Total number of unsuccessful outgoing handovers on TCH	{hoNcellsUnsuccessTchChlR} + {hoNcellsUnsuccessTchTimer} + {hoNcellsUnsuccessTchOther}	Sum, ntesdcchbh, nttchbh, nttchfrbh

7.6.4 Neighbour.Nortel.GSM.Neighbour_Cells

Neighbour cell statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
hoNcellsRequestOutgoingAmrFrDownlinkCMR	ACCUMULATION	INTEGER	Number of outgoing intra-bss or inter-bss handover attempts for downlink CMR (with AMR L1M) from a central cell to a neighbouring one (only on TCH channel) from FR channel	ADJ.NEIGH_1839_11_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh

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hoNcellsRequestOutgoingAmrFrUplinkCMC	ACCUMULATION	INTEGER	Number of outgoing intra-bss or inter-bss handover attempts for uplink CMC (with AMR L1M) from a central cell to a neighbouring one (only on TCH channel) from FR channel	ADJ.NEIGH_1839_10_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
hoNcellsRequestOutgoingAmrHrDownlinkCMR	ACCUMULATION	INTEGER	Number of outgoing intra-bss or inter-bss handover attempts for downlink CMR (with AMR L1M) from a central cell to a neighbouring one (only on TCH channel) from HR channel	ADJ.NEIGH_1839_13_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
hoNcellsRequestOutgoingAmrHrUplinkCMC	ACCUMULATION	INTEGER	Number of outgoing intra-bss or inter-bss handover attempts for uplink CMC (with AMR L1M) from a central cell	ADJ.NEIGH_1839_12_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

			to a neighbouring one (only on TCH channel) from HR channel		
hoNcellsSuccessOutgoingAmrFrDownlinkCMR	ACCUMULATION	INTEGER	Number of outgoing intra BSS or inter BSS handovers success downlink CMR (with AMR LIM) from a central cell to a neighbouring one (only on TCH channel) from FR channel	ADJ.NEIGH_1840_11_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoNcellsSuccessOutgoingAmrHrDownlinkCMR	ACCUMULATION	INTEGER	Number of outgoing intra BSS or inter BSS handovers success for downlink CMR (with AMR LIM) from a central cell to a neighbouring one (only on TCH	ADJ.NEIGH_1840_13_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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			channel) from HR channel		
hoNcellsSuccessOutgoingAmrHrUplinkCMC	ACCUMULATION	INTEGER	Number of outgoing intra BSS or inter BSS handovers success for uplink CMC (with AMR L1M) from a central cell to a neighbouring one (only on TCH channel) from HR channel	ADJ.NEIGH_1840_12_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
hoNcellsSuccessOutgoingUplinkStrength	ACCUMULATION	INTEGER	Number of outgoing intra-bss or inter-bss handover successes from a central cell to a neighboring one - Loss of Uplink power	ADJ.NEIGH_1840_10_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.7 NSVC Performance Indicators

This section shows the key performance indicators and other counters for the NSVC object, divided into the following sub-sections:

- [NSVC.Nortel.GSM.GPRS_EDGE](#)

7.7.1 NSVC.Nortel.GSM.GPRS_EDGE

GPRS Edge statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuBytesFromIf	ACCUMULATION	INT8	Number of bytes received on this connection	NVC.NSVC_15303_0_CUM	Sum,
pcuBytesToIf	ACCUMULATION	INT8	Number of bytes sent on this connection	NVC.NSVC_15305_0_CUM	Sum,
pcuCir	ACCUMULATION	INT8	Rate at which the frame relay network agrees to transfer information under normal conditions (local rate)	NVC.NSVC_15306_0_CUM	Sum,
pcuDeBytesFromIf	ACCUMULATION	INT8	Number of bytes received on this connection, with the Discard Eligibility (DE) bit set	NVC.NSVC_15304_0_CUM	Sum,
pcuDeFrmFromIf	ACCUMULATION	INT8	Number of frames (frame relay PDU) received on this connection, with the Discard Eligibility (DE) bit set	NVC.NSVC_15301_0_CUM	Sum,
pcuEir	ACCUMULATION	INT8	Rate at which the frame relay network attempts to transfer information (local rate)	NVC.NSVC_15307_0_CUM	Sum,
pcuFrmFromIf	ACCUMULATION	INT8	Number of frames (frame relay PDU)	NVC.NSVC_15300_0_CUM	Sum,

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			received on this connection		
pcuFrmToIf	ACCUMULATION	INT8	Number of frames (frame relay PDU) sent on this connection	NVC.NSVC_15302_0_CUM	Sum,

7.8 OMC Performance Indicators

This section shows the key performance indicators and other counters for the OMC object, divided into the following sub-sections:

- [OMC.Nortel.GSM.System_stats.Q3_CMIS](#)
- [OMC.Nortel.GSM.System_stats.Q3_Notification_FTAM](#)
- [OMC.Nortel.GSM.System_stats.SCSE](#)
- [OMC.Nortel.GSM.System_stats.Sybase](#)
- [OMC.Nortel.GSM.System_stats.UNIX](#)

7.8.1 OMC.Nortel.GSM.System_stats.Q3_CMIS

CMIS statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
ommdActConf	ACCUMULATION	INT8	Number of CMIS ACTION confirmations sent for the md subtree	OMC_R.Q3_10009_0_CUM	Sum
ommdActRequest	ACCUMULATION	INT8	Number of CMIS ACTION requests received for the md subtree	OMC_R.Q3_10008_0_CUM	Sum
ommdCancelGetConf	ACCUMULATION	INT8	Number of CMIS CANCEL GET confirmations sent for the md subtree	OMC_R.Q3_10011_0_CUM	Sum
ommdCancelGetRequest	ACCUMULATION	INT8	Number of CMIS CANCEL GET requests received for the md subtree	OMC_R.Q3_10010_0_CUM	Sum
ommdCreConf	ACCUMULATION	INT8	Number of CMIS CREATE	OMC_R.Q3_10003_0_CUM	Sum

			confirmations sent for the md subtree		
ommdCreRequest	ACCUMULATION	INT8	Number of CMIS CREATE requests received for the md subtree	OMC_R.Q3_10002_0_CUM	Sum
ommdDelConf	ACCUMULATION	INT8	Number of CMIS DELETE confirmations sent for the md subtree	OMC_R.Q3_10007_0_CUM	Sum
ommdDelRequest	ACCUMULATION	INT8	Number of CMIS DELETE requests received for the md subtree	OMC_R.Q3_10006_0_CUM	Sum
ommdGetConf	ACCUMULATION	INT8	Number of CMIS GET confirmations sent for the md subtree	OMC_R.Q3_10001_0_CUM	Sum
ommdGetRequest	ACCUMULATION	INT8	Number of CMIS GET requests received for the md subtree	OMC_R.Q3_10000_0_CUM	Sum
ommdSetConf	ACCUMULATION	INT8	Number of CMIS SET confirmations sent for the md subtree	OMC_R.Q3_10005_0_CUM	Sum
ommdSetRequest	ACCUMULATION	INT8	Number of CMIS SET requests received for the md subtree	OMC_R.Q3_10004_0_CUM	Sum
omnetActConf	ACCUMULATION	INT8	Number of CMIS ACTION confirmations sent for the network subtree	OMC_R.Q3_10021_0_CUM	Sum

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omnetActRequest	ACCUMULATION	INT8	Number of CMIS ACTION requests received for the network subtree	OMC_R.Q3_10020_0_CUM	Sum
omnetCancelGetConf	ACCUMULATION	INT8	Number of CMIS CANCEL GET confirmations sent for the network subtree	OMC_R.Q3_10023_0_CUM	Sum
omnetCancelGetRequest	ACCUMULATION	INT8	Number of CMIS CANCEL GET requests received for the network subtree	OMC_R.Q3_10022_0_CUM	Sum
omnetCreConf	ACCUMULATION	INT8	Number of CMIS CREATE confirmations sent for the network subtree	OMC_R.Q3_10015_0_CUM	Sum
omnetCreRequest	ACCUMULATION	INT8	Number of CMIS CREATE requests received for the network subtree	OMC_R.Q3_10014_0_CUM	Sum
omnetDelConf	ACCUMULATION	INT8	Number of CMIS DELETE confirmations sent for the network subtree	OMC_R.Q3_10019_0_CUM	Sum
omnetDelRequest	ACCUMULATION	INT8	Number of CMIS DELETE requests received for the network subtree	OMC_R.Q3_10018_0_CUM	Sum
omnetGetConf	ACCUMULATION	INT8	Number of CMIS GET confirmations sent for the network subtree	OMC_R.Q3_10013_0_CUM	Sum
omnetGetRequest	ACCUMULATION	INT8	Number of CMIS GET requests received for the network subtree	OMC_R.Q3_10012_0_CUM	Sum

omnetSetConf	ACCUMULATION	INT8	Number of CMIS SET confirmations sent for the network subtree	OMC_R.Q3_10017_0_CUM	Sum
omnetSetRequest	ACCUMULATION	INT8	Number of CMIS SET requests received for the network subtree	OMC_R.Q3_10016_0_CUM	Sum

7.8.2 OMC.Nortel.GSM.System_stats.Q3_Notification_FTAM

Notification and FTAM statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
ftamFtiDeleteConf	ACCUMULATION	INT8	Number of successful FTAM DELETE requests	OMC_R.Q3_10034_0_CUM	Sum
ftamFtiDelete	ACCUMULATION	INT8	Number of FTAM DELETE requests	OMC_R.Q3_10033_0_CUM	Sum
ftamFtiDirConf	ACCUMULATION	INT8	Number of successful FTAM DIR transfers	OMC_R.Q3_10036_0_CUM	Sum
ftamFtiDir	ACCUMULATION	INT8	Number of FTAM DIR transfer requests	OMC_R.Q3_10035_0_CUM	Sum
ftamFtiGetConf	ACCUMULATION	INT8	Number of successful FTAM GET transfers	OMC_R.Q3_10030_0_CUM	Sum
ftamFtiGet	ACCUMULATION	INT8	Number of FTAM GET transfer requests	OMC_R.Q3_10029_0_CUM	Sum

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ftamFtiPutConf	ACCUMULATION	INT8	Number of successful FTAM PUT transfers	OMC_R.Q3_10032_0_CUM	Sum
ftamFtiPut	ACCUMULATION	INT8	Number of FTAM PUT transfer requests	OMC_R.Q3_10031_0_CUM	Sum
ftamFtiRenameConf	ACCUMULATION	INT8	Number of successful FTAM RENAME request	OMC_R.Q3_10038_0_CUM	Sum
ftamFtiRename	ACCUMULATION	INT8	Number of FTAM RENAME requests	OMC_R.Q3_10037_0_CUM	Sum
notifsReachMaxTransmit	ACCUMULATION	INT8	Number of notifications that were not sent to all managers	OMC_R.Q3_10028_0_CUM	Sum
notifsReceived	ACCUMULATION	INT8	Number of notifications received	OMC_R.Q3_10024_0_CUM	Sum
notifsSentOnce	ACCUMULATION	INT8	Number of notifications sent for the first time	OMC_R.Q3_10025_0_CUM	Sum
notifsTransmitAgainOnce	ACCUMULATION	INT8	Number of notifications sent a second time	OMC_R.Q3_10026_0_CUM	Sum
notifsTransmitAgainTwiceAndMore	ACCUMULATION	INT8	Number of notifications sent more than two times	OMC_R.Q3_10027_0_CUM	Sum

7.8.3 OMC.Nortel.GSM.System_stats.SCSE

SCSE statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
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scseFailConnect	ACCUMULATION	INT8	Number of BSS/OMC-R link failures	OMC_R.SCSE_9972_0_CUM	Sum
scseRgeIn	ACCUMULATION	INT8	Number of RGE received	OMC_R.SCSE_9971_0_CUM	Sum
scseTgeOut	ACCUMULATION	INT8	Number of TGE sent	OMC_R.SCSE_9970_0_CUM	Sum
scseTotAssocFree	ACCUMULATION	INT8	Total number of association release requests sent by the BSC	OMC_R.SCSE_9974_0_CUM	Sum
scseTotTgeRefused	ACCUMULATION	INT8	Total number of TGE reservations refused	OMC_R.SCSE_9973_0_CUM	Sum

7.8.4 OMC.Nortel.GSM.System_stats.Sybase

Sybase agent statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
cmDatabaseUsed	INTENSITY	FLOAT	Average filling rate of configuration database cm_db	OMC_R.SYBASE_10047_0_AVG	Average, tot, min, max
cmLogUsed	INTENSITY	FLOAT	Average filling rate of configuration log cm_db	OMC_R.SYBASE_10049_0_AVG	Average, tot, min, max
fmDatabaseUsed	INTENSITY	FLOAT	Average filling rate of fault database fm_db	OMC_R.SYBASE_10048_0_AVG	Average, tot, min, max
fmLogUsed	INTENSITY	FLOAT	Average filling rate of fault log fm_db	OMC_R.SYBASE_10050_0_AVG	Average, tot, min, max

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sybaseCpuBusy	ACCUMULATION	INT8	CPU time used by the SYBASE server (1/10 s)	OMC_R.SYBASE_9943_0_CUM	Sum
sybaseIdle	ACCUMULATION	INT8	SYBASE server idle time (s)	OMC_R.SYBASE_9945_0_CUM	Sum
sybaseIoBusy	ACCUMULATION	INT8	I/O time used by the SYBASE server (1/10 s)	OMC_R.SYBASE_9944_0_CUM	Sum
sybasePacketErr	ACCUMULATION	INT8	Number of erroneous packets sent or received by the SYBASE	OMC_R.SYBASE_9948_0_CUM	Sum
sybasePacketIn	ACCUMULATION	INT8	Number of packets received by the SYBASE server	OMC_R.SYBASE_9946_0_CUM	Sum
sybasePacketOut	ACCUMULATION	INT8	Number of packets sent by the SYBASE server	OMC_R.SYBASE_9947_0_CUM	Sum
sybaseTotalError	ACCUMULATION	INT8	Total number of SYBASE errors	OMC_R.SYBASE_9940_0_CUM	Sum
sybaseTotalRead	ACCUMULATION	INT8	Total number of SYBASE read operations	OMC_R.SYBASE_9941_0_CUM	Sum
sybaseTotalWrite	ACCUMULATION	INT8	Total number of SYBASE write operations	OMC_R.SYBASE_9942_0_CUM	Sum

7.8.5 OMC.Nortel.GSM.System_stats.UNIX

Unix statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
unixCmnBasePartition NMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server /CMN/base partition	OMC_R.UNIX_10045_0_AVG	Average, tot, min, max
unixCmnDataPartition NMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server	OMC_R.UNIX_10046_0_AVG	Average, tot, min, max

			/CMN/data partition		max
unixCpu0UsedNMCSrv	INTENSITY	FLOAT	Average load of NMC server CPU 0	OMC_R.UNIX_9984_ 0_AVG	Average, tot, min, max
unixCpu1UsedNMCSrv	INTENSITY	FLOAT	Average load of NMC server CPU 1	OMC_R.UNIX_9985_ 0_AVG	Average, tot, min, max
unixDataSsnPartition	INTENSITY	FLOAT	Average filling rate of /MD/data/ssn partition	OMC_R.UNIX_9998_ 0_AVG	Average, tot, min, max
unixMdrBasePartition NMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server /MD/base partition	OMC_R.UNIX_10043_ 0_AVG	Average, tot, min, max
unixMdrDataPartition NMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server /MD/data partition	OMC_R.UNIX_10044_ 0_AVG	Average, tot, min, max
unixNotifPartition	INTENSITY	FLOAT	Average filling rate of /MD/notif partition	OMC_R.UNIX_9994_ 0_AVG	Average, tot, min, max
unixObsPartition	INTENSITY	FLOAT	Average filling rate of /MD/obs partition	OMC_R.UNIX_9993_ 0_AVG	Average, tot, min, max
unixRestoredNotifPart ition	INTENSITY	FLOAT	Average filling rate of /MD/restored/notif partition	OMC_R.UNIX_9996_ 0_AVG	Average, tot, min, max
unixRestoredObsPartit ion	INTENSITY	FLOAT	Average filling rate of /MD/restored/obs partition	OMC_R.UNIX_9995_ 0_AVG	Average, tot, min, max
unixRestoredTracePart ition	INTENSITY	FLOAT	Average filling rate of /MD/restored/trace _function partition	OMC_R.UNIX_9999_ 0_AVG	Average, tot, min, max

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unixRootPartitionNMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server / partition	OMC_R.UNIX_9990_0_AVG	Average, tot, min, max
unixSwapNMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server SWAP area	OMC_R.UNIX_9988_0_AVG	Average, tot, min, max
unixTmpPartitionNMCSrv	INTENSITY	FLOAT	Average filling rate of NMS server /tmp partition	OMC_R.UNIX_9991_0_AVG	Average, tot, min, max
unixTracePartition	INTENSITY	FLOAT	Average filling rate of /MD/trace_function partition	OMC_R.UNIX_9997_0_AVG	Average, tot, min, max

7.9 PCM_BSC Performance Indicators

This section shows the key performance indicators and other counters for the PCM_BSC object, divided into the following sub-sections:

- [PCM_BSC.Nortel.GSM.Paging_and_traffic](#)
- [PCM_BSC.Nortel.GSM.PCM_unavailability_and_fault](#)

7.9.1 PCM_BSC.Nortel.GSM.Paging_and_traffic

Paging and traffic statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
csPaging	ACCUMULATION	INT8	Cumulative number of BSSGP PAGING CS PDU received on the SPM and related to this PCM link	PCM.PCM_15073_1_CUM	Sum, ntbccpabh, ntbtaubh
CsPagingOnCcch	ACCUMULATION	INT8	Total Number of CS Paging messages sent by the PCU to the BSC on this LAPD link	PCM.LAPD_15023_0_CUM	Sum, ntbccpabh, ntbtaubh
CsPagingOnPacch	ACCUMULATION	INT8	Total Number of CS Paging	PCM.LAPD_15024_0_CUM	Sum, ntbccpabh

			messages sent by the PCU to the MS on PACCH		h, ntbtaubh
octetsDn	ACCUMULATION	INT8	Number of bytes received by all the BVCs associated to this PCM link in an Element (SPMcard)	PCM.PCM_15001_0_CUM	Sum, ntbsscpabh, ntbtaubh
octetsUp	ACCUMULATION	INT8	Number of bytes sent by all the BVCs associated to this PCMLink in an Element (SPMcard)	PCM.PCM_15001_1_CUM	Sum, ntbsscpabh, ntbtaubh
psPaging	ACCUMULATION	INT8	Cumulative number of BSSGP PAGING PS PDU received on the SPM and related to this PCM link	PCM.PCM_15073_0_CUM	Sum, ntbsscpabh, ntbtaubh
PsPagingOnCcch	ACCUMULATION	INT8	Total Number of PS Paging messages sent by the PCU to the BTS on this LAPD link	PCM.LAPD_15023_1_CUM	Sum, ntbsscpabh, ntbtaubh

7.9.2 PCM_BSC.Nortel.GSM.PCM_unavailability_and_fault

Unavailability and fault statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcmFaultDDTIBoard	ACCUMULATION	INT8	Number of faults relating to the PCM with cause	PCM.PCM_1755_2_CUM	Sum, ntbsscpabh,

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			DDTI board fault		ntbtcaubh
pcmFaultExternal	ACCUMULATION	INT8	Number of faults relating to the PCM with cause external PCM fault	PCM.PCM_1755_0_CUM	Sum, ntbsecpabh, ntbtcaubh
pcmFaultInternal	ACCUMULATION	INT8	Number of faults relating to the PCM with cause internal fault	PCM.PCM_1755_1_CUM	Sum, ntbsecpabh, ntbtcaubh
pcmFaultOutOfService	ACCUMULATION	INT8	Number of faults relating to the PCM with cause taken out of service for an OAM reason	PCM.PCM_1755_3_CUM	Sum, ntbsecpabh, ntbtcaubh
pcmUnavailabilityCum	ACCUMULATION	INT8	Cumulative time of PCM unavailability	PCM.PCM_1114_0_CUM	Sum, ntbsecpabh, ntbtcaubh
pcmUnavailabilityEch	ACCUMULATION	INT8	Number of samples, time of PCM unavailability	PCM.PCM_1114_0_NBS	Sum, ntbsecpabh, ntbtcaubh
pcmUnavailabilityMax	INTENSITY	INTEGER	Maximum time of PCM unavailability	PCM.PCM_1114_0_MAX	Constant, ntbsecpabh, ntbtcaubh, tot, min, max
pcmUnavailabilityMoy	INTENSITY	FLOAT	Average time of PCM unavailability	PCM.PCM_1114_0_AVG	Average, ntbsecpabh, ntbtcaubh, tot, min, max

7.10 Processor Performance Indicators

This section shows the key performance indicators and other counters for the Processor object, divided into the following sub-sections:

- [Processor.Nortel.GSM.Load.CC](#)
- [Processor.Nortel.GSM.Load.CEM_IN_and_TCU](#)
- [Processor.Nortel.GSM.Load.CPUE](#)
- [Processor.Nortel.GSM.Load.CPUM](#)
- [Processor.Nortel.GSM.Load.Logical_processor](#)
- [Processor.Nortel.GSM.Load.OMU](#)
- [Processor.Nortel.GSM.Load.Pblock](#)
- [Processor.Nortel.GSM.Load.TMU](#)

7.10.1 Processor.Nortel.GSM.Load.CC

CC processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
e3prMemCnCC1Cum	ACCUMULATION	INT8	-Obsolete in V15.1- Cumulative memory usage on CC1 processor inside the Control Node of the system	CC.CC_3006_0_CUM	Sum
e3prMemCnCC1Ech	ACCUMULATION	INT8	-Obsolete in V15.1- No of samples, memory usage on CC1 processor inside the Control Node of the system	CC.CC_3006_0_NBS	Sum
e3prMemCnCC1Max	INTENSITY	INTEGER	-Obsolete in V15.1- Maximum memory usage on CC1 processor inside the Control Node of the system	CC.CC_3006_0_MAX	Constant, tot, min, max
e3prMemCnCC1Mo	INTENSITY	FLOA	-Obsolete in	CC.CC_3006_0_AVG	Average,

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y		T	V15.1- Average memory usage on CC1 processor inside the Control Node of the system		tot, min, max
prLoadCne3CC1Cum	ACCUMULATION	INT8	-Obsolete in V15.1- Cumulative load of a given CC1 processor inside the Control Node of the system	CC.CC_3002_0_CUM	Sum
prLoadCne3CC1Ech	ACCUMULATION	INT8	-Obsolete in V15.1- No of samples, load of a given CC1 processor inside the Control Node of the system	CC.CC_3002_0_NBS	Sum
prLoadCne3CC1Max	INTENSITY	INTEGER	-Obsolete in V15.1- Maximum load of a given CC1 processor inside the Control Node of the system	CC.CC_3002_0_MAX	Constant, tot, min, max
prLoadCne3CC1Mo	INTENSITY	FLOAT	-Obsolete in V15.1- Average load of a given CC1 processor inside the Control Node of the system	CC.CC_3002_0_AVG	Average, tot, min, max

7.10.2 Processor.Nortel.GSM.Load.CEM_IN_and_TCU

CEM TCU and CEM TCU processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
e3PrLoadSpmCum	ACCUMULATION	INT8	-Obsolete in	CEM.CEM_3003_0_C	Sum

	TION		V15.1- Cumulative Load of a given BSC(IN)/TCU processor	UM	
e3PrLoadSpmEch	ACCUMULA TION	INT8	-Obsolete in V15.1- No of samples, Load of a given BSC(IN)/TCU processor	CEM.CEM_3003_0_N BS	Sum
e3PrLoadSpmMax	INTENSITY	INTEG ER	-Obsolete in V15.1- Maximum Load of a given BSC(IN)/TCU processor	CEM.CEM_3003_0_ MAX	Constant, tot, min, max
e3PrLoadSpmMoy	INTENSITY	FLOA T	-Obsolete in V15.1- Average Load of a given BSC(IN)/TCU processor	CEM.CEM_3003_0_A VG	Average, tot, min, max
e3PrMemSpmCum	ACCUMULA TION	INT8	-Obsolete in V15.1- Cumulative memory usage on BSC(IN)/TCU processor	CEM.CEM_3007_0_C UM	Sum
e3PrMemSpmEch	ACCUMULA TION	INT8	-Obsolete in V15.1- No of samples, memory usage on BSC(IN)/TCU processor	CEM.CEM_3007_0_N BS	Sum
e3PrMemSpmMax	INTENSITY	INTEG ER	-Obsolete in V15.1- Maximum memory usage on BSC(IN)/TCU	CEM.CEM_3007_0_ MAX	Constant, tot, min, max

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			processor		
e3PrMemSpmMoy	INTENSITY	FLOAT	-Obsolete in V15.1- Average memory usage on BSC(IN)/TCU processor	CEM.CEM_3007_0_AVG	Average, tot, min, max

7.10.3 Processor.Nortel.GSM.Load.CPUE

CPU-E processor load statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
cardSynthLoadCpueCum	ACCUMULATION	INT8	Cummulative synthetic load on CPUE x board	CPUE.c1835_0_CUM	Sum
cardSynthLoadCpueEch	ACCUMULATION	INT8	Number of samples, synthetic load on CPUE x board	CPUE.c1835_0_NBS	Sum
cardSynthLoadCpueMax	INTENSITY	INTEGER	Maximum synthetic load on CPUE x board	CPUE.c1835_0_MAX	Constant, tot, min, max
cardSynthLoadCpueMoy	INTENSITY	FLOAT	Average synthetic load on CPUE x board	CPUE.c1835_0_AVG	Average, tot, min, max
cgOverloadRejectedOpChannelReqCg	ACCUMULATION	INT8	Number of rejected calls on channel requests due to overload	CPUE.c1803_1_CUM	Sum
cgOverloadRejectedOpEstablishIndCg	ACCUMULATION	INT8	Number of rejected calls on establish indication due to overload	CPUE.c1803_2_CUM	Sum
cgOverloadRejectedOpHo	ACCUMULATION	INT8	Number of	CPUE.c1803_3_CUM	Sum

