SwissQual®··· NetQual NQDI Classic Database Structure

Manual

Release 16.0

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SwissQual

A Rohde & Schwarz Company

Test & Measurement

Manual

ROHDE&SCHWARZ

The software contained in this product makes use of several valuable open source software packages. For information, see the "Open Source Acknowledgment" on the user documentation CD-ROM (included in delivery).
Rohde & Schwarz would like to thank the open source community for their valuable contribution to embedded computing.

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Contents

1 Introduction

This document describes the tables as well as the relationship of the tables in the SQL database that NQDI Classic 16.0 uses.

1.1 About NQDI Classic

NQDI Classic 16.0 is a post-processing system that maximizes the potential of data that is collected by QualiPoc and Diversity products for network and service optimization and benchmarking. Based on data from all radio technologies, NQDI Classic provides automated data validation, detailed quality analysis and troubleshooting, and long-term reporting for voice and data services.

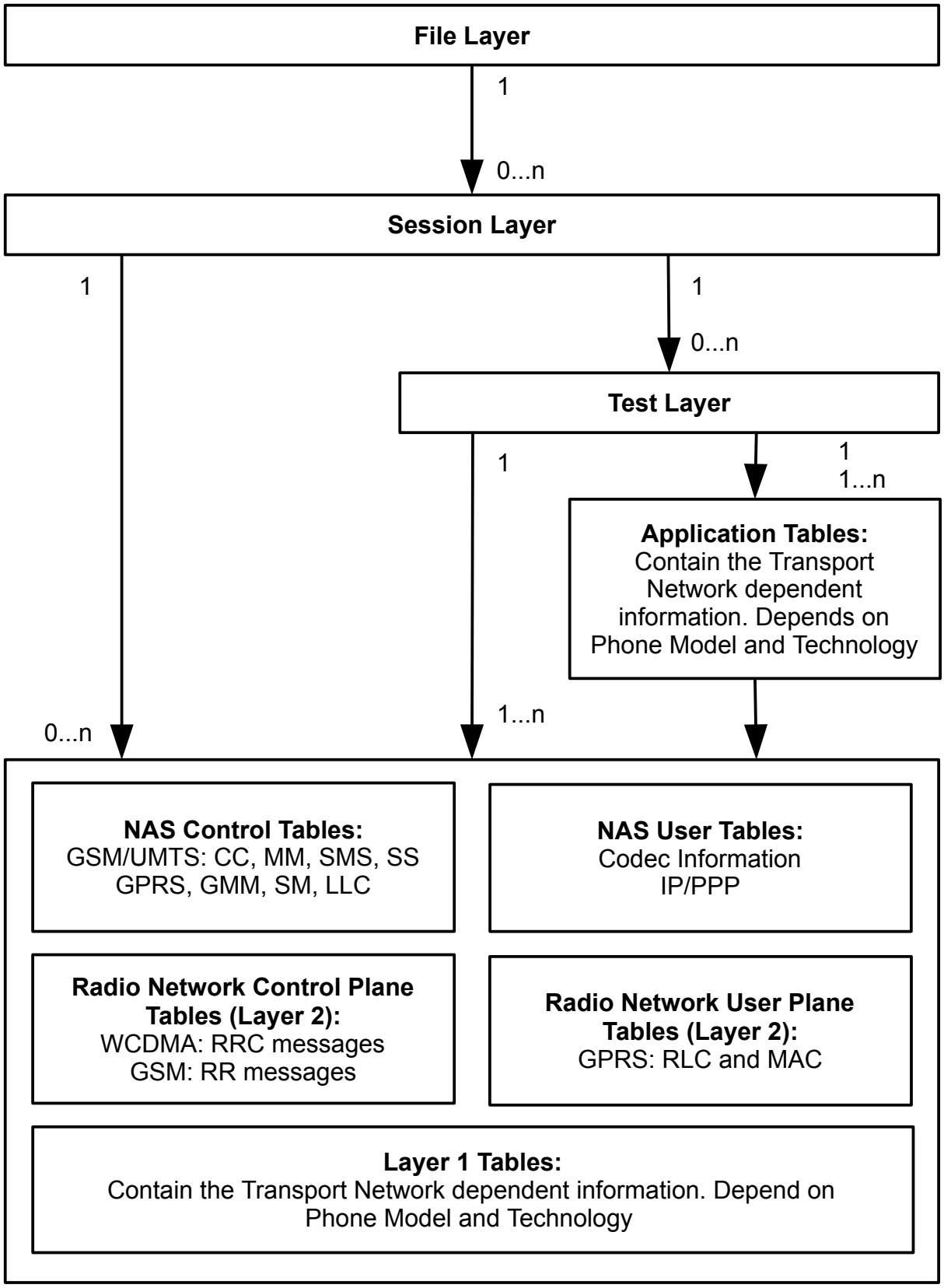
NQDI is designed as a client/server application that uses Microsoft SQL Server as a repository for the measurement data. The client application system includes features for data administration, filtering capability, analysis, statistics, map plotting, and KPI report generation.

1.2 Database Structure Overview

The NQDI database contains the following types of tables, which are described in this document:

- Configuration Tables
- System Tables
- Position Tables
- Network Information Table
- Audio Recordings Table
- Measurement Result Tables
- Other Tables

The NQDI database still contains some tables for Seven.Five measurement data. Seven.Five is the predecessor to Diversity.


File Layer
1
0...n
Session Layer
1
1
0...n
Test Layer
1
1
1...n
Application Tables:
Contain the Transport Network dependent information. Depends on Phone Model and Technology
0...n
1...n
NAS Control Tables:
GSM/UMTS: CC, MM, SMS, SS
GPRS, GMM, SM, LLC
NAS User Tables:
Codec Information
IP/PPP
Radio Network Control Plane Tables (Layer 2):
WCDMA: RRC messages
GSM: RR messages
Radio Network User Plane Tables (Layer 2):
GPRS: RLC and MAC
Layer 1 Tables:
Contain the Transport Network dependent information. Depend on Phone Model and Technology

1.3 Related Documents

- Manual - NQDI.pdf
- Manual - NQDI - Database changes.pdf
- Installation - NetQual - NQDI.pdf

2 Configuration Tables

This chapter describes the structure of the configuration tables in the NQDI Classic database.

2.1 BTSList Table

This table contains the configuration of the GSM base stations, which you can use to display the base stations and the BTS parameters on a geographical map.

► To configure the contents of this table in NQDI, point to "GSM Configuration" on the "Configuration" menu, and then click "BtsList Configuration".

Table 2-1: Description of the content of the BTSList Configuration table

Column Name	Type	Length	Description
Id	bigint	8	Unique Id
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
LAC	int	4	Location Area Code
CId	int	4	Cell Id
BCCH	int	4	Broadcast channel Number
BSIC	int	4	Base Station Identity Code
Longitude	numeric	9	Longitude (WGS 84) in degrees
Latitude	numeric	9	Latitude (WGS84) in degrees
Direction	int	4	Transmit direction
CellName	varchar	50	Name of the Cell
CGI	varchar	50	Cell Global Identifier; depending on the settings this is: CID-LAC-MNC-MCC or CID-BCCH-BSIC-MNC-MCC
CIDNx	int	4	CID of the a Neighbor (x = 1..20)
LACNx	int	4	LAC of the a Neighbor (x = 1..20)
BCCHNx	int	4	BCCH of the a Neighbor (x = 1..20)
BSICNx	int	4	BISC of the a Neighbor (x = 1..20)
AreaName	varchar	100	Field to embrace several BTS
CIDNx	int	4	CID of the a Neighbor (x = 21..32)
LACNx	int	4	LAC of the a Neighbor (x = 21..32)
BCCHNx	int	4	BCCH of the a Neighbor (x = 21..32)
BSICNx	int	4	BISC of the a Neighbor (x = 21..32)

Column Name	Type	Length	Description
CellId_IRATWNx	int	4	CID of IRAT neighbor (x = 1..32)
SC_IRATWNx	int	4	PSC of IRAT neighbor (x = 1..32)
UARFCN_IRATWNx	int	4	UARFCN of IRAT neighbor (x = 1..32)

2.2 CDMABTSList Table

This table contains the configuration of the CDMA/1xRTT base stations, which you can use to display the base stations and the BTS parameters on a geographical map.

► To configure the contents of this table in NQDI, point to "1xRTT Configuration" on the "Configuration" menu, and then click "BtsList Configuration".

Table 2-2: Description of the content of the CDMABTSList Configuration table

Column Name	Type	Length	Description
Id	bigint	8	Unique Id
MCC	int	4	Mobile Country Code
SID	bigint	8	System ID
CellID	int	4	Cell Id
CellName	varchar	50	Name of the cell
SwitchName	varchar	50	Name of the switch
Latitude	numeric	9	Longitude (WGS 84) in degrees
Longitude	numeric	9	Latitude (WGS84) in degrees
Pointer	int	4	
SectorID	varchar	50	
Sectorname	varchar	50	
Angle	int	4	
Openingangle	int	4	
Radius	int	4	
Channel	int	4	
PN	int	4	
CGI	varchar	100	
AreaName	varchar	100	Field to embrace several BTS

2.3 UMTSBTSList Table

This table contains the configuration of the UMTS base stations, which you can use to display the base stations and the BTS parameters on a geographical map.

► To configure the contents of this table in NQDI, point to "UMTS Configuration" on the "Configuration" menu, and then click "BtsList Configuration".

Table 2-3: Description of the content of the UMTSBTSList Configuration table

Column Name	Type	Length	Description
Id	bigint	8	Unique Id
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
LAC	int	4	Location Area Code
CId	int	4	Cell Id
Longitude	numeric	9	Longitude (WGS 84) in degrees
Latitude	numeric	9	Latitude (WGS84) in degrees
CellName	varchar	50	
CGI	varchar	50	Cell Global Identifier; depending on the settings this is: CID-LAC-MNC-MCC or CID-BCCH-BSIC-MNC-MCC
NodeBIdentity	varchar	100	
RNC	varchar	100	Radio Network Controller
MSC	varchar	100	Mobile Switching Center
UARFCN	int	4	Absolute Radio Frequency Channel
SC	int	4	Scrambling Code
RA	varchar	100	Routing Area
URA	varchar	100	UTRAN Registration Area
TimeOffset	int	4	
CPICH_POWER	int	4	Common Pilot Channel Power
MaxTxPower	int	4	Maximum uplink send power
AntDirection	smallint	2	
AntHeight	smallint	2	
AntType	varchar	50	
AntGain	int	4	
AntTilt	smallint	2	
AntFeederLoss	int	4	
CellIdNx	int	4	CID of the x Neighbor (x = 1..32)

Column Name	Type	Length	Description
SCNx	int	4	SC of the x Neighbor (x = 1..32)
AreaName	varchar	100	Field to embrace several BTS
CellId_IFNx	int	4	CID of the x IF Neighbor (x = 1..32)
SC_IFNx	int	4	SC of the x IF Neighbor (x = 1..32)
UARFCN_IFNx	int	4	UARFCN of the x IF Neighbor (x = 1..32)
CellId_IRATGNx	int	4	CID of the x IRAT Neighbor (x = 1..32)
BCCH_IRATGNx	int	4	BCCH of the x IRAT Neighbor (x = 1..32)
BSIC_IRATGNx	int	4	BSIC of the x IRAT Neighbor (x = 1..32)

2.4 LTEBTSList Table

This table contains the configuration of the LTE base stations, which you can use to display the base stations and the BTS parameters on a geographical map.

► To configure the contents of this table in NQDI, point to "LTE Configuration" on the "Configuration" menu, and then click "BtsList Configuration".

Table 2-4: Description of the content of the LTEBTSList Configuration table

Column Name	Type	Length	Description
Id	bigint	8	Unique Id
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
TAC	int	4	Location Area Code
CID	int	4	Cell Id
Longitude	numeric	9	Longitude (WGS 84) in degrees
Latitude	numeric	9	Latitude (WGS84) in degrees
EARFCN	int	4	
PhyCID	int	4	
Direction	int	4	
CellName	varchar	50	
TAI	varchar	50	
ECGI	varchar	50	
eNBID	int	4	
GeNBID	int	4	

Column Name	Type	Length	Description
CGI	varchar	50	
AreaName	varchar	100	

2.5 Operators Table

This table contains a list of Mobile Operators, which you can use to map MNC and MCC to an Operator name.

► To configure the contents of this table in NQDI, click "Operators" on the "Configuration" menu.

Table 2-5: Description of the content of the Operators table

Column Name	Type	Length	Description
OperatorId	int	4	Unique id
Country	varchar	50	Name of the country
Operator	varchar	100	Name of the operator
Display	varchar	50	Display name
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
Technology	varchar	50	GSM, UMTS, CDMA

2.6 UMTSCellParameters Table

Table 2-6: Description of the content of the UMTSCellParameters table

Column Name	Type	Length	Description
LastUpdate	float	8	Time when last data was written to the line
CGI	varchar	50	Cell Global Identifier
MCC	int	4	
MNC	int	4	
LAC	int	4	
CID	int	4	
UARFCN	int	4	
SC	int	4	
RNCID	int	4	
TReselection	smallint	2	

Column Name	Type	Length	Description
QHyst1S	smallint	2	
QHyst2S	smallint	2	
SIntraSearch	smallint	2	
QRxQualMin	smallint	2	
QRxLevMin	smallint	2	
SSearchRAT	smallint	2	
QOffset1	smallint	2	
QOffset2	smallint	2	

3 System Tables

This chapter describes the structure of the system tables in the NQDI database.

3.1 SQSystem Table

This table is for NQDI internal use only.

3.2 SQGeneralSettings Table

This table contains NQDI internal Settings Parameters, which are for NQDI internal use only.

Table 3-1: Description of the content of the SQGeneralSettings table

Column Name	Type	Length	Description
SettingId	int	4	Unique Id
Identifier	varchar	250	Name of the stored parameter
Settings	varchar	500	The stored settings

3.3 VersionInfo Table

This table contains the version information of the database.

Table 3-2: Description of the content of the VersionInfo table

Column Name	Type	Length	Description
VersionId	int	4	Unique Id
Version	smallint	2	Major Version Number
MinorVersion	smallint	2	Minor Version Number
Release	smallint	2	Release Number
Build	smallint	2	Build Number
Changes	varchar	500	Version information text

3.4 SelectedSessions Table

This table is for NQDI internal use only.

3.5 SelectedTests Table

This table is for NQDI internal use only.

3.6 DelSessions Table

This table is for NQDI internal use only.

3.7 GridRelation Table

This table is for NQDI internal use only.

3.8 MultiSelection Table

This table contains the settings for different stored selections and is for NQDI internal use only.