ReqCg	TION		rejected calls on handover requests due to overload (Cg x)	UM	
cgOverloadRejectedOpPagingReqBtsCg	ACCUMULATION	INT8	Number of rejected calls on handover requests due to an overloaded cell (Cg x)	CPUE.c1803_4_CUM	Sum
cgOverloadRejectedOpPagingReqCg	ACCUMULATION	INT8	Number of rejected calls on paging requests due to overload	CPUE.c1803_0_CUM	Sum
cgOverloadRejectedOpSmsCbCg1	ACCUMULATION	INT8	Number of rejected sms-cb messages due to overload situation	CPUE.CPUE1_1803_5_CUM	Sum
cgOverloadRejectedOpSmsCbCg2	ACCUMULATION	INT8	Number of rejected sms-cb messages due to overload situation	CPUE.CPUE2_1803_5_CUM	Sum
cgOverloadRejectedOpSmsCbCg	ACCUMULATION	INT8	Number of rejected sms-cb messages due to overload situation	CPUE.c1803_5_CUM	Sum
prLoadCpueCum	ACCUMULATION	INT8	Cumulative load of CPUE x board	CPUE.c1400_0_CUM	Sum
prLoadCpueEch	ACCUMULATION	INT8	Number of samples, load	CPUE.c1400_0_NBS	Sum

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			of CPUE x board		
prLoadCpueMax	INTENSITY	INTEGER	Maximum load of CPUE x board	CPUE.c1400_0_MAX	Constant, tot, min, max
prLoadCpueMoy	INTENSITY	FLOAT	Average load of CPUE x board	CPUE.c1400_0_AVG	Average, tot, min, max

7.10.4 Processor.Nortel.GSM.Load.CPUM

CPU-M processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
cardSynthLoadCpumCum	ACCUMULATION	INT8	Cumulative synthetic load on CPUM board	CPUM.c1835_0_CUM	Sum
cardSynthLoadCpumEch	ACCUMULATION	INT8	No of samples, synthetic load on CPUM board	CPUM.c1835_0_NBS	Sum
cardSynthLoadCpumMax	INTENSITY	INTEGER	Maximum synthetic load on CPUM board	CPUM.c1835_0_MAX	Constant, tot, min, max
cardSynthLoadCpumMoy	INTENSITY	FLOAT	Average synthetic load on CPUM board	CPUM.c1835_0_AVG	Average, tot, min, max
prLoadCpumCum	ACCUMULATION	INT8	Cumulative load of Cpum board	CPUM.c1400_0_CUM	Sum
prLoadCpumEch	ACCUMULATION	INT8	No of samples, load of Cpum board	CPUM.c1400_0_NBS	Sum
prLoadCpumMax	INTENSITY	INTEGER	Maximum load of Cpum board	CPUM.c1400_0_MAX	Constant, tot, min, max
prLoadCpumMoy	INTENSITY	FLOAT	Average load of Cpum board	CPUM.c1400_0_AVG	Average, tot, min, max

7.10.5 Processor.Nortel.GSM.Load.Logical_processor

Logical processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
cpuUtilAvg	INTENSITY	FLOAT	Average LP CPU load	LPR.LP_15066_0_AVG	Average, tot, min, max
cpuUtilAvgMax	INTENSITY	FLOAT	Maximum LP CPU load	LPR.LP_15066_0_MAX	Constant, tot, min, max
cpuUtilAvgMin	INTENSITY	FLOAT	Minimum LP CPU load	LPR.LP_15066_0_MIN	Minimum, tot, min, max
localMsgBlockCapacity	INTENSITY	FLOAT	Memory capacity of the processor cards local message blocks	LPR.LP_15069_2_CUM	Average, tot, min, max
localMsgBlockUsageAvg	INTENSITY	FLOAT	Average utilization of the processor cards local message blocks	LPR.LP_15069_3_AVG	Average, tot, min, max
localMsgBlockUsageMax	INTENSITY	FLOAT	Maximum utilization of the processor cards local message blocks	LPR.LP_15069_3_MAX	Constant, tot, min, max
localMsgBlockUsageMin	INTENSITY	FLOAT	Minimum utilization of the processor cards local message blocks	LPR.LP_15069_3_MIN	Minimum, tot, min, max
memoryCapacityFastRam	INTENSITY	FLOAT	Fast RAM memory capacity	LPR.LP_15067_0_CUM	Average, tot, min, max

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memoryCapacityNormalRam	INTENSITY	FLOAT	Normal RAM memory capacity	LPR.LP_15067_1_CUM	Average, tot, min, max
memoryCapacitySharedRam	INTENSITY	FLOAT	Shared RAM memory capacity	LPR.LP_15067_2_CUM	Average, tot, min, max
memoryUsageAvgFastRam	INTENSITY	FLOAT	Average Fast RAM utilization	LPR.LP_15068_0_AVG	Average, tot, min, max
memoryUsageAvgMaxFastRam	INTENSITY	FLOAT	Maximum Fast RAM utilization	LPR.LP_15068_0_MAX	Constant, tot, min, max
memoryUsageAvgMaxNormalRam	INTENSITY	FLOAT	Maximum Normal RAM utilization	LPR.LP_15068_1_MAX	Constant, tot, min, max
memoryUsageAvgMaxSharedRam	INTENSITY	FLOAT	Maximum Shared RAM utilization	LPR.LP_15068_2_MAX	Constant, tot, min, max
memoryUsageAvgMinFastRam	INTENSITY	FLOAT	Minimum Fast RAM utilization	LPR.LP_15068_0_MIN	Minimum, tot, min, max
memoryUsageAvgMinNormalRam	INTENSITY	FLOAT	Minimum Normal RAM utilization	LPR.LP_15068_1_MIN	Minimum, tot, min, max
memoryUsageAvgMinSharedRam	INTENSITY	FLOAT	Minimum Shared RAM utilization	LPR.LP_15068_2_MIN	Minimum, tot, min, max
memoryUsageAvgNormalRam	INTENSITY	FLOAT	Average Normal RAM utilization	LPR.LP_15068_1_AVG	Average, tot, min, max
memoryUsageAvgSharedRam	INTENSITY	FLOAT	Average Shared RAM utilization	LPR.LP_15068_2_AVG	Average, tot, min, max
sharedMsgBlockCapacity	INTENSITY	FLOAT	Memory capacity of the processor cards shared message blocks	LPR.LP_15069_0_CUM	Average, tot, min, max
sharedMsgBlockUsageA	INTENSITY	FLOAT	Average	LPR.LP_15069_1_A	Average,

vg	TY	T	utilization of the processor cards shared message blocks	VG	tot, min, max
sharedMsgBlockUsageAvgMax	INTENSITY	FLOAT	Maximum utilization of the processor cards shared message blocks	LPR.LP_15069_1_MAX	Constant, tot, min, max
sharedMsgBlockUsageAvgMin	INTENSITY	FLOAT	Minimum utilization of the processor cards shared message blocks	LPR.LP_15069_1_MIN	Minimum, tot, min, max

7.10.6 Processor.Nortel.GSM.Load.OMU

OMU processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
e3PrDiskCnOmuLdR Cum	ACCUMULATION	INT8	Cumulative Disk usage on OMU processor inside the ControlNode of the system: local disk access for read operation	OMU.OMU_3008_1_CUM	Sum
e3PrDiskCnOmuLdR Ech	ACCUMULATION	INT8	No of samples, Disk usage on OMU processor inside the ControlNode of the system: local disk access for read operation	OMU.OMU_3008_1_NBS	Sum
e3PrDiskCnOmuLdR	INTENSITY	INTEG	Maximum Disk	OMU.OMU_3008_1	Constant,

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Max		ER	usage on OMU processor inside the ControlNode of the system: local disk access for read operation	_MAX	tot, min, max
e3PrDiskCnOmuLdR Moy	INTENSITY	FLOAT	Average Disk usage on OMU processor inside the ControlNode of the system: local disk access for read operation	OMU.OMU_3008_1_AVG	Average, tot, min, max
e3PrDiskCnOmuLdW Cum	ACCUMULATION	INT8	Cumulative Disk usage on OMU processor inside the ControlNode of the system: local disk access for write operation	OMU.OMU_3008_0_CUM	Sum
e3PrDiskCnOmuLdW Ech	ACCUMULATION	INT8	No of samples, Disk usage on OMU processor inside the ControlNode of the system: local disk access for write operation	OMU.OMU_3008_0_NBS	Sum
e3PrDiskCnOmuLdW Max	INTENSITY	INTEGER	Maximum Disk usage on OMU processor inside the ControlNode of the system: local disk access for write operation	OMU.OMU_3008_0_MAX	Constant, tot, min, max
e3PrDiskCnOmuLdW Moy	INTENSITY	FLOAT	Average Disk usage on OMU processor inside the ControlNode of the system: local disk access for write operation	OMU.OMU_3008_0_AVG	Average, tot, min, max

e3PrDiskCnOmuMdR Cum	ACCUMULA TION	INT8	Cumulative Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for read operation	OMU.OMU_3008_3 _CUM	Sum
e3PrDiskCnOmuMdR Ech	ACCUMULA TION	INT8	No of samples, Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for read operation	OMU.OMU_3008_3 _NBS	Sum
e3PrDiskCnOmuMdR Max	INTENSITY	INTEG ER	Maximum Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for read operation	OMU.OMU_3008_3 _MAX	Constant, tot, min, max
e3PrDiskCnOmuMdR Moy	INTENSITY	FLOA T	Average Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for read operation	OMU.OMU_3008_3 _AVG	Average, tot, min, max
e3PrDiskCnOmuMd WCum	ACCUMULA TION	INT8	Cumulative Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for write operation	OMU.OMU_3008_2 _CUM	Sum
e3PrDiskCnOmuMd WEch	ACCUMULA TION	INT8	No of samples, Disk usage on	OMU.OMU_3008_2 _NBS	Sum

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			OMU processor inside the ControlNode of the system: mirror disk access for write operation		
e3PrDiskCnOmuMdWMax	INTENSITY	INTEGER	Maximum Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for write operation	OMU.OMU_3008_2_MAX	Constant, tot, min, max
e3PrDiskCnOmuMdWMoy	INTENSITY	FLOAT	Average Disk usage on OMU processor inside the ControlNode of the system: mirror disk access for write operation	OMU.OMU_3008_2_AVG	Average, tot, min, max
e3PrMemCnOmuSbcMemCum	ACCUMULATION	INT8	Cumulative memory usage on OMU processor inside the ControlNode of the system: SBC_MEM	OMU.OMU_3004_0_CUM	Sum
e3PrMemCnOmuSbcMemEch	ACCUMULATION	INT8	No of samples, memory usage on OMU processor inside the ControlNode of the system: SBC_MEM	OMU.OMU_3004_0_NBS	Sum
e3PrMemCnOmuSbcMemMax	INTENSITY	INTEGER	Maximum memory usage on OMU processor inside the ControlNode of the system: SBC_MEM	OMU.OMU_3004_0_MAX	Constant, tot, min, max
e3PrMemCnOmuSbcMemMoy	INTENSITY	FLOAT	Average memory usage on OMU	OMU.OMU_3004_0_AVG	Average, tot, min,

			processor inside the ControlNode of the system: SBC_MEM		max
e3PrMemCnOmuSbcSwapCum	ACCUMULATION	INT8	Cumulative memory usage on OMU processor inside the ControlNode of the system: SBC_SWAP	OMU.OMU_3004_1_CUM	Sum
e3PrMemCnOmuSbcSwapEch	ACCUMULATION	INT8	No of samples, memory usage on OMU processor inside the ControlNode of the system: SBC_SWAP	OMU.OMU_3004_1_NBS	Sum
e3PrMemCnOmuSbcSwapMax	INTENSITY	INTEGER	Maximum memory usage on OMU processor inside the ControlNode of the system: SBC_SWAP	OMU.OMU_3004_1_MAX	Constant, tot, min, max
e3PrMemCnOmuSbcSwapMoy	INTENSITY	FLOAT	Average memory usage on OMU processor inside the ControlNode of the system: SBC_SWAP	OMU.OMU_3004_1_AVG	Average, tot, min, max
e3PrMemCnOmuSbcTmCum	ACCUMULATION	INT8	-Obsolete in V15.1- Cumulative memory usage on OMU processor inside the ControlNode of the system: SBC_TM	OMU.OMU_3004_2_CUM	Sum

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e3PrMemCnOmuSbcTmEch	ACCUMULATION	INT8	-Obsolete in V15.1- No of samples, memory usage on OMU processor inside the ControlNode of the system: SBC_TM	OMU.OMU_3004_2_NBS	Sum
e3PrMemCnOmuSbcTmMax	INTENSITY	INTEGER	-Obsolete in V15.1- Maximum memory usage on OMU processor inside the ControlNode of the system: SBC_TM	OMU.OMU_3004_2_MAX	Constant, tot, min, max
e3PrMemCnOmuSbcTmMoy	INTENSITY	FLOAT	-Obsolete in V15.1- Average memory usage on OMU processor inside the ControlNode of the system: SBC_TM	OMU.OMU_3004_2_AVG	Average, tot, min, max
prLoadCne3OmuSbcAvg	INTENSITY	FLOAT	-Obsolete in V15.1, replaced by prLoadCne3OmuSbcMoy- Average load of a OMU processor inside the Control Node of the system: SBC	{prLoadCne3OmuSbcCum} / {prLoadCne3OmuSbcEch}	Average, tot, min, max
prLoadCne3OmuSbcCum	ACCUMULATION	INT8	Cumulative load of a OMU processor inside the Control Node of the system: SBC	OMU.OMU_3000_0_CUM	Sum
prLoadCne3OmuSbcEch	ACCUMULATION	INT8	No of samples, load of a OMU processor inside the Control Node of the system: SBC	OMU.OMU_3000_0_NBS	Sum
prLoadCne3OmuSbcMax	INTENSITY	INTEGER	Maximum load of a OMU processor	OMU.OMU_3000_0_MAX	Constant, tot, min,

			inside the Control Node of the system: SBC		max
prLoadCne3OmuSbcMoy	INTENSITY	FLOAT	Average load of a OMU processor inside the Control Node of the system: SBC	OMU.OMU_3000_0_AVG	Average, tot, min, max

7.10.7 Processor.Nortel.GSM.Load.Pblock

Pblock processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
cpuPBlockUtilAvg	INTENSITY	FLOAT	Average MPC load	PBK.PBLK_15063_0_AVG	Average, tot, min, max
cpuPBlockUtilMax	INTENSITY	FLOAT	Max MPC load	PBK.PBLK_15063_2_MAX	Constant, tot, min, max

7.10.8 Processor.Nortel.GSM.Load.TMU

TMU processor statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
e3PrMemCnTmuPmcCum	ACCUMULATION	INT8	Cumulative memory usage on TMU processor inside the ControlNode of the system: PMC	TMU.TMU_3005_2_CUM	Sum
e3PrMemCnTmuPmcEch	ACCUMULATION	INT8	No of samples, memory usage on TMU processor	TMU.TMU_3005_2_NBS	Sum

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			inside the ControlNode of the system: PMC		
e3PrMemCnTmuPmcMax	INTENSITY	INTEGER	Maximum memory usage on TMU processor inside the ControlNode of the system: PMC	TMU.TMU_3005_2_MAX	Constant, tot, min, max
e3PrMemCnTmuPmcMoy	INTENSITY	FLOAT	Average memory usage on TMU processor inside the ControlNode of the system: PMC	TMU.TMU_3005_2_AVG	Average, tot, min, max
e3PrMemCnTmuSbcCum	ACCUMULATION	INT8	Cumulative memory usage on TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3005_0_CUM	Sum
e3PrMemCnTmuSbcEch	ACCUMULATION	INT8	No of samples, memory usage on TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3005_0_NBS	Sum
e3PrMemCnTmuSbcMax	INTENSITY	INTEGER	Maximum memory usage on TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3005_0_MAX	Constant, tot, min, max
e3PrMemCnTmuSbcMoy	INTENSITY	FLOAT	Average memory usage on TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3005_0_AVG	Average, tot, min, max
prLoadCne3TmuPmcCum	ACCUMULATION	INT8	Cumulative load of a given TMU	TMU.TMU_3001_2_CUM	Sum

			processor inside the ControlNode of the system: PMC		
prLoadCne3TmuPmcEch	ACCUMULATION	INT8	No of samples, load of a given TMU processor inside the ControlNode of the system: PMC	TMU.TMU_3001_2_NBS	Sum
prLoadCne3TmuPmcMax	INTENSITY	INTEGER	Maximum load of a given TMU processor inside the ControlNode of the system: PMC	TMU.TMU_3001_2_MAX	Constant, tot, min, max
prLoadCne3TmuPmcMoy	INTENSITY	FLOAT	Average load of a given TMU processor inside the ControlNode of the system: PMC	TMU.TMU_3001_2_AVG	Average, tot, min, max
prLoadCne3TmuSbcCum	ACCUMULATION	INT8	Cumulative load of a given TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3001_0_CUM	Sum
prLoadCne3TmuSbcEch	ACCUMULATION	INT8	No of samples, load of a given TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3001_0_NBS	Sum
prLoadCne3TmuSbcMax	INTENSITY	INTEGER	Maximum load of a given TMU processor inside	TMU.TMU_3001_0_MAX	Constant, tot, min, max

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			the ControlNode of the system: SBC		
prLoadCne3TmuSbcMoy	INTENSITY	FLOAT	Average load of a given TMU processor inside the ControlNode of the system: SBC	TMU.TMU_3001_0_AVG	Average, tot, min, max

7.11 SICD Performance Indicators

This section shows the key performance indicators and other counters for the SICD object, divided into the following sub-sections:

- [SICD.Nortel.GSM.Load](#)
- [SICD.Nortel.GSM.Overload_Rejection](#)

7.11.1 SICD.Nortel.GSM.Load

Load on a SICD board

KPI	Type	Data Type	Description	Derivation	Aggregation
cardSynthLoadSicdCum	ACCUMULATION	INT8	Cummulative synthetic load on SICD board	SICD.c1835_0_CUM	Sum, ntbsecpabh, ntbtaubh
cardSynthLoadSicdEch	ACCUMULATION	INT8	Number of samples, synthetic load on SICD board	SICD.c1835_0_NBS	Sum, ntbsecpabh, ntbtaubh
cardSynthLoadSicdMax	INTENSITY	INTEGER	Maximum synthetic load on SICD board	SICD.c1835_0_MAX	Constant, ntbsecpabh, ntbtaubh, tot, min, max
cardSynthLoadSicdMoy	INTENSITY	FLOAT	Average synthetic load on SICD board	SICD.c1835_0_AVG	Average, ntbsecpabh, ntbtaubh,

					tot, min, max
prLoadSicdCum	ACCUMULATION	INT8	Cummulative load of SICD board	SICD.c1400_0_CUM	Sum, ntbsccpabh, ntbtcaubh
prLoadSicdEch	ACCUMULATION	INT8	Number of samples, load of SICD board	SICD.c1400_0_NBS	Sum, ntbsccpabh, ntbtcaubh
prLoadSicdMax	INTENSITY	INTEGER	Maximum load of SICD board	SICD.c1400_0_MAX	Constant, ntbsccpabh, ntbtcaubh, tot, min, max
prLoadSicdMoy	INTENSITY	FLOAT	Average load of SICD board	SICD.c1400_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max

7.11.2 SICD.Nortel.GSM.Overload_Rejection

Rejection due to overload on SICD board

KPI	Type	Data Type	Description	Derivation	Aggregation
gprsImmAssRejected	ACCUMULATION	INT8	Number of GPRS IMMEDIATE ASSIGNMENT messages rejected due to SICD board overload	SICD.c1087_0_CUM	Sum, ntbsccpabh, ntbtcaubh
gprsPagingRejected	ACCUMULATION	INT8	Number of GPRS PAGING	SICD.c1088_0_CUM	Sum, ntbsccpabh

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			messages rejected due to SICD board overload		h, ntbzcaubh
gprsRachRejected	ACCUMULATION	INT8	Number of GPRS RACHs rejected due to SICD board overload	SICD.c1086_0_CUM	Sum, ntbccpabh, ntbzcaubh
lapdOverloadRejectedOp	ACCUMULATION	INT8	Number of rejected calls on paging requests due to SICD board overload	SICD.c1834_0_CUM	Sum, ntbccpabh, ntbzcaubh

7.12 Signalling_Link Performance Indicators

This section shows the key performance indicators and other counters for the Signalling_Link object, divided into the following sub-sections:

- [Signalling_Link.Nortel.GSM.Temporary_Obs.MSU](#)
- [Signalling_Link.Nortel.GSM.Temporary_Obs.SS7_level2](#)

7.12.1 Signalling_Link.Nortel.GSM.Temporary_Obs.MSU

Temporary observation category statistics for MSU

KPI	Type	Data Type	Description	Derivation	Aggregation
ss7InputMsu	ACCUMULATION	INT8	Number of MSU frames received on Level 2	SignallingLink.c5100_0_CUM	Sum
ss7OutputMsu	ACCUMULATION	INT8	Number of MSU frames sent on Level 2	SignallingLink.c5101_0_CUM	Sum

7.12.2 Signalling_Link.Nortel.GSM.Temporary_Obs.SS7_level2

Temporary observation category statistics for SS7 Level 2 errors

KPI	Type	Data Type	Description	Derivation	Aggregation
ss7Level2ErrorMsuCongest	ACCUMULATION	INT8	Number of SS7 Level 2 errors:	SignallingLink.c5102_2_CUM	Sum

			MSU rejected for congestion		
ss7Level2ErrorNegAckRec	ACCUMULATION	INT8	Number of SS7 Level 2 errors: Negative ACK received	SignallingLink.c5102_0_CUM	Sum
ss7Level2ErrorNegAckTrans	ACCUMULATION	INT8	Number of SS7 Level 2 errors: Negative ACK sent	SignallingLink.c5102_1_CUM	Sum
ss7Level2ErrorSuErr	ACCUMULATION	INT8	Number of SS7 Level 2 errors: SU error	SignallingLink.c5102_3_CUM	Sum
ss7Level3ErrorDelay	ACCUMULATION	INT8	Number of SS7 Level 3 errors: ACK delay exceeded	SignallingLink.c5103_0_CUM	Sum
ss7Level3ErrorHighErrorRate	ACCUMULATION	INT8	Number of SS7 Level 3 errors: High error rate	SignallingLink.c5103_1_CUM	Sum

7.13 TRX Performance Indicators

This section shows the key performance indicators and other counters for the TRX object, divided into the following sub-sections:

- [TRX.Nortel.GSM.AMR](#)
- [TRX.Nortel.GSM.BSS_Handover](#)
- [TRX.Nortel.GSM.Channel_Assignment](#)
- [TRX.Nortel.GSM.EGPRS.BEP_8PSK_and_GMSK](#)
- [TRX.Nortel.GSM.EGPRS.Link_adaptation](#)
- [TRX.Nortel.GSM.EGPRS.Preempted_Channel](#)
- [TRX.Nortel.GSM.EGPRS.RLC_DL_per_MCS](#)
- [TRX.Nortel.GSM.EGPRS.RLC_UL_per_MCS](#)
- [TRX.Nortel.GSM.GPRS_EDGE](#)
- [TRX.Nortel.GSM.GPRS.Temporary_Block_Flow](#)
- [TRX.Nortel.GSM.RLC](#)
- [TRX.Nortel.GSM.SDCCH_Allocation](#)

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- [TRX.Nortel.GSM.TCH_Allocation](#)
- [TRX.Nortel.GSM.TDMA_ASCl](#)
- [TRX.Nortel.GSM.TDMA_Interference](#)
- [TRX.Nortel.GSM.TDMA_Layer1](#)
- [TRX.Nortel.GSM.TDMA_Layer2](#)
- [TRX.Nortel.GSM.TDMA_Release](#)
- [TRX.Nortel.GSM.TDMA](#)
- [TRX.Nortel.GSM.Tx_Power_Overboost](#)

7.13.1 TRX.Nortel.GSM.AMR

AMR statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrAttemptedFrTchSeizureTdma	ACCUMULATION	INTEGER	Number of attempts of assignation of an AMR TCH for any kind of mobile	TMA.TDMA_2118_0_CUM	Sum,
amrAttemptedHrTchSeizureTdma	ACCUMULATION	INTEGER	Number of attempts of assignation of an AMR TCH for any kind of mobile	TMA.TDMA_2118_1_CUM	Sum,
amrFrBadSpeechFramesCodec102Tdma	ACCUMULATION	INTEGER	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 10.2	TMA.TDMA_2114_3_CUM	Sum,
amrFrBadSpeechFramesCodec475Tdma	ACCUMULATION	INTEGER	Number of bad speech frames (BFI KO) received at the BTS level for full	TMA.TDMA_2114_0_CUM	Sum,

			rate AMR at Codec 4.75		
amrFrBadSpeechFramesCodec5 9Tdma	ACCUMULA TION	INTEG ER	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 5.9	TMA.TDMA_2 114_1_CUM	Sum,
amrFrBadSpeechFramesCodec6 7Tdma	ACCUMULA TION	INTEG ER	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 6.7	TMA.TDMA_2 114_2_CUM	Sum,
amrFrTchAllocatedTdma	ACCUMULA TION	INTEG ER	Number of AMR full rate TCH allocations	TMA.TDMA_2 102_0_CUM	Sum,
amrFrTchAssignFailureTdma	ACCUMULA TION	INTEG ER	Number of Failures of the Dedicated Channel Assignment Procedure for AMR full rate TCH	TMA.TDMA_2 101_0_CUM	Sum,
amrFrTchConnectionDurationT dmaCum	INTENSITY	INTEG ER	Duration of the AMR full rate TCH connections	TMA.TDMA_2 103_0_CUM	Average, , tot, min, max
amrFrTchConnectionDurationT dmaEch	INTENSITY	INTEG ER	Number of samples of	TMA.TDMA_2 103_0_NBS	Average, , tot, min,