Table 3-3: Description of the content of the MultiSelection table

Column Name	Type	Length	Description
SelectionId	int	4	UniqueId
PCName	varchar	50	Name of the PC which stored the selection
Name	varchar	100	Name of the selection
Private	bit	1	Selection visible to other PC's or only to the PC stored the selection
RegNames	text	–	Selection Criterions (internal use only)
RegValues	text	–	Selection Criterions (internal use only)

3.9 MultiSelectionSessions Table

This table is linked with the Multiselection table and is for NQDI internal use only.

Table 3-4: Description of the content of the MultiSelectionSessions table

Column Name	Type	Length	Description
SelectionId	int	4	Id from table MultiSelection
SessionId	bigint	8	Selected SessionId

3.10 MultiSelectionTests Table

This table is linked with the Multiselection table and is for internal use only.

Table 3-5: Description of the content of the MultiSelectionTests table

Column Name	Type	Length	Description
SelectionId	int	4	Id from table MultiSelection
SessionId	bigint	8	Selected SessionId
TestId	bigint	8	Selected TestId

3.11 DataSelectionStatement Table

This table is for NQDI internal use only.

Table 3-6: Description of the content of the DataSelectionStatement table

Column Name	Type	Length	Description
SessionBased	text		Dataselection for sessions
TestBased	text		Dataselection for tests
SessionBasedPre	text		DataSelection pre query
SessionBasedPost	text		DataSelection post query

3.12 PolygonInfo Table

This table is for data selection and is for internal use only.

Table 3-7: Description of the content of the PolygonInfo table

Column Name	Type	Length	Description
PolygonId	int	4	Unique Polygon id
GroupName	varchar	255	Name of the assigned group
Name	varchar	255	Name of the polygon
Description	varchar	4096	Description of the polygon
Type	smallint	2	Type of polygon: • 1: Polygon • 2: Rectangle • 3: Circle/Ellipse

3.13 PolygonData Table

This table is used for the data selection. *For internal use only!*

Table 3-8: Description of the contents of the PolygonData table

Column Name	Type	Length	Description
PolygonId	int	4	Polygon id, linked to PolygonInfo
Id	int	4	Consecutive number per polygon
Lon	float	8	Longitude of the position
Lat	float	8	Latitude of the position

3.14 PolygonRelation Table

This table is used for the data selection. *For internal use only!*

Table 3-9: Description of the contents of the PolygonRelation table

Column Name	Type	Length	Description
PolygonId	int	4	Polygon id, linked to PolygonInfo
PosId	bigint	8	Position id, linked to Positions

3.15 ErrorCodes Table

This table contains a list of the ErrorCodes for the Data (GPRS/UMTS) tests.

Table 3-10: Description of the content of the ErrorCodes table

Column Name	Type	Length	Description
errorId	int	4	Unique Id
type	int	4	Always 0
code	int	4	Error code
msg	varchar	1024	Error Text

3.16 TaskTbl Table

This table contains NQDI internal Task information to avoid parallel data processing within one Database, for example, to prevent the start of two separate imports.

Table 3-11: Description of the content of the TaskTbl table

Column Name	Type	Length	Description
Task	int	4	Id of a running task
CPCName	varchar	50	Name of the PC which started the task

Column Name	Type	Length	Description
SQLServerTime	datetime2 (3)	8	Last time this task reported a life sign
ThreadId	int	4	Used when executing multiple reports

3.17 Reports Table

This table contains the configured reports and the query for each report1.

Table 3-12: Description of the content of the Reports table

Column Name	Type	Length	Description
reportId	int	4	Unique Id
name	varchar	100	The report name
selectPart	text	–	SELECT statement
fromPart	text	–	FROM statement
wherePart	text	–	WHERE statement
groupPart	text	–	GROUP BY statement
query2	text	–	Unused
netinfo	int	4	Flag that indicates, if this report wants to use the operator name instead of MNC,MCC
type	int	4	bigint
template	varchar	50	Unused
app	varchar	50	'NQDI' or 'WebReport'
sqkey	int	4	For internal use
reportGroup	varchar	50	Assigned Group
sheetName	varchar	50	Name of Excel sheet
excelMacro	varchar	100	Macro name to be executed at the end of the report

3.18 ReportTemplates Table

This table contains the Excel `*.XLS` files of the configured reports.

Table 3-13: Description of the content of the ReportTemplates table

Column Name	Type	Length	Description
TemplateId	int	4	Unique id
Template	image	16	Binary (xls file)
Name	varchar	100	Name of the report

Column Name	Type	Length	Description
Type	smallint	2	0 = customer report, 1 = report provided by SwissQual
Extension	varchar	10	Extension of the report file (either xls or xlsm)

3.19 GSML3Causes Table

This table contains a list of the GSM Layer 3 Cause values.

Table 3-14: Description of the content of the GSML3Causes table

Column Name	Type	Length	Description
CauseId	int	4	Unique Id
ProtDiscr	char	3	Layer3 protocol discriminator (3: RR)
CauseValue	smallint	2	Cause Value
Class	varchar	50	Decoded Class (GSM 04.08)
Cause	varchar	100	Decoded Cause (GSM 04.08)

3.20 GSML3Locations Table

This table contains a list of the GSM Layer 3 location values.

Table 3-15: Description of the content of the GSML3Locations table

Column Name	Type	Length	Description
LocationId	int	4	Unique Id
ProtDiscr	char	3	Layer3 protocol discriminator (3: CC)
LocValue	smallint	2	Location value (GSM 04.08)
Location	varchar	100	Location Text (GSM 04.08)

3.21 GSML3Messages Table

This table contains a list of the GSM Layer 3 messages values.

Table 3-16: Description of the content of the GSML3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
ProtDiscr	char	1	Layer3 protocol discriminator: • 3: CC • 5:MM • 6:RR • A:SM • B:SS • 8:GMM
MsgType	char	2	GSM message type
Msg	varchar	70	Decoded message
Category	varchar	10	CC, MM, RR, SM, SS or GMM
SubCategory	varchar	50	“Type” of the message

3.22 CGPRSRLCMAC Table

This table contains a list of the decoded RLC and MAC messages, which are available.

Table 3-17: Description of the content of the CGPRSRLCMAC table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
direction	char	1	‘D’ = Downlink, ‘U’ = Uplink
msgType	char	2	Message type
msg	varchar	500	Decoded message type

3.23 CUMTSL3Messages Table

This table contains a list of the RRC messages.

Table 3-18: Description of the content of the CUMTSL3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
LogType	char	2	Log channel type
MsgType	char	2	Msg identifier
Msg	varchar	50	Message as string
Category	varchar	10	Always RRC
SubCategory	varchar	50	“Type” of the message

3.24 CLTEL3Messages Table

This table contains a list of the LTE-RRC messages.

Table 3-19: Description of the content of the CLTEL3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
ChnType	smallint	2	Channel type
MsgType	smallint	2	Msg identifier
Msg	varchar	50	Message as string
Category	varchar	10	Always LTE
SubCategory	varchar	50	“Type” of the message

3.25 CLTENASMessages Table

This table contains a list of the LTE EMM/EMS NAS messages.

Table 3-20: Description of the content of the CLTENASMessages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
MsgType	char	2	Msg identifier
Msg	varchar	50	Message as string
Category	varchar	10	Always LTE-NAS
SubCategory	varchar	10	“Type” of the message

3.26 IS136L3Messages Table

This table contains a list of the IS136 messages.

Table 3-21: Description of the content of the IS136L3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
Channel	char	4	TCH or DCCH
MsgType	char	2	Msg identifier
Msg	varchar	100	Message as string
Category	varchar	10	Identical to Channel
SubCategory	varchar	50	“Type” of the message

3.27 CDMAL3Messages Table

This table contains a list of the CDMA messages.

Table 3-22: Description of the content of the CDMAL3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
Channel	char	10	Channel description
MsgType	varchar	4	Msg identifier
Msg	varchar	100	Message as string
Category	varchar	10	Identical to Channel
SubCategory	varchar	50	“Type” of the message

3.28 EvDOL3Messages Table

This table contains a list of the EvDO messages.

Table 3-23: Description of the content of the EvDOL3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
ProtDiscr	char	2	Protocol discriminator
MsgType	char	2	Msg identifier
Msg	varchar	70	Message as string
Category	varchar	10	EvDO Category
SubCategory	varchar	50	“Type” of the message

3.29 WiMAXL3Messages Table

This table contains a list of the WiMAX MAC messages.

Table 3-24: Description of the content of the EvDOL3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
MsgType	char	2	Id of the message
MsgName	varchar	20	Short description of the message
Msg	varchar	50	Message as string
Connection	varchar	30	Type of connection where message occurs

3.30 MiscMsg Table

This table contains miscellaneous messages, such as unparsed or unhandled messages and is for internal use only.

Table 3-25: Description of the content of the MiscMsg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to Sessions.SessionId
TestId	bigint	8	Link to TestInfo.TestId
MsgTime	datetime2 (3)	8	Message time
PosId	bigint	8	Link to Position.PosId
NetworkId	bigint	8	Link to NetworkInfo.NetworkId
ParseCode	varchar	10	Identifier of the message
Msg	varchar	4096	Character Binary representation of the message

3.31 LogImport Table

This table contains the log of the import process and is for internal use only.

Table 3-26: Description of the content of the LogImport table

Column Name	Type	Length	Description
MsgTime	datetime2 (3)	8	Message time
Msg	varchar	2000	Message

3.32 LogProcess Table

This table contains the logs of some NQDI operations and is for internal use only.

Table 3-27: Description of the content of the LogProcess table

Column Name	Type	Length	Description
MsgTime	datetime2 (3)	8	Message time
Operation	varchar	2000	Executed operation
DBSize	float	8	Database size

3.33 Licensing Table

This table holds some information depending on the current license and is for internal use only.

3.34 SQDefinitions

This table contains constant definitions for NQDI internal use.

4 Position Tables

This chapter describes the Position table of the NQDI database.

4.1 Table Relation Overview

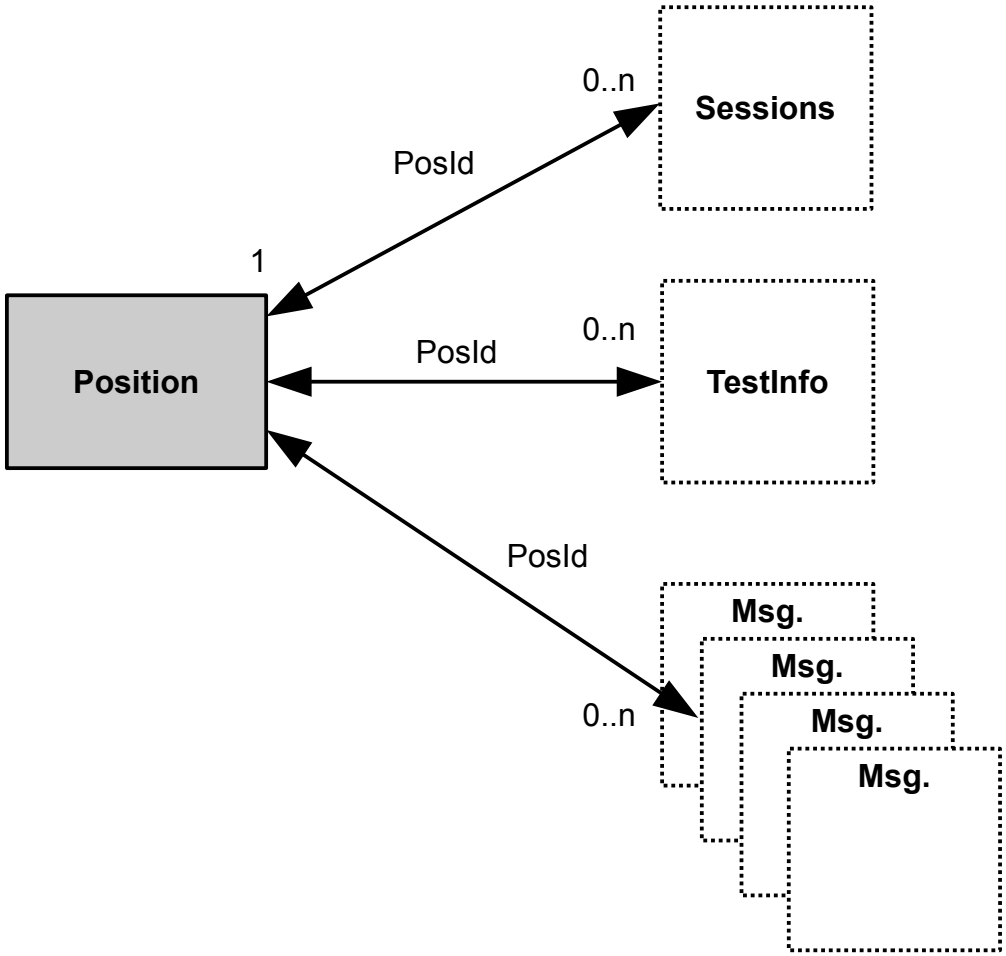


Figure 4-1: Position Table Relation Overview

4.1.1 Position Table

This table contains the geographical position information of your measurement data. The information in this table can be accessed through the posId.bigintb8igint8 field. Tables that contain measurement results can be aligned to the Position table through the posId bigintb8igintt8o field to retrieve the longitude and latitude value.

Table 4-1: Description of the content of the Position table

Column Name	Type	Length	Description
PosId	bigint	8	Unique Id
FileId	bigint	8	File identifier
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of position information
latitude	float	8	Latitude in degrees
longitude	float	8	Longitude in degrees
numSat	int	4	Number of satellites
navMode	int	4	Navigation mode
speed	int	4	Speed
speedUnits	char	5	Speed units (MPH or KMH)
ageData	int	4	Age of the data
pidx	int	4	For internal use only
Location	varchar	200	Indoor location Name
altitude	real	4	Altitude value
altitudeUnit	char	5	Unit for Altitude (m = meter or f = feet)
Direction	real	4	Driving direction
Distance	real	4	Distance between last and this position in m
Level	int	4	Floor plan level
FloorPlanId	smallint	2	Link to IndoorMap.FloorPlanId
Point	geometry		SQL geometry type

5 Network Information Tables

This chapter describes the structure of the NetWorkInfo table, which contains the network information of your measurement data.

This table contains the known parameters of the current serving BTS. The NetworkInfo can be accessed by the field '**NetworkId**'bigintb8igint.8 To obtain more information about the current serving BTS, the MNC, MCC, Cid, and LAC fields of the NetworkInfo table can be linked to the BtsList table.

5.1 Table Relation Overview

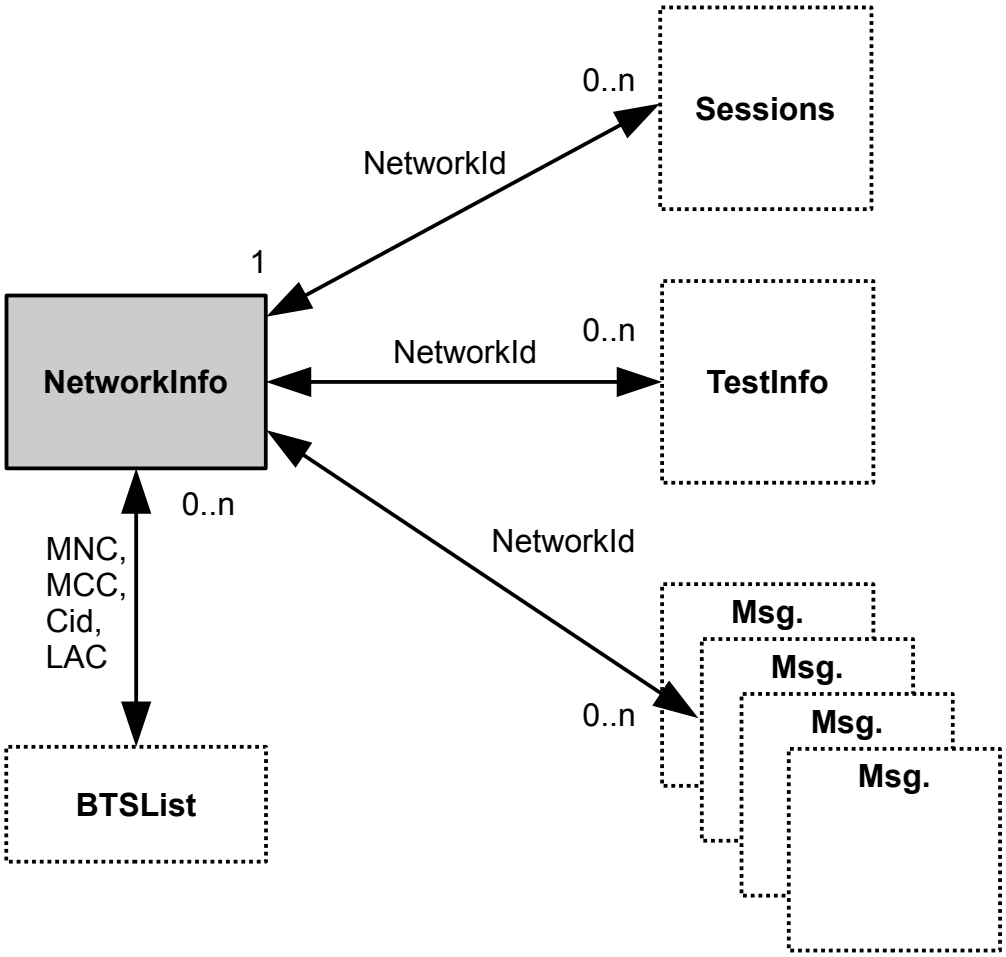


Figure 5-1: Network Information Table Relation Overview

5.2 NetworkInfo Table

This table contains information about the current serving BTS, that is, Time, CellId, LAC, MNC and MCC.

Table 5-1: Description of the content of the NetworkInfo table

Column Name	Type	Length	Description
NetworkId	bigint	8	Unique Id
FileId	bigint	8	File identifier
MsgTime	datetime2 (3)	8	Current time of network information
CId	int	4	Cell Id
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
LAC	int	4	Location Area Code
technology	varchar	50	See function GetRFBand
CGI	varchar	50	Cell Global Identifier (description see table BTSList)
Operator	varchar	50	Actually connected operator
BCCH	int	4	
BSIC	int	4	• Bit 0-2: NCC • Bit 3-5: BCC • All other bits: 0
HomeOperator	varchar	50	SIM card operator
HOMCC	int	4	
HOMNC	int	4	
RFBand	int	4	Integer representation of the Technology
CGI2	varchar	50	CGI for the second connection (UMTS only)
CGI3	varchar	50	CGI for the third connection
SC1	int	4	Scrambling code 1
SC2	int	4	Scrambling code 2
SC3	int	4	Scrambling code 3
Status	smallint	2	Current network status (see NetworkStatus table for valid values)
RAC	int	4	Routing Area code
Duration	bigint	8	Duration of this network info in ms

5.3 NetworkIdRelation Table

This table can be used to run queries where one would like to start on the NetworkInfo table.

Table 5-2: Description of the content of the NetworkIdRelation table

Column Name	Type	Length	Description
type	varchar	20	Event releasing the entry (Session, Test, Network or Position id change)
MsgTime	datetime2 (3)	8	Current time of information
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’

5.4 NetworkStatus Table

This table contains the current status of the mobiles network.

Table 5-3: Description of the content of the NetworkStatus table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
State	smallint	2	• 0: 'Status not available' • 1: 'Unknown status' • 2: 'No service' • 3: 'Emergency calls only' • 4: 'Searching' • 5: 'Busy' • 6: 'Home network' • 7: 'Registration denied' • 8: 'Roaming' • All others: 'undefined status'

6 Audio and Video Recordings Tables

This chapter describes the structure of the recorded WAV data table, which you can use to reload and replay audio data.

6.1 Table Relation Overview

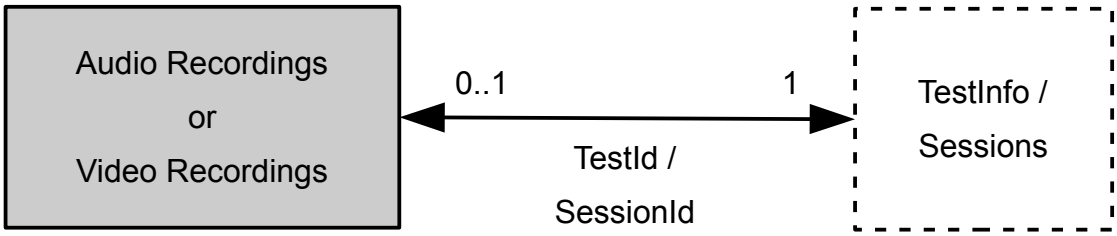


Figure 6-1: Audio Table Relation Overview

6.2 AudioRecordings Table

This table contains the recorded audio data as `WAV` files.

Table 6-1: Description of the content of the AudioRecordings table

Column Name	Type	Length	Description
data	image	--	Audio data
recId	int	4	Unique Id
TestId	bigint	8	Link to 'TestInfo.TestId'

6.3 AudioRecordingsCS Table

This table contains the recordings from the call setup as wav files.

Table 6-2: Description of the content of the AudioRecordingsCS table

Column Name	Type	Length	Description
data	image	--	Audio data
recId	int	4	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
FileName	varchar	255	Name of the recorded file

6.4 ClipAudioRecordings Table

This table contains the recordings from the clips.

Table 6-3: Description of the content of the ClipAudioRecordings table

Column Name	Type	Length	Description
data	image	--	Audio data
recId	int	4	Unique Id
ClipId	bigint	8	Link to 'ClipInfi.ClipId'

6.5 VideoRecordings Table

This table contains the Video files as avi or H263 files.

Table 6-4: Structure of the VideoRecordings table

Column Name	Type	Length	Description
data	image	--	Video data
recId	int	4	Unique Id
TestId	bigint	8	Link to 'TestInfo.TestId'
Ext	varchar	10	Extension of the recorded file (avi or mov)

6.6 ClipVideoRecordings Table

This table contains the Video files for a clip as avi or H263 files.

Table 6-5: Structure of the ClipVideoRecordings table

Column Name	Type	Length	Description
Data	image	--	Video data
RecId	int	4	Unique Id
ClipId	bigint	8	Link to 'ClipInfo.ClipId'
Ext	varchar	10	Extension of the recorded file (avi or mov)

6.7 ResultsVQFreezings Table

This table contains a summary of the freezings. Used for ETSI YouTube KPIs.

Table 6-6: Structure of the ResultsVQFreezings table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
StartFrameNr	int	4	Frame number where freezing starts
Duration	int	4	Duration of freezing
NumFrames	int	4	Number of frames in this freezing
MinFreezeDuration	int	4	Configured minimum freezing time

7 Other Tables

This chapter describes the structure of other tables in the NQDI database.

7.1 AnalysisComment Table

This table contains comments that were entered by the user.

Table 7-1: Structure of the AnalysisComment table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Comment	text	16	Comment entered by the user

7.2 PlottParameters Table

This table contains the Parameter to plot on the graph tab. These parameters formulate a query which is executed for a particular graph.

Table 7-2: Structure of the PlottParameters table

Column Name	Type	Length	Description
ParameterID	int	4	Unique Id
ParameterName	varchar	50	Screen Name of the parameter
dbTable	varchar	50	Name of table that contains the parameter
tblField	varchar	200	Field name of parameter
Regularity	varchar	50	Frequency of occurrence once per 'Position' or 'Test' or every 'Msg'
whereCls	varchar	200	Condition of the query
unit	varchar	10	Unit of the parameter '[s]','[dB]' and so on.

7.3 CReportItems Table

This table contains information about the KPI report items (ReportGenerator).

Table 7-3:

Column Name	Type	Length	Description
msgId	int	4	Unique Id
name	char	255	Name of the Report item

Column Name	Type	Length	Description
Number	int	4	Number of the KPI item
DBTable	char	255	
DBFieldStatus	char	255	
DBFieldValue	char	255	
DBFieldExtra1	char	255	
DBFieldExtra2	char	255	
DBTableExtra	char	255	
DBFieldExtraTable	char	255	
SuccessRateQuery	int	4	Exists a query for the SuccessRate
CountQuery	int	4	
AverageQuery	int	4	Exists a query for the Average
AdditionalColumns	int	4	Exists additional columns
CutOff	int	4	Exists CutOff in the query
LimitedChart	int	4	
TimeCumulation	int	4	
PDFPercentage	int	4	
CDF100	int	4	
LogarithmicScale	int	4	
PDFMin	int	4	Parameter for the PDF formula
PDFMax	int	4	Parameter for the PDF formula
PDFStart	int	4	Startpoint from the PDF chart
PDFStepSize	float	8	Distance between 2 chart points
PDFFormula	char	255	Formula for the CDF chart
CDFMin	int	4	Parameter for the CDF formula
CDFMax	int	4	Parameter for the CDF formula
CDFStart	int	4	Startpoint from the CDF chart
CDFStepSize	float	8	Distance between 2 chart points
CDFFormula	char	255	Formula for the CDF chart
PCMin	int	4	Parameter for the PC formula
PCMax	int	4	Parameter for the PC formula
PCStart	int	4	Startpoint from the PC chart
PCStepSize	float	8	Distance between 2 chart points
PCFormula	char	255	Formula for the PC chart

Column Name	Type	Length	Description
PivotTable	int	4	Usage PivotTable (1=yes 0=no)
SuccessRate	int	4	Usage SuccessTate (1=yes 0=no)
Average	int	4	Usage Average (1=yes 0=no)
CutOffVal	int	4	Usage CutOffVal (1=yes 0=no)
PDFGraph	int	4	Use a PDF graph (1=yes 0=no)
PDFGraphPoints	int	4	Show only the points in the graph
CDFGraph	int	4	Use a PDF graph (1=yes 0=no)
CDFGraphPoints	int	4	Show only the points in the graph
PCGraph	int	4	Use a PDF graph (1=yes 0=no)
PCGraphPoints	int	4	Show only the points in the graph
Title	char	1024	Title of the KPI
Measure	char	100	Measure of the KPI
Unit	char	50	Unit of the KPI
ExtraItem1	int	4	Usage of the extra item 1
ExtraItem1Title	char	100	Title of the extra item 1
ExtraItem1Pos	char	100	Position of the extra item 1
ExtraItem2	int	4	Usage of the extra item 2
ExtraItem2Title	char	100	Title of the extra item 2
ExtraItem2Pos	char	100	Position of the extra item 2

7.4 CockpitViewItems Table

This table contains the information for the cockpit view.

Table 7-4: Structure of the CockpitViewItems table

Column Name	Type	Length	Description
Id	int	4	Unique Id
ParentId	int	4	Id of the parent item
ConfigItem	int	4	0=No config item 1=Failed/Dropped
ShowTitle	int	4	0=No 1=Yes
ShowValue	int	4	0=No 1=Yes
Title	char	255	Title of the item
SQLText	text	–	SQL query text for the item

7.5 ReportMapplotAssignment Table

This table contains the relation between favorite mapplots and reports. It is only used for NQDI internally.

Table 7-5: Structure of the ReportMapplotAssignment table

Column Name	Type	Length	Description
MapFavGroupName	varchar	50	Name of the group
GroupId	int	4	Id of the group
ReportName	varchar	100	Name of the report
Included	bit	1	Indicating of plot is used in report
BTSPlots	int	4	Indicating BTS plotted in report

8 Measurement Result Tables

This chapter describes the structure of the measurement result tables in the NQDI database.