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			duration of the AMR full rate TCH connections		max
amrFrTchConnectionDurationTdmaMax	INTENSITY	INTEGER	Maximum duration of the AMR full rate TCH connections	TMA.TDMA_2103_0_MAX	Constant, , tot, min, max
amrFrTchConnectionDurationTdmaMoy	INTENSITY	FLOAT	Average duration of the AMR full rate TCH connections	TMA.TDMA_2103_0_AVG	Average, , tot, min, max
amrFrTchSuccessfullyAssignedTdma	ACCUMULATION	INTEGER	Number of Successful AMR full rate TCH assignments for any kind of mobile	TMA.TDMA_2100_0_CUM	Sum,
amrFrValidSpeechFramesCodec102Tdma	ACCUMULATION	INTEGER	Received speech frames AMR FR at Codec 10.2	TMA.TDMA_2115_3_CUM	Sum,
amrFrValidSpeechFramesCodec475Tdma	ACCUMULATION	INTEGER	Received speech frames AMR FR at Codec 4.75	TMA.TDMA_2115_0_CUM	Sum,
amrFrValidSpeechFramesCodec59Tdma	ACCUMULATION	INTEGER	Received speech frames AMR FR at Codec 5.9	TMA.TDMA_2115_1_CUM	Sum,
amrFrValidSpeechFramesCodec67Tdma	ACCUMULATION	INTEGER	Received speech frames AMR FR at Codec 6.7	TMA.TDMA_2115_2_CUM	Sum,

amrHrBadSpeechFramesCodec4 75Tdma	ACCUMULATION	INTEGER	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 4.75	TMA.TDMA_2 116_0_CUM	Sum,
amrHrBadSpeechFramesCodec5 9Tdma	ACCUMULATION	INTEGER	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 5.9	TMA.TDMA_2 116_1_CUM	Sum,
amrHrBadSpeechFramesCodec6 7Tdma	ACCUMULATION	INTEGER	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 6.7	TMA.TDMA_2 116_2_CUM	Sum,
amrHrTchAssignFailureTdma	ACCUMULATION	INTEGER	Number of Failures of the Dedicated Channel Assignment Procedure for AMR half rate TCH	TMA.TDMA_2 101_1_CUM	Sum,
amrHrTchConnectionDurationT dmaCum	INTENSITY	INTEGER	Duration of the AMR half rate TCH connections	TMA.TDMA_2 103_1_CUM	Average, , tot, min, max

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amrHrTchConnectionDurationTdmaEch	INTENSITY	INTEGER	Number of samples of duration of the AMR half rate TCH connections	TMA.TDMA_2103_1_NBS	Average, , tot, min, max
amrHrTchConnectionDurationTdmaMax	INTENSITY	INTEGER	Maximum duration of the AMR half rate TCH connections	TMA.TDMA_2103_1_MAX	Constant, , tot, min, max
amrHrTchConnectionDurationTdmaMoy	INTENSITY	FLOAT	Average duration of the AMR half rate TCH connections	TMA.TDMA_2103_1_AVG	Average, , tot, min, max
amrHrTchSuccessfullyAssignedTdma	ACCUMULATION	INTEGER	Number of Successful AMR half rate TCH assignments for any kind of mobile	TMA.TDMA_2100_1_CUM	Sum,
amrHrValidSpeechFramesCodec475Tdma	ACCUMULATION	INTEGER	Received speech frames AMR HR at Codec 4.75	TMA.TDMA_2117_0_CUM	Sum,
amrHrValidSpeechFramesCodec59Tdma	ACCUMULATION	INTEGER	Received speech frames AMR HR at Codec 5.9	TMA.TDMA_2117_1_CUM	Sum,
amrHrValidSpeechFramesCodec67Tdma	ACCUMULATION	INTEGER	Received speech frames AMR HR at Codec 6.7	TMA.TDMA_2117_2_CUM	Sum,

CIUplinkAmrFrTdma	ACCUMULATION	INTEGER	Total of the uplink C/I received from the L1m, for AMR full rate calls	TMA.TDMA_2124_0_CUM	Sum,
CIUplinkAmrHrTdma	ACCUMULATION	INTEGER	Total of the uplink C/I received from the L1m, for AMR half rate calls	TMA.TDMA_2125_0_CUM	Sum,
CIUplinkFrTdma	ACCUMULATION	INTEGER	Total of the uplink C/I received from the L1m, for a non AMR channel	TMA.TDMA_2123_0_CUM	Sum,
downlinkPowerCtrlMaxTchAmrFrTdmaCum	INTENSITY	INTEGER	Amount of time the downlink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2119_0_CUM	Average, , tot, min, max
downlinkPowerCtrlMaxTchAmrFrTdmaEch	INTENSITY	INTEGER	Number of samples for the amount of time the downlink power	TMA.TDMA_2119_0_NBS	Average, , tot, min, max

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			control was running at the maximum level for the busy full rate AMR TCHs		
downlinkPowerCtrlMaxTchAmrFrTdmaMax	INTENSITY	INTEGER	Maximum amount of time the downlink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2119_0_MAX	Constant, , tot, min, max
downlinkPowerCtrlMaxTchAmrFrTdmaMoy	INTENSITY	FLOAT	Average amount of time the downlink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2119_0_AVG	Average, , tot, min, max
downlinkPowerCtrlMaxTchAmrHrTdmaCum	INTENSITY	INTEGER	Amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	TMA.TDMA_2121_0_CUM	Average, , tot, min, max
downlinkPowerCtrlMaxTchAmr	INTENSITY	INTEGER	Number of	TMA.TDMA_2	Average,

HrTdmaEch		ER	samples for the amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	121_0_NBS	, tot, min, max
downlinkPowerCtrlMaxTchAmrHrTdmaMax	INTENSITY	INTEGER	Maximum amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	TMA.TDMA_2121_0_MAX	Constant, , tot, min, max
downlinkPowerCtrlMaxTchAmrHrTdmaMoy	INTENSITY	FLOAT	Average amount of time the downlink power control was running at the maximum level for the busy half rate AMR TCHs	TMA.TDMA_2121_0_AVG	Average, , tot, min, max
msLostMeasurementsAmrFrTdma	ACCUMULATION	INTEGER	Number of MS measurement	TMA.TDMA_2112_0_CUM	Sum,

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			messages not received by the BTS for a AMR full rate call		
msLostMeasurementsAmrHrTdma	ACCUMULATION	INTEGER	Number of MS measurement messages not received by the BTS for a AMR half rate call	TMA.TDMA_2113_0_CUM	Sum,
RxLevDownlinkAmrFrTdma	ACCUMULATION	INTEGER	Number of downlink RXLEV received from the L1m for AMR full rate TCH	TMA.TDMA_2104_0_CUM	Sum,
RxLevDownlinkAmrHrTdma	ACCUMULATION	INTEGER	Number of downlink RXLEV received from the L1m for AMR half rate TCH	TMA.TDMA_2108_0_CUM	Sum,
RxLevUplinkAmrFrTdma	ACCUMULATION	INTEGER	Number of uplink RXLEV received from the L1m for AMR full rate TCH	TMA.TDMA_2105_0_CUM	Sum,
RxLevUplinkAmrHrTdma	ACCUMULATION	INTEGER	Number of uplink RXLEV received from the L1m for	TMA.TDMA_2109_0_CUM	Sum,

			AMR half rate TCH		
RxQualDownlinkAmrFrTdma	ACCUMULATION	INTEGER	Number of downlink RXQUAL received from the L1m for AMR full rate TCH	TMA.TDMA_2106_0_CUM	Sum,
RxQualDownlinkAmrHrTdma	ACCUMULATION	INTEGER	Number of downlink RXQUAL received from the L1m for AMR half rate TCH	TMA.TDMA_2110_0_CUM	Sum,
RxQualUplinkAmrFrTdma	ACCUMULATION	INTEGER	Number of uplink RXQUAL received from the L1m for AMR full rate TCH	TMA.TDMA_2107_0_CUM	Sum,
RxQualUplinkAmrHrTdma	ACCUMULATION	INTEGER	Number of uplink RXQUAL received from the L1m for AMR half rate TCH	TMA.TDMA_2111_0_CUM	Sum,
trafficReleaseAmrFrLapdmCauseTdma	ACCUMULATION	INTEGER	Number of releases for full rate AMR mobile	TMA.TDMA_1968_0_CUM	Sum,

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			caused by Lapdm		
trafficReleaseAmrFrOthersCauseTdma	ACCUMULATION	INTEGER	Number of releases for full rate AMR mobile caused by other causes	TMA.TDMA_1968_2_CUM	Sum,
trafficReleaseAmrFrRadioCauseTdma	ACCUMULATION	INTEGER	Number of releases for full rate AMR mobile caused the radio	TMA.TDMA_1968_1_CUM	Sum,
trafficReleaseAmrHrLapdmCauseTdma	ACCUMULATION	INTEGER	Number of releases for half rate AMR mobile caused by Lapdm	TMA.TDMA_1969_0_CUM	Sum,
trafficReleaseAmrHrOthersCauseTdma	ACCUMULATION	INTEGER	Number of releases for half rate AMR mobile caused by other causes	TMA.TDMA_1969_2_CUM	Sum,
trafficReleaseAmrHrRadioCauseTdma	ACCUMULATION	INTEGER	Number of releases for half rate AMR mobile caused the radio	TMA.TDMA_1969_1_CUM	Sum,
uplinkPowerCtrlMaxTchAmrFrTdmaCum	INTENSITY	INTEGER	Amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2120_0_CUM	Average, , tot, min, max

uplinkPowerCtrlMaxTchAmrFrTdmaEch	INTENSITY	INTEGER	Number of samples for the amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2120_0_NBS	Average, tot, min, max
uplinkPowerCtrlMaxTchAmrFrTdmaMax	INTENSITY	INTEGER	Maximum amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2120_0_MAX	Constant, tot, min, max
uplinkPowerCtrlMaxTchAmrFrTdmaMoy	INTENSITY	FLOAT	Average amount of time the uplink power control was running at the maximum level for the busy full rate AMR TCHs	TMA.TDMA_2120_0_AVG	Average, tot, min, max
uplinkPowerCtrlMaxTchAmrHrTdmaCum	INTENSITY	INTEGER	Amount of time the uplink power control was running at	TMA.TDMA_2122_0_CUM	Average, tot, min, max

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			the maximum level for the busy half rate AMR TCHs		
uplinkPowerCtrlMaxTchAmrHrTdmaEch	INTENSITY	INTEGER	Number of samples for the amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	TMA.TDMA_2122_0_NBS	Average, , tot, min, max
uplinkPowerCtrlMaxTchAmrHrTdmaMax	INTENSITY	INTEGER	Maximum amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	TMA.TDMA_2122_0_MAX	Constant, , tot, min, max
uplinkPowerCtrlMaxTchAmrHrTdmaMoy	INTENSITY	FLOAT	Average amount of time the uplink power control was running at the maximum level for the busy half rate AMR TCHs	TMA.TDMA_2122_0_AVG	Average, , tot, min, max

7.13.2 TRX.Nortel.GSM.BSS_Handover

BSS Handover statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
hoExecutionIncomingInterBssTdma	ACCUMULATION	INTEGER	Number of incoming inter-bss handovers on TCH executed	TMA.TDMA_1847_0_CUM	Sum,
hoExecutionIncomingIntraBssTdma	ACCUMULATION	INTEGER	Number of incoming intra-bss handovers on TCH execution attempts	TMA.TDMA_1846_0_CUM	Sum,
hoSuccessIncomingInterBss8WTdma	ACCUMULATION	INTEGER	Number of successful incoming inter_bss handovers received by the cell, for MS 8W only	TMA.TDMA_1856_0_CUM	Sum,
hoSuccessIncomingInterBssTdma	ACCUMULATION	INTEGER	Number of successful incoming inter-bss handovers on TCH	TMA.TDMA_1844_0_CUM	Sum,
hoSuccessIncomingIntraBss8WTdma	ACCUMULATION	INTEGER	Number of successful incoming intra_bss handovers received by the cell, for MS 8W only	TMA.TDMA_1855_0_CUM	Sum,
hoSuccessIncomingIntraBssTdma	ACCUMULATION	INTEGER	Number of successful incoming intra-	TMA.TDMA_1845_0_CUM	Sum,

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			bss handovers on TCH		
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7.13.3 TRX.Nortel.GSM.Channel_Assignment

Channel assignment statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
attemptedTchFrSeizuresTdma	ACCUMULATION	INTEGER	Number of TCH/FR or preempted PDTCH assignment requests	TMA.TDMA_2142_0_CUM	Sum,
successfulTchFrSeizuresTdma	ACCUMULATION	INTEGER	Number of TCH/FR or a preempted PDTCH successfully assigned	TMA.TDMA_2141_0_CUM	Sum,

7.13.4 TRX.Nortel.GSM.EGPRS.BEP_8PSK_and_GMSK

EGPRS-Modulation Bit Error Probability(BEP) statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuDnBlocksSent	ACCUMULATION	INTEGER	Cumulated number of radio blocks sent by the PCU	TMA.TDMA_15108_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuDnBlocksVerbose	ACCUMULATION	INTEGER	Cumulated number of radio blocks that could have been sent by the PCU	TMA.TDMA_15109_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeDataBlocksReceivedUp	ACCUMULATION	INT8	Cumulative number of EGPRS RLC data blocks received by the PCU on a TDMA.	TMA.TDMA_15101_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeDnAvg8PskM	INTENSITY	FLOAT	Average number	TMA.TDMA_1510	Average,

eanBep		T	of 8PSK_BEP (assumed value) derived from the 8PSK_MEAN_BEP received from anMS in this TDMA in the EGPRS BEP Link QualityMeasurements (8PSK_MEAN_BEP).	2_0_AVG	ntbsccpabh, ntbtcabuh, tot, min, max
pcuEdgeDnAvgGmsk MeanBep	INTENSITY	FLOAT	Average number of GMSK_BEP (assumed value) derived from the GMSK_MEAN_BEP received from an MS in this TDMA in the EGPRS BEP Link QualityMeasurements (GMSK_MEAN_BEP).	TMA.TDMA_15103_0_AVG	Average, ntbsccpabh, ntbtcabuh, tot, min, max
pcuEdgeDnCum8Psk MeanBep	ACCUMULATION	INT8	Cumulative number of 8PSK_BEP (assumed value) derived from the 8PSK_MEAN_BEP received from anMS in this TDMA in the EGPRS BEP Link QualityMeasurements (8PSK_MEAN_BEP).	TMA.TDMA_15102_0_CUM	Sum, ntbsccpabh, ntbtcabuh

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pcuEdgeDnCumGmskMeanBep	ACCUMULATION	INT8	Cumulative number of GMSK_BEP (assumed value) derived from the GMSK_MEAN_BEP received from anMS in this TDMA in the EGPRS BEP Link QualityMeasurements (GMSK_MEAN_BEP).	TMA.TDMA_15103_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnNbs8PskMeanBep	ACCUMULATION	INT8	Number of samples, number of 8PSK_BEP (assumed value) derived from the 8PSK_MEAN_BEP received from anMS in this TDMA in the EGPRS BEP Link QualityMeasurements (8PSK_MEAN_BEP).	TMA.TDMA_15102_0_NBS	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnNbsGmskMeanBep	ACCUMULATION	INT8	Number of samples, number of GMSK_BEP (assumed value) derived from the GMSK_MEAN_BEP received from anMS in this TDMA in the EGPRS BEP Link QualityMeasurements (GMSK_MEAN_BEP).	TMA.TDMA_15103_0_NBS	Sum, ntbsscpabh, nbtcaubh
pcuEdgeTdma15100s0	ACCUMULATION	INT8	Spare counter, 0 by default	TMA.TDMA_15100_0_CUM	Sum, ntbsscpabh

					h, ntbtcaubh
pcuEdgeTdma15105s0	ACCUMULATION	INT8	Spare counter, 0 by default	TMA.TDMA_15105_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeTdma15106s0	ACCUMULATION	INT8	Spare counter, 0 by default	TMA.TDMA_15106_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeTdma15107s0	ACCUMULATION	INT8	Spare counter, 0 by default	TMA.TDMA_15107_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeTdma15108s0	ACCUMULATION	INT8	- Obsolete in V16 - Spare counter, 0 by default	TMA.TDMA_15108_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeTdma15109s0	ACCUMULATION	INT8	- Obsolete in V16 - Spare counter, 0 by default	TMA.TDMA_15109_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeUpAvgMeanBep	INTENSITY	FLOAT	Average BEP (assumed value) received by the PCU in each EGPRS RLC data block on this TDMA	TMA.TDMA_15104_0_AVG	Average, ntbsccpabh, ntbtcaubh, tot, min, max
pcuEdgeUpCumMeanBep	ACCUMULATION	INT8	Cumulative number of BEP (assumed value) received by the PCU in each EGPRS RLC data block on this	TMA.TDMA_15104_0_CUM	Sum, ntbsccpabh, ntbtcaubh

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			TDMA		
pcuEdgeUpNbsMeanBep	ACCUMULATION	INT8	Number of samples, BEP (assumed value) received by the PCU in each EGPRS RLC data block on this TDMA	TMA.TDMA_15104_0_NBS	Sum, ntbsscpabh, nbtcaubh

7.13.5 TRX.Nortel.GSM.EGPRS.Link_adaptation

EGPRS-Link adaptation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuLackAbisJokerTSAvg	INTENSITY	FLOAT	Average number of periods of 20ms when missing jokers in the DL direction to reach the MCS targeted by the LinkAdaptation	TMA.TDMA_15129_0_AVG	Average, ntbsscpabh, nbtcaubh, tot, min, max
pcuLackAbisJokerTSCum	ACCUMULATION	INT8	Cumulative number of periods of 20ms when missing jokers in the DL direction to reach the MCS targeted by the LinkAdaptation	TMA.TDMA_15129_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuLackAbisJokerTSNbs	ACCUMULATION	INT8	No of samples, number of periods of 20ms when missing jokers in the DL direction to reach the MCS targeted by the LinkAdaptation	TMA.TDMA_15129_0_NBS	Sum, ntbsscpabh, nbtcaubh

7.13.6 TRX.Nortel.GSM.EGPRS.Preempted_Channel

EGPRS-Preempted channel statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allocatedEdgeTsCum	ACCUMULATION	INT8	-Obsolete in V15.1- Number of PDTCH available and preempted for EDGE services	TMA.TDMA_2000_1_CUM	Sum, ntbsscpabh, nbtcaubh
preemptedEdgeTsCum	ACCUMULATION	INT8	-Obsolete in V15.1- Number of PDTCH available and preempted for EDGE services	TMA.TDMA_2000_2_CUM	Sum, ntbsscpabh, nbtcaubh
totalNumberOfEdgeTsCum	ACCUMULATION	INT8	-Obsolete in V15.1- Number of PDTCH available and preempted for EDGE services	TMA.TDMA_2000_0_CUM	Sum, ntbsscpabh, nbtcaubh

7.13.7 TRX.Nortel.GSM.EGPRS.RLC_DL_per_MCS

EGPRS-Downlink RLC data blocks per MCS statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuEdgeDnTransmittedMcs2	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS2 by PCU in the DL direction	TMA.TDMA_15132_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnTransmittedMcs3	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in	TMA.TDMA_15133_0_CUM	Sum, ntbsscpabh, nbtcaubh

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			MCS3 by PCU in the DL direction		
pcuEdgeDnTransmittedMcs5	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS5 by PCU in the DL direction	TMA.TDMA_15135_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnTransmittedMcs6	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS6 by PCU in the DL direction	TMA.TDMA_15136_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnTransmittedMcs7	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS7 by PCU in the DL direction	TMA.TDMA_15137_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnTransmittedMcs8	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS8 by PCU in the DL direction	TMA.TDMA_15138_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeDnTransmittedMcs9	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS9 by PCU in the DL direction	TMA.TDMA_15139_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeLADnTargetedTransmittedMcs2	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are	TMA.TDMA_15152_0_CUM	Sum, ntbsscpabh, nbtcaubh

			commanded by the Link Adaptation in MCS2 and sent in MCS2 by PCU in the DL direction		
pcuEdgeLADnTargetedTransmittedMcs3	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are commanded by the Link Adaptation in MCS3 AND sent in MCS3 by PCU in the DL direction	TMA.TDMA_15153_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeLADnTargetedTransmittedMcs5	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are commanded by the Link Adaptation in MCS5 AND sent in MCS5 by PCU in the DL direction	TMA.TDMA_15155_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeLADnTargetedTransmittedMcs6	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are commanded by the Link Adaptation in MCS6 AND sent in MCS6 by PCU in the	TMA.TDMA_15156_0_CUM	Sum, ntbsscpabh, nbtcaubh

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			DL direction		
pcuEdgeLADnTargetedTransmittedMcs7	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data blocks that are commanded by the Link Adaptation in MCS7 and sent in MCS7 by PCU in the DL direction	TMA.TDMA_15157_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeLADnTargetedTransmittedMcs8	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are commanded by the Link Adaptation in MCS8 and sent in MCS8 by PCU in the DL direction	TMA.TDMA_15158_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeLADnTargetedTransmittedMcs9	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the Link Adaptation in MCS9 AND sent in MCS9 by PCU in the DL direction	TMA.TDMA_15159_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeMcs2RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS2 by PCU in the DL direction	TMA.TDMA_15142_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeMcs3RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC	TMA.TDMA_15143_0_CUM	Sum, ntbsscpab

			Data Blocks transmitted in MCS3 by PCU in the DL direction		h, ntbtcaubh
pcuEdgeMcs5RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS5 by PCU in the DL direction	TMA.TDMA_15145_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeMcs6RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS6 by PCU in the DL direction	TMA.TDMA_15146_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeMcs7RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS7 by PCU in the DL direction	TMA.TDMA_15147_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeMcs8RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS8 by PCU in the DL direction	TMA.TDMA_15148_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeMcs9RequestRetransDataBlockDn	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS9 by	TMA.TDMA_15149_0_CUM	Sum, ntbsccpabh, ntbtcaubh

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			PCU in the DL direction		
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7.13.8 TRX.Nortel.GSM.EGPRS.RLC_UL_per_MCS

EGPRS-Uplink RLC data blocks per MCS statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuEdgeLAUpTargetedTransmittedMcs2	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the LinkAdaptation in MCS2 AND sent in MCS2 by MS in the UL direction	TMA.TDMA_15182_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeLAUpTargetedTransmittedMcs3	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the LinkAdaptation in MCS3 AND sent in MCS3 by MS in the UL direction	TMA.TDMA_15183_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeLAUpTargetedTransmittedMcs5	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the LinkAdaptation in MCS5 AND sent in MCS5 by MS in the UL direction	TMA.TDMA_15185_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeLAUpTargetedTrans	ACCUMULATION	INT8	Number of 1/2	TMA.TDMA_15	Sum,

mittedMcs6	TION		EDGE Radio Data Blocks that are commanded by the LinkAdaptation in MCS6 AND sent in MCS6 by MS in the UL direction	186_0_CUM	ntbsccpabh, ntbtcaubh
pcuEdgeLAUpTargetedTransmittedMcs7	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the LinkAdaptation in MCS7 AND sent in MCS7 by MS in the UL direction	TMA.TDMA_15 187_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeLAUpTargetedTransmittedMcs8	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the LinkAdaptation in MCS8 AND sent in MCS8 by MS in the UL direction	TMA.TDMA_15 188_0_CUM	Sum, ntbsccpabh, ntbtcaubh
pcuEdgeLAUpTargetedTransmittedMcs9	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that are commanded by the LinkAdaptation	TMA.TDMA_15 189_0_CUM	Sum, ntbsccpabh, ntbtcaubh

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			in MCS9 AND sent in MCS9 by MS in the UL direction		
pcuEdgeMcs2RequestRetransDataBlockUp	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the Link Adaptation in MCS2 AND sent in MCS2 by MS in the UL direction AND badly received by BTS	TMA.TDMA_15172_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeMcs3RequestRetransDataBlockUp	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the LinkAdaptation in MCS3 AND sent in MCS3 by MS in the UL direction AND badly received by BTS	TMA.TDMA_15173_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeMcs5RequestRetransDataBlockUp	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the LinkAdaptation in MCS5 AND sent in MCS5 by MS in the UL direction AND badly	TMA.TDMA_15175_0_CUM	Sum, ntbsscpabh, nbtcaubh

			received by BTS		
pcuEdgeMcs6RequestRetrans DataBlockUp	ACCUMULA TION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the LinkAdaptation in MCS6 AND sent in MCS6 by MS in the UL direction AND badly received by BTS	TMA.TDMA_15 176_0_CUM	Sum, ntbsccpab h, ntbtcaubh
pcuEdgeMcs7RequestRetrans DataBlockUp	ACCUMULA TION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the LinkAdaptation in MCS7 AND sent in MCS7 by MS in the UL direction AND badly received by BTS	TMA.TDMA_15 177_0_CUM	Sum, ntbsccpab h, ntbtcaubh
pcuEdgeMcs8RequestRetrans DataBlockUp	ACCUMULA TION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the LinkAdaptation in MCS8 AND sent in MCS8	TMA.TDMA_15 178_0_CUM	Sum, ntbsccpab h, ntbtcaubh