8.1 Layer Overview

All the measurement results are stored in the measurement result tables and are differentiated by the following layers:

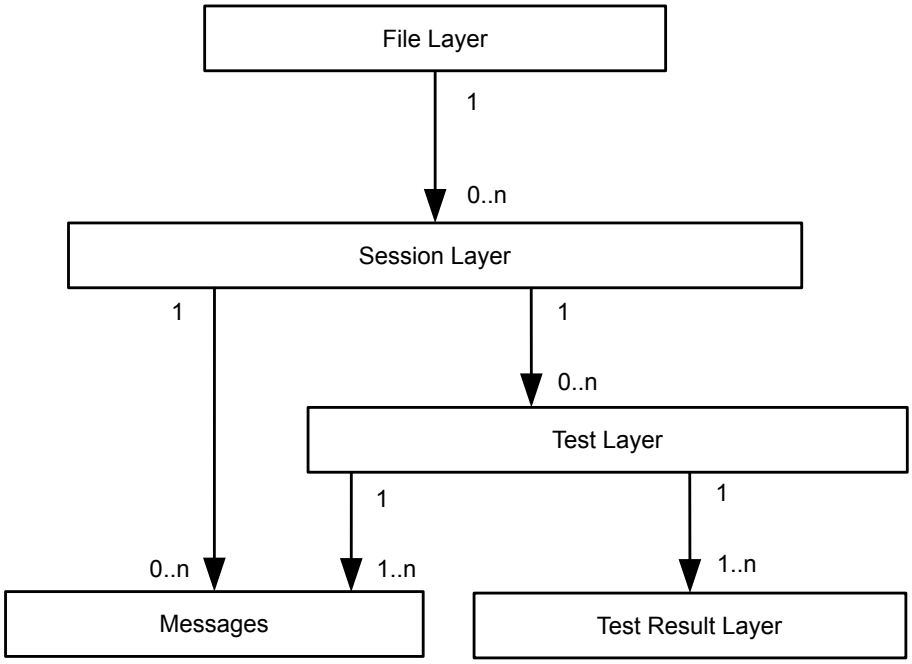


Figure 8-1: Layers

8.2 Table Relation Overview

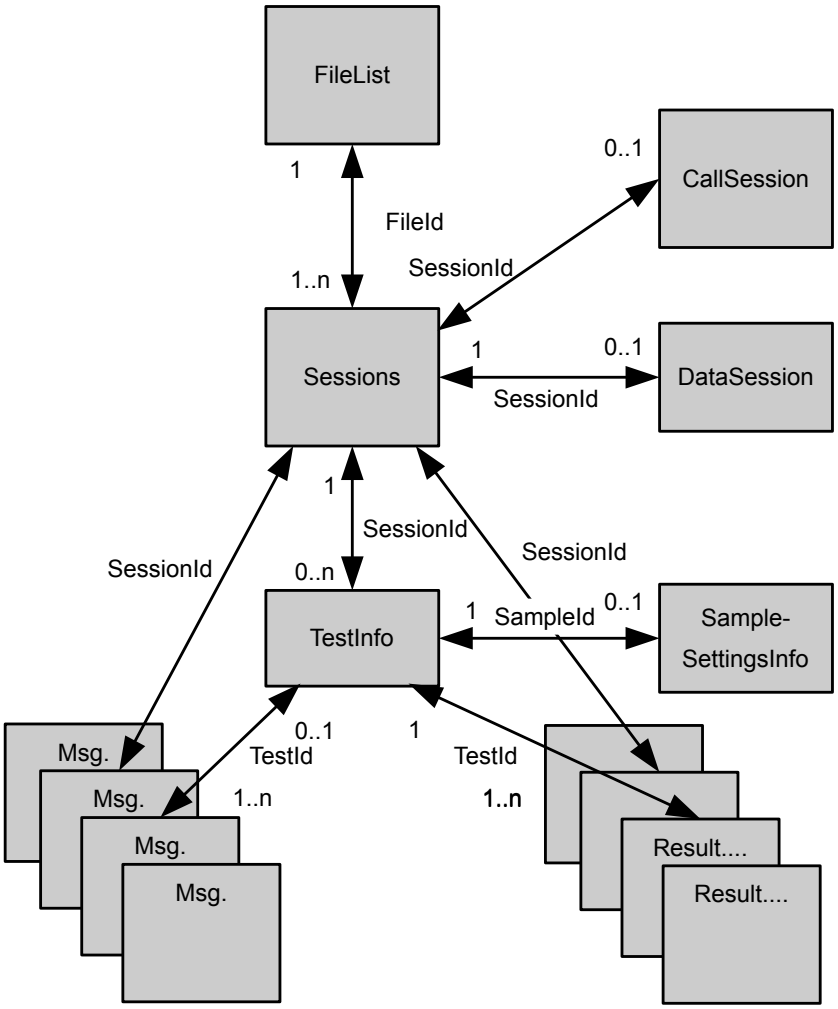


Figure 8-2: Measurement Results Table Relation Overview

8.3 FileList Table

The FileList table, which is on the file layer, receives a record each time you add an A-Side measurement file to the NQDI database.

Table 8-1: Structure of the FileList table

Column Name	Type	Length	Description
FileId	bigint	8	Unique Id
ASideDevice	varchar	50	Device name of the A Side device
BSideDevice	varchar	50	Device Name of the B Side device

Column Name	Type	Length	Description
ASideNumber	varchar	100	Phone number of the A Side device
BSideNumber	varchar	100	Phone number of the B Side device (if present)
ASideFileName	varchar	100	File name of the A Side
BSideFileName	varchar	100	File name of the B Side (if any)
CollectionName	varchar	100	Collection Name given by the user during the import process
TID	char	10	Test Id
TestDescription	varchar	100	Test description given by the user during test definition
CallingModule	char	10	Calling Module number (0: NetQual and QualiPoc, <>0 Seven.Five and Diversity)
ASideLocation	varchar	100	Location of the A Side NQMP (not for Seven.Five)
BSideLocation	varchar	100	Location of the B Side NQMP (not for Seven.Five)
CampaignName	varchar	100	Name of the Campaign (not for Seven.Five)
UserName	varchar	50	Campaign Owner (not for Seven.Five)
Zone	varchar	50	Zone defined in a Seven.Five log file
Job	text	–	The job used to for this file
IMEI	varchar	50	IMEI of the device
FirmwareV	varchar	255	Firmware version of the device
BTimeOffset	float	8	Offset of the BFile (internal use only)
BFileId	bigint	8	FileId of the B File
FileOptions	int	4	Internal bit field
Region	varchar	1000	Region (for data selection)
MFVersion	varchar	20	Version of the mf file
SWVersion	varchar	20	Version of the software stored in the mf file
Provider	varchar	50	Name of the provider defined in NQTM
TaskName	varchar	100	Name of the used task
IMSI	varchar	50	IMSI of the device
ProductVersion	varchar	250	Product version of the used engine(s)

The FileList table can be linked to the table sessions through the FileId field.

Example:

```
SELECT    CampaignName
FROM        FileList, Sessions
WHERE        Sessions.FileId = FileList.FileId AND
            Sessions.SessionId = 201
```

8.4 FileInfo Table

The FileInfo table contains info related to a file.

Table 8-2: Structure of the FileInfo table

Column Name	Type	Length	Description
FileId	bigint	8	Link to 'FileList.FileId'
InfoName	varchar	100	Identifier for the following fields
Id	int	4	Integer field depending on InfoName
Str_1	varchar	255	Individual information depending on InfoName
Str_2	varchar	255	Individual information depending on InfoName

8.5 MultiTransferMode Table

The MultiTransferMode table contains general information about each measurements done within one file.

Table 8-3: Structure of the MultiTransferMode table

Column Name	Type	Length	Description
FileId	bigint	8	Link to 'FileList.FileId'
MeasId	smallint	2	Internal measurement identifier
JobType	smallint	2	Job type assigned with the MeasId
TaskJobExecutionType	smallint	2	Execution type (sequential, parallel, Multi-RAB)
JTAsString	varchar	50	Job Type as string

8.6 DataReduction Table

This table contains the data reduction profile set by Diversity

Table 8-4: Structure of the DataReduction table

Column Name	Type	Length	Description
FileId	bigint	8	Link to 'FileList.FileId'
Profile	text	16	Data reduction profile

8.7 IndoorMap Table

This table contains the indoor maps of an indoor measurement created with Diversity.

Table 8-5: Structure of the IndoorMap table

Column Name	Type	Length	Description
FileId	bigint	8	Link to 'FileList.FileId'
Name	varchar	100	Name of the map
Image	image	–	Picture used for the map
Tab	Image	–	MapInfo tab file (geo coding information)
FloorPlanId	smallint	2	Link to Position.FloorPlanId

8.8 Sessions Table

The Sessions table contains general information about each session.

Table 8-6: Structure of the Sessions table

Column Name	Type	Length	Description
SessionId	bigint	8	Unique Id
sessionType	varchar	50	Session type: • 'IDLE' • 'CALL' • 'DATA'
FileId	bigint	8	Link to 'FileList.FileId'
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
startTime	datetime2 (3)	8	Start time of the session
duration	int	4	Duration of the session in milliseconds
info	varchar	50	Some information regarding the current session
numOfTests	int	4	Number of tests executed within this session
valid	tinyint	1	Flag that indicates, whether this session is valid or not
prevSessionId	bigint	8	Previous SessionId
nextSessionId	bigint	8	Next SessionId
oldSessionId	bigint	8	For internal use only
jtId	int	4	Job type as integer
jtIdString	varchar	50	Job type as string
InvalidReason	varchar	255	Reason if the session is invalid
SpeedAvg	float	8	Average speed of the session
SpeedCategory	smallint	2	Speed category given by the average speed
Tech	varchar	250	Technology of the session

Column Name	Type	Length	Description
StartPosId	bigint	8	Position at start of session, link to ‘Position.PosId’
StartNetworkId	bigint	8	Network info at start of session, link to ‘NetworkInfo.NetworkId’

8.9 SessionsB Table

This table contains general information about a B Session, that is, session of the B-Side.

Table 8-7: Structure of the SessionsB table

Column Name	Type	Length	Description
SessionId	bigint	8	Unique Id
SessionIdA	bigint	8	Link to the A Session (Sessions.SessionId)
FileId	bigint	8	Link to ‘FileList.FileId’
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
prevSessionId	bigint	8	Previous SessionId
nextSessionId	bigint	8	Next SessionId
startTime	datetime2 (3)	8	Start time of the session
duration	int	4	Duration of the session in milliseconds
FileType	int	4	Internal use only
sessionType	varchar	50	Session Type. Can be ‘IDLE’ or ‘CALL’
SpeedAvg	float	8	Average speed of the session
SpeedCategory	smallint	2	Speed category given by the average speed
Valid	tinyint	1	Flag that indicates, whether this session is valid or not (equal to valid flag in Sessions table)
StartPosId	bigint	8	Position at start of session, link to ‘Position.PosId’
StartNetworkId	bigint	8	Network info at start of session, link to ‘NetworkInfo.NetworkId’

8.10 SessionList Table

This table contains the list of sessions which are added during the last import. This table is for internal use only and is used by the PostImport procedure and is truncated at the end of the post Import.

Table 8-8: Structure of the SessionList table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to 'Sessions.SessionId'
FileId	bigint	8	Link to 'FileList.FileId'
TestId	bigint	8	Link to 'TestInfo.TestId'

8.11 CallSession Table

The CallSession table is a linked table that contains additional information about call sessions.

Table 8-9: Structure of the CallSession table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to 'Sessions.SessionId'
callNumber	int	4	Call Number inside a file
callStatus	varchar	50	Call status: • Completed • Failed • Dropped • System Release
setupTime	real	4	Setup Time (Dial Command to Connect Ack) in seconds
callCause	varchar	300	Cause value, coming from either the signalization or from the equipment
pdd	int	4	Post Dial Delay in milliseconds
dtd	int	4	Dial Tone Delay in milliseconds
BSideNumber	varchar	150	B Side Number of this call session
PrefixName	varchar	150	Prefix Name (with Test Manager only)
PrefixNumber	varchar	150	Prefix Number (with Test Manager only)
callType	varchar	5	Call setup direction: • 'L->M': Land to Mobile • 'M->L': Mobile to Land • 'L->L': Land to Land • 'M->M': Mobile to Mobile
CLI	varchar	50	CLIP of the called side (QualiPoc only)
callDir	varchar	5	Call direction (A->B, B->A)
VoiceCallType	varchar	100	Type of call (Video, intrusive…)
StartTechnology	int	4	Technology when call starts
StartTechnologyTrigger	varchar	100	Trigger for the call start technology
EndTechnology	int	4	Technology when call ends
EndTechnologyTrigger	varchar	100	Trigger for the call end technology

Column Name	Type	Length	Description
CallTechnology	varchar	255	Summary of technologies used in call
JobName	varchar	50	Name of the job given in TM
SpeechActivity	int	4	Speech activity of the call setup
MediaClient	varchar	50	Media client used for call (for example, Skype)
CallMode	varchar	50	Classification of the voice calls: • SRVCC • CSFB • VoLTE • CS

8.12 CallAnalysis Table

This table contains results of the Call Analysis script.

Column Name	Type	Length
SessionId	bigint	8
FileId	bigint	8
NetworkId	bigint	8
PosId	bigint	8
callType	varchar	5
callDir	varchar	5
callStatus	varchar	50
setupTime	real	4
callCause	varchar	300
valid	smallint	2
technology	varchar	50
band	varchar	50
Roaming	varchar	50
NetIds	int	4
callDuration	int	4
callStartTimeStamp	datetime2 (3)	8
callEndTimeStamp	datetime2 (3)	8
EndTechnology	varchar	50
Layer3Messages	int	4
SgnChnReq	datetime2 (3)	8
SgnChnAss	datetime2 (3)	8

Column Name	Type	Length
alertTimeStamp	datetime2 (3)	8
connAckTimeStamp	datetime2 (3)	8
callSetupEndTimeStamp	datetime2 (3)	8
callDisconnectTimeStamp	datetime2 (3)	8
StartTechnology	varchar	50
avgRxQual	real	4
avgRxLev	real	4
avgTA	real	4
avgMsTxPwr	real	4
AvgBCCHRxLev	real	4
numOfRadioValues	int	4
LastRadioTimeStamp	datetime2 (3)	8
avgScanRxLev	real	4
numOfScanValues	real	4
lastScanTimeStamp	datetime2 (3)	8
numBetterNeighbors	int	4
numBetterScannedGSM	int	4
NumULSamples	int	4
NumDLSamples	int	4
NumBadSamples	int	4
percentage	real	4
badcall	varchar	10
avgLQ	real	4
numChnReq	int	4
numCMServiceRequest	int	4
numCMServiceReject	int	4
numpageResponse	int	4
numImmASS	int	4
numImmAssRej	int	4
numSetup	int	4
numCallProceding	int	4
numAssCmd	int	4
numAssCmpl	int	4

Column Name	Type	Length
numAssFail	int	4
numProgress	int	4
numAlerting	int	4
numConn	int	4
numConnAck	int	4
numChnRelCallSetup	int	4
numLURequest	int	4
numLUAccept	int	4
numLUReject	int	4
numDisconnect	int	4
numRelease	int	4
numRelCmpl	int	4
numChnRel	int	4
numDCCH2GTrial	int	4
numDCCH2GSuccess	int	4
numTCHTrial	int	4
numTCHSuccess	int	4
LastHoTimeStamp	datetime2 (3)	8
LastHoType	varchar	100
LastHoCause	varchar	100
avgRLT	real	4
numOfRLTValues	int	4
LastRLTTimeStamp	datetime2 (3)	8
configCall	tinyint	1
NumReestablishmentRequests	tinyint	1
disconDirection	varchar	100
disconClass	varchar	100
disconCause	varchar	100
disconLocation	varchar	100
code	varchar	255
codeDescription	varchar	255
noL3Duration	int	4
NoService	smallint	2

Column Name	Type	Length
Initializing	smallint	2
LastAssTimeStamp	datetime2 (3)	8
LastAssMsg	varchar	100
LastAssCause	varchar	100
CRRandomCode	char	2
RRCConnReqTimeStamp	datetime2 (3)	8
RRCConnSetupTimeStamp	datetime2 (3)	8
numMMTrial	int	4
numMMSuccess	int	4
avgBLER	real	4
avgTotEcIo	real	4
avgUETxPwr	real	4
avgUERxPwr	real	4
numOfWCDMARadioValues	int	4
LastWCDMARadioTimeStamp	datetime2 (3)	8
numBetterMonitored	int	4
numBetterDetected	int	4
numBetterScannedUMTS	int	4
numRRCConnReq	int	4
numUMTSpageResponse	int	4
numRRCConnSetup	int	4
numRRCConnRej	int	4
numRBSetup	int	4
numRBSetupCmpl	int	4
numRBSetupFail	int	4
numRRCConnRelCallSetup	int	4
numRRCConnRel	int	4
numDCCH3GTrial	int	4
numDCCH3GSuccess	int	4
numRABTrial	int	4
numRABSuccess	int	4
LastUMTSHoTimeStamp	datetime2 (3)	8
LastUMTSHoType	varchar	100

Column Name	Type	Length
LastUMTSCause	varchar	100
numGMMMessages	int	4
numSMSMessages	int	4
numMMMessages	int	4
RLCexp	int	4
avgCDMAFER	real	4
avgCDMATotEcIo	real	4
avgCDMATxPwr	real	4
avgCDMAAGC	real	4
numOfCDMARadioValues	int	4
LastCDMARadioTimeStamp	datetime2 (3)	8
numCDMAOriginationMsg	int	4
numCDMAPageResponse	int	4
numCDMAServiceConnect	int	4
numCDMAServiceConnectCmpl	int	4
numCDMAChnAssMsg	int	4
numCDMAInitState	int	4
numCDMAOriginationState	int	4
numCDMAPageResponseState	int	4
numCDMARegistrationState	int	4
numCDMAAuthenticationState	int	4
numCDMAWaitForOrderState	int	4
numCDMAWaitForAnswerState	int	4
numCDMAConversationState	int	4
numCDMAReleaseOrder	int	4
avgTDMABER	real	4
avgTDMARxLev	real	4
avgTDMATxLev	real	4
avgTDMATA	real	4
numOfTDMARadioValues	int	4
LastTDMARadioTimeStamp	datetime2 (3)	8
numTDMAOriginationMsg	int	4
numTDMADigitalTrafficDesignation	int	4

Column Name	Type	Length
avgiDENRRSSI	real	4
numOfiDENRadioValues	int	4
LastiDENRadioTimeStamp	datetime2 (3)	8
numiDENTchRequest	int	4
numiDENTchAllocation	int	4
FailedRegistration	int	4
ReleaseCause	varchar	100
CallMode	varchar	50
avgLTERSSI	real	4
avgLTERSRQ	real	4
avgLTERSRP	real	4
avgLTESINR	real	4
avgPuschTxPower	real	4
numOfLTERadioValues	int	4
LastLTERadioTimeStamp	datetime2 (3)	7
LastLTEHoTimeStamp	datetime2 (3)	7
LastLTEHoType	varchar	100
LastLTECause	varchar	100
numDCCH4GTrial	int	4
numDCCH4GSuccess	int	4
numDedicatedBearer	int	4
numDedicatedBearerSuccess	int	4
numCSFBRRCConnectionRequest	int	4
numCSFBEMMExtendedServiceRequest	int	4
numCSFBEMMServiceReject	int	4
numCSFBRRCRelease	int	4
numCSFB4GIRATChange	int	4
numVoLTEINVITERequest	int	4
numVoLTEINVITEFailure	int	4
numVoLTEINVITETrying	int	4
numVoLTEPRACKRequest	int	4
numVoLTEPRACKFailure	int	4
numVoLTEPRACKOK	int	4

Column Name	Type	Length
numVoLTEINVITERinging	int	4
numVoLTEINVITEOK	int	4
numVoLTEBYERequest	int	4
numVoLTEBYEFailure	int	4
numVoLTEBYEOK	int	4

8.13 DataSession Table

There is an additional linked table called ‘DataSession’ that contains additional information for data sessions:

Table 8-10: Structure of the DataSession table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to ‘Sessions.SessionId’
dataSessionType	varchar	50	Always ‘Internet’
Status	varchar	50	Last dial-up marker
errorCode	int	4	Error code of the session
JobName	varchar	50	Name of the job given in TM

8.14 DataCallAnalysis Table

This table contains results of the Data Call Analysis script.

Table 8-11: Structure of the DataCallAnalysis table

Column Name	Type	Length
SessionId	bigint	8
FileId	bigint	8
NetworkId	bigint	8
PosId	bigint	8
Status	varchar	50
valid	smallint	2
technology	varchar	50
band	varchar	50
Roaming	varchar	50
NetIds	int	4

Column Name	Type	Length
Duration	int	4
StartTimeStamp	datetime2 (3)	8
DialTimeStamp	datetime2 (3)	8
ConnectTimeStamp	datetime2 (3)	8
DisconnectTimeStamp	datetime2 (3)	8
EndTimeStamp	datetime2 (3)	8
SetupTime	int	4
ConnectTime	int	4
datacallDuration	int	4
StartTechnology	varchar	50
EndTechnology	varchar	50
Layer3Messages	int	4
SgnChnReq	datetime2 (3)	8
SgnChnAss	datetime2 (3)	8
avgRxQual	real	4
avgRxLev	real	4
avgTA	real	4
avgMsTxPwr	real	4
AvgBCCHRxLev	real	4
numOfRadioValues	int	4
LastRadioTimeStamp	datetime2 (3)	8
avgScanRxLev	real	4
numOfScanValues	real	4
lastScanTimeStamp	datetime2 (3)	8
numBetterNeighbors	int	4
numBetterScannedGSM	int	4
NumDeactivationAccept	int	4
NumDeactivationRequest	int	4
NumSMStatus	int	4
NumPDPContextaccept	int	4
NumPDPContextReject	int	4
NumPDPContextRequest	int	4
NumServiceAccept	int	4

Column Name	Type	Length
NumServiceReject	int	4
NumServiceRequest	int	4
NumAttachComplete	int	4
NumAttachAccept	int	4
NumAttachReject	int	4
NumAttachRequest	int	4
NumDetachAccept	int	4
NumDetachRequest	int	4
NumLURequest	int	4
NumLUAccept	int	4
NumLUReject	int	4
NumRARequest	int	4
NumRAAccept	int	4
NumRAComplete	int	4
NumRAReject	int	4
numChnReq	int	4
numImmASS	int	4
numImmAssRej	int	4
numChnRelCallSetup	int	4
numChnRel	int	4
PDPDeactDirection	varchar	2
PDPDeactCause	varchar	100
PDPActRejDirection	varchar	2
PDPActRejCause	varchar	100
SMStatusDirection	varchar	100
SMStatusCause	varchar	100
DetachDirection	varchar	100
DetachCause	varchar	100
RARejectDirection	varchar	100
RARejectCause	varchar	100
AttachRejectDirection	varchar	100
AttachRejectCause	varchar	100
AttachTestFailed	int	4

Column Name	Type	Length
lastIRATChange	datetime2 (3)	8
numDCCH2GTrial	int	4
numDCCH2GSuccess	int	4
numTCHTrial	int	4
numTCHSuccess	int	4
code	varchar	255
codeDescription	varchar	255
noL3Duration	int	4
NoService	smallint	2
Initializing	smallint	2
FailedRegistration	int	4
CRRandomCode	char	2
RRCConnReqTimeStamp	datetime2 (3)	8
RRCConnSetupTimeStamp	datetime2 (3)	8
numMMTrial	int	4
numMMSuccess	int	4
avgBLER	real	4
avgTotEcIo	real	4
avgUETxPwr	real	4
avgUERxPwr	real	4
numOfWCDMARadioValues	int	4
LastWCDMARadioTimeStamp	datetime2 (3)	8
numBetterMonitored	int	4
numBetterDetected	int	4
numBetterScannedUMTS	int	4
RRCConnReqforDataCall	int	4
numRRCConnSetupComplete	int	4
numRRCConnReq	int	4
numRRCConnSetup	int	4
numRRCConnRej	int	4
numRBSetup	int	4
numRBSetupCmpl	int	4
numRBSetupFail	int	4

Column Name	Type	Length
numRRCConnRel	int	4
numRABTrial	int	4
numRABSuccess	int	4
LastUMTSCause	varchar	100
numGMMMessages	int	4
numSMSMessages	int	4
numMMMessages	int	4
avgCDMAFER	real	4
avgCDMATotEcIo	real	4
avgCDMATxPwr	real	4
avgCDMAAGC	real	4
numOfCDMARadioValues	int	4
LastCDMARadioTimeStamp	datetime2 (3)	8
numCDMAOriginationMsg	int	4
numCDMAServiceConnect	int	4
numCDMAServiceConnectCmpl	int	4
numCDMAChnAssMsg	int	4
numCDMAInitState	int	4
numCDMAOriginationState	int	4
numCDMARegistrationState	int	4
numCDMAAuthenticationState	int	4
numCDMAWaitForOrderState	int	4
numCDMAWaitForAnswerState	int	4
numCDMAConversationState	int	4
numCDMAReleaseOrder	int	4

8.15 StreamInfo Table

This table contains information about the session stream, which NQDI records when a streaming session is established.

Table 8-12: Structure of the StreamInfo table

Column Name	Type	Length	Description
StreamId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
StartTime	datetime2 (3)	8	Starting time of the stream
Duration	int	4	Stream duration in ms
Player	varchar	20	For example, Real or QuickTime
Setup	varchar	40	Type of setup, for example, URL
Protocol	varchar	20	IP protocol (TCP, RTSP)
URL	varchar	2048	Link to the stream
ErrorCode	int	4	Linked to 'ErrorCodes.ErrorCode'
HorResolution	int	4	Resolution in pixels
VerResolution	int	4	Resolution in pixels
CapturingDevice	varchar	64	Capturing device
Status	varchar	16	Status of the stream (COMPLETED, FAILED…)
FirstDelay	int	4	Time in ms to display first picture
AudioCodec	varchar	50	The audio codec used
VideoCodec	varchar	50	The video codec used
ImageSize	varchar	50	Size of the image in pixels
Technology	varchar	50	Technology used for the stream

8.16 TestInfo Table

The Testinfo table is on the Testinfo layer. Within Call Sessions, one or more voice tests, such as Speech, Noise suppression, and Silence Suppression, can occur. Within a Data Session, one or more data tests such as HTTP, FTP, and UDP can occur.

The TestInfo table contains general information about the tests inside of a call or data session.

Table 8-13: Structure of the TestInfo table

Column Name	Type	Length	Description
TestId	bigint	8	Unique Id
SessionId	bigint	8	Linked to 'Sessions.SessionId'
PosId	bigint	8	Linked to 'Position.PosId'
NetworkId	bigint	8	Linked to 'NetworkInfo.NetworkId'
startDate	varchar	50	Start date of this test
startHour	varchar	50	Start hour of this test
startTime	datetime2 (3)	8	Start time of this test
typeoftest	varchar	50	The Type of Test executed
direction	varchar	20	Direction of the Sample or Test
sampleId	bigint	8	Linked to 'SampleSettingsInfo.sampleId'
duration	int	4	Duration of this test in milliseconds
qualityIndication	varchar	255	A text containing some general information regarding the results inside of this test
valid	tinyint	1	Indicates if this test is valid or not
InvalidReason	varchar	255	Reason if the test is invalid
JobType	int	4	Job type as integer
TypeOfTestId	int	4	Test type as integer
FullDuplex	tinyint	1	0 or 1: indicating a full duplex video test
SpeedAvg	float	8	Average speed of the session
SpeedCategory	smallint	2	Speed category given by the average speed
TestName	varchar	50	Name of the test given in TM
StartPosId	bigint	8	Position at start of session, link to 'Position.PosId'
StartNetworkId	bigint	8	Network info at start of session, link to 'NetworkInfo.NetworkId'

8.17 SampleSettingsInfo Table

This table contains additional information about voice tests.

Table 8-14: Structure of the SampleSettingsInfo table

Column Name	Type	Length	Description
SampleId	bigint	8	Link to 'TestInfo.SampleId'
refFileName	varchar	255	Name of the reference wav file
codedFileName	varchar	255	Name of the coded wav file
signalLength	float	8	Length of the voice signal in seconds

Column Name	Type	Length	Description
startOffset	float	8	Beginning of the voice activity
numOfBits	smallint	2	Number of bits per frame
samplingFreq	int	4	Sampling frequency
direction	varchar	10	Direction of the sample (A->B or B->A)
Offset	int	4	Internal use only
RunTime	float	8	Run time of POLQA

8.18 ClipInfo Table

This table contains information about a clip (sub sample of a Test).

Table 8-15: Structure of the ClipInfo table

Column Name	Type	Length	Description
ClipId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'SessionInfo.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	End time of clip
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
StartTime	datetime2 (3)	8	Start time of the clip
LipSync	int	4	Lipsync value
VideoRecDelay	int	4	Time when LS was measured

8.19 ClipSampleInfo Table

This table contains information about a clip sample.

Table 8-16: Structure of the ClipSampleInfo table

Column Name	Type	Length	Description
ClipId	bigint	8	Link to 'ClipInfo.ClipId'
refFileName	varchar	255	Name of the reference wav file
codedFileName	varchar	255	Name of the coded wav file
signalLength	float	8	Length of the voice signal in seconds
startOffset	float	8	Beginning of the voice activity
numOfBits	smallint	2	Number of bits per frame

Column Name	Type	Length	Description
samplingFreq	int	4	Sampling frequency
direction	varchar	10	Direction of the sample (A->B or B->A)
Offset	int	4	Internal use only
RunTime	float	8	Run time of POLQA

8.20 VideoSettingsInfo Table

This table contains additional information for video tests.

Table 8-17: Structure of the VideoSettingsInfo table

Column Name	Type	Length	Description
SampleId	bigint	8	Link to 'TestInfo.SampleId'
RefFileName	varchar	255	Reference filename
CodedFileName	varchar	255	Coded filename
SequenceLength	float	8	Length of clip
FrameRate	smallint	2	Frame rate
VerResolution	int	4	Vertical resolution
HorResolution	int	4	Horizontal resolution
RefFrame	int	4	Reference frame number of first real frame
CodedFrame	int	4	Coded frame number of first real frame
Offset	int	4	Internal use only
NrFramesEval	int	4	Video evaluation version 06 values
NoiseThresh	real	4	Video evaluation version 06 values
Application	int	4	Video evaluation version 06 values
SceneAnalysis	int	4	
AlgoVersion	int	4	Version of the video algorithms: • 0 = VQ 05 • 1 = VQ 06 • 2 = VQ 08

8.21 CallQuality Table

This table contains the calculated call quality (CQ = Call Quality).

Table 8-18: Structure of the CallQuality table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
CQLQDL	real	4	LQ Downlink
CQLQUL	real	4	LQ Uplink
CQP862LQDL	real	4	P862 Downlink
CQP862LQUL	real	4	P862 Uplink

8.22 ResultsKPI Table

This table contains the results of a KPI Scenario.