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			by MS in the UL direction AND badly received by BTS		
pcuEdgeMcs9RequestRetransDataBlockUp	ACCUMULATION	INT8	Number of 1/2 EDGE Radio Data Blocks that were commanded by the LinkAdaptation in MCS9 AND sent in MCS9 by MS in the UL direction AND badly received by BTS	TMA.TDMA_15179_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeUpTransmittedMcs2	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are transmitted in MCS2 by MS in the UL direction	TMA.TDMA_15162_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeUpTransmittedMcs3	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are transmitted in MCS3 by MS in the UL direction	TMA.TDMA_15163_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeUpTransmittedMcs5	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks that are transmitted in MCS5 by MS in the UL direction	TMA.TDMA_15165_0_CUM	Sum, ntbsscpabh, nbtcaubh

pcuEdgeUpTransmittedMcs6	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS6 by MS in the UL direction	TMA.TDMA_15166_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeUpTransmittedMcs7	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS7 by MS in the UL direction	TMA.TDMA_15167_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeUpTransmittedMcs8	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS8 by MS in the UL direction	TMA.TDMA_15168_0_CUM	Sum, ntbsscpabh, nbtcaubh
pcuEdgeUpTransmittedMcs9	ACCUMULATION	INT8	Number of 1/2 EDGE RLC Data Blocks transmitted in MCS9 by MS in the UL direction	TMA.TDMA_15169_0_CUM	Sum, ntbsscpabh, nbtcaubh

7.13.9 TRX.Nortel.GSM.GPRS_EDGE

GPRS Edge statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
pcuLlcPacketsDnSig	ACCUMULATION	INT8	Cumulative number of LLC DL frames with	TMA.TDMA_15279_0_CUM	Sum,

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			GMM signalling (T bit equal 0), segmented by the PCU in RLC data blocks on this TDMA		
pcuPfcNrtThp1DnBlocksSent	INTENSITY	INT8	Number of blocks including data bytes of a THP1 LLC frame sent when the pipe is verbose	TMA.TDMA_15272_0_CUM	Average, , tot, min, max
pcuPfcNrtThp1DnBlocksVerbose	INTENSITY	INT8	Number of samples of blocks including data bytes of a THP1 LLC frame sent when the pipe is verbose	TMA.TDMA_15272_0_NBS	Average, , tot, min, max
pcuPfcNrtThp1DnSatisfaction	INTENSITY	FLOAT	Average number of blocks including data bytes of a THP1 LLC frame sent when the pipe is verbose	TMA.TDMA_15272_0_AVG	Average, , tot, min, max
pcuPfcNrtThp2DnBlocksSent	INTENSITY	INT8	Number of blocks including data bytes of a THP2 LLC frame sent when the pipe is verbose	TMA.TDMA_15274_0_CUM	Average, , tot, min, max
pcuPfcNrtThp2DnBlocksVerbose	INTENSITY	INT8	Number of samples of blocks including data bytes of a THP2 LLC frame sent when the pipe is verbose	TMA.TDMA_15274_0_NBS	Average, , tot, min, max

pcuPfcNrtThp2DnSatisfaction	INTENSITY	FLOAT	Average number of blocks including data bytes of a THP2 LLC frame sent when the pipe is verbose	TMA.TDMA_15274_0_AVG	Average, , tot, min, max
pcuPfcNrtThp3DnBlocksSent	INTENSITY	INT8	Number of blocks including data bytes of a THP3 LLC frame sent when the pipe is verbose	TMA.TDMA_15276_0_CUM	Average, , tot, min, max
pcuPfcNrtThp3DnBlocksVerbose	INTENSITY	INT8	Number of samples of blocks including data bytes of a THP3 LLC frame sent when the pipe is verbose	TMA.TDMA_15276_0_NBS	Average, , tot, min, max
pcuPfcNrtThp3DnSatisfaction	INTENSITY	FLOAT	Average number of blocks including data bytes of a THP3 LLC frame sent when the pipe is verbose	TMA.TDMA_15276_0_AVG	Average, , tot, min, max
pcuUpBlocksSatisfaction	INTENSITY	FLOAT	Average of all the USF sent when the pipe is verbose	TMA.TDMA_15278_0_AVG	Average, , tot, min, max
pcuUpBlocksSent	INTENSITY	INT8	Sum of all the USF sent when the pipe is verbose	TMA.TDMA_15278_0_CUM	Average, , tot, min, max

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pcuUpBlocksVerbose	INTENSITY	INT8	Number of samples of all the USF sent when the pipe is verbose	TMA.TDMA_15278_0_NBS	Average, , tot, min, max
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7.13.10TRX.Nortel.GSM.GPRS.Temporary_Block_Flow

Temporary block flow statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
lossOfComNN002 Max	ACCUMULATION	INT8	Number of TBF abnormal releases due to V(Q) and V(A) non progression	TMA.TDMA_15057_0_CUM	Sum, ntbsscpabh, ntbtaubh
lossOfComNT0001	ACCUMULATION	INT8	Number of TBF abnormal releases due to timer T0001 expiry	TMA.TDMA_15057_2_CUM	Sum, ntbsscpabh, ntbtaubh
lossOfComT3169	ACCUMULATION	INT8	Number of TBF abnormal releases due to timer T3169 expiry	TMA.TDMA_15057_1_CUM	Sum, ntbsscpabh, ntbtaubh
lossOfComT3191	ACCUMULATION	INT8	Number of TBF abnormal releases due to timer T3191 expiry	TMA.TDMA_15057_4_CUM	Sum, ntbsscpabh, ntbtaubh
lossOfComT3195	ACCUMULATION	INT8	Number of TBF abnormal releases due to timer T3195 expiry	TMA.TDMA_15057_3_CUM	Sum, ntbsscpabh, ntbtaubh
noPacketResourceReq	ACCUMULATION	INT8	Number of TBF abnormal releases due to non receipt of Packet Resource Request	TMA.TDMA_15056_0_CUM	Sum, ntbsscpabh, ntbtaubh
tbfnNormalReleaseDn	ACCUMULATION	INT8	Total number of downlink TBFs terminated	TMA.TDMA_15055_1_CUM	Sum, ntbsscpabh,

			normally		ntbtcaubh
tbfNormalReleaseUp	ACCUMULATION	INT8	Total number of uplink TBFs terminated normally	TMA.TDMA_15055_0_CUM	Sum, ntbsscpabh, ntbtcabuh

7.13.11 TRX.Nortel.GSM.RLC

Radio Link Control statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
controlBlocksDn	ACCUMULATION	INT8	Total number of downlink RLC control blocks transmitted	TMA.TDMA_15047_1_CUM	Sum, ntbsscpabh, ntbtcabuh
controlBlocksUp	ACCUMULATION	INT8	Total number of uplink RLC control blocks received	TMA.TDMA_15047_0_CUM	Sum, ntbsscpabh, ntbtcabuh
cumulativeDnRxLev	ACCUMULATION	INT8	Cumulative value C received by the PCU in the message Packet Downlink Ack/Nack	TMA.TDMA_15039_0_CUM	Sum, ntbsscpabh, ntbtcabuh
cumulativeDnRxQual	ACCUMULATION	INT8	Cumulative value RxQual in Channel Quality Report received by the PCU in the message Packet Downlink Ack/Nack	TMA.TDMA_15051_1_CUM	Sum, ntbsscpabh, ntbtcabuh
cumulativeUpRxLev	ACCUMULATION	INT8	Cumulative value upRxLev received by the	TMA.TDMA_15052_0_CUM	Sum, ntbsscpabh,

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			PCU in each valid RLC/MAC block on this TDMA		ntbtcaubh
cumulativeUpRxQual	ACCUMULATION	INT8	Cumulative uplink rxQual value	TMA.TDMA_15051_0_CUM	Sum, ntbsccpabh, ntbtcaubh
dataBlocksDn	ACCUMULATION	INT8	Total number of downlink RLC data blocks transmitted	TMA.TDMA_15046_1_CUM	Sum, ntbsccpabh, ntbtcaubh
dataBlocksUp	ACCUMULATION	INT8	Total number of uplink RLC data blocks received	TMA.TDMA_15046_0_CUM	Sum, ntbsccpabh, ntbtcaubh
invalidBlocksUp	ACCUMULATION	INT8	Total number of uplink invalid radio blocks received	TMA.TDMA_15048_0_CUM	Sum, ntbsccpabh, ntbtcaubh
invalidProtocolErrorBlocksUp	ACCUMULATION	INT8	Total number of invalid RLC/MAC blocks triggering a protocol error	TMA.TDMA_15048_1_CUM	Sum, ntbsccpabh, ntbtcaubh
llcPacketsDn	ACCUMULATION	INT8	Total number of LLC packets segmented into RLC data blocks	TMA.TDMA_15045_1_CUM	Sum, ntbsccpabh, ntbtcaubh
llcPacketsUp	ACCUMULATION	INT8	Total number of LLC packets reassembled and transmitted to the LLC Relay	TMA.TDMA_15045_0_CUM	Sum, ntbsccpabh, ntbtcaubh
localBusy	ACCUMULATION	INT8	Number of RLC data blocks sent by the PCU in a stalled window condition	TMA.TDMA_15038_0_CUM	Sum, ntbsccpabh, ntbtcaubh
nbSamplesDnQuality	ACCUMULATION	INT8	Cumulative	TMA.TDMA_150	Sum,

	TION		number of Packet Downlink Ack/Nack messages received by the PCU on this TDMA, containing the Channel Quality Report	53_1_CUM	ntbsccpabh, ntbtcaubh
nbSamplesUpQuality	ACCUMULATION	INT8	Number of sampling for uplink rxQual and uplink rxLev cumulative values	TMA.TDMA_150 53_0_CUM	Sum, ntbsccpabh, ntbtcaubh
outOfSequenceBlocksUp	ACCUMULATION	INT8	Total number of uplink data blocks received with Block Sequence Number outside the received window	TMA.TDMA_150 48_2_CUM	Sum, ntbsccpabh, ntbtcaubh
packetAckNackDn	ACCUMULATION	INT8	Total number of PACKET DOWNLINK ACK/NACK messages	TMA.TDMA_150 49_1_CUM	Sum, ntbsccpabh, ntbtcaubh
packetAckNackUp	ACCUMULATION	INT8	Total number of PACKET UPLINK ACK/NACK messages	TMA.TDMA_150 49_0_CUM	Sum, ntbsccpabh, ntbtcaubh
RequestedRetransmittedDataBlocksDN	ACCUMULATION	INT8	Number of retransmitted data blocks due to negative acknowledgement	TMA.TDMA_150 43_0_CUM	Sum, ntbsccpabh, ntbtcaubh

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			nt		
retransmittedDataBlocksDn	ACCUMULATION	INT8	Total number of data blocks retransmitted downlink	TMA.TDMA_15054_0_CUM	Sum, ntbsscpabh, ntbtaubh
totalRetransmissionRequested	ACCUMULATION	INT8	Total number of RLC/MAC block retransmission requests	TMA.TDMA_15050_0_CUM	Sum, ntbsscpabh, ntbtaubh
upUserdatablocks	ACCUMULATION	INT8	Number of user uplink data blocks	TMA.TDMA_15041_0_CUM	Sum, ntbsscpabh, ntbtaubh

7.13.12TRX.Nortel.GSM.SDCCH_Allocation

SDCCH allocation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
sdccchAllocatedTdma	ACCUMULATION	INTEGER	Number of SDCCHs allocated in the zone (concentric cell)	TMA.TDMA_2140_0_CUM	Sum,

7.13.13TRX.Nortel.GSM.TCH_Allocation

TCH allocation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
saicTchSuccessfullyAssignedTdma	ACCUMULATION	INTEGER	Number of successful TCH allocations (including preempted PDTCH) to SAIC mobiles	TMA.TDMA_2097_0_CUM	Sum,
tchFrAllocatedOverflowAllocationTdma	ACCUMULATION	INTEGER	Number of TCH/FR	TMA.TDMA_2138_2_CUM	Sum,

			allocated because of SDCCH unavailability in the zone (concentric cell)		
tchFrAllocatedPrimoAllocationTdma	ACCUMULATION	INTEGER	Number of TCH/FR allocated for call reestablishments in the zone (concentric cell) (primo-allocation)	TMA.TDMA_2138_1_CUM	Sum,
tchFrAllocatedTchAllocationTdma	ACCUMULATION	INTEGER	Number of TCH/FR or preempted PDTCH allocated for traffic in the zone (concentric cell)	TMA.TDMA_2138_0_CUM	Sum,
tchFrAllocatedWpsTdma	ACCUMULATION	INTEGER	Number of WPS full rate TCH allocations	TMA.TDMA_2138_3_CUM	Sum,
tchHrAllocatedTchAllocationTdma	ACCUMULATION	INTEGER	Number of half rate TCH allocations	TMA.TDMA_2139_0_CUM	Sum,
tchHrAllocatedWpsTdma	ACCUMULATION	INTEGER	Number of half rate TCH allocations (including PDTCH) for a WPS call	TMA.TDMA_2139_1_CUM	Sum,

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7.13.14TRX.Nortel.GSM.TDMA_ASCl

TDMA AscI statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
attemptedTchFrSeizures8WTdma	ACCUMULATION	FLOAT	Number of attempts of assignment of a TCH full rate or a preempted PDTCH for MS 8W	TMA.TDMA_2170_0_CUM	Sum,
successfulTchFrSeizures8WTdma	ACCUMULATION	INTEGER	Number of successful TCH full rate or preempted PDTCH assignments for MS 8W	TMA.TDMA_2171_0_CUM	Sum,

7.13.15TRX.Nortel.GSM.TDMA_Interference

TDMA interference statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
channelAveragedIdlePerInterfBand0TdmaCum	INTENSITY	INTEGER	Number of free channels in interference band No.0	TMA.TDMA_2167_0_CUM	Average, tot, min, max
channelAveragedIdlePerInterfBand0TdmaEch	INTENSITY	INTEGER	Number of samples of free channels in interference band No.0	TMA.TDMA_2167_0_NBS	Average, tot, min, max
channelAveragedIdlePerInterfBand0TdmaMax	INTENSITY	INTEGER	Maximum number of free channels in interference band No.0	TMA.TDMA_2167_0_MAX	Constant, tot, min, max

channelAveragedIdlePerInterfBand0TdmaMoy	INTENSITY	FLOAT	Average number of free channels in interference band No.0	TMA.TDMA_2167_0_AVG	Average, , tot, min, max
channelAveragedIdlePerInterfBand1TdmaCum	INTENSITY	INTEGER	Number of free channels in interference band No.1	TMA.TDMA_2167_1_CUM	Average, , tot, min, max
channelAveragedIdlePerInterfBand1TdmaEch	INTENSITY	INTEGER	Number of samples of free channels in interference band No.1	TMA.TDMA_2167_1_NBS	Average, , tot, min, max
channelAveragedIdlePerInterfBand1TdmaMax	INTENSITY	INTEGER	Maximum number of free channels in interference band No.1	TMA.TDMA_2167_1_MAX	Constant, , tot, min, max
channelAveragedIdlePerInterfBand1TdmaMoy	INTENSITY	FLOAT	Average number of free channels in interference band No.1	TMA.TDMA_2167_1_AVG	Average, , tot, min, max
channelAveragedIdlePerInterfBand2TdmaCum	INTENSITY	INTEGER	Number of free channels in interference band No.2	TMA.TDMA_2167_2_CUM	Average, , tot, min, max
channelAveragedIdlePerInterfBand2TdmaEch	INTENSITY	INTEGER	Number of samples of free channels in interference band No.2	TMA.TDMA_2167_2_NBS	Average, , tot, min, max
channelAveragedIdlePerInterfBand2TdmaMax	INTENSITY	INTEGER	Maximum number of free channels in	TMA.TDMA_2167_2_MAX	Constant, , tot, min, max

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			interference band No.2		
channelAveragedIdlePerInterfBand2TdmaMoy	INTENSITY	FLOAT	Average number of free channels in interference band No.2	TMA.TDMA_2167_2_AVG	Average, , tot, min, max
channelAveragedIdlePerInterfBand3TdmaCum	INTENSITY	INTEGER	Number of free channels in interference band No.3	TMA.TDMA_2167_3_CUM	Average, , tot, min, max
channelAveragedIdlePerInterfBand3TdmaEch	INTENSITY	INTEGER	Number of samples of free channels in interference band No.3	TMA.TDMA_2167_3_NBS	Average, , tot, min, max
channelAveragedIdlePerInterfBand3TdmaMax	INTENSITY	INTEGER	Maximum number of free channels in interference band No.3	TMA.TDMA_2167_3_MAX	Constant, , tot, min, max
channelAveragedIdlePerInterfBand3TdmaMoy	INTENSITY	FLOAT	Average number of free channels in interference band No.3	TMA.TDMA_2167_3_AVG	Average, , tot, min, max
channelAveragedIdlePerInterfBand4TdmaCum	INTENSITY	INTEGER	Number of free channels in interference band No.4	TMA.TDMA_2167_4_CUM	Average, , tot, min, max
channelAveragedIdlePerInterfBand4TdmaEch	INTENSITY	INTEGER	Number of samples of free channels in interference band No.4	TMA.TDMA_2167_4_NBS	Average, , tot, min, max
channelAveragedIdlePerInterfBand4TdmaMax	INTENSITY	INTEGER	Maximum number of free channels in interference band No.4	TMA.TDMA_2167_4_MAX	Constant, , tot, min, max

channelAveragedIdlePerInterfBand4TdmaMoy	INTENSITY	FLOAT	Average number of free channels in interference band No.4	TMA.TDMA_2167_4_AVG	Average, tot, min, max
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7.13.16TRX.Nortel.GSM.TDMA_Layer1

TDMA Layer 1 statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
connectionDurationSdcchTdmaCum	INTENSITY	INTEGER	Connection duration of SDCCHs	TMA.TDMA_2151_0_CUM	Average, tot, min, max
connectionDurationSdcchTdmaEch	INTENSITY	INTEGER	Number of samples or connection duration of SDCCHs	TMA.TDMA_2151_0_NBS	Average, tot, min, max
connectionDurationSdcchTdmaMax	INTENSITY	INTEGER	Maximum connection duration of SDCCHs	TMA.TDMA_2151_0_MAX	Constant, tot, min, max
connectionDurationSdcchTdmaMoy	INTENSITY	FLOAT	Average connection duration of SDCCHs	TMA.TDMA_2151_0_AVG	Average, tot, min, max
connectionDurationTchTdmaCum	INTENSITY	INTEGER	Connection duration of TCH/FRs or preempted PDTCH	TMA.TDMA_2150_0_CUM	Average, tot, min, max
connectionDurationTchTdmaEch	INTENSITY	INTEGER	Number of samples of connection duration of	TMA.TDMA_2150_0_NBS	Average, tot, min, max

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			TCH/FRs or preempted PDTCH		
connectionDurationTchTdmaMax	INTENSITY	INTEGER	Maximum connection duration of TCH/FRs or preempted PDTCH	TMA.TDMA_2150_0_MAX	Constant, tot, min, max
connectionDurationTchTdmaMoy	INTENSITY	FLOAT	Average connection duration of TCH/FRs or preempted PDTCH	TMA.TDMA_2150_0_AVG	Average, tot, min, max
downlinkPowerCtrlMaxSdchTdmaCum	INTENSITY	INTEGER	Cumulative duration of maximum Downlink power use on busy SDCCHs	TMA.TDMA_2160_0_CUM	Average, tot, min, max
downlinkPowerCtrlMaxSdchTdmaEch	INTENSITY	INTEGER	Number of samples for duration of maximum Downlink power use on busy SDCCHs	TMA.TDMA_2160_0_NBS	Average, tot, min, max
downlinkPowerCtrlMaxSdchTdmaMax	INTENSITY	INTEGER	Maximum duration of maximum Downlink power use on busy SDCCHs	TMA.TDMA_2160_0_MAX	Constant, tot, min, max
downlinkPowerCtrlMaxSdchTdmaMoy	INTENSITY	FLOAT	Average duration of maximum Downlink power use on busy SDCCHs	TMA.TDMA_2160_0_AVG	Average, tot, min, max
downlinkPowerCtrlMaxTch	INTENSITY	INTEGER	Cumulative	TMA.TDMA_21	Average,

TdmaCum		ER	duration of maximum Downlink power use on busy TCH/FRs or preempted PDTCHs	58_0_CUM	, tot, min, max
downlinkPowerCtrlMaxTchTdmaEch	INTENSITY	INTEGER	Number of samples for duration of maximum Downlink power use on busy TCH/FRs or preempted PDTCHs	TMA.TDMA_2158_0_NBS	Average, , tot, min, max
downlinkPowerCtrlMaxTchTdmaMax	INTENSITY	INTEGER	Duration of maximum Downlink power use on busy TCH/FRs or preempted PDTCHs	TMA.TDMA_2158_0_MAX	Average, , tot, min, max
downlinkPowerCtrlMaxTchTdmaMoy	INTENSITY	FLOAT	Average duration of maximum Downlink power use on busy TCH/FRs or preempted PDTCHs	TMA.TDMA_2158_0_AVG	Average, , tot, min, max
msLostMeasurementsTdma	ACCUMULATION	INTEGER	Number of MS measurement messages not received	TMA.TDMA_2152_0_CUM	Sum,
pathBalanceTdmaCum	INTENSITY	INTEGER	Cumulative ath balance for all the	TMA.TDMA_2157_0_CUM	Average, , tot, min, max

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			communication s on TCH full rate channel or preempted PDTCH on the BCCH TDMA		
pathBalanceTdmaEch	INTENSITY	INTEG ER	Number of samples of path balance for all the communication s on TCH full rate channel or preempted PDTCH on the BCCH TDMA	TMA.TDMA_21 57_0_NBS	Average, , tot, min, max
pathBalanceTdmaMax	INTENSITY	INTEG ER	Maximum path balance for all the communication s on TCH full rate channel or preempted PDTCH on the BCCH TDMA	TMA.TDMA_21 57_0_MAX	Constant, , tot, min, max
pathBalanceTdmaMoy	INTENSITY	FLOA T	Average path balance for all the communication s on TCH full rate channel or preempted PDTCH on the BCCH TDMA	TMA.TDMA_21 57_0_AVG	Average, , tot, min, max
rxLevDownLinkTdma	ACCUMULA TION	INTEG ER	Sum of downlink signal strength measurements	TMA.TDMA_21 53_0_CUM	Sum,
rxLevUpLinkTdma	ACCUMULA TION	INTEG ER	Sum of uplink signal strength measurements	TMA.TDMA_21 54_0_CUM	Sum,
rxQualDownLinkTdma	ACCUMULA	INTEG	Sum of	TMA.TDMA_21	Sum,

	TION	ER	Downlink signal quality measurements	55_0_CUM	
rxQualUpLinkTdma	ACCUMULATION	INTEGER	Sum of uplink signal quality measurements	TMA.TDMA_21 56_0_CUM	Sum,
uplinkPowerCtrlMaxSdcchTdmaCum	INTENSITY	INTEGER	Cumulative duration of maximum Uplink power use on busy SDCCHs	TMA.TDMA_21 61_0_CUM	Average, , tot, min, max
uplinkPowerCtrlMaxSdcchTdmaEch	INTENSITY	INTEGER	Number of samples for duration of maximum Uplink power use on busy SDCCHs	TMA.TDMA_21 61_0_NBS	Average, , tot, min, max
uplinkPowerCtrlMaxSdcchTdmaMax	INTENSITY	INTEGER	Maximum duration of maximum Uplink power use on busy SDCCHs	TMA.TDMA_21 61_0_MAX	Constant, , tot, min, max
uplinkPowerCtrlMaxSdcchTdmaMoy	INTENSITY	FLOAT	Average duration of maximum Uplink power use on busy SDCCHs	TMA.TDMA_21 61_0_AVG	Average, , tot, min, max
uplinkPowerCtrlMaxTchTdmaCum	INTENSITY	INTEGER	Cumulative duration of maximum Uplink power use on busy TCH/FRs or	TMA.TDMA_21 59_0_CUM	Average, , tot, min, max

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			preempted PDTCHs		
uplinkPowerCtrlMaxTchTdmaEch	INTENSITY	INTEGER	Number of samples for duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	TMA.TDMA_2159_0_NBS	Average, , tot, min, max
uplinkPowerCtrlMaxTchTdmaMax	INTENSITY	INTEGER	Duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	TMA.TDMA_2159_0_MAX	Average, , tot, min, max
uplinkPowerCtrlMaxTchTdmaMoy	INTENSITY	FLOAT	Average duration of maximum Uplink power use on busy TCH/FRs or preempted PDTCHs	TMA.TDMA_2159_0_AVG	Average, , tot, min, max

7.13.17TRX.Nortel.GSM.TDMA_Layer2

TDMA Layer 2 statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
ecuActivationTdma	ACCUMULATION	INTEGER	Number of erroneous frames	TMA.TDMA_2166_0_CUM	Sum,
radioFrameUlReceivedTdma	ACCUMULATION	INTEGER	Number of radio frames uplink received	TMA.TDMA_2165_0_CUM	Sum,

7.13.18TRX.Nortel.GSM.TDMA_Release

TDMA release statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
signallingReleaseAllCausesTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA all causes	TMA.TDMA_1173_11_CUM	Sum,
signallingReleaseBtsCallClearingTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA CALL CLEARING received	TMA.TDMA_1173_2_CUM	Sum,
signallingReleaseBtsCnxFailRadioLinkFailTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA radio link failure	TMA.TDMA_1173_3_CUM	Sum,
signallingReleaseBtsErrorIndDmTdma	ACCUMULATION	INTEGER	Number of releases while the communication	TMA.TDMA_1173_6_CUM	Sum,

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			on is in signalling phase on the concerned TDMA DM error		
signallingReleaseBtsErrorIndSeqTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA sequencing error	TMA.TDMA_1173_7_CUM	Sum,
signallingReleaseBtsErrorIndT200Tdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA T200 elapse	TMA.TDMA_1173_5_CUM	Sum,
signallingReleaseBtsReleaseIndTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA RELEASE INDICATION received	TMA.TDMA_1173_4_CUM	Sum,
signallingReleaseBtsRfResIndTdma	ACCUMULATION	INTEGER	Number of releases while the communication	TMA.TDMA_1173_8_CUM	Sum,

			on is in signalling phase on the concerned TDMA RF RESOURCE INDICATION received		
signallingReleaseBtsT3101Tdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA T3101 elapse	TMA.TDMA_1173_0_CUM	Sum,
signallingReleaseBtsT3103Tdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA T3103 elapse	TMA.TDMA_1173_10_CUM	Sum,
signallingReleaseBtsT3107CircDownTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA T3107 elapse	TMA.TDMA_1173_1_CUM	Sum,

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signallingReleaseBtsTmodMsTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in signalling phase on the concerned TDMA double TmodMs elapse	TMA.TDMA_1173_9_CUM	Sum,
trafficReleaseAllCausesTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned TDMA all causes	TMA.TDMA_1174_10_CUM	Sum,
trafficReleaseCallClearingTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned TDMA CALL CLEARING received	TMA.TDMA_1174_1_CUM	Sum,
trafficReleaseCnxFailRadioLinkFailTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned TDMA radio link failure	TMA.TDMA_1174_2_CUM	Sum,

trafficReleaseErrorIndDmTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned TDMA DM error	TMA.TDMA_1174_5_CUM	Sum,
trafficReleaseErrorIndSeqTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned TDMA sequencing error	TMA.TDMA_1174_6_CUM	Sum,
trafficReleaseErrorIndT200Tdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned TDMA T200 elapse	TMA.TDMA_1174_4_CUM	Sum,
trafficReleaseReleaseIndTdma	ACCUMULATION	INTEGER	Number of releases while the communication is in traffic phase on the concerned	TMA.TDMA_1174_3_CUM	Sum,

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			TDMA RELEASE INDICATIO N received		
trafficReleaseRfResIndTdma	ACCUMULA TION	INTEG ER	Number of releases while the communicati on is in traffic phase on the concerned TDMA RF RESOURCE INDICATIO N	TMA.TDMA _1174_7_CU M	Sum,
trafficReleaseT3103Tdma	ACCUMULA TION	INTEG ER	Number of releases while the communicati on is in traffic phase on the concerned TDMA T3103 elapse	TMA.TDMA _1174_9_CU M	Sum,
trafficReleaseT3107CircDownTdma	ACCUMULA TION	INTEG ER	Number of releases while the communicati on is in traffic phase on the concerned TDMA T3107 elapse	TMA.TDMA _1174_0_CU M	Sum,
trafficReleaseTmodMsTdma	ACCUMULA TION	INTEG ER	Number of releases while the communicati on is in traffic phase on the	TMA.TDMA _1174_8_CU M	Sum,

			concerned TDMA TmodMs elapse		
--	--	--	---------------------------------------	--	--

7.13.19TRX.Nortel.GSM.TDMA

TDMA statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
tdmaNbConfiguration	ACCUMULATION	INTEGER	Number of TDMA reconfigurations during the observation period	TMA.TDMA_2144_0_CUM	Sum,
tdmaTeiAllocation	ACCUMULATION	INTEGER	TEI of the TRX allocated to the TDMA at the end of the observation period	TMA.TDMA_2143_0_CUM	Sum,

7.13.20TRX.Nortel.GSM.Tx_Power_Overboost

Tx power overboost statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
signallingBurstsOverboostLimitedTdma	ACCUMULATION	INTEGER	Number of signalling bursts not transmitted with Tx overboost because of PA protection mechanism	TMA.TDMA_2189_0_CUM	Sum,
signallingBurstsOverboostTdma	ACCUMULATION	INTEGER	Number of signalling	TMA.TDMA_2188_0_CUM	Sum,

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			bursts transmitted with Tx overboost when Tx Power greater than nominal		
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7.14 TRZ Performance Indicators

This section shows the key performance indicators and other counters for the TRZ object, divided into the following sub-sections:

- [TRZ.Nortel.GSM.Abis_DS0](#)
- [TRZ.Nortel.GSM.Codec.AMR_Control](#)
- [TRZ.Nortel.GSM.Codec.AMR_Duration](#)
- [TRZ.Nortel.GSM.Codec.AMR_Recv_Frames](#)
- [TRZ.Nortel.GSM.EGPRS.PDTCH_Resources](#)
- [TRZ.Nortel.GSM.Layer_1_management_SDCCH](#)
- [TRZ.Nortel.GSM.Layer_1_management_TCH](#)
- [TRZ.Nortel.GSM.Layer_1_management](#)
- [TRZ.Nortel.GSM.PDTCH_resources](#)
- [TRZ.Nortel.GSM.RX_level_and_Quality](#)
- [TRZ.Nortel.GSM.SDCCH_allocation](#)
- [TRZ.Nortel.GSM.TCH_allocation.AMR](#)
- [TRZ.Nortel.GSM.TCH_allocation.SAIC](#)
- [TRZ.Nortel.GSM.TCH_connection.AMR](#)
- [TRZ.Nortel.GSM.TCH_FR_Resources](#)
- [TRZ.Nortel.GSM.TCH_HR_Resources](#)
- [TRZ.Nortel.GSM.TCH_resources](#)
- [TRZ.Nortel.GSM.Time_Advance](#)
- [TRZ.Nortel.GSM.Wireless_Priority_Service](#)

7.14.1 TRZ.Nortel.GSM.Abis_DS0

ABIS DSO statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allocatedAbisJokerTSEdgeTrZoneCum	ACCUMULATION	INT8	Cumulative number of joker DS0 TS allocated on the Abis interface.	TRZ.TRZ_2001_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

allocatedAbisJokerTSEdgeTrZoneEch	ACCUMULATION	INT8	Number of samples, number of joker DS0 TS allocated on the Abis interface.	TRZ.TRZ_2001_0_NBS	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
allocatedAbisJokerTSEdgeTrZoneMax	INTENSITY	INT8	Maximum number of joker DS0 TS allocated on the Abis interface.	TRZ.TRZ_2001_0_MAX	Constant, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
allocatedAbisJokerTSEdgeTrZoneMoy	INTENSITY	FLOAT	Average number of joker DS0 TS allocated on the Abis interface.	TRZ.TRZ_2001_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max

7.14.2 TRZ.Nortel.GSM.Codec.AMR_Control

Codec-Change control for AMR calls

KPI	Type	Data Type	Description	Derivation	Aggregation
decAmrFrDownModifTrZone	ACCUMULATION	INT8	Number of Codec decrement modifications for full rate AMR in downlink -transceiver zone	TRZ.TRZ_1985_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
decAmrFrUpModifTrZone	ACCUMULATION	INT8	Number of Codec decrement modifications for full rate AMR in uplink -transceiver	TRZ.TRZ_1984_1_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh

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			zone		
decAmrHrDownModifTrZone	ACCUMULATION	INT8	Number of Codec decrement modifications for half rate AMR in downlink -transceiver zone	TRZ.TRZ_1987_1_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
decAmrHrUpModifTrZone	ACCUMULATION	INT8	Number of Codec decrement modifications for half rate AMR in uplink -transceiver zone	TRZ.TRZ_1986_1_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
incAmrFrDownModifTrZone	ACCUMULATION	INT8	Number of Codec increment modifications for full rate AMR in downlink -transceiver zone	TRZ.TRZ_1985_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
incAmrFrUpModifTrZone	ACCUMULATION	INT8	Number of Codec increment modifications for full rate AMR in uplink -transceiver zone	TRZ.TRZ_1984_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
incAmrHrDownModifTrZone	ACCUMULATION	INT8	Number of Codec increment modifications for half rate AMR in downlink -transceiver zone	TRZ.TRZ_1987_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh
incAmrHrUpModifTrZone	ACCUMULATION	INT8	Number of Codec increment modifications for half rate AMR in uplink -transceiver zone	TRZ.TRZ_1986_0_CUM	Sum, ntsdcchbh, ntetchbh, ntetchfrbh

7.14.3 TRZ.Nortel.GSM.Codec.AMR_Duration

Codec-Type use duration for AMR calls

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrDownlinkCodec102TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 10.2 has been applied on the downlink for full rate AMR	TRZ.TRZ_1977_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrDownlinkCodec475TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 4.75 has been applied on the downlink for full rate AMR	TRZ.TRZ_1977_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrDownlinkCodec59TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the downlink for full rate AMR	TRZ.TRZ_1977_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrDownlinkCodec67TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the downlink for full rate AMR	TRZ.TRZ_1977_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrUplinkCodec102TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 10.2 has been applied on the uplink for full rate AMR	TRZ.TRZ_1975_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrUplinkCodec475TrZone	ACCUMULATION	INT8	Number of 40ms periods during	TRZ.TRZ_1975_0_CUM	Sum, ntesdcchbh

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			which Codec 4.75 has been applied on the uplink for full rate AMR		h, ntctchbh, ntctchfrbh
amrFrUplinkCodec59TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the uplink for full rate AMR	TRZ.TRZ_1975_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
amrFrUplinkCodec67TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the uplink for full rate AMR	TRZ.TRZ_1975_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
amrHrDownlinkCodec475TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 4.75 has been applied on the downlink for half rate AMR	TRZ.TRZ_1978_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
amrHrDownlinkCodec59TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the downlink for half rate AMR	TRZ.TRZ_1978_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
amrHrDownlinkCodec67TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the downlink for half rate AMR	TRZ.TRZ_1978_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
amrHrUplinkCodec475TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 4.75 has been	TRZ.TRZ_1976_0_CUM	Sum, ntcsdcchbh, ntctchbh,

			applied on the uplink for half rate AMR		nttchfrbh
amrHrUplinkCodec59TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 5.9 has been applied on the uplink for half rate AMR	TRZ.TRZ_1976_1_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh
amrHrUplinkCodec67TrZone	ACCUMULATION	INT8	Number of 40ms periods during which Codec 6.7 has been applied on the uplink for half rate AMR	TRZ.TRZ_1976_2_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh

7.14.4 TRZ.Nortel.GSM.Codec.AMR_Recv_Frames

Codec-Received speech frames for AMR calls

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrBadSpeechFramesCodec102TrZone	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 10.2 - transceiver zone	TRZ.TRZ_1979_3_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh
amrFrBadSpeechFramesCodec475TrZone	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 4.75 -	TRZ.TRZ_1979_0_CUM	Sum, ntesdcchbh, nttchbh, nttchfrbh

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			transceiver zone		
amrFrBadSpeechFramesCodec59TrZone	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 5.9-transceiver zone	TRZ.TRZ_1979_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrBadSpeechFramesCodec67TrZone	ACCUMULATION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for full rate AMR at Codec 6.7-transceiver zone	TRZ.TRZ_1979_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrValidSpeechFramesCodec102TrZone	ACCUMULATION	INT8	Received speech frames AMR FR at Codec 10.2 transceiver zone	TRZ.TRZ_1980_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrValidSpeechFramesCodec475TrZone	ACCUMULATION	INT8	Received speech frames AMR FR at Codec 4.75 transceiver zone	TRZ.TRZ_1980_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrValidSpeechFramesCodec59TrZone	ACCUMULATION	INT8	Received speech frames AMR FR at Codec 5.9 transceiver zone	TRZ.TRZ_1980_1_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrValidSpeechFramesCodec67TrZone	ACCUMULATION	INT8	Received speech frames AMR FR at Codec 6.7	TRZ.TRZ_1980_2_CUM	Sum, ntesdcchbh, ntctchbh,

			transceiver zone		ntetchfrb h
amrHrBadSpeechFramesCodec 475TrZone	ACCUMULA TION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 4.75 - transceiver zone	TRZ.TRZ_1981_ 0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
amrHrBadSpeechFramesCodec 59TrZone	ACCUMULA TION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 5.9 -transceiver zone	TRZ.TRZ_1981_ 1_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
amrHrBadSpeechFramesCodec 67TrZone	ACCUMULA TION	INT8	Number of bad speech frames (BFI KO) received at the BTS level for half rate AMR at Codec 6.7 -transceiver zone	TRZ.TRZ_1981_ 2_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
amrHrValidSpeechFramesCod ec475TrZone	ACCUMULA TION	INT8	Received speech frames AMR HR at Codec 4.75 -transceiver zone	TRZ.TRZ_1982_ 0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
amrHrValidSpeechFramesCod ec59TrZone	ACCUMULA TION	INT8	Received speech frames AMR HR at	TRZ.TRZ_1982_ 1_CUM	Sum, ntesdcchb h,

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			Codec 5.9 -transceiver zone		ntetchbh, ntetchfrb h
amrHrValidSpeechFramesCod ec67TrZone	ACCUMULA TION	INT8	Received speech frames AMR HR at Codec 6.7 -transceiver zone	TRZ.TRZ_1982_ 2_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h

7.14.5 TRZ.Nortel.GSM.EGPRS.PDTCH_Resources

PDTCH resources for EDGPRS service statistics

KPI	Type	Data Type	Description	Derivation	Aggregat ion
allocatedEdgeTsTrZone Cum	ACCUMULA TION	INT8	Cumulative number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_1_ CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
allocatedEdgeTsTrZone Ech	ACCUMULA TION	INT8	Number of samples, number of available PDTCH for EDGE allocated to the PCU	TRZ.TRZ_2000_1_ NBS	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
allocatedEdgeTsTrZone Max	INTENSITY	INT8	Maximum number of available PDTCH for EDGE allocated to the PCU	TRZ.TRZ_2000_1_ MAX	Constant, ntesdcchb h, ntetchbh, ntetchfrbh , tot, min, max
allocatedEdgeTsTrZone Moy	INTENSITY	FLOA T	Average number of available PDTCH for EDGE allocated to the PCU	TRZ.TRZ_2000_1_ AVG	Average, ntesdcchb h, ntetchbh, ntetchfrbh , tot, min, max

preemptedEdgeTsTrZoneCum	ACCUMULATION	INT8	Cumulative number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_2_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
preemptedEdgeTsTrZoneEch	ACCUMULATION	INT8	Number of samples, number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_2_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
preemptedEdgeTsTrZoneMax	INTENSITY	INT8	Maximum number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_2_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
preemptedEdgeTsTrZoneMoy	INTENSITY	FLOAT	Average number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_2_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
totalNumberOfEdgeTsTrZoneCum	ACCUMULATION	INT8	Cumulative number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
totalNumberOfEdgeTsTrZoneEch	ACCUMULATION	INT8	Number of samples, number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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totalNumberOfEdgeTsTrZoneMax	INTENSITY	INT8	Maximum number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
totalNumberOfEdgeTsTrZoneMoy	INTENSITY	FLOAT	Average number of PDTCH available and preempted for EDGE services	TRZ.TRZ_2000_0_AVG	Average, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max

7.14.6 TRZ.Nortel.GSM.Layer_1_management_SDCCH

SDCCH related Layer 1 Management statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
connectionDurationSdcchTrZoneCum	ACCUMULATION	INT8	Cumulative connection duration of SDCCHs (inner or outer cell zone)	TRZ.TRZ_1603_0_CUM	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
connectionDurationSdcchTrZoneEch	ACCUMULATION	INT8	No of samples, connection duration of SDCCHs (inner or outer cell zone)	TRZ.TRZ_1603_0_NBS	Sum, ntesdcchb h, ntctchbh, ntctchfrbh
connectionDurationSdcchTrZoneMax	INTENSITY	INTEGER	Maximum connection duration of SDCCHs (inner or outer cell zone)	TRZ.TRZ_1603_0_MAX	Constant, ntesdcchb h, ntctchbh, ntctchfrbh , tot, min, max
connectionDurationSdcchTrZoneMoy	INTENSITY	FLOAT	Average connection	TRZ.TRZ_1603_0_AVG	Average, ntesdcchb

			duration of SDCCHs (inner or outer cell zone)		h, ntctchbh, ntctchfrbh, tot, min, max
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7.14.7 TRZ.Nortel.GSM.Layer_1_management_TCH

TCH related Layer 1 Management statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
connectionDurationTchTrZoneCum	INTENSITY	FLOAT	Average connection duration of TCH/FRs or preempted PDTCHs (inner or outer cell zone)	TRZ.TRZ_1600_0_CUM	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
connectionDurationTchTrZoneEch	ACCUMULATION	INT8	Cumulative connection duration of TCH/FRs or preempted PDTCHs (inner or outer cell zone)	TRZ.TRZ_1600_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
connectionDurationTchTrZoneMax	INTENSITY	INTEGER	Maximum connection duration of TCH/FRs or preempted PDTCHs (inner or outer cell zone)	TRZ.TRZ_1600_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
connectionDurationTchTrZoneMoy	INTENSITY	INT8	No of samples, connection	TRZ.TRZ_1600_0_AVG	Average, ntesdcchbh

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			duration of TCH/FRs or preempted PDTCHs (inner or outer cell zone)		h, ntctchbh, ntctchfrbh, tot, min, max
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7.14.8 TRZ.Nortel.GSM.Layer_1_management

Layer 1 Management statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
CIUplinkAmrFrTrZone	ACCUMULATION	INT8	Total of the uplink C/I received from the L1m, for AMR full rate calls-transceiver zone	TRZ.TRZ_1916_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
CIUplinkAmrHrTrZone	ACCUMULATION	INT8	Total of the uplink C/I received from the L1M	TRZ.TRZ_1928_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
CIUplinkFrTrZone	ACCUMULATION	INT8	Total of the uplink C/I received from the L1m, for a non AMR channel-transceiver zone	TRZ.TRZ_1905_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
msLostMeasurementsAmrFrTrZone	ACCUMULATION	INT8	Number of MS measurement messages not received by the BTS for a AMR full rate call	TRZ.TRZ_1930_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
msLostMeasurementsAmrHrTrZone	ACCUMULATION	INT8	Number of MS measurement messages not received by the	TRZ.TRZ_1931_0_CUM	Sum, ntesdcchbh, ntctchbh,

			BTS for a AMR half rate call		ntctchfrbh
msLostMeasurementsTrZone	ACCUMULATION	INT8	Number of MS measurement messages not received	TRZ.TRZ_1622_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxLevDownlinkAmrFrTrZone	ACCUMULATION	INT8	Number of downlink RXLEV received from the L1m for AMR full rate TCH-transceiver zone	TRZ.TRZ_1908_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxLevDownlinkAmrHrTrZone	ACCUMULATION	INT8	Number of downlink RXLEV received from the L1m for AMR half rate TCH-transceiver zone	TRZ.TRZ_1920_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxLevUplinkAmrFrTrZone	ACCUMULATION	INT8	Number of uplink RXLEV received from the L1m for AMR full rate TCH-transceiver zone	TRZ.TRZ_1909_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxLevUplinkAmrHrTrZone	ACCUMULATION	INT8	Number of uplink RXLEV received from the L1m for AMR half rate TCH-transceiver zone	TRZ.TRZ_1921_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

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RxQualDownlinkAmrFrTrZone	ACCUMULATION	INT8	Number of downlink RXQUAL received from the L1m for AMR full rate TCH-transceiver zone	TRZ.TRZ_1910_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxQualDownlinkAmrHrTrZone	ACCUMULATION	INT8	Number of downlink RXQUAL received from the L1m for AMR half rate TCH-transceiver zone	TRZ.TRZ_1922_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxQualUplinkAmrFrTrZone	ACCUMULATION	INT8	Number of uplink RXQUAL received from the L1m for AMR full rate TCH-transceiver zone	TRZ.TRZ_1911_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
RxQualUplinkAmrHrTrZone	ACCUMULATION	INT8	Number of uplink RXQUAL received from the L1m for AMR half rate TCH-transceiver zone	TRZ.TRZ_1923_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh

7.14.9 TRZ.Nortel.GSM.PDTCH_resources

PDTCH resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allocatedCircuitTsTrZoneCum	ACCUMULATION	INT8	Cumulative number of activated and non	TRZ.TRZ_1812_0_CUM	Sum, ntesdcchbh, ntctchbh,

			activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell-transceiver zone		nttchfrbh
allocatedCircuitTsTrZoneEch	ACCUMULATION	INT8	No of samples, number of activated and non activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell-transceiver zone	TRZ.TRZ_1812_0_NBS	Sum, ntsdcchbh, nttchbh, nttchfrbh
allocatedCircuitTsTrZoneMax	INTENSITY	INTEGER	Maximum number of activated and non activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell-transceiver zone	TRZ.TRZ_1812_0_MAX	Constant, ntsdcchbh, nttchbh, nttchfrbh, tot, min, max

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allocatedCircuitTsTrZoneMoy	INTENSITY	FLOAT	Average number of activated and non activated circuit TS for traffic in circuit mode in the inner or the outer zone of the cell-transceiver zone	TRZ.TRZ_1812_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allocatedPacketTsTrZoneCum	ACCUMULATION	INT8	Cumulative number of TS allocations for packet mode in the cell-transceiver zone	TRZ.TRZ_1813_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
allocatedPacketTsTrZoneEch	ACCUMULATION	INT8	No of samples, number of TS allocations for packet mode in the cell-transceiver zone	TRZ.TRZ_1813_0_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
allocatedPacketTsTrZoneMax	INTENSITY	INTEGER	Maximum number of TS allocations for packet mode in the cell-transceiver zone	TRZ.TRZ_1813_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allocatedPacketTsTrZoneMoy	INTENSITY	FLOAT	Average	TRZ.TRZ_1	Average,

		T	number of TS allocations for packet mode in the cell -transceiver zone	813_0_AVG	ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
totalNumberOfPacketTsTrZoneCum	ACCUMULATION	INT8	Cumulative number of PDTCH configured on the cell -transceiver zone	TRZ.TRZ_1 813_1_CUM	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
totalNumberOfPacketTsTrZoneEch	ACCUMULATION	INT8	No of sample, number of PDTCH configured on the cell -transceiver zone	TRZ.TRZ_1 813_1_NBS	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
totalNumberOfPacketTsTrZoneMax	INTENSITY	INTEGER	Maximum number of PDTCH configured on the cell -transceiver zone	TRZ.TRZ_1 813_1_MAX	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
totalNumberOfPacketTsTrZoneMoy	INTENSITY	FLOAT	Average number of PDTCH configured on the cell -transceiver zone	TRZ.TRZ_1 813_1_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
totalNumberOfPacketTsUsedForCirc	ACCUMULATION	INT8	Cumulative	TRZ.TRZ_1	Sum,

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uitTrZoneCum	TION		number of PDTCH preempted - transceiver zone	813_2_CUM	ntcsdcchbh, ntctchbh, ntctchfrbh
totalNumberOfPacketTsUsedForCircuitTrZoneEch	ACCUMULATION	INT8	No of samples, number of PDTCH preempted - transceiver zone	TRZ.TRZ_1813_2_NBS	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
totalNumberOfPacketTsUsedForCircuitTrZoneMax	INTENSITY	INTEGER	Maximum number of PDTCH preempted - transceiver zone	TRZ.TRZ_1813_2_MAX	Constant, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
totalNumberOfPacketTsUsedForCircuitTrZoneMoy	INTENSITY	FLOAT	Average number of PDTCH preempted - transceiver zone	TRZ.TRZ_1813_2_AVG	Average, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.14.10TRZ.Nortel.GSM.RX_level_and_Quality

Receiver level and quality statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
rxLevDownLinkTrZone	ACCUMULATION	INT8	Sum of Downlink signal strength measurements in transceiver zone	TRZ.TRZ_1623_0_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
rxLevUpLinkTrZone	ACCUMULATION	INT8	Sum of Uplink signal strength measurements in transceiver zone	TRZ.TRZ_1624_0_CUM	Sum, ntcsdcchbh, ntctchbh,

					ntetchfrbh
rxQualDownLinkTrZone	ACCUMULATION	INT8	Sum of Downlink signal quality measurements in transceiver zone	TRZ.TRZ_1625_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
rxQualUpLinkTrZone	ACCUMULATION	INT8	Sum of Uplink signal quality measurements in transceiver zone	TRZ.TRZ_1626_0_CUM	Sum, ntesdcchbh, ntetchbh, ntetchfrbh
zoneAverageDLRxLev	INTENSITY	FLOAT	-Obsolete in V15.1- Average downlink rxLev in dBm at zone level	TRZ.CELL_8723_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
zoneAverageDLRxQual	INTENSITY	FLOAT	-Obsolete in V15.1- Average downlink rxQual in BER at zone level	TRZ.CELL_8725_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
zoneAverageULRxLev	INTENSITY	FLOAT	-Obsolete in V15.1- Average uplink rxLev in dBm at zone level	TRZ.CELL_8724_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh, tot, min, max
zoneAverageULRxQual	INTENSITY	FLOAT	-Obsolete in V15.1- Average uplink rxQual in BER at zone level	TRZ.TRZ_8736_0_AVG	Average, ntesdcchbh, ntetchbh, ntetchfrbh

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					, tot, min, max
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7.14.11TRZ.Nortel.GSM.SDCCH_allocation