Table 8-19: Structure of the ResultsKPI table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PosId	bigint	8	Link to 'Position.PosId'
KPIId	int	4	Id of the KPI test
StartTime	datetime2 (3)	8	Start of KPI Test
EndTime	datetime2 (3)	8	End of KPI Test
Duration	int	4	Duration of the KPI test
ErrorCode	int	4	Error of the test or KPI, if everything is ok this will be 0
Sum	float	8	Additional values See the KPI document for more information
Counter	int	4	Additional values See the KPI document for more information
Value1	float	8	Additional values See the KPI document for more information
Value2	int	4	Additional values See the KPI document for more information
Value3	varchar	255	Additional values See the KPI document for more information
Value4	varchar	255	Additional values See the KPI document for more information
Value5	varchar	255	Additional values See the KPI document for more information
TriggerTime	datetime2 (3)	8	Additional values See the KPI document for more information
ErrorCodeImport	int	4	Error set in Import

Column Name	Type	Length	Description
Description	varchar	255	Name of the KPI if calculated with the new user definable KPI function
Options	int	4	For internal use only

8.23 EventQueries Table

This table holds the defined event queries, which are used to generate user reports.

Table 8-20: Structure of the EventQueries table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique identifier
Name	varchar	100	Name of the event query
Event	varchar	100	The event to be calculated
BeginEnd	int	4	Begin or end of the event
BeforeTime	int	4	Time before the event in sec
AfterTime	int	4	Time after the event in sec
CalcValue	varchar	50	Value to be calculated
Arithmetics	int	4	Selected Arithmetics as bit array
AutoImport	bit	1	Automatic import enable

8.24 ResultsEventQueries Table

This table contains the results of the calculated EventQueries.

Table 8-21: Structure of the ResultsEventQueries table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique identifier
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	
queryID	int	4	Id of the event query
calcValue	varchar	255	Value to be calculated
minimum	float	8	Min value
maximum	float	8	Max value
average	float	8	Average value

Column Name	Type	Length	Description
median	float	8	Median value
cnt	int	4	Count value
summary	float	8	Summary value
lastValBefore	float	8	Last value before event value
firstValAfter	float	8	First value after event value
numValBefore	int	4	Number of values before event
numValAfter	int	4	Number of values after event
special	float	8	Value for special calculations

8.25 ResultsEvents Table

This table contains the results of the calculated events.

Table 8-22: Structure of the ResultsEvents table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique identifier
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
EventId	int	4	Id of the event
EventName	varchar	255	Name of the event
CustomText	varchar	1000	Customer defined event text
Value1	varchar	1000	Event related value 1
Value2	varchar	1000	Event related value 2

8.26 MsgLogTrace Table

This table contains some measurement cycle log messages.

Table 8-23: Structure of the MsgLogTrace table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’

Column Name	Type	Length	Description
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
info	varchar	500	Log message
side	char	1	A, B (side of the message)
MeasId	smallint	2	Link to ‘MultiTransferMode.MeasId’, used to get which engine did write a MsLogTrace entry

8.27 Markers Table

This table contains two types of markers, namely, call event markers and information markers. Call event markers are markers for voice calls and GPRS data calls.

Table 8-24: Structure of the Markers table

Column Name	Type	Length	Description
markerId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
MarkerText	varchar	50	Marker Text like ‘Dial’, ‘Connect’…
MarkerType	char	5	‘CM’ or ‘IM’
Info	varchar	50	‘A’ or ‘B’ indicating the side

8.28 Alarms Table

This table contains alarms written by NQView.

Table 8-25: Structure of the Alarms table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Name	varchar	255	Name given when defining the alarm
Description	varchar	500	Description of the alarm
PCName	varchar	50	Unit which has written the alarm
Side	char	1	‘A’ or ‘B’

8.29 Technology Table

This table contains the data technology that is written when a test starts and ends as well as when changes appear.

Table 8-26: Structure of the Technology table

Column Name	Type	Length	Description
FileId	bigint	8	Link to ‘FileList.FileId
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PrevTechnology	varchar	20	Previous technology
CurrTechnology	varchar	20	Current technology
TriggerMsg	varchar	100	Trigger which changes the technology
Summary	varchar	200	All data technologies used in the test (will be written only at the test end)
Duration	int	4	Duration the technology was active

8.30 MediaStreamInfo Table

Table 8-27: Structure of the MediaStreamInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’

Column Name	Type	Length	Description
MediaStreamId	bigint	8	
CodecId	int	4	
CodecStr	varchar	50	
TransportProto	varchar	50	

8.31 MediaStreamData Table

Table 8-28: Structure of the MediaStreamData table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MediaStreamId	bigint	8	
FirstId	int	4	
LastId	int	4	
PresentTime	real	4	
FrameType	varchar	50	
FrameSize	int	4	
Options	varchar	500	

8.32 AlarmMessages Table

Table 8-29: Structure of the AlarmMessages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
Alarm_Type	smallint	2	
Alarm_Severity	smallint	2	
AlarmMessage	varchar	250	Text describing the alarm
side	char	1	‘A’ or ‘B’

8.33 AccessPoints Table

Table 8-30: Structure of the AccessPoints table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
Name	varchar	100	Name given for the APN
APN	varchar	100	APN
APType	varchar	40	Type of APN

8.34 AppliedForcing Table

Table 8-31: Structure of the AppliedForcing table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Forcing	varchar	4096	XML description of the forcing

8.35 SIPClientInfo Table

Table 8-32: Structure of the SIPClientInfo table

Column Name	Type	Length	Description
FileId	bigint	8	Link to 'FileList.FileId'
SessionId	bigint	8	Link to 'Sessions.SessionId'
Client	varchar	50	Application type
User	varchar	50	User name
AuthUser	varchar	50	Authorization user name
SIPServer	varchar	50	SIP server
Outbound	varchar	50	Outbound traffic
DialingPlan	varchar	50	Dialing plan
ReRegisterTime	int	4	Reregister time in ms
STUNServer	varchar	100	STUN server
ICE	tinyint	1	ICE support
RPort	tinyint	1	RPort support

8.36 SIPSessionInfo Table

Table 8-33: Structure of the SIPSessionInfo table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to 'Sessions.SessionId'
AudioCodecA	varchar	20	Codec used of the A side
RegisteringTimeA	int	4	Registering time of the A side in ms
AudioCodecP	varchar	20	Codec used of the B side
RegisteringTimeP	int	4	Registering time of the B side in ms

8.37 PhotoMarker Table

Table 8-34: Structure of the PhotoMarker table

Column Name	Type	Length	Description
Data	image	16	Binary marker data
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Ext	varchar	10	Extension of the marker data (jpg, png…)

8.38 AndroidPerformanceData Table

Table 8-35: Structure of the AndroidPerformanceData table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Time of the actual data
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
BatteryLevel	int	4	Battery level in %
BatteryTemp	float	8	Battery temperature in °C
BatteryStatus	int	4	0: Unknown 1: Charging AC 2: Charging USB 3: Discharging 4: Not Charging 5: Full
BatteryHealth	int	4	1: Unknown 2: Good 3: Overheat 4: Dead 5: Voltage too high 6: Unspecified Failure
ScreenStatus	smallint	2	0: screen off 1: screen on
CPUCores	smallint	2	Number of CPU cores
CPUFrequencies	varchar	100	CPU frequencies
CPUTemp	int	4	CPU temperature in °C
CPULoad	int	4	CPU load in %
CPULoadStatistics	varchar	100	CPU load over the last 15, 5 or 1 s

9 GPRS Test Results

This chapter describes the structure of the result tables from the GPRS tests that can be done with Diversity.

Each table is linked to the following tables:

- Position -> PosId
- bigintb8igintS8essions -> SessionId
- bigintb8igintT8estInfo -> TestId
- bigintb8igintN8etworkInfo -> NetworkId
- bigintb8igint -> 8

You can link to this information at any time.

9.1 ResultsAttachDetach Table

This table contains the results from the Attach/Detach test. There is one row per test.

Table 9-1: Structure of the ResultsAttachDetach table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
startTime	datetime2 (3)	8	Start time of this test
endTime	datetime2 (3)	8	End time of this test
Type	varchar	20	Attach or Detach
duration	int	4	Duration of the test procedure (Attach duration or Detach duration). We measure the time difference between the start and end message. For Attach: Time between the first Attach Request until the first Attach Complete or Attach Reject For Detach: Time between the first Detach Request until the first Detach Accept
numAttachReject	smallint	2	Number of Attach Reject Messages
numAttachRequest	smallint	2	Number of Attach Request Messages
numAttachAccept	smallint	2	Number of Attach Accept Messages

Column Name	Type	Length	Description
numAttachComplete	smallint	2	Number of Attach Complete Messages
numDetachRequest	smallint	2	Number of Detach Request Messages
numDetachAccept	smallint	2	Number of Detach Reject Messages
status	varchar	20	Failed, successful or unknown

9.2 ResultsPDPContext table

Each row of this table contains the results from one Attach/Detach PDP Context test.

Table 9-2: Structure of the ResultsPDPContext table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
startTime	datetime2 (3)	8	Start time of this test
endTime	datetime2 (3)	8	End time of this test
Type	varchar	20	'PDP Activate' or 'PDP Deactivate'
duration	int	4	Duration of the test procedure (PDP Activate duration or PDP Deactivate duration). We measure the time difference between the start and end message. For PDP Activate we measure the time between the first Activate Request until the first Activate Accept or Activate Reject. For PDP Deactivate we measure the time from the first Deactivate Request until the first Deactivate Accept.
numActivateReject	smallint	2	Number of Activate Reject Messages
numActivateRequest	smallint	2	Number of Activate Request Messages
numActivateAccept	smallint	2	Number of Activate Accept Messages
numDeactivateRequest	smallint	2	Number of Deactivate Complete Messages
numDeactivateAccept	smallint	2	Number of Deactivate Request Messages
status	varchar	20	Failed, successful or unknown

10 Data Test Results

This chapter describes the structure of the result tables of the Data tests that can be done with Diversity or Seven.Five.

Each table is linked to the following tables:

- Position -> PosId
- bigintb8igintS8essions -> SessionId
- bigintb8igintT8estInfo -> TestId
- bigintb8igintN8etworkInfo -> NetworkId
- bigintb8igint -> 8

You can link to this information at any time.

10.1 ResultsEmailRecvTest Table

Each row of this table contains the results from one email receive test.

Table 10-1: Structure of the ResultsEmailRecvTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
errorCode	int	4	Error Code. Link to 'ErrorCodes.ErrorCode'
host	varchar	100	Host address
account	varchar	50	Email account, username
subject	varchar	50	Subject of the email
size	int	4	Size of email
throughput	real	4	Throughput when downloading email
recvTime	int	4	Time to receive email
searchTime	int	4	Time to search the message (subject)
connectTime	int	4	Time to connect and authenticate on POP3 server
msgNr	int	4	Number of this message on server
Protocol	varchar	10	Type of Protocol: POP3 or IMAP

10.2 ResultsEmailSendTest Table

Each row of this table contains the results from an email send test.

Table 10-2: Table ResultsEmailSendTest

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
errorCode	int	4	Error Code. Link to 'ErrorCodes.ErrorCode'
host	varchar	100	Host address
address	varchar	100	Email address
subject	varchar	50	Subject of the email
size	int	4	Size of email
throughput	real	4	Throughput when sending email
connectTime	int	4	Time to connect and authenticate on SMTP server
sendTime	int	4	Time to send email

10.3 ResultsFTPTest Table

This table contains the results for the FTP downlink or FTP uplink test. Each test has one or more entries.

Table 10-3: Structure of the ResultsFTPTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
errorCode	int	4	Error Code. Link to 'ErrorCodes.ErrorCode'
operation	varchar	10	'PUT' or 'GET'
fileName	varchar	255	Name of the file that was transmitted or received

Column Name	Type	Length	Description
throughput	int	4	Actual throughput in Bytes/Sec
lastBlock	smallint	2	1 if it is the last block of an operation, else 0
host	varchar	100	Host address
sampleTransferTime	int	4	Unused
bytesTransferred	bigint	84	Number of Bytes transferred since beginning of the test

10.4 ResultsIntermediateFTPTest Table

This table contains intermediate FTP Results. Each FTP test has multiple records.

Table 10-4: Structure of the ResultsIntermediateFTPTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
intermediateErrorCode	int	4	Error Code (see Table 'ErrorCodes') of the intermediate result
sessionErrorCode	int	4	Error Code (see Table 'ErrorCodes') of the session
operation	varchar	10	'PUT' or 'GET'
fileName	varchar	255	File Name that was used for FTP transfer
lastBlock	smallint	2	Last block indication (0=intermediate block, 1=last block)
host	varchar	100	IP address of the ftp host
sampleTransferTime	real	4	Transfer time of an intermediate result
bytesTransferred	bigint	84	Number of bytes transmitted since the last intermediate result or since the start of the ftp test

10.5 ResultsFTPParameters Table

This table contains parameters for the FTP test.

Table 10-5: Structure of the ResultsFTPParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
operation	varchar	10	Put or Get
fileName	varchar	255	File name for the operation
host	varchar	100	Remote host
mode	varchar	50	Active or passive
FixedDuration	tinyint	1	Indicates the abort criterion
Protocol	varchar	10	Protocol used for ftp test (ftp or ftps)
Port	int	4	Used port

10.6 ResultsHTTPBrowserTest Table

This table contains the results of a **HTTPBrowser** test. There's one row per test.

Table 10-6: Structure of the ResultsHTTPBrowserTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
errorCode	int	4	Error Code. Link to 'ErrorCodes.ErrorCode'
numOfImages	int	4	Number of images in page
numOfFrames	int	4	Number of frames in page
size	int	4	Size of page(incl images, …)
throughput	int	4	Application throughput
host	varchar	100	Host address
url	varchar	500	Complete URL
browser	varchar	150	Browser tag (that is, IE 6.0)

10.7 ResultsHTTPBrowserTrace Table

This table contains the results of an HTTPBrowser test.

Table 10-7: Description of the contents of the ResultsHTTPBrowserTrace table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
info	varchar	5000	Trace info

10.8 ResultsHTTPKeySequence Table

This table contains the results for the HTTP Key Sequence test on QualiPoc.

Table 10-8: Description of the contents of the ResultsHTTPKeySequence table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
keySequence	varchar	100	Word to search defined by the job
fileName	varchar	250	Path to the file where the sequence was found

10.9 ResultsPingTest Table

This table contains the results for the Ping test. Each test can have one or more entries.

Table 10-9: Structure of the ResultsPingTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
pingType	smallint	2	Always set to ‘1’
errorCode	int	4	Error Code. Link to ‘ErrorCodes.ErrorCode’
seqNumber	int	4	Unused
RTT	int	4	Round Trip Time in milliseconds
host	varchar	50	Host address
packetSize	int	4	Packet size in Bytes for the Ping test

10.10 ResultsPingTraceTest Table

This table contains the results for the Ping Trace test. Each test can have more than one entry.