SDCCH allocation statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
allSdcchAllocatedTimeTrZoneCum	ACCUMULATION	INT8	Cumulative allocation duration of all SDCCH resources (inner or outer cell zone)	TRZ.TRZ_1060_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
allSdcchAllocatedTimeTrZoneEch	ACCUMULATION	INT8	Number of samples, allocation duration of all SDCCH resources (inner or outer cell zone)	TRZ.TRZ_1060_0_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
allSdcchAllocatedTimeTrZoneMax	INTENSITY	INTEGER	Maximum allocation duration of all SDCCH resources (inner or outer cell zone)	TRZ.TRZ_1060_0_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
allSdcchAllocatedTimeTrZoneMoy	INTENSITY	FLOAT	Average allocation duration of all SDCCH resources (inner or outer cell zone)	TRZ.TRZ_1060_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
sdcchAllocatedTrZone	ACCUMULATION	INT8	Number of SDCCHs allocated in the zone (concentric	TRZ.TRZ_1606_0_CUM	Sum, ntesdcchbh, ntctchbh,

			cell)		ntetchfrb h
sdccchAverageConfigured TrZoneCum	ACCUMULA TION	INT8	Cumulative numbers of configured SDCCH full rate resource- tranceiver zone	TRZ.TRZ_1811 _0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
sdccchAverageConfigured TrZoneEch	ACCUMULA TION	INT8	No of samples, numbers of configured SDCCH full rate resource- tranceiver zone	TRZ.TRZ_1811 _0_NBS	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
sdccchAverageConfigured TrZoneMax	INTENSITY	INTEG ER	Maximum numbers of configured SDCCH full rate resource- tranceiver zone	TRZ.TRZ_1811 _0_MAX	Constant, ntesdcchb h, ntetchbh, ntetchfrb h, tot, min, max
sdccchAverageConfigured TrZoneMoy	INTENSITY	FLOA T	Average numbers of configured SDCCH full rate resource- tranceiver zone	TRZ.TRZ_1811 _0_AVG	Average, ntesdcchb h, ntetchbh, ntetchfrb h, tot, min, max
sdccchAveragedAvailableTr ZoneCum	ACCUMULA TION	INT8	Cummulative number of SDCCHavailabl e in the zone (concentric cell)	TRZ.TRZ_1701 _0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrb h
sdccchAveragedAvailableTr ZoneEch	ACCUMULA TION	INT8	Number of samples, number of	TRZ.TRZ_1701 _0_NBS	Sum, ntesdcchb h,

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			SDCCHavailable in the zone (concentric cell)		nttchb, nttchfrb
sdchAveragedAvailableTrZoneMax	INTENSITY	INTEGER	Maximum number of SDCCHavailable in the zone (concentric cell)	TRZ.TRZ_1701_0_MAX	Constant, nttchb, nttchfrb, tot, min, max
sdchAveragedAvailableTrZoneMoy	INTENSITY	FLOAT	Average number of SDCCHavailable in the zone (concentric cell)	TRZ.TRZ_1701_0_AVG	Average, nttchb, nttchfrb, tot, min, max
sdchAveragedUsedTrZoneCum	ACCUMULATION	INT8	Cummulative number of SDCCHs used in the zone (concentric cell)	TRZ.TRZ_1607_0_CUM	Sum, nttchb, nttchfrb
sdchAveragedUsedTrZoneEch	ACCUMULATION	INT8	Number of samples, number of SDCCHs used in the zone (concentric cell)	TRZ.TRZ_1607_0_NBS	Sum, nttchb, nttchfrb
sdchAveragedUsedTrZoneMax	INTENSITY	INTEGER	Maximum number of SDCCHs used in the zone (concentric cell)	TRZ.TRZ_1607_0_MAX	Constant, nttchb, nttchfrb, tot, min, max
sdchAveragedUsedTrZoneMoy	INTENSITY	FLOAT	Average number of SDCCHs used in the zone (concentric cell)	TRZ.TRZ_1607_0_AVG	Average, nttchb, nttchfrb, tot,

					min, max
sdcchRessourceFailureTrZone	ACCUMULATION	INT8	Number of SDCCH allocation failures in the zone (concentric cell)	TRZ.TRZ_1608_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tdmaClassSdcchResourceFailureRatio	INTENSITY	FLOAT	-Obsolete in V15.1- Ratio of SDCCH resource failures in the TDMA class	TRZ.TRZ_8756_0_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.14.12TRZ.Nortel.GSM.TCH_allocation.AMR

TCH allocation for AMR calls statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrTchAllocatedTrZone	ACCUMULATION	INT8	Number of AMR full rate TCH allocations transceiver zone	TRZ.TRZ_1900_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrTchStdAveragedUsedTrZoneCum	ACCUMULATION	INT8	Cumulative number of AMR full rate TCH allocations transceiver zone	TRZ.TRZ_1901_0_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
amrFrTchStdAveragedUsedTrZoneEch	ACCUMULATION	INT8	No of samples, number of AMR full rate TCH	TRZ.TRZ_1901_0_NBS	Sum, ntesdcchbh, ntctchbh,

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			allocations tranceiver zone		ntetchfrbh
amrFrTchStdAveragedUsed TrZoneMax	INTENSITY	INTEGER	Maximum number of AMR full rate TCH allocations tranceiver zone	TRZ.TRZ_1901_ 0_MAX	Constant, ntesdcchb h, ntetchbh, ntetchfrbh , tot, min, max
amrFrTchStdAveragedUsed TrZoneMoy	INTENSITY	FLOAT	Average number of AMR full rate TCH allocations tranceiver zone	TRZ.TRZ_1901_ 0_AVG	Average, ntesdcchb h, ntetchbh, ntetchfrbh , tot, min, max

7.14.13TRZ.Nortel.GSM.TCH_allocation.SAIC

TCH allocation for SAIC mobile statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
saicTchSuccessfullyAssignedTrZone	ACCUMULATION	INT8	Number of successful TCH allocations (including preempted PDTCH) to SAIC mobiles	TRZ.TRZ_2096_0_ CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh

7.14.14TRZ.Nortel.GSM.TCH_connection.AMR

TCH connections for AMR calls statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
amrFrTchConnectionDuration TrZoneCum	ACCUMULATION	INT8	Cumulative duration of the AMR full rate TCH connections tranceiver	TRZ.TRZ_1902_ 0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh

			zone		
amrFrTchConnectionDuration TrZoneEch	ACCUMULA TION	INT8	No of samples duration of the AMR full rate TCH connections tranceiver zone	TRZ.TRZ_1902 _0_NBS	Sum, ntcsdcchb h, ntctchbh, ntctchfrb h
amrFrTchConnectionDuration TrZoneMax	INTENSITY	INTEG ER	Maximum duration of the AMR full rate TCH connections tranceiver zone	TRZ.TRZ_1902 _0_MAX	Constant, ntcsdcchb h, ntctchbh, ntctchfrb h, tot, min, max
amrFrTchConnectionDuration TrZoneMoy	INTENSITY	FLOA T	Average duration of the AMR full rate TCH connections tranceiver zone	TRZ.TRZ_1902 _0_AVG	Average, ntcsdcchb h, ntctchbh, ntctchfrb h, tot, min, max
amrHrTchConnectionDuration TrZoneCum	ACCUMULA TION	INT8	Cumulative duration of the AMR half rate TCH connections tranceiver zone	TRZ.TRZ_1902 _1_CUM	Sum, ntcsdcchb h, ntctchbh, ntctchfrb h
amrHrTchConnectionDuration TrZoneEch	ACCUMULA TION	INT8	No of samples duration of the AMR half rate TCH connections tranceiver zone	TRZ.TRZ_1902 _1_NBS	Sum, ntcsdcchb h, ntctchbh, ntctchfrb h
amrHrTchConnectionDuration	INTENSITY	INTEG	Maximum	TRZ.TRZ_1902	Constant,

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TrZoneMax		ER	duration of the AMR half rate TCH connections transceiver zone	_1_MAX	ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
amrHrTchConnectionDuration TrZoneMoy	INTENSITY	FLOAT	Average duration of the AMR half rate TCH connections transceiver zone	TRZ.TRZ_1902_1_AVG	Average, ntcsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.14.15TRZ.Nortel.GSM.TCH_FR_Resources

Full rate TCH resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
tchFrAllocatedOverflowAllocationTrZone	ACCUMULATION	INT8	Number of TCH/FR allocated because of SDCCH unavailability in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1609_2_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh
tchFrAllocatedPrimoAllocationTrZone	ACCUMULATION	INT8	Number of TCH/FR allocated for call reestablishments in the zone (concentric cell) (primo-allocation) -transceiver zone	TRZ.TRZ_1609_1_CUM	Sum, ntcsdcchbh, ntctchbh, ntctchfrbh

tchFrAllocatedTchAllocationTrZone	ACCUMULATION	INT8	Number of TCH/FR or preempted PDTCH allocated for traffic in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1609_0_C_UM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAllocatedTrZone	ACCUMULATION	INT8	Number of TCH/FR or preempted PDTCH allocated in the cell -transceiver zone	TRZ.TRZ_1744_0_C_UM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAverageConfiguredTrZoneCum	ACCUMULATION	INT8	Cumulative numbers of configured TCH full rate resource-transceiver zone	TRZ.TRZ_1810_0_C_UM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAverageConfiguredTrZoneEch	ACCUMULATION	INT8	No of samples, numbers of configured TCH full rate resource-transceiver zone	TRZ.TRZ_1810_0_N_BS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAverageConfiguredTrZoneMax	INTENSITY	INTEGER	Maximum numbers of configured TCH full rate	TRZ.TRZ_1810_0_M_AX	Constant, ntsdcchbh, ntctchbh,

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			resource- transceiver zone		ntctchfrb h, tot, min, max
tchFrAverageConfiguredTrZoneMoy	INTENSITY	FLOAT	Average numbers of configured TCH full rate resource- transceiver zone	TRZ.TRZ_ 1810_0_A VG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchFrAveragedAvailableTrZoneCum	ACCUMULATION	INT8	Cumulative number of TCH/FR and preemptable PDTCH available in multizone cell -transceiver zone	TRZ.TRZ_ 1700_0_C UM	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
tchFrAveragedAvailableTrZoneEch	ACCUMULATION	INT8	No of samples, number of TCH/FR and preemptable PDTCH available in multizone cell -transceiver zone	TRZ.TRZ_ 1700_0_N BS	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
tchFrAveragedAvailableTrZoneMax	INTENSITY	INTEGER	Maximum number of TCH/FR and preemptable PDTCH available in multizone cell -transceiver zone	TRZ.TRZ_ 1700_0_M AX	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchFrAveragedAvailableTrZoneMoy	INTENSITY	FLOAT	Average number of	TRZ.TRZ_ 1700_0_A	Average, ntcsdcch

			TCH/FR and preemptable PDTCH available in multizone cell -transceiver zone	VG	bh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedOverflowAllocationTrZoneCum	ACCUMULATION	INT8	Cumulative number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1611_2_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedOverflowAllocationTrZoneEch	ACCUMULATION	INT8	No of samples, number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1611_2_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedOverflowAllocationTrZoneMax	INTENSITY	INTEGER	Maximum number of TCH/FR used because of SDCCH unavailability in the zone (concentric	TRZ.TRZ_1611_2_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

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			cell) -transceiver zone		
tchFrAveragedUsedOverflowAllocationTrZoneMoy	INTENSITY	FLOAT	Average number of TCH/FR used because of SDCCH unavailability in the zone (concentric cell) -transceiver zone	TRZ.TRZ_ 1611_2_A VG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchFrAveragedUsedPrimoAllocationTrZoneCum	ACCUMULATION	INT8	Cumulative number of TCH/FR used for call reestablishme nts in the zone (concentric cell) (primo- allocation) -transceiver zone	TRZ.TRZ_ 1611_1_C UM	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
tchFrAveragedUsedPrimoAllocationTrZoneEch	ACCUMULATION	INT8	No of samples, number of TCH/FR used for call reestablishme nts in the zone (concentric cell) (primo- allocation) -transceiver zone	TRZ.TRZ_ 1611_1_N BS	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
tchFrAveragedUsedPrimoAllocationTrZoneMax	INTENSITY	INTEGER	Maximum, number of TCH/FR used for call	TRZ.TRZ_ 1611_1_M AX	Constant, ntcsdcch bh, ntctchbh,

			reestablishments in the zone (concentric cell) (primo-allocation) -transceiver zone		ntctchfrbh, tot, min, max
tchFrAveragedUsedPrimoAllocationTrZoneMoy	INTENSITY	FLOAT	Average number of TCH/FR used for call reestablishments in the zone (concentric cell) (primo-allocation) -transceiver zone	TRZ.TRZ_1611_1_A_VG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedTchAllocationTrZoneCum	ACCUMULATION	INT8	Cumulative number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1611_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedTchAllocationTrZoneEch	ACCUMULATION	INT8	No of samples, number of TCH/FR or preempted PDTCH used for traffic in the zone	TRZ.TRZ_1611_0_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

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			(concentric cell) -transceiver zone		
tchFrAveragedUsedTchAllocationTrZoneMax	INTENSITY	INTEGER	Maximum number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1611_0_MAX	Constant, ntsdcch bh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedTchAllocationTrZoneMoy	INTENSITY	FLOAT	Average number of TCH/FR or preempted PDTCH used for traffic in the zone (concentric cell) -transceiver zone	TRZ.TRZ_1611_0_AVG	Average, ntsdcch bh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedTrZoneCum	ACCUMULATION	INT8	Cumulative number of TCH/FR or preempted PDTCH used in the concentric cell and zone -transceiver zone	TRZ.TRZ_1746_0_CUM	Sum, ntsdcch bh, ntctchbh, ntctchfrbh
tchFrAveragedUsedTrZoneEch	ACCUMULATION	INT8	No of samples, number of TCH/FR or preempted PDTCH used in the	TRZ.TRZ_1746_0_NBS	Sum, ntsdcch bh, ntctchbh, ntctchfrbh

			concentric cell and zone-transceiver zone		
tchFrAveragedUsedTrZoneMax	INTENSITY	INTEGER	Maximum number of TCH/FR or preempted PDTCH used in the concentric cell and zone-transceiver zone	TRZ.TRZ_1746_0_M AX	Constant, ntsdcch bh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedTrZoneMoy	INTENSITY	FLOAT	Average number of TCH/FR or preempted PDTCH used in the concentric cell and zone-transceiver zone	TRZ.TRZ_1746_0_A VG	Average, ntsdcch bh, ntctchbh, ntctchfrbh, tot, min, max
tchFrRessourceFailureTrZone	ACCUMULATION	INT8	Number of TCH/FR and preemptable PDTCH allocation failures in the zone (concentric cell)-transceiver zone	TRZ.TRZ_1613_0_C UM	Sum, ntsdcch bh, ntctchbh, ntctchfrbh
tdmaClassTchResourceFailureRatio	INTENSITY	FLOAT	Ratio of TCH or preempted PDTCH	TRZ.TRZ_8757_0_A VG	Average, ntsdcch bh,

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			resource failures in the TDMA class		ntctchbh, ntctchfrbh, tot, min, max
underUsedTch	INTENSITY	FLOAT	-Obsolete in V15.1- Under-used zone TCH and preempted PDTCH	TRZ.TRZ_8024_0_A_VG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.14.16TRZ.Nortel.GSM.TCH_HR_Resources

Half rate TCH resource statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
tchHrAllocatedPrimoAllocationTrZone	ACCUMULATION	INT8	-Obsolete in V15.1- Number of half rate primo TCH allocations in transceiver zone	TRZ.TRZ_1610_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAllocatedTchAllocationTrZone	ACCUMULATION	INT8	Number of half rate TCH allocations in Transceiver Zone	TRZ.TRZ_1610_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAllocatedTrZone	ACCUMULATION	INT8	Number of Half-rate TCH allocations in the cell in transceiver zone	TRZ.TRZ_1745_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh

tchHrAllocatedWpsTrZone	ACCUMULATION	INT8	Number of half rate TCH allocations for a WPS call	TRZ.TRZ_1 610_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedOverflowAllocationTrZoneCum	ACCUMULATION	INT8	-Obsolete in V15.1- Cumulative number of half rate Overflow allocations in transceiver zone	TRZ.TRZ_1 612_2_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedOverflowAllocationTrZoneEch	ACCUMULATION	INT8	-Obsolete in V15.1- No of samples, number of half rate Overflow allocations in transceiver zone	TRZ.TRZ_1 612_2_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedOverflowAllocationTrZoneMax	INTENSITY	INTEGER	-Obsolete in V15.1- Maximum number of half rate Overflow allocations in transceiver zone	TRZ.TRZ_1 612_2_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAveragedUsedOverflowAllocation	INTENSITY	FLOA	-Obsolete	TRZ.TRZ_1	Average,

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ionTrZoneMoy		T	in V15.1- Average number of half rate Overflow allocations in transceiver zone	612_2_AVG	ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchHrAveragedUsedPrimoAllocation TrZoneCum	ACCUMULA TION	INT8	-Obsolete in V15.1- Cumulative number of half rate Primo allocations in transceiver zone	TRZ.TRZ_1 612_1_CU M	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
tchHrAveragedUsedPrimoAllocation TrZoneEch	ACCUMULA TION	INT8	-Obsolete in V15.1- No of samples, number of half rate Primo allocations in transceiver zone	TRZ.TRZ_1 612_1_NBS	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h
tchHrAveragedUsedPrimoAllocation TrZoneMax	INTENSITY	INTEG ER	-Obsolete in V15.1- Maximum number of half rate Primo allocations in transceiver zone	TRZ.TRZ_1 612_1_MA X	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchHrAveragedUsedPrimoAllocation TrZoneMoy	INTENSITY	FLOA T	-Obsolete in V15.1- Average	TRZ.TRZ_1 612_1_AVG	Average, ntcsdcch bh,

			number of half rate Primo allocations in transceiver zone		nttchbh, nttchfrbh, tot, min, max
tchHrAveragedUsedTchAllocationTrZoneCum	ACCUMULATION	INT8	Cumulative number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1612_0_CUM	Sum, ntsdcchbh, nttchbh, nttchfrbh
tchHrAveragedUsedTchAllocationTrZoneEch	ACCUMULATION	INT8	No of samples, number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1612_0_NBS	Sum, ntsdcchbh, nttchbh, nttchfrbh
tchHrAveragedUsedTchAllocationTrZoneMax	INTENSITY	INTEGER	Maximum number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1612_0_MAX	Constant, ntsdcchbh, nttchbh, nttchfrbh, tot, min, max
tchHrAveragedUsedTchAllocationTrZoneMoy	INTENSITY	FLOAT	Average number of half rate TCH allocations transceiver	TRZ.TRZ_1612_0_AVG	Average, ntsdcchbh, nttchbh, nttchfrbh, tot,

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			zone		min, max
tchHrAveragedUsedTrZoneCum	ACCUMULATION	INT8	Cumulative number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1747_0_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedTrZoneEch	ACCUMULATION	INT8	Number of samples, number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1747_0_NBS	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedTrZoneMax	INTENSITY	INTEGER	Maximum number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1747_0_MAX	Constant, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAveragedUsedTrZoneMoy	INTENSITY	FLOAT	Average number of half rate TCH allocations in transceiver zone	TRZ.TRZ_1747_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchHrAveragedUsedWpsTrZoneCum	ACCUMULATION	INT8	Cumulative number of WPS half rate TCH (including PDTCH) allocations	TRZ.TRZ_1612_1_CUM	Sum, ntsdcchbh, ntctchbh, ntctchfrbh
tchHrAveragedUsedWpsTrZoneEch	ACCUMULATION	INT8	Number of	TRZ.TRZ_1	Sum,

	TION		samples, number of WPS half rate TCH (including PDTCH) allocations	612_1_NBS	ntcsdcch bh, ntctchbh, ntctchfrb h
tchHrAveragedUsedWpsTrZoneMax	INTENSITY	INT8	Maximum number of WPS half rate TCH (including PDTCH) allocations	TRZ.TRZ_1 612_1_MA X	Constant, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchHrAveragedUsedWpsTrZoneMoy	INTENSITY	FLOA T	Average number of WPS half rate TCH (including PDTCH) allocations	TRZ.TRZ_1 612_1_AVG	Average, ntcsdcch bh, ntctchbh, ntctchfrb h, tot, min, max
tchHrRessourceFailureTrZone	ACCUMULA TION	INT8	Number of TCH/HR and preemptabl e PDTCH allocation failures in the zone (concentric cell) in transceiver zone	TRZ.TRZ_1 614_0_CU M	Sum, ntcsdcch bh, ntctchbh, ntctchfrb h

7.14.17TRZ.Nortel.GSM.TCH_resources

TCH resources statistics

KPI	Type	Data	Description	Derivation	Aggregat
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		Type			ion
allTchFrAllocatedTimeTrZoneCum	ACCUMULATION	INT8	Cumulative duration to allocate all TCH/FR and preempted PDTCH resources (inner or outer cell zone)	TRZ.TRZ_1057_0_CUM	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
allTchFrAllocatedTimeTrZoneEch	ACCUMULATION	INT8	Number of samples, duration to allocate all TCH/FR and preempted PDTCH resources (inner or outer cell zone)	TRZ.TRZ_1057_0_NBS	Sum, ntesdcchb h, ntetchbh, ntetchfrbh
allTchFrAllocatedTimeTrZoneMax	INTENSITY	INTEGER	Maximum duration to allocate all TCH/FR and preempted PDTCH resources (inner or outer cell zone)	TRZ.TRZ_1057_0_MAX	Constant, ntesdcchb h, ntetchbh, ntetchfrbh, tot, min, max
allTchFrAllocatedTimeTrZoneMoy	INTENSITY	FLOAT	Average duration to allocate all TCH/FR and preempted PDTCH resources (inner or outer cell zone)	TRZ.TRZ_1057_0_AVG	Average, ntesdcchb h, ntetchbh, ntetchfrbh, tot, min, max
availableSdcchRateTrZone	INTENSITY	FLOAT	SDCCH available TDMA class rate	TRZ.TRZ_8913_0_AVG	Average, ntesdcchb h, ntetchbh, ntetchfrbh

					, tot, min, max
availableTchRateTrZone	INTENSITY	FLOAT	TCH available TDMA class rate	TRZ.TRZ_8912_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchOccupancy	INTENSITY	FLOAT	TCH and preempted PDTCH channel occupancy for zone	TRZ.TRZ_8804_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.14.18TRZ.Nortel.GSM.Time_Advance

Timing advance statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
averagedTimingAdvanceTrZone	INTENSITY	FLOAT	Average of Timing Advance measured in a zone	TRZ.TRZ_8919_0_AVG	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max
timingAdvanceAverageTrZone	INTENSITY	FLOAT	Average timing advance value for the communications in the cell-transceiver zone	TRZ.TRZ_1809_0_CUM	Average, ntsdcchbh, ntctchbh, ntctchfrbh, tot, min, max

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timingAdvanceMaximumTrZone	ACCUMULATION	INT8	Maximum timing advance value for the communications in the cell-transceiver zone	TRZ.TRZ_1809_1_CUM	Constant, ntesdcchbh, ntctchbh, ntctchfrbh
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7.14.19TRZ.Nortel.GSM.Wireless_Priority_Service

Wireless priority service statistics

KPI	Type	Data Type	Description	Derivation	Aggregation
tchFrAllocatedWpsTrZone	ACCUMULATION	INT8	Number of WPS full rate TCH allocations	TRZ.TRZ_1609_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedWpsTrZoneCum	ACCUMULATION	INT8	Cumulative number of WPS full rate TCH allocations	TRZ.TRZ_1611_3_CUM	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedWpsTrZoneEch	ACCUMULATION	INT8	Number of samples, number of WPS full rate TCH allocations	TRZ.TRZ_1611_3_NBS	Sum, ntesdcchbh, ntctchbh, ntctchfrbh
tchFrAveragedUsedWpsTrZoneMax	INTENSITY	INT8	Maximum number of WPS full rate TCH allocations	TRZ.TRZ_1611_3_MAX	Constant, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max
tchFrAveragedUsedWpsTrZoneMoy	INTENSITY	FLOAT	Average number of WPS full rate TCH allocations	TRZ.TRZ_1611_3_AVG	Average, ntesdcchbh, ntctchbh, ntctchfrbh, tot, min, max

7.15 TSCB Performance Indicators

This section shows the key performance indicators and other counters for the TSCB object, divided into the following sub-sections:

- [TSCB.Nortel.GSM.Load_V12](#)

7.15.1 TSCB.Nortel.GSM.Load_V12

Data migration purposes. The kpi group in V12 is Load.

KPI	Type	Data Type	Description	Derivation	Aggregation
cardSynthLoadTscbCum	ACCUMULATION	INTEGER	-Obsolete in V15.1- Cumulative synthetic load on TSCB x board	TSCB.c1835_0_CUM	Sum, ntbccpabh, nbtcaubh
cardSynthLoadTscbEch	ACCUMULATION	INTEGER	-Obsolete in V15.1- Number of samples, synthetic load on TSCB x board	TSCB.c1835_0_NBS	Sum, ntbccpabh, nbtcaubh
cardSynthLoadTscbMax	INTENSITY	INTEGER	-Obsolete in V15.1- Maximum synthetic load on TSCB x board	TSCB.c1835_0_MAX	Constant, ntbccpabh, nbtcaubh, tot, min, max
cardSynthLoadTscbMoy	INTENSITY	FLOAT	-Obsolete in V15.1- Average synthetic load on TSCB x board	TSCB.c1835_0_AVG	Average, ntbccpabh, nbtcaubh, tot, min, max

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8 Performance Alarms

This section shows details of the alarms that are defined in this technology pack module:

None.

9 Reports

This section shows details of the reports that are defined in this technology pack module.

All reports can be run as raw, daily, weekly or monthly reports.

Where a KPI is marked (DA), it means Data Availability is to be reported upon it.

- [BSC Reports.](#)
- [Bearer Reports.](#)
- [Cell Reports.](#)
- [LAPD Reports.](#)
- [Neighbour Reports.](#)
- [Processor Reports.](#)
- [Signalling_Link Reports.](#)
- [TRX Reports.](#)

9.1 BSC Reports.

This section shows reports for the BSC object.

- [A interface](#)
- [BSC Handovers Required SDCCH](#)
- [Handovers Required TCH](#)
- [Overload_situation](#)
- [SCCP connections](#)
- [SDCCH allocation](#)
- [TCH_resources](#)

9.1.1 A interface

This report shows the allocated and usage for the A interface in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC

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Primary Object	BSC
Terrestrial circuits	BSC.Nortel.A_Interface.tcAllocated, BSC.Nortel.A_Interface.tcAveragedUsedMoy
BSSAP messages	BSC.Nortel.A_Interface.aInputMessage, BSC.Nortel.A_Interface.aOutputMessage, BSC.Nortel.A_Interface.aMessageErrors
DTAP non-transparent messages	BSC.Nortel.A_Interface.aNonTransparentDown, BSC.Nortel.A_Interface.aNonTransparentUp
DTAP transparent messages	BSC.Nortel.A_Interface.aTransparentDown, BSC.Nortel.A_Interface.aTransparentUp, BSC.Nortel.A_Interface.aMessageErroneousRate

9.1.2 BSC Handovers Required SDCCH

This report shows key BSC SDCCH traffic statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC
Primary Object	BSC
Handover overview	BSC.Nortel.Handovers.hoInExecutionBscSdcch, BSC.Nortel.Handovers.hoOutExecutionBscSdcch
SDCCH Handover report	BSC.BSC_Id, BSC.BSC_Name, BSC.Nortel.Handovers_Required_SDCCH.hoOutInterSdcchExecutionBscFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoInIntraSdcchExecutionBscFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoInInterSdcchExecutionBscFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoInInterSdcchSelectionBscFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoOutSdcchExecutionBscFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoOutSdcchSelectionBscFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoOutSdcchBscGlobalFailRate, BSC.Nortel.Handovers_Required_SDCCH.hoOutSdcchrequestBscRatio, BSC.Nortel.Handovers_Required_SDCCH.hoOutFirstSuccessSdcchRatio, BSC.Nortel.Handovers.hoOutExecutionBscSdcch, BSC.Nortel.Handovers.hoInExecutionBscSdcch, BSC.MSC_Id

9.1.3 Handovers Required TCH

This report shows key BSC TCH HO statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC
Primary Object	BSC
Handover overview	BSC.Nortel.Handovers.hoInExecutionBscTch, BSC.Nortel.Handovers.hoOutExecutionBscTch
TCH Handover report	BSC.BSC_Id, BSC.BSC_Name, BSC.MSC_Id, BSC.Nortel.Handovers.hoInExecutionBscTch, BSC.Nortel.Handovers.hoOutExecutionBscTch, BSC.Nortel.Handovers_Required_TCH.hoOutFirstSuccessTchRatio, BSC.Nortel.Handovers_Required_TCH.hoOutTchRequestBscRatio, BSC.Nortel.Handovers_Required_TCH.hoOutTchBscGlobalFailRate, BSC.Nortel.Handovers_Required_TCH.hoOutTchSelectionBscFailRate, BSC.Nortel.Handovers_Required_TCH.hoOutTchExecutionBscFailRate, BSC.Nortel.Handovers_Required_TCH.hoInInterTchSelectionBscFailRate, BSC.Nortel.Handovers_Required_TCH.hoInInterTchExecutionBscFailRate, BSC.Nortel.Handovers_Required_TCH.hoInIntraTchExecutionBscFailRate, BSC.Nortel.Handovers_Required_TCH.hoOutInterTchExecutionBscFailRate

9.1.4 Overload_situation

This report shows key BSC AINT and E3 overload statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC
Primary Object	BSC
Overload report	BSC.BSC_Id, BSC.BSC_Name,

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	BSC.Nortel.Overload_situation.overLoadRejPagingReq, BSC.Nortel.Overload_situation.overLoadRejChannelReq, BSC.Nortel.Overload_situation.e3OverloadRejectedOpPagingReqReject, BSC.Nortel.Overload_situation.e3OverloadRejectedOpHoReq, BSC.Nortel.Overload_situation.e3OverloadRejectedOpEstablishInd, BSC.Nortel.Overload_situation.e3OverloadRejectedOpPagingReq, BSC.Nortel.Overload_situation.aintOverloadRejectedOpVbsVgcsAssignment, BSC.Nortel.Overload_situation.aintOverLoadRejectedOpVbsVgcsSetup, BSC.Nortel.Overload_situation.aintOverloadRejectedOpIncomingExtHoReq, BSC.Nortel.Overload_situation.aintOverloadRejectedOpPageReq, BSC.MSC_Id
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9.1.5 SCCP connections

This report shows key BSC SCCP connection established and refused in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC
Primary Object	BSC
Signalling connection report	BSC.BSC_Id, BSC.BSC_Name, BSC.Nortel.Signalling_connections.sccpResourceFailureRatio, BSC.Nortel.Signalling_connections.sccpRessourceFailureBscRefusalLcs (DA), BSC.Nortel.Signalling_connections.sccpRessourceFailureLcs (DA), BSC.Nortel.Signalling_connections.sccpRessourceFailureBscRefusal (DA), BSC.Nortel.Signalling_connections.sccpRessourceFailure (DA), BSC.Nortel.Signalling_connections.sccpAveragedUsedMax (DA), BSC.Nortel.Signalling_connections.sccpAveragedUsedMoy (DA), BSC.Nortel.Signalling_connections.sccpAllocatedLcs (DA), BSC.Nortel.Signalling_connections.sccpAllocated (DA), BSC.MSC_Id

9.1.6 SDCCH allocation

This report shows key BSC SDCCH allocation statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC
Primary Object	BSC

Allocated and used	BSC.Nortel.SDCCH_allocation.bscSdcchAllocated, BSC.Nortel.SDCCH_allocation.bscSdcchAveragedUsedMoy
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9.1.7 TCH_resources

This report shows key BSC TCH allocations and traffic in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.BSC
Primary Object	BSC
TCH allocation	BSC.Nortel.TCH_resources.bscAttemptedTchFrSeizureInclHo, BSC.Nortel.TCH_resources.bscAllocationFailureTchFrSeizureInclHo
TCH Usage	BSC.Nortel.TCH_resources.bscTchAveragedUsed
TCH report	BSC.BSC_Id, BSC.BSC_Name, BSC.MSC_Id, BSC.Nortel.TCH_resources.bscAttemptedTchFrSeizureInclHo, BSC.Nortel.TCH_resources.bscAttemptedTchFrSeizureNotInclHo, BSC.Nortel.TCH_resources.bscAllocationFailureTchFrSeizureInclHo, BSC.Nortel.TCH_resources.bscTchFrAveragedUsedOverflowAllocation Moy, BSC.Nortel.TCH_resources.bscTchAveragedUsedPrimoAllocationMoy, BSC.Nortel.TCH_resources.bscTchFrAveragedUsedTchAllocationMoy, BSC.Nortel.TCH_resources.bscTchFrAllocatedOverflowAllocation, BSC.Nortel.TCH_resources.bscTchFrAllocatedPrimoAllocation, BSC.Nortel.TCH_resources.bscTchFrAllocatedAllocation

9.2 Bearer Reports.

This section shows reports for the Bearer object.

- [Frame relay utilisation](#)

9.2.1 Frame relay utilisation

This report shows key Bearer traffic statistics in a selected time period. The report shows the utilisation and bytes/frames send and received.

Report Feature	Details
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Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Bearer
Primary Object	Bearer
Utilisation	Bearer.Nortel.Frame_Relay_utilisation.rxTotalLinkUtil
Frames traffic	Bearer.Nortel.Frame_Relay_utilisation.txFrames, Bearer.Nortel.Frame_Relay_utilisation.rxFrames
Bytes traffic	Bearer.Nortel.Frame_Relay_utilisation.txBytes, Bearer.Nortel.Frame_Relay_utilisation.rxBytes

9.3 Cell Reports.

This section shows reports for the Cell object.

- [Abis interface](#)
- [AGPRS_interface](#)
- [AMR received HR and FR frames per Codec](#)
- [AMR traffic release per causes](#)
- [Assignment AMR](#)
- [Assignment FR and HR](#)
- [BSSGP Virtual Connection traffic](#)
- [Cell Handovers required SDCCH](#)
- [EGPRS Radio Link Control](#)
- [Establish Indication per phases](#)
- [Free channels in interference](#)
- [GPRS multislot](#)
- [GPRS QoS Downlink and uplink](#)
- [GPRS radio resource](#)
- [GPRS Temporary Block Flow](#)
- [Handovers AMR](#)
- [Handovers Inter BSS SDCCH](#)
- [Handovers InterBSS TCH](#)
- [Handovers IntraBSS SDCCH](#)
- [Handovers IntraBSS TCH](#)
- [Handovers Intra Bts](#)
- [Handovers required TCH per causes](#)
- [Immediate assignment](#)
- [Immediate assignment rejected per causes](#)
- [Incoming and outgoing handovers on TCH](#)
- [Mobile power](#)
- [PCU Throughput](#)
- [PDTCH resources](#)
- [RX level and quality](#)
- [SMS service](#)
- [Traffic release per causes 1](#)
- [Traffic release per causes 2](#)

9.3.1 Abis interface

This report shows key Abis frames statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Frames traffic	Cell.Nortel.Abis_interface.AMR.amrDownlinkNoDataFrames, Cell.Nortel.Abis_interface.AMR.amrUplinkNoDataFrames

9.3.2 AGPRS_interface

This report shows key AGPRS interface traffic statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
AGRPS interface report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.AGPRS_interface.pcuAgprsJokerNbofBlocksUp, Cell.Nortel.AGPRS_interface.pcuAgprsMainNbofBlocksUp, Cell.Nortel.AGPRS_interface.pcuAgprsJokerNbofBlocksDn, Cell.Nortel.AGPRS_interface.pcuDynAgprsJokerMaxNbTimeslot, Cell.Nortel.AGPRS_interface.pcuDynAgprsJokerMinNbTimeslot, Cell.Nortel.AGPRS_interface.pcuDynAgprsJokerAvgNbTimeslot, Cell.Nortel.AGPRS_interface.pcuAgprsMainNbofBlocksDn, Cell.Nortel.AGPRS_interface.dyAgprsMaxLoadCriterion, Cell.Nortel.AGPRS_interface.dyAgprsAvgLoadCriterion, Cell.Nortel.AGPRS_interface.dyAgprsNbModif, Cell.Nortel.AGPRS_interface.dyAgprsAvgNbTimeslots, Cell.Nortel.AGPRS_interface.dyAgprsMaxNbTimeslots, Cell.Nortel.AGPRS_interface.dyAgprsMinNbTimeslots, Cell.Defined_TCH

9.3.3 AMR received HR and FR frames per Codec

This report shows AMR per Codec in a selected time period.

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Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
AMR Frames reports	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Codec.AMR_Recv_Frames.amrHrBadSpeechFramesCode c67, Cell.Nortel.Codec.AMR_Recv_Frames.amrHrBadSpeechFramesCode c59, Cell.Nortel.Codec.AMR_Recv_Frames.amrHrBadSpeechFramesCode c475, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrBadSpeechFramesCode c102, Cell.Nortel.Codec.AMR_Recv_Frames.amrHrValidSpeechFramesCod ec67, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrBadSpeechFramesCode c59, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrBadSpeechFramesCode c475, Cell.Nortel.Codec.AMR_Recv_Frames.amrHrValidSpeechFramesCod ec59, Cell.Nortel.Codec.AMR_Recv_Frames.amrHrValidSpeechFramesCod ec475, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrValidSpeechFramesCod ec102, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrValidSpeechFramesCod ec67, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrValidSpeechFramesCod ec59, Cell.Nortel.Codec.AMR_Recv_Frames.amrFrValidSpeechFramesCod ec475, Cell.Defined_TCH

9.3.4 AMR traffic release per causes

This report shows the AMR traffic release statistics per causes in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
AMR traffic release report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Traffic_release.AMR.trafficReleaseAmrHrOthersCause, Cell.Nortel.Traffic_release.AMR.trafficReleaseAmrHrRadioCause, Cell.Nortel.Traffic_release.AMR.trafficReleaseAmrHrLapdmCause,

	Cell.Nortel.Traffic_release.AMR.trafficReleaseAmrFrOthersCause, Cell.Nortel.Traffic_release.AMR.trafficReleaseAmrFrRadioCause, Cell.Nortel.Traffic_release.AMR.trafficReleaseAmrFrLapdmCause, Cell.Defined_TCH
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9.3.5 Assignment AMR

This report shows assignment AMR, AMR Control and AMR duration statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
AMR assignment report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.Assignment_AMR.amrFrTchSuccessfullyAssigned, Cell.Nortel.Assignment_AMR.amrFrTchAssignFailure, Cell.Nortel.Assignment_AMR.amrHrTchSuccessfullyAssigned, Cell.Nortel.Assignment_AMR.amrHrTchAssignFailure, Cell.Nortel.Assignment_AMR.downlinkPowerCtrlMaxTchAmrFrMoy, Cell.Nortel.Assignment_AMR.uplinkPowerCtrlMaxTchAmrFrMoy, Cell.Nortel.Assignment_AMR.downlinkPowerCtrlMaxTchAmrHrMoy, Cell.Nortel.Assignment_AMR.uplinkPowerCtrlMaxTchAmrHrMoy, Cell.Nortel.Assignment_AMR.timingAdvanceAmrFrAvg, Cell.Nortel.Assignment_AMR.timingAdvanceAmrHrAvg

9.3.6 Assignment FR and HR

This report shows key activation HR and FR transparent and non-transparent traffic statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Assignment report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Assignment_HR.channelActivateTchHrDataNT6000, Cell.Nortel.Assignment_FR.channelActivateTchFrDataNT14500,

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	Cell.Nortel.Assignment_FR.channelActivateTchFrDataNT12000, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT600, Cell.Nortel.Assignment_FR.channelActivateTchFrDataNT6000, Cell.Nortel.Assignment_HR.channelActivateTchHrDataT4800, Cell.Nortel.Assignment_HR.channelActivateTchHrDataT2400, Cell.Nortel.Assignment_HR.channelActivateTchHrDataT1200, Cell.Nortel.Assignment_HR.channelActivateTchHrDataT600, Cell.Nortel.Assignment_HR.channelActivateTchHrDataT16, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT14400, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT9600, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT4800, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT2400, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT1200, Cell.Nortel.Assignment_FR.channelActivateTchFrDataT16, Cell.Nortel.Assignment_HR.channelActTchHrDataNT, Cell.Nortel.Assignment_HR.channelActTchHrDataT, Cell.Nortel.Assignment_FR.channelActTchFrDataNT, Cell.Nortel.Assignment_FR.channelActTchFrDataT, Cell.Defined_CCH
--	--

9.3.7 BSSGP Virtual Connection traffic

This report shows the BSSGP Virtual Connection statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
PDUs data	Cell.Nortel.GPRS.BSSGP_Virtual_Connection.pduDataDn, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.pduDataUp
BVC bytes	Cell.Nortel.GPRS.BSSGP_Virtual_Connection.octetsDataDn, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.octetsDataUp
BSSGP report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.msFlushLLRequest, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.llcDiscardedOctets, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.llcDiscardedPdu, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.msFlowControlRequests, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.bvcFlowControlRequests, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.octetsDataUp, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.octetsDataDn, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.pduDataUp, Cell.Nortel.GPRS.BSSGP_Virtual_Connection.pduDataDn,

	Cell.Defined_TCH
--	------------------

9.3.8 Cell Handovers required SDCCH

This report shows the handovers required SDCCH statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Handovers required SDCCH Report	Cell.Nortel.Handovers_Required_SDCCH.Tot_hoRequiredSdcch, Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_CCH

9.3.9 EGPRS Radio Link Control

This report shows the EGPRS RLC establishment and traffic statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
EGPRS TBF establishment	Cell.Nortel.EGPRS.Radio_Link_Control.pcuEdgeTbfEstReq
EGPRS TBF downgrade	Cell.Nortel.EGPRS.Radio_Link_Control.pcuEdgeDowngradedTbfAvg
RLC Byte traffic	Cell.Nortel.EGPRS.Radio_Link_Control.pcuEdgeUpAvgUsefulDataPerCell, Cell.Nortel.EGPRS.Radio_Link_Control.pcuEdgeDnAvgUsefulDataPerCell
Duration EGPRS TBF verbose state	Cell.Nortel.EGPRS.Radio_Link_Control.pcuEdgeDnUsefulDataDurationPerCell, Cell.Nortel.EGPRS.Radio_Link_Control.pcuEdgeDnAvgUsefulDataPerCell

9.3.10 Establish Indication per phases

This report shows the establish Indication received statistics per phases in a selected time period.

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Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Establishment indications report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Defined_CCH, Cell.Nortel.Establish_Indication_Per_Phases.allEstabIndicSignalling, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSigPhase1Ratio, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSigPhase2Ratio, Cell.Nortel.Establish_Indication_Per_Phases.locUpRate, Cell.Nortel.Establish_Indication_Per_Phases.pagingResponseDegradation, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingPagingRes, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingLocUpdate, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingReEstab, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingImsiDetach, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingMoc, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingEmergency, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingShortMsg, Cell.Nortel.Establish_Indication_Per_Phases.estabIndicSignallingSuppService

9.3.11 Free channels in interference

This report shows the free channels in interference statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Interference report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand4Max, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand4Moy, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand3Max, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand3Moy, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand2Max,

	Cell.Nortel.Interference.channelAveragedIdlePerInterfBand2Moy, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand1Max, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand1Moy, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand0Max, Cell.Nortel.Interference.channelAveragedIdlePerInterfBand0Moy, Cell.Defined_TCH
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9.3.12 GPRS multislot

This report shows the GPRS multislot request statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
GPRS service-multislot report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.GPRS.MultiSlot_request.upMultiSlotRequest4, Cell.Nortel.GPRS.MultiSlot_request.upMultiSlotRequest3, Cell.Nortel.GPRS.MultiSlot_request.upMultiSlotRequest2, Cell.Nortel.GPRS.MultiSlot_request.upMultiSlotRequest1, Cell.Nortel.GPRS.MultiSlot_request.dnMultiSlotRequest4, Cell.Nortel.GPRS.MultiSlot_request.dnMultiSlotRequest3, Cell.Nortel.GPRS.MultiSlot_request.dnMultiSlotRequest2, Cell.Nortel.GPRS.MultiSlot_request.dnMultiSlotRequest1, Cell.Defined_TCH

9.3.13 GPRS QoS Downlink and uplink

This report shows the GPRS UL and DL QoS statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
DL QoS report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.GPRS.DL_QoS.dnTbfBronzeRejectedForMinTput, Cell.Nortel.GPRS.DL_QoS.dnTbfBronzeSatisfactLess50pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfBronzeSatisfactBet5090pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfBronzeSatisfactMore90pCent,

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	Cell.Nortel.GPRS.DL_QoS.dnTbfSilverRejectedForMinTput, Cell.Nortel.GPRS.DL_QoS.dnTbfSilverSatisfactLess50pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfSilverSatisfactBet5090pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfSilverSatisfactMore90pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfGoldRejectedForMinTput, Cell.Nortel.GPRS.DL_QoS.dnTbfGoldSatisfactLess50pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfGoldSatisfactBet5090pCent, Cell.Nortel.GPRS.DL_QoS.dnTbfGoldSatisfactMore90pCent, Cell.Defined_TCH
UL QoS report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Defined_PDCH, Cell.Nortel.GPRS.UL_QoS.upTbfGoldSatisfactMore90pCent, Cell.Nortel.GPRS.UL_QoS.upTbfGoldSatisfactBet5090pCent, Cell.Nortel.GPRS.UL_QoS.upTbfGoldSatisfactLess50pCent, Cell.Nortel.GPRS.UL_QoS.upTbfGoldRejectedForMinTput, Cell.Nortel.GPRS.UL_QoS.upTbfSilverSatisfactMore90pCent, Cell.Nortel.GPRS.UL_QoS.upTbfSilverSatisfactBet5090pCent, Cell.Nortel.GPRS.UL_QoS.upTbfSilverSatisfactLess50pCent, Cell.Nortel.GPRS.UL_QoS.upTbfSilverRejectedForMinTput, Cell.Nortel.GPRS.UL_QoS.upTbfBronzeSatisfactMore90pCent, Cell.Nortel.GPRS.UL_QoS.upTbfBronzeSatisfactBet5090pCent, Cell.Nortel.GPRS.UL_QoS.upTbfBronzeSatisfactLess50pCent, Cell.Nortel.GPRS.UL_QoS.upTbfBronzeRejectedForMinTput

9.3.14 GPRS radio resource

This report shows the GPRS UL and DL QoS statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
PDCH allocation	Cell.Nortel.PDTCH_resources.allocatedCircuitTsMoy, Cell.Nortel.PDTCH_resources.allocatedPacketTsMoy
DL Throughput	Cell.Nortel.GPRS.Radio_Resource.AvgDlThroughput, Cell.Nortel.GPRS.Radio_Resource.MaxDlThroughput
DL Discarded	Cell.Nortel.GPRS.Radio_Resource.octetDiscarded

9.3.15 GPRS Temporary Block Flow

This report shows the GPRS TBF statistics in a selected time period.

Report Feature	Details
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Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
UL and DL TBF report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.GPRS.Temporary_Block_Flow.dnTbfReleases, Cell.Nortel.GPRS.Temporary_Block_Flow.upTbfReleases, Cell.Nortel.GPRS.Temporary_Block_Flow.dlTBFAllocFailure, Cell.Nortel.GPRS.Temporary_Block_Flow.dlTBFRadioFailure, Cell.Nortel.GPRS.Temporary_Block_Flow.FirstDIUnitDataFrame, Cell.Nortel.GPRS.Temporary_Block_Flow.PDANWithUIReq, Cell.Nortel.GPRS.Temporary_Block_Flow.ulsecondPhaseAllocFailure, Cell.Nortel.GPRS.Temporary_Block_Flow.ulsecondPhaseRadioFailure, Cell.Nortel.GPRS.Temporary_Block_Flow.fullDuplexTbfEstablishment

9.3.16 Handovers AMR

This report shows the AMR handovers statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Intracell AMR	Cell.Nortel.Handovers_AMR.intracellAmrFrUpHoRequiredTch, Cell.Nortel.Handovers_AMR.intracellAmrFrDownHoRequiredTch
AMR Quality	Cell.Nortel.Handovers_AMR.amrQualityFrUpHoRequiredTch, Cell.Nortel.Handovers_AMR.amrQualityFrDownHoRequiredTch
AMR halfrate to fullrate HO	Cell.Nortel.Handovers_AMR.amrHrToFrHoSuccessIntraCellTch, Cell.Nortel.Handovers_AMR._%_amrHrToFrHoSuccessIntraCellTch
AMR fullrate to halfrate HO	Cell.Nortel.Handovers_AMR.amrFrToHrHoSuccessIntraCellTch, Cell.Nortel.Handovers_AMR._%_amrFrToHrHoSuccessIntraCellTch
AMR full Rate	Cell.Nortel.Handovers_AMR.amrFrHoRequestOutgoingTch, Cell.Nortel.Handovers_AMR._%_amrFrHoSuccessOutgoingTch

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9.3.17 Handovers Inter BSS SDCCH

This report shows the Handovers Inter-BSS SDCCH statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Outgoing InterBss SDCCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureOutgoingInterBssSdcchOtherCase, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureOutgoingInterBssSdcchT7TimerExp, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureOutgoingInterBssSdcchHoNotAllowed, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureOutgoingInterBssSdcchTerrestrialLack, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureOutgoingInterBssSdcchRadioLack, Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessOutgoingInterCellSdcchOtherCases, Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessOutgoingInterCellSdcchReturnOldChannel, Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessOutgoingInterCellSdcchT3103TimerExp, Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessOutgoingInterBssNAttemptSdcch, Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessReestOutgoingInterBssSdcch, Cell.Nortel.Handovers_InterBSS_SDCCH.hoSuccessOutgoingFirstInterSdcch, Cell.Nortel.Handovers_InterBSS_SDCCH._ %_hoSuccessOutgoingInterBssSdcch, Cell.Nortel.Handovers_InterBSS_SDCCH.hoSuccessOutgoingInterBssSdcch, Cell.Nortel.Handovers_InterBSS_SDCCH.hoExecutionOutgoingInterBssSdcch, Cell.Nortel.Handovers_InterBSS_SDCCH.hoRequestOutgoingInterBssSdcch, Cell.Defined_CCH
Incoming InterBss SDCCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureIncomingInterBssSdcchCICIncompatible, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureIncomingInterBssSdcchTechnAckTimerExp, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureIncomingInterBssSdcchChannelActivateNack, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureIncomingInterBssSdcchHoNotAllowed, Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureIncomingInterBssSdcchTerrestrialLack

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estLack,
Cell.Nortel.Handovers_InterBSS_SDCCH.hoFailureIncomingInterBssSdcchRadioLack,
Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessIncomingInterBssSdcchTimerExp,
Cell.Nortel.Handovers_InterBSS_SDCCH.hoUnsuccessIncomingInterBssSdcchOtherCases, Cell.Nortel.Handovers_InterBSS_SDCCH._
%_hoSuccessIncomingInterBssSdcch,
Cell.Nortel.Handovers_InterBSS_SDCCH.hoSuccessIncomingInterBssSdcch,
Cell.Nortel.Handovers_InterBSS_SDCCH.hoExecutionIncomingInterBssSdcch,
Cell.Nortel.Handovers_InterBSS_SDCCH.hoRequestIncomingInterBssSdcch,
Cell.Defined_CCH