Table 10-10: Structure of the ResultsPingTraceTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
errorCode	int	4	Error Code. Link to ‘ErrorCodes.ErrorCode’
seqNumber	int	4	Unused
hopNumber	int	4	Hop number
RTT	int	4	Round Trip Time in milliseconds
host	varchar	50	Host Name or address
dnsName	varchar	50	Unused

10.11 ResultsUDPDL Table

This table contains the intermediate results of an UDP downlink test. Each test occupies one or more rows in the table.

Table 10-11: Structure of the ResultsUDPDL table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
errorCode	int	4	Error Code. Link to 'ErrorCodes.ErrorCode'
seqNumber	int	4	Sequence number of packet

10.12 ResultsUDPDLAvg Table

Each row of this table contains the results of an UDP downlink test.

Table 10-12: Structure of the ResultsUDPDLAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
errorCode	int	4	Error Code. Link to 'ErrorCodes.ErrorCode'
throughput	int	4	Throughput (Bytes/sec)
packetsSent	int	4	Number of packets sent
packetsRecv	int	4	Number of packets received
host	varchar	50	Host address
SeqNumber	int	4	-
jitter	int	4	Jitter in ms
bandwidth	int	4	Bandwidth (Bytes/sec)
packetSize	int	4	Packet size

10.13 ResultsUDPDLIntermediate Table

Averaged throughput for the UDPDL test.

Table 10-13: Structure of the ResultsUDPDLIntermediate table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PacketCount	int	4	Count of packets within the measured duration
Duration	int	4	Duration in ms
Throughput	int	4	Throughput during the above duration

10.14 ResultsWAPParameters Table

Each row of this table contains the parameters for one WAP test.

Table 10-14: Structure of the ResultsWAPParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Host	varchar	250	Host address
URL	varchar	250	Complete URL
TimeOut	int	4	Timeout used for downloading

10.15 ResultsWAPRslt Table

Each row of this table contains the results from one WAP test.

Table 10-15: Structure of the ResultsWAPRslt table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'

Column Name	Type	Length	Description
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
ErrorCode	int	4	Error Code. Link to ‘ErrorCodes.ErrorCode’
NumOfImages	int	4	Number of images in wml page
size	int	4	Size of complete page
Throughput	real	4	Throughput in Bytes/sec
ConnectTime	int	4	Time to connect to WAP gateway
Duration	real	4	Time to download page
NumberOfLinks	int	4	Number of links
Protocol	varchar	10	Used protocol

10.16 ResultsWAPTrace Table

This table contains intermediate results for a WAP test. The results of each test occupy one or more rows in the table.

Table 10-16: Structure of the ResultsWAPTrace table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
event	varchar	100	WAP event (defined by the application
size	int	4	Size of the downloaded element
name	varchar	2048	Name according to the event

10.17 ResultsHTTPTransferParameters Table

This table contains the parameters for a HTTP Transfer test.

Table 10-17: Structure of the ResultsHTTPTransferParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Operation	varchar	10	GET or PUT
Protocol	varchar	10	Protocol used for test. Normally this would be HTTP
Host	varchar	255	Remote host where the file is located
LocalFilename	varchar	255	Local file name
RemoteFilename	varchar	255	Remote file name
BufferSize	int	4	Configured buffer size
FixedDuration	tinyint	1	Indicates the abort criterion

10.18 ResultsHTTPTransferTest Table

This table contains the results for a HTTP Transfer test.

Table 10-18: Structure of the ResultsHTTPTransferTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ErrorCode	int	4	WAP event (defined by the application
Throughput	int	4	Current throughput (kbits/s)
LastBlock	smallint	2	1 indicates the end of the test
Duration	int	4	Duration between two messages
BytesTransferred	bigint	84	Total number of bytes transferred

10.19 ResultsIperfUDPParameters Table

This table contains the parameters for an IperfUDP test.

Table 10-19: Structure of the ResultsIperfUDPParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Host	varchar	250	Host where Iperf test is performed to.
Bandwidth	int	4	Desired bandwidth in Bytes/s
DatagramSize	int	4	Size of udp datagram (default 1470 Bytes)
BufferSize	int	4	Windows socket buffer size in bytes

10.20 ResultsIperfUDPTest Table

This table contains the results for an IperfUDP test.

Table 10-20: Structure of the ResultsIperfUDPTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LastBlock	int	4	0: intermediate result 1: overall summary
ErrorCode	int	4	Error Code, link to errorcodes.ini
Direction	int	4	0: downlink 1: uplink
Bandwidth	int	4	In bits/s
Throughput	int	4	Bytes received / transmit time in s
PacketsReceived	int	4	Only if LastBlock = 1: number of received packets
PacketsLost	int	4	Only if LastBlock = 1: number of lost packets
PercentPacketsLost	real	4	Only if LastBlock = 1: percent of lost packets
PacketsOutOfOrder	int	4	Only if LastBlock = 1: out of order packets
DelayJitter	real	4	Delay jitter in ms.

10.21 ResultsCapacityTestParameters Table

This table contains the parameters for a Capacity test.

Table 10-21: Structure of the ResultsCapacityTestParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Direction	varchar	15	Put or Get
Protocol	varchar	20	Protocol used (HTTP)
URICount	int	4	Number of URI (= number of threads) following in the next field.
URIList	varchar	8000	Separated list of full qualified URIs. The numbers of entries represent the number of "transfer threads". Separator tag: Semicolon, entries containing a comma character is replaced with the dot character.
LocalFilename	varchar	255	Reference file (uplink tests only, otherwise empty)
BufferSize	int	4	Send Buffer size value in Bytes (only interesting for uplink tests)

10.22 ResultsCapacityTest Table

This table contains the results for a Capacity test.

Table 10-22: Structure of the ResultsCapacityTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ErrorCode	int	4	Error code of the current operation
ThroughputGet	int	4	application throughput in Bytes/s DL
LastBlock	smallint	2	LastBlock: 0 = intermediate result; 1 = result over test
Duration	int	4	Duration used for throughput calculation
BytesTransferredGet	bigint	84	Number of bytes transferred DL

Column Name	Type	Length	Description
ThroughputPut	int	4	application throughput in Bytes/s in UL
BytesTransferredPut	bigint	84	Number of bytes transferred UL

10.23 ResultsCapacitySubTest Table

This table contains the results for the sub tests of the Capacity test.

Table 10-23: Structure of the ResultsCapacitySubTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
SubTestId	bigint	8	Id of the subtest
Direction	smallint	2	Direction of the subtest 0: Get 1: Put
ErrorCode	int	4	Error code of the current operation
LastBlock	smallint	2	LastBlock: 0 = intermediate result; 1 = result over test
Duration	int	4	Duration used for throughput calculation
BytesTransferred	bigint	84	Error code of the current operation
Throughput	int	4	Application throughput in Bytes/s

10.24 ResultsCapacitySubTestAccessTimes Table

This table contains the timing results for the sub tests of the Capacity test.

Table 10-24: Structure of the ResultsCapacitySubTestAccessTimes table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
SubTestId	bigint	8	Id of the sub test

Column Name	Type	Length	Description
TCPSynTime	datetime2	7	UTC time of TCP Syn
TCPSynAckTime	datetime2	7	UTC time of ACK to TCP Syn
HTTPSendTime	datetime2	7	UTC time of HTTP Send
HTTPReceiveTime	datetime2	7	UTC time of HTTP receive

10.25 ResultsAppTestParameters Table

The following tables contain the results for a Application test.

Table 10-25: Structure of the ResultsAppTestParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
ServiceClass	smallint	2	2: CloudStorageService
ServiceProvider	varchar	50	Name of the service provider
ServiceProfileName	varchar	255	User-specified name of the used service profile
ActionNames	varchar	8000	Semicolon-separated list of action names

10.26 ResultsAppActionParams Table

Table 10-26: Structure of the ResultsAppActionParams table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual parameter
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ActionId	smallint	2	Id of the action, linked to the results
ActionName	varchar	100	Name of the application

10.27 ResultsAppActionUploadFileParams Table

Table 10-27: Structure of the ResultsAppActionUploadFileParams table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual parameter
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ActionId	smallint	2	Id of the action, linked to the results
ActionName	varchar	100	Name of the application
LocalFile	varchar	255	Local file name to upload
RemoteFilePath	varchar	255	Destination path for the upload file

10.28 ResultsAppActionDownloadFileParams Table

Table 10-28: Structure of the ResultsAppActionDownloadFileParams table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual parameter
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ActionId	smallint	2	Id of the action, linked to the results
ActionName	varchar	100	Name of the application
RemoteFilePath	varchar	255	Remote file name for download

10.29 ResultsAppAction Table

Table 10-29: Structure of the ResultsAppAction table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ActionId	smallint	2	Id of the action, linked to the parameters
ErrorCode	int	4	Test result
LastBlock	smallint	2	• 0: Intermediate results • 1: Result of the test
Duration	bigint	8	• Lastblock = 0: duration since last reporting or start • Lastblock = 1: duration of test
BytesTransferred	bigint	8	• Lastblock = 0: number of bytes transferred so far • Lastblock = 1: total transferred bytes
Throughput	int	4	• Lastblock = 0: Intermediate throughput • Lastblock = 1: total throughput of test • Value is in bytes/second.

10.30 ResultsAppActionPerformance Table

Table 10-30: Structure of the ResultsAppActionPerformance table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ActionId	smallint	2	Id of the action, linked to the parameters
ErrorCode	int	4	Error for the action
InitDuration	int	4	Duration to initialize the action [ms]
Duration	bigint	8	Overall duration
Server	varchar	250	Server used for the action
Ping	int	4	Ping duration [ms]
DLSize	int	4	Size of downloaded data [Bytes]
DLThroughput	int	4	DL throughput [Bytes/s]

Column Name	Type	Length	Description
ULSize	int	4	Size of uploaded data [Bytes]
ULThroughput	int	4	UL throughput [Bytes/s]

10.31 ResultsAppTest Table

Table 10-31: Structure of the ResultsAppTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ErrorCode	int	4	Errorcode of the overall app test
Duration	bigint	8	Duration of the test in milliseconds
BytesTransferred	bigint	8	Number of bytes transferred

10.32 ResultsNetworkPerformanceParameters Table

Table 10-32: Structure of the ResultsNetworkPerformanceParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Direction	varchar	15	Direction of test (UL/DL)
CapacityPeakDuration	int	4	Duration of capacity test
CapacityPeakInterval	int	4	Capacity peak interval
CapacityPeakStartOffset	int	4	Initial offset for capacity test
TCPFloorLevel	int	4	TCP floor level
CapacityBufferSize	int	4	Capacity buffer size
LimitedConnectivityThreshold	int	4	Threshold for limited connectivity

10.33 ResultsNetworkPerformanceTest Table

Table 10-33: Structure of the ResultsNetworkPerformanceTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ErrorCode	int	4	Errorcode of the test
Direction	int	4	Duration of the test
AvgThputCapacity	int	4	Average throughput of capacity test
AvgThputSustainableCapacity	int	4	Sustainable avg. throughput
Thput30thPercentile	int	4	30th percentile throughput
AvgRoundTripTime	int	4	Round trip time
PercentageLimitedConnectivity	real	4	Duration with limited connectivity in % of total test duration
PercentageNoConnectivity	real	4	Duration with no connectivity in % of total test duration

10.34 ResultsNetworkPerformanceConn Table

Table 10-34: Structure of the ResultsNetworkPerformanceConn table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
StartTime	datetime2	7	Start time of the limited/no connectivity
Type	smallint	2	0: limited connectivity 1: no connectivity

10.35 ResultsNPTIperfUDPParameters Table

Table 10-35: Structure of the ResultsNPTIperfUDPParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
NPTSubTestId	int	4	NP test sub test id
Host	varchar	250	Host where Iperf test is performed to.
Bandwidth	int	4	Desired bandwidth in Bytes/s
DatagramSize	int	4	Size of udp datagram (default 1470 Bytes)
BufferSize	int	4	Windows socket buffer size in bytes

10.36 ResultsNPTIperfUDPTest Table

Table 10-36: Structure of the ResultsNPTIperfUDPTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NPTSubTestId	int	4	NP test sub test id
LastBlock	int	4	0: intermediate result 1: overall summary
ErrorCode	int	4	Error Code, link to errorcodes.ini
Direction	int	4	0: downlink 1: uplink
Bandwidth	int	4	In bits/s
Throughput	int	4	Bytes received / transmit time in s
PacketsReceived	int	4	Only if LastBlock = 1: number of received packets
PacketsLost	int	4	Only if LastBlock = 1: number of lost packets
PercentPacketsLost	real	4	Only if LastBlock = 1: percent of lost packets

Column Name	Type	Length	Description
PacketsOutOfOrder	int	4	Only if LastBlock = 1: out of order packets
DelayJitter	real	4	Delay jitter in ms.

10.37 ResultsNPTCapacityTestParameters Table

Table 10-37: Structure of the ResultsNPTCapacityTestParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
NPTSubTestId	int	4	NP test sub test id
Direction	varchar	15	Put or Get
Protocol	varchar	20	Protocol used (HTTP)
URICount	int	4	Number of URI (= number of threads) following in the next field.
URIList	varchar	8000	Separated list of full qualified URIs. The numbers of entries represent the number of "transfer threads". Separator tag: Semicolon, entries containing a comma character is replaced with the dot character.
LocalFilename	varchar	255	Reference file (uplink tests only, otherwise empty)
BufferSize	int	4	Send Buffer size value in Bytes (only interesting for uplink tests)

10.38 ResultsNPTCapacityTest Table

Table 10-38: Structure of the ResultsNPTCapacityTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
NPTSubTestId	int	4	NP test sub test id
ErrorCode	int	4	Error code of the current operation
ThroughputGet	int	4	application throughput in Bytes/s DL

Column Name	Type	Length	Description
LastBlock	smallint	2	LastBlock: 0 = intermediate result; 1 = result over test
Duration	int	4	Duration used for throughput calculation
BytesTransferredGet	bigint	8	Number of bytes transferred DL
ThroughputPut	int	4	application throughput in Bytes/s in UL
BytesTransferredPut	bigint	8	Number of bytes transferred UL
RoundTripTime	int	4	Round trip time

10.39 ResultsNPTCapacitySubTest Table

Table 10-39: Structure of the ResultsNPTCapacitySubTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Time of the actual result set
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
NPTSubTestId	int	4	NP test sub test id
SubTestId	bigint	8	Id of the subtest
Direction	smallint	2	Direction of the subtest 0: Get 1: Put
ErrorCode	int	4	Error code of the current operation
LastBlock	smallint	2	LastBlock: 0 = intermediate result; 1 = result over test
Duration	int	4	Duration used for throughput calculation
BytesTransferred	bigint	8	Error code of the current operation
Throughput	int	4	Application throughput in Bytes/s
RoundTripTime	int	4	Round trip time

10.40 ResultsNPTCapacitySubTestAccessTimes Table

Table 10-40: Structure of the ResultsNPTCapacitySubTestAccessTimes table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
NPTSubTestId	int	4	NP test sub test id
SubTestId	bigint	8	Id of the sub test
TCPSynTime	datetime2	7	UTC time of TCP Syn
TCPSynAckTime	datetime2	7	UTC time of ACK to TCP Syn
HTTPSendTime	datetime2	7	UTC time of HTTP Send
HTTPReceiveTime	datetime2	7	UTC time of HTTP receive

11 Messaging Test Results

This chapter describes the structure of the NQDI database tables that contain the message test results.