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9.3.18 Handovers InterBSS TCH

This report shows the Handovers Inter-BSS TCH statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Outgoing interBSS TCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.Handovers_InterBSS_TCH.hoRequestOutgoingInterBss, Cell.Nortel.Handovers_InterBSS_TCH.hoExecutionOutgoingInterBss, Cell.Nortel.Handovers_InterBSS_TCH.hoSuccessOutgoingInterBss, Cell.Nortel.Handovers_InterBSS_TCH._%_hoSuccessOutgoingInterBss, Cell.Nortel.Handovers_InterBSS_TCH.hoSuccessOutgoingFirstInter, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessReestOutgoingInterBssTch, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessOutgoingInterBssNAtemptTch, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessOutgoingInterCellTchT3103TimerExp, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessOutgoingInterCellTchReturnOldChannel, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessOutgoingInterCellTchOtherCases, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureOutgoingInterBssTchRadioLack, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureOutgoingInterBssTchTe

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	rrrestLack, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureOutgoingInterBssTchHo NotAllowed, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureOutgoingInterBssTchT7 TimerExp, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureOutgoingInterBssTchOt herCases
Incoming interBSS TCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureIncomingInterBssTchCI CIncompatible, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureIncomingInterBssTchTc hnAckTimerExp, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureIncomingInterBssTchCh annelActivateNack, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureIncomingInterBssTchHo NotAllowed, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureIncomingInterBssTchTe rrrestLack, Cell.Nortel.Handovers_InterBSS_TCH.hoFailureIncomingInterBssTchRa dioLack, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessIncomingInterBssTc hTimerExp, Cell.Nortel.Handovers_InterBSS_TCH.hoUnsuccessIncomingInterBssTc hOtherCases, Cell.Nortel.Handovers_InterBSS_TCH._ %_hoSuccessIncomingInterBss, Cell.Nortel.Handovers_InterBSS_TCH.hoSuccessIncomingInterBss, Cell.Nortel.Handovers_InterBSS_TCH.hoExecutionIncomingInterBss, Cell.Nortel.Handovers_InterBSS_TCH.hoRequestIncomingInterBss, Cell.Defined_TCH

9.3.19 Handovers IntraBSS SDCCH

This report shows the handovers Intra-BSS SDCCH statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Outgoing intraBSS SDCCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_CCH, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoRequestOutgoingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoExecutionOutgoingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoSuccessOutgoingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH._ %_hoSuccessOutgoingIntraBssSdcch,

	Cell.Nortel.Handovers_IntraBSS_SDCCH.hoSuccessOutgoingFirstIntraSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessReestOutgoingIntraBssS dcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessOutgoingIntraBssNAtte mptSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessOutgoingIntraCellSdcch T3103TimerExp, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessOutgoingIntraCellSdcch ReturnOldChannel, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureOutgoingIntraBssSdcchRadi oLack, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureOutgoingIntraBssSdcchCha nnelActivateNack, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureOutgoingIntraBssSdcchHo NotAllowed, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureOutgoingIntraBssSdcchTch nAckTimerExp
Incoming intraBSS SDCCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_CCH, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoRequestIncomingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoExecutionIncomingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoSuccessIncomingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH._ %_hoSuccessIncomingIntraBssSdcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessIncomingIntraCellSdcch ReturnOldChannel, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessIncomingIntraCellSdcch T3103TimerExp, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoUnsuccessReestIncomingIntraBssS dcch, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureIncomingIntraBssSdcchRad ioLack, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureIncomingIntraBssSdcchCha nnelActivateNack, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureIncomingIntraBssSdcchHo NotAllowed, Cell.Nortel.Handovers_IntraBSS_SDCCH.hoFailureIncomingIntraBssSdcchTch nAckTimerExp

9.3.20 Handovers IntraBSS TCH

This report shows the handovers Intra-BSS TCH statistics in a selected time period.
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Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Outgoing intraBSS TCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessOutgoingIntraCellTchReturnOldChannel, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessOutgoingIntraCellTchT3103TimerExp, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessOutgoingIntraBssNAtemptTch, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureOutgoingIntraBssTchTchhnAckTimerExp, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureOutgoingIntraBssTchHoNotAllowed, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureOutgoingIntraBssTchChannelActivateNack, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureOutgoingIntraBssTchRadioLack, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessReestOutgoingIntraBssTch, Cell.Nortel.Handovers_IntraBSS_TCH.hoSuccessOutgoingFirstIntra, Cell.Nortel.Handovers_IntraBSS_TCH._%_hoSuccessOutgoingIntraBss, Cell.Nortel.Handovers_IntraBSS_TCH.hoSuccessOutgoingIntraBss, Cell.Nortel.Handovers_IntraBSS_TCH.hoExecutionOutgoingIntraBss, Cell.Nortel.Handovers_IntraBSS_TCH.hoRequestOutgoingIntraBss, Cell.Defined_TCH
Incoming intraBSS TCH report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessIncomingIntraCellTchReturnOldChannel, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessIncomingIntraCellTchT3103TimerExp, Cell.Nortel.Handovers_IntraBSS_TCH.hoUnsuccessReestIncomingIntraBssTch, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureIncomingIntraBssTchRadioLack, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureIncomingIntraBssTchChannelActivateNack, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureIncomingIntraBssTchHoNotAllowed, Cell.Nortel.Handovers_IntraBSS_TCH.hoFailureIncomingIntraBssTchTchhnAckTimerExp, Cell.Nortel.Handovers_IntraBSS_TCH.hoRequestIncomingIntraBss, Cell.Nortel.Handovers_IntraBSS_TCH.hoExecutionIncomingIntraBss,

Cell.Nortel.Handovers_IntraBSS_TCH.hoSuccessIncomingIntraBss, Cell.Nortel.Handovers_IntraBSS_TCH._%_hoSuccessIncomingIntraBss
--

9.3.21 Handovers Intra Bts

This report shows the handovers Intra-BTS SDCCH and TCH statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
IntraBts SDCCH	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Handovers_IntraBts_SDCCH.hoFailureIntraBtsSdcchTchn AckTimerExp, Cell.Nortel.Handovers_IntraBts_SDCCH.hoFailureIntraBtsSdcchChann elActivateNack, Cell.Nortel.Handovers_IntraBts_SDCCH.hoFailureIntraBtsSdcchRadio Lack, Cell.Nortel.Handovers_IntraBts_SDCCH.t3107ExpIntraBtsHoSdcch, Cell.Nortel.Handovers_IntraBts_SDCCH.hoUnsuccessReestIntraBtsSd cch, Cell.Nortel.Handovers_IntraBts_SDCCH._ %_hoSuccessIntraBtsSdcch, Cell.Nortel.Handovers_IntraBts_SDCCH.hoSuccessIntraBtsSdcch, Cell.Nortel.Handovers_IntraBts_SDCCH.hoExecutionIntraBtsSdcch, Cell.Nortel.Handovers_IntraBts_SDCCH.hoRequestIntraBtsSdcch, Cell.Defined_CCH
IntraBts TCH	Cell.Cell_Id, Cell.Cell_Name, Cell.Nortel.Handovers_IntraBts_TCH.t3107expIntraBtsHoTch, Cell.Nortel.Handovers_IntraBts_TCH.hoIntraBtsFailRateTchTieringSm allToLargePattern, Cell.Nortel.Handovers_IntraBts_TCH.hoIntraBtsFailRateTchTieringLa rgeToSmallPattern, Cell.Nortel.Handovers_IntraBts_TCH.hoFailureTieringTchNorrSmallT oLargePattern, Cell.Nortel.Handovers_IntraBts_TCH.hoFailureTieringTchNorrLargeT oSmallPattern, Cell.Nortel.Handovers_IntraBts_TCH.hoSuccessTieringTchSmallToLa rgePattern, Cell.Nortel.Handovers_IntraBts_TCH.hoSuccessTieringTchLargeToSm

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	allPattern, Cell.Nortel.Handovers_IntraBts_TCH.requestedIntraBtsHandoverForDualBandMSRate, Cell.Nortel.Handovers_IntraBts_TCH.hoUnsuccessReestIntraBtsTch, Cell.Nortel.Handovers_IntraBts_TCH._%_hoSuccessIntraBtsMsDualb, Cell.Nortel.Handovers_IntraBts_TCH.hoSuccessIntraBtsMsDualb, Cell.Nortel.Handovers_IntraBts_TCH.hoExecutionIntraBtsMsDualb, Cell.Nortel.Handovers_IntraBts_TCH.hoRequestIntraBtsMsDualb, Cell.Nortel.Handovers_IntraBts_TCH._%_hoSuccessIntraBts, Cell.Nortel.Handovers_IntraBts_TCH.hoSuccessIntraBts, Cell.Nortel.Handovers_IntraBts_TCH.hoExecutionIntraBts, Cell.Nortel.Handovers_IntraBts_TCH.hoRequestIntraBts, Cell.Defined_TCH
--	--

9.3.22 Handovers required TCH per causes

This report shows the handovers TCH statistics per causes in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Handovers required TCHs report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.Handovers_Required_TCH.hoRequiredTch, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchUplinkStrength, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchDownlinkStrength, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchUplinkQuality, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchDownlinkQuality, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchDistance, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchPowerBudgetQuality, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchCapture, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchIntraBtsOm, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchIntraBtsUplink, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchIntraBtsDownlink, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchDirectedRetry, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchTdmaClass0, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchTdmaClass1, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchInterBtsOm, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchTraffic, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchTieringLargeToSmallPattern, Cell.Nortel.Handovers_Required_TCH.hoRequiredTchTieringSmallT

oLargePattern

9.3.23 Immediate assignment

This report shows the immediate assignment statistics (including multiband) in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Immediate assignment overview	Cell.Nortel.Immediate_assignment.immediateAssignmentSuccess, Cell.Nortel.Immediate_assignment.immediateAssignmentRejectRatio
Immediate assignment DualBand	Cell.Nortel.Immediate_assignment.immAssignDualBandMSRate
Immediate assignment Multiband	Cell.Nortel.Immediate_assignment.immediateAssignmentMultiband

9.3.24 Immediate assignment rejected per causes

This report shows the immediate assignment rejected statistics per causes in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Immediate Assignment rejection report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Defined_CCH, Cell.Nortel.Immediate_assignment.immediateAssignmentSuccess, Cell.Nortel.Immediate_assignment.immediateAssignmentReject, Cell.Nortel.Immediate_assignment.immediateAssignmentRejectRatio, Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectTraffMsc, Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectRadioRes, Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectChanActNack, Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectChanActTimmack,

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	Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectOverload, Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectTimingAdv, Cell.Nortel.Immediate_assignment_rejected_per_causes.immediateAssignmentRejectOthers
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9.3.25 Incoming and outgoing handovers on TCH

This report shows the incoming and outgoing handovers statistics on TCH channel in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Handover TCH required	Cell.Nortel.Handovers_Required_TCH.hoRequiredTch
Failure of outgoing handovers	Cell.Nortel.Handovers_Required_TCH.hoOutTchGlobalFailRate
Incoming handovers on TCH	Cell.Nortel.Handovers_Required_TCH.hoInTchSelectionFailRate, Cell.Nortel.Handovers_Required_TCH.hoInTchExecutionFailRate
Outgoing handovers on TCH	Cell.Nortel.Handovers_Required_TCH.hoOutTchRequestRatio, Cell.Nortel.Handovers_Required_TCH.hoOutTchSelectionFailRate, Cell.Nortel.Handovers_Required_TCH.hoOutTchExecutionFailRate

9.3.26 Mobile power

This report shows the mobile power control statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Mobile power report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.Mobile_Power.msPwrcIncPerChannel, Cell.Nortel.Mobile_Power.msPwrcDecPerChannel, Cell.Nortel.Mobile_Power.msPowerIncControl, Cell.Nortel.Mobile_Power.msPowerDecControl, Cell.Nortel.Mobile_Power.bsPwrcIncPerChannel, Cell.Nortel.Mobile_Power.bsPwrcDecPerChannel, Cell.Nortel.Mobile_Power.bsPowerIncControl, Cell.Nortel.Mobile_Power.bsPowerDecControl

9.3.27 PCU Throughput

This report shows the PCU traffic bytes statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Traffic size for GPRS RLC data blocks	Cell.Nortel.PCU_Throughput.pcuDlThroughputCum, Cell.Nortel.PCU_Throughput.pcuUpThroughputCum

9.3.28 PDTCH resources

This report shows the PDTCH (configured and preempted) resources statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
PDTCH requests	Cell.Nortel.PDTCH_resources.attemptedTchFrSeizures, Cell.Nortel.PDTCH_resources._%_successful_assignments
PDTCH configured and preempted	Cell.Nortel.PDTCH_resources.totalNumberOfPacketTsMoy, Cell.Nortel.PDTCH_resources.totalNumberOfPacketTsUsedForCircuitMoy
Traffic in packet mode	Cell.Nortel.PDTCH_resources.allocatedPacketTsMoy, Cell.Nortel.PDTCH_resources.allocatedPacketTsMax
Traffic in circuit mode	Cell.Nortel.PDTCH_resources.allocatedCircuitTsMoy, Cell.Nortel.PDTCH_resources.allocatedCircuitTsMax

9.3.29 RX level and quality

This report shows the RX level and quality statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell

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RxLev in dBm	Cell.Nortel.RX_level_and_Quality.averageDLRxLev, Cell.Nortel.RX_level_and_Quality.averageULRxLev
RxQual in BER	Cell.Nortel.RX_level_and_Quality.averageDLRxQual, Cell.Nortel.RX_level_and_Quality.averageULRxQual

9.3.30 SMS service

This report shows the SMS rate statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
SMS rate	Cell.Nortel.SMS_service.smsRate
SAPI 3 session	Cell.Nortel.SMS_service.sapi3SessionEstablishment

9.3.31 Traffic release per causes 1

This report shows the first part of traffic release statistics per causes in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Traffic release report	Cell.Cell_Id, Cell.Cell_Name, Cell.Defined_TCH, Cell.Nortel.Traffic_release_per_causes.trafficRelease, Cell.Nortel.Traffic_release_per_causes.trafficAbnormalRelease, Cell.Nortel.Traffic_release_per_causes.trafficReleaseSccpDiscInd, Cell.Nortel.Traffic_release_per_causes.trafficReleaseReset, Cell.Nortel.Traffic_release_per_causes.trafficReleaseResetCirc, Cell.Nortel.Traffic_release_per_causes.trafficReleaseSccpDataRefusal , Cell.Nortel.Traffic_release_per_causes.trafficReleaseT3107CircDown , Cell.Nortel.Traffic_release_per_causes.trafficReleaseOmTsRemoval, Cell.Nortel.Traffic_release_per_causes.trafficReleaseTsRemovalEqpt Fail, Cell.Nortel.Traffic_release_per_causes.trafficReleaseOmCicRemoval, Cell.Nortel.Traffic_release_per_causes.trafficReleaseCicRemovalEqpt Fail, Cell.Nortel.Traffic_release_per_causes.trafficReleaseOmRadioChanBl oc, Cell.Nortel.Traffic_release_per_causes.trafficReleaseCallClearing

9.3.32 Traffic release per causes 2

This report shows the second part of traffic release statistics per causes in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Cell
Primary Object	Cell
Traffic release report	Cell.Cell_Id, Cell.Cell_Name, Cell.BSC_Id, Cell.Defined_TCH, Cell.Nortel.Traffic_release_per_causes.trafficReleaseCnxFailRadioInt Fail, Cell.Nortel.Traffic_release_per_causes.trafficReleaseCnxFailRadioLinkFail, Cell.Nortel.Traffic_release_per_causes.trafficReleaseReleaseInd, Cell.Nortel.Traffic_release_per_causes.trafficReleaseErrorIndT200, Cell.Nortel.Traffic_release_per_causes.trafficReleaseErrorIndDm, Cell.Nortel.Traffic_release_per_causes.trafficReleaseErrorIndSeq, Cell.Nortel.Traffic_release_per_causes.trafficReleaseClearCommand, Cell.Nortel.Traffic_release_per_causes.trafficReleaseRfResInd, Cell.Nortel.Traffic_release_per_causes.trafficReleaseTmodMs, Cell.Nortel.Traffic_release_per_causes.trafficReleaseT3103, Cell.Nortel.Traffic_release_per_causes.trafficReleaseT8, Cell.Nortel.Traffic_release_per_causes.trafficReleaseOthers, Cell.Nortel.Traffic_release_per_causes.trafficReleaseSysInfoFail, Cell.Nortel.Traffic_release_per_causes.trafficReleaseCnxFailRemTransFail, Cell.Nortel.Traffic_release_per_causes.trafficReleaseTbcEdge

9.4 LAPD Reports.

This section shows reports for the LAPD object.

- [Lapd Abis and paging](#)

9.4.1 Lapd Abis and paging

This report shows the Abis interface errors and paging statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.LAPD
Primary Object	LAPD

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Abis level1 errors	LAPD.Nortel.Abis_interface_errors.abisLevel1ErrorsBadFrame, LAPD.Nortel.Abis_interface_errors.abisLevel1ErrorsCrcError, LAPD.Nortel.Abis_interface_errors.abisLevel1ErrorsLostAlign
Paging over LAPD link	LAPD.Nortel.Paging.lapdiFramesDn, LAPD.Nortel.Paging.lapdiFramesUp, LAPD.Nortel.Paging.lapduiFramesUp

9.5 Neighbour Reports.

This section shows reports for the Neighbour object.

- [Handovers requests per causes](#)
- [Neighbour handovers](#)

9.5.1 Handovers requests per causes

This report shows the handovers requests statistics per causes in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Neighbour
Primary Object	Neighbour
Outgoing intra-bss or inter-bss HO reports	Neighbour.Target_Cell_Id, Neighbour.Neighbour_Name, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingOthers, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingOt hers, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingTraffic, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingTr affic, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingInterBtsOm, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingIn terBtsOm, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingDirectedRetry, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingDi rectedRetry, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingPowerBudgetQuality, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingPo werBudgetQuality, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingDistance, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingDi stance, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingDownlinkQuality, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingD

	ownlinkQuality, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingUplinkQuality, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingU plinkQuality, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingDownlinkStrength, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingD ownlinkStrength, Neighbour.Nortel.Handovers_per_causes._ %_hoNCellsSuccessOutgoingUplinkStrength, Neighbour.Nortel.Handovers_per_causes.hoNCellsRequestOutgoingU plinkStrength, Neighbour.Source_Cell_Id
--	--

9.5.2 Neighbour handovers

This report shows the handovers statistics per neighbour cells in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Neighbour
Primary Object	Neighbour
Handovers on TCH executed	Neighbour.Nortel.Handovers.hoNcellsExecution, Neighbour.Nortel.Handovers.hoNcellsUnsuccessTchChlR, Neighbour.Nortel.Handovers.hoNcellsUnsuccessTchOther, Neighbour.Nortel.Handovers.hoNcellsUnsuccessTchTimer
Handovers on SDCCH executed	Neighbour.Nortel.Handovers.hoNcellsExecutionSdcch, Neighbour.Nortel.Handovers.hoNcellsUnsuccessSdcchChlR, Neighbour.Nortel.Handovers.hoNcellsUnsuccessSdcchOther, Neighbour.Nortel.Handovers.hoNcellsUnsuccessSdcchTimer

9.6 Processor Reports.

This section shows reports for the Processor object.

- [Processor Load Logical Processor](#)
- [Processor Load OMU](#)
- [Processor Load Pblock](#)
- [Processor Load TMU](#)

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9.6.1 Processor Load Logical Processor

This report shows the CPU load statistics for CC, TCU, CPUE, CPUM, OMU, TMU and Pblock in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Processor
Primary Object	Processor
LP CPU load	Processor.Nortel.Load.Logical_processor.cpuUtilAvg, Processor.Nortel.Load.Logical_processor.cpuUtilAvgMax

9.6.2 Processor Load OMU

This report shows the CPU load statistics for CC, TCU, CPUE, CPUM, OMU, TMU and Pblock in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Processor
Primary Object	Processor
OMU CPU load	Processor.Nortel.Load.OMU.prLoadCne3OmuSbcCum, Processor.Nortel.Load.OMU.prLoadCne3OmuSbcMoy

9.6.3 Processor Load Pblock

This report shows the CPU load statistics for CC, TCU, CPUE, CPUM, OMU, TMU and Pblock in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Processor
Primary Object	Processor
MPC CPU load	Processor.Nortel.Load.Pblock.cpuPBlockUtilAvg, Processor.Nortel.Load.Pblock.cpuPBlockUtilMax

9.6.4 Processor Load TMU

This report shows the CPU load statistics for CC, TCU, CPUE, CPUM, OMU, TMU and Pblock in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Processor

Primary Object	Processor
TMU CPU load for system PMC	Processor.Nortel.Load.TMU.prLoadCne3TmuPmcMoy, Processor.Nortel.Load.TMU.prLoadCne3TmuPmcMax
TMU CPU load for system SBC	Processor.Nortel.Load.TMU.prLoadCne3TmuSbcMoy, Processor.Nortel.Load.TMU.prLoadCne3TmuSbcMax

9.7 Signalling_Link Reports.

This section shows reports for the Signalling_Link object.

- [MSU frames](#)

9.7.1 MSU frames

This report shows the MSU traffic statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.Signalling_Link
Primary Object	Signalling_Link
MSU frames received on Level 2	Signalling_Link.Nortel.Temporary_Obs.MSU.ss7InputMsu
MSU frames sent on Level 2	Signalling_Link.Nortel.Temporary_Obs.MSU.ss7OutputMsu

9.8 TRX Reports.

This section shows reports for the TRX object.

- [LLC and Radio Link Control traffic](#)
- [RLC DownLink blocks per MCS](#)
- [RLC UpLink blocks per MCS](#)
- [Temporary Block Flow releases](#)

9.8.1 LLC and Radio Link Control traffic

This report shows the LLC and RLC statistics in a selected time period.

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Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.TRX
Primary Object	TRX
LLC packets reassembled and segmented	TRX.Nortel.RLC.llcPacketsUp, TRX.Nortel.RLC.llcPacketsDn
RLC Uplink traffic	TRX.Nortel.RLC.dataBlocksUp, TRX.Nortel.RLC.controlBlocksUp, TRX.Nortel.RLC.upUserdatablocks
Packet ACK/NACK messages	TRX.Nortel.RLC.packetAckNackUp, TRX.Nortel.RLC.packetAckNackDn
RLC Downlink traffic	TRX.Nortel.RLC.dataBlocksDn, TRX.Nortel.RLC.controlBlocksDn, TRX.Nortel.RLC.retransmittedDataBlocksDn

9.8.2 RLC DownLink blocks per MCS

This report shows the RLC DL traffic statistics per MCS in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.TRX
Primary Object	TRX
QoS RLC DL Edge report	TRX.TRX_Id, TRX.Cell_Id, TRX.BSC_Id, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs2, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs2, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs2RequestRetransDataBlockDn, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs3, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs3, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs3RequestRetransDataBlockDn, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs5, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs5, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs5RequestRetransDataBlockDn, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs6,

	TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs6, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs6RequestRetransDataBlockDn, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs7, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs7, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs7RequestRetransDataBlockDn, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs8, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs8, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs8RequestRetransDataBlockDn, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeDnTransmittedMcs9, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeLADnTargetedTransmittedMcs9, TRX.Nortel.EGPRS.RLC_DL_per_MCS.pcuEdgeMcs9RequestRetransDataBlockDn
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9.8.3 RLC UpLink blocks per MCS

This report shows the RLC UL traffic statistics per MCS in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.TRX
Primary Object	TRX
QoS RLC UL Edge report	TRX.TRX_Id, TRX.Cell_Id, TRX.BSC_Id, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs2, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs2, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs2RequestRetransDataBlockUp, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs3,

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	TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs3, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs3RequestRetransDataBlockUp, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs5, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs5, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs5RequestRetransDataBlockUp, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs6, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs6, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs6RequestRetransDataBlockUp, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs7, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs7, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs7RequestRetransDataBlockUp, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs8, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs8, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs8RequestRetransDataBlockUp, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeUpTransmittedMcs9, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeLAUpTargetedTransmittedMcs9, TRX.Nortel.EGPRS.RLC_UL_per_MCS.pcuEdgeMcs9RequestRetransDataBlockUp
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9.8.4 Temporary Block Flow releases

This report shows the TBF statistics in a selected time period.

Report Feature	Details
Report Tree Branch	System.GSM.Engineering.BSS.Nortel.TRX
Primary Object	TRX
TBF normal release UL	TRX.Nortel.GPRS.Temporary_Block_Flow.tbfNormalReleaseUp

TBF normal release DL	TRX.Nortel.GPRS.Temporary_Block_Flow.tbfNormalReleaseDn
TBF abnormal releases	TRX.Nortel.GPRS.Temporary_Block_Flow.noPacketResourceReq, TRX.Nortel.GPRS.Temporary_Block_Flow.lossOfComNN002Max, TRX.Nortel.GPRS.Temporary_Block_Flow.lossOfComT3191, TRX.Nortel.GPRS.Temporary_Block_Flow.lossOfComT3195, TRX.Nortel.GPRS.Temporary_Block_Flow.lossOfComNT0001, TRX.Nortel.GPRS.Temporary_Block_Flow.lossOfComT3169

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