11.1 ResultsSMSParameters Table

This table contains the parameter of a SMS test.

Table 11-1: Structure of the ResultsSMSParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
SMSSize	int	4	Size in bytes (character)
MaxTime	int	4	Maximum Sending Time in s
PauseTime	int	4	Pause between messages in s
CntPtNumber	varchar	100	Number of the receiver/sender
identifier	varchar	100	Unique Identifier of the SMS message
SMSC	varchar	100	Name of the SMSC
DeliveryReport	smallint	2	Indicates if a delivery report is requested or not
SMSText	varchar	1000	Contains the SMS text

11.2 ResultsSMSRslt Table

This table contains the results of a SMS test.

Table 11-2: Structure of the ResultsSMSRslt table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
ErrorCode	int	4	Link to 'ErrorCodes.ErrorCode'
Duration	real	4	Send/Receive Time in ms

11.3 ResultsSMSTrace Table

This table contains the individual events of a SMS test, where each event has one row.

Table 11-3: Structure of the ResultsSMSTrace table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
sendReceive	char	2	'S' Sender event / 'R' Receiver event
event	varchar	100	Event text

11.4 ResultsMMSParameters Table

This table contains the parameters of the MMS test.

Table 11-4: Structure of the ResultsMMSParameters table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MMSSize	int	4	Size of the message in bytes
MaxTime	int	4	Maximum sending Time in seconds
PauseTime	int	4	Pause between messages in seconds
CntPtNumber	varchar	100	Number/ email address of the receiver
identifier	varchar	100	Unique Identifier of the MMS message
Gateway	varchar	100	Gateway of the MMS
MMSC	varchar	100	Name of MMSC
DeliveryReport	smallint	2	Requested a delivery report or not (0 or 1)

Column Name	Type	Length	Description
Protocol	varchar	10	Used protocol (HTTP, WSP)
Attachment1	varchar	100	Name of the first attachment
Attachment2	varchar	100	Name of the second attachment

11.5 ResultsMMSRslt Table

This table contains the results of the MMS test.

Table 11-5: Structure of the ResultsMMSRslt table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ErrorCode	int	4	Link to 'ErrorCodes.ErrorCode'
GPRSConnectTime	int	4	Time to connect to GPRS in ms
WAPConnectTime	int	4	Time to connect to WAP in ms
Duration	real	4	Duration of the sending/receiving in ms
Throughput	real	4	Throughput in bytes/s

11.6 ResultsMMSStat Table

This table contains the results of the MMS test.

Table 11-6: Structure of the ResultsMMSStat table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
sendReceive	char	2	Link to 'Position.PosId'
PosId	bigint	8	Link to 'NetworkInfo.NetworkId'
NetworkId	bigint	8	'S' Sender event / 'R' Receiver event

Column Name	Type	Length	Description
TransferTime	real	4	Time to transfer the MMS in s
MMSSize	int	4	Size of the message in bytes
Throughput	real	4	Throughput in bits/s

11.7 ResultsMMSTest Table

This table contains the results from MMS test.

Table 11-7: Structure of the ResultsMMSTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
sendReceive	char	2	'S' Sender event / 'R' Receiver event
MMSId	varchar	100	Unique Identifier of the MMS message
event	varchar	100	Event text

11.8 ResultsMMSTrace Table

This table contains the individual events of the MMS test.

Table 11-8: Structure of the ResultsMMSTrace table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of the actual result set
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
sendReceive	char	2	'S' Sender event / 'R' Receiver event
event	varchar	100	Event text

12 Voice Test Results

This chapter describes the structure of the voice test results tables from Diversity and Seven.Five.

12.1 ResultsInbandRTT Table

This table contains the results from the inband round trip time test. In general, the results from each test occupy there rows.

Table 12-1: Structure of the ResultsInbandRTT table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Time of a single RTT test
rtt	int	4	Round Trip Time in ms
T1	int	4	Internal values to calculate the rtt
T2	int	4	Internal values to calculate the rtt

12.2 ResultsLqAvg Table

Each row in this table contains the average results from one SQuad LQ voice test.

Table 12-2: Structure of the ResultsLQAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
LQ	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
timeClipping	real	4	
refDcOffset	real	4	
codedDcOffset	real	4	
posFreqShift	real	4	
negFreqShift	real	4	
delaySpread	real	4	

Column Name	Type	Length	Description
speechThreshold	real	4	
codedLevel	real	4	
delayDeviation	real	4	
qualityCode	char	20	
avgFreqShift	real	4	
ACG	real	4	
sQuadIe	int	4	
aSLrcvP56	real	4	
activityRcvP56	real	4	
noiseRcv	real	4	
staticSNR	real	4	
appl	int	4	
p862LQ	real	4	
p862	real	4	
RcvDelay	real	4	
AmplClipping	real	4	
MissedVoice	real	4	
ErrCode	int	4	

12.3 ResultsLqFreqShift Table

This table contains the frequency shift results from SQuad LQ voice tests. Each voice test for an 8 kHz sample occupies 55 rows in the table.

Table 12-3: Structure of the ResultsLqFreqShift table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
measFreq	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
posShift	real	4	
negShift	real	4	

12.4 ResultsLqNetFilter Table

This table contains the network filter (frequency response) results from SQUAD LQ voice test. Each voice test for an 8kHz sample occupies 128 rows in the table.

Table 12-4: Structure of the ResultsLqNetFilter table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
frequency	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
power	real	4	

12.5 ResultsLqTimeDom Table

Each row of this table contains the time domain results from one SQUAD LQ voice test.

Table 12-5: Structure of the ResultsLqTimeDom table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
timeOffset	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
signalLevel	real	4	
similarity	real	4	
timeClipping	real	4	
refEnvelope	real	4	
codedEnvelope	real	4	
interruptions	real	4	
signalLevelTrend	real	4	

12.6 ResultsLqTimeDomVarDelay Table

This table contains the time domain results for variable delay from SQUAD LQ voice test. The table contains as many records as there are variable delay events during one sample.

Table 12-6: Structure of the ResultsLqTimeDomVarDelay table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
timeOffset	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
delay	real	4	
length	real	4	

12.7 ResultsLqVarDelay Table

This table contains the time domain results for variable delay data from SQUAD LQ voice test. The table contains as many records as there are variable delay events during one sample.

Table 12-7: Structure of the ResultsLqVarDelay table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
blockLength	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
blockDelay	real	4	

12.8 ResultsNSAvg Table

This table contains the average results from a Noise Suppression test. Each test has one record in the table.

Table 12-8: Structure of the ResultsNSAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
SNRI_h	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
SNRI_m	real	4	
SNRI_l	real	4	
SPLR_h	real	4	
SPLR_m	real	4	
SPLR_l	real	4	
SPLR_p	real	4	
SNRI	real	4	
SPLR	real	4	
NPLR	real	4	
LQ	real	4	
QualityIndex	real	4	
NSRed	int	4	
ConvergenceTime	real	4	
SNRef	real	4	
MOSrcv	real	4	
SpeechLevRcv	real	4	
NoiseLevRcv	real	4	
SNRrcv	real	4	
Gain	real	4	
Clipping	real	4	

12.9 ResultsNSTimeDom Table

This table contains the time domain results from a Noise Suppression test. Each test has several records, depending on the duration of the sample.

Table 12-9: Structure of the ResultsNSTimeDom table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
timeOffset	real	4	
refEnvelope	real	4	
codedEnvelope	real	4	
diffEnvelope	real	4	
signalLevelGroup	int	4	

12.10 ResultsNinaAvg Table

This table contains the results of the NiNA+ test. The table contains one record for each test.

Table 12-10: Structure of the ResultsNinaAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
LQ	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
SpeechLevel	real	4	
NoiseLevel	real	4	
StaticSNR	real	4	
SpeechActivity	real	4	
AmplClipping	real	4	
TempClipping	real	4	
Impulseness	real	4	
DCOffset	real	4	
PitchFreq	real	4	
QualityCode	char	20	
SignalClass	int	4	

Column Name	Type	Length	Description
Application	int	4	
LQP563	real	4	
ErrCodeNiNAx	int	4	
Status	varchar	50	
LQNina	real	4	

12.11 ResultsNinaImpulsNoise Table

This table contains the timestamp of impulse noise events during a NiNA sample.

Table 12-11: Structure of the ResultsNinaImpulseNoise table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
startTime	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details

12.12 ResultsNinaInterruptions Table

This table contains the timestamps and the length of interruptions during a NiNA sample.

Table 12-12: Structure of the ResultsNinaInterruptions table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
start	real	4	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
length	real	4	

12.13 ResultsNinaTimeDom Table

This table contains the time domain information of a NiNA test.

Table 12-13: Structure of the ResultsNinaTimeDom table

Column	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
timeOffset	real	4	Time offset at the beginning of the sample
codedEnvelope	real	4	Level of the coded signal in dB

12.14 ResultsAECAvg Table

This table contains the results of the Active Echo test.

Table 12-14: Structure of the ResultsAECAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
signalType	char	50	See the `Manual - SQuad Voice Test Result Description.pdf` document for more details
delay	real	4	
lossSingelTalk	real	4	
lossOverall	real	4	
doubleTalkRatio	real	4	
distanceEOR	real	4	
EOR	real	4	
echoStatus	varchar	50	
gsm0350Status	varchar	50	
CodSignalType	int	4	
echoLossG122DT	real	4	
envCorr	real	4	
envDelay	real	4	
levelRcvSignal	real	4	

12.15 ResultsAECTimeDom Table

This table contains the time domain information for the AEC test.

Table 12-15: Structure of the ResultsAECTimeDom table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	
time	real	4	
el	real	4	

12.16 ResultsAECActiveParams Table

Table 12-16: Structure of the ResultsAECActiveParams table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
echoType	varchar	50	
echoLoss	real	4	
echoDelay	real	4	
doubletalkSignal	varchar	100	

12.17 ResultsLQ08Avg Table

Table 12-17: Structure of the ResultsLQ08Avg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
LQNB	real	4	MOS-LQO value obtained by SQuad-LQ in narrow-band (remains NIL in WB)
LQWB	real	4	MOS-LQO value obtained by SQuad-LQ in wide-band

Column Name	Type	Length	Description
Appl	int	4	Application (0 for narrowband handset telephony, 2 for SuperWideband, 100 for NB handset incl. P.862)
MissedVoice	real	4	Missed Voice compared to reference signal
TotalGain	real	4	Gain of the transmission channel (should be in the range of +6 …-12dB)
ASLrcvP56	real	4	Active Speech Level acc. to ITU-T P.56 in dB, considers only active speech parts but no speech pauses
ActivityRcvP56	real	4	Speech Activity acc. to ITU-T P.56 in %
NoiseRcv	real	4	Noise Level (r.m.s. of the noise floor) in dB
StaticSNR	real	4	Signal-to-Noise ratio between Active Speech Level and Noise Level
BandWidth	int	4	Actual measured bandwidth 0: narrowband telephony, 1: wideband, 2:super wideband
RcvDelay	real	4	Delay between the reference speech signal and the signal evaluated in seconds
DelaySpread	real	4	Maximal spread of observed delay jitter in ms
DelayDeviation	real	4	Delay deviation of observed delay jitter in ms
QualityCode	varchar	50	Observed main distortions in the signal evaluated. Code is explained separately
P862LQ	real	4	P.862.1 (only if Appl = 100)
OptionalNB	real	4	3rd party NB
OptionalWB	real	4	3rd party WB
ErrCode	real	4	Usually 0, -5 for Silence
Status	varchar	100	Usually OK, 'Silence' as option
FrontClipping	real	4	Front-End-Clipping of speech in %. It describes the 'missed' speech at the beginning and the end of utterances
AmplClipping	real	4	Place holder for an indicator describing the signal saturation
PerceivedBandWidth	real	4	Perceived bandwidth / spectral coloration 0…100%
BandWidthDeviation	real	4	Deviation of bandwidth in relation to dominating bandwidth (BandWidth)
LowerFilterLimit	real	4	Frequency value for the lower TX band limit
UpperFilterLimit	real	4	Frequency value for the upper TX band limit
ReferDCOffset	real	4	DC offset in the source (reference) speech signal in % of the full range of short integer
CodedDCOffset	real	4	DC offset in the speech signal evaluated in % of the full range of short integer
AverFrequencyShift	real	4	Frequency shift as an indicator for unnaturalness of the coded speech. Without dimension.

Column Name	Type	Length	Description
PosFreqShift	real	4	Number of frequency shift to higher spectral values. Result of spectral evaluation.
NegFreqShift	real	4	Number of frequency shift to higher spectral values. Result of spectral evaluation.
Optional0	real	4	
P862	real	4	P.862 (only if Appl = 100)
OptionalNB2	real	4	2nd Optional 3rd party NB
OptionalWB2	real	4	2nd Optional 3rd party WB
MOSSpcShape	real	4	Partially MOS for spectral shaping
MOSDiscont	real	4	Partially MOS for discontinuity
MOSNoise	real	4	Partially MOS for noisiness
MOSLoudness	real	4	Partially MOS for loudness
Optional1	real	4	
Optional2	real	4	
Optional3	real	4	
Optional4	real	4	
Optional5	real	4	

12.18 ResultsLQ08TimeDom Table

Table 12-18: Structure of the ResultsLQ08TimeDom table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
Time	real	4	Time stamp of the analyzed frame
SignalAttenuation	real	4	Attenuation of the actual frame
Similarity	real	4	Short term quality on a scale from 0 to 1 (based on rcv)
SimilarityX	real	4	Short term quality on a scale from 0 to 1 (based on sent)
ReferenceEnvelope	real	4	Signal envelope of reference ('sent') signal
CodedEnvelope	real	4	Signal envelope of received signal
Interruptions	real	4	Interruption at this frame, value between 0 (no interruption) and 1 (complete signal loss)
AttenuationTrend	real	4	Smoothed trend of signal attenuation in dB
DelayProfile	real	4	Delay change at this frame, length is given in ms

Column Name	Type	Length	Description
DelayTrend	real	4	Reports the signal delay per time frame in ms
NoiseLevelTrend	real	4	Reports the noise level of the actual frame Values are only provided in case of background noise, that is, could be for one part of the speech signal only.

12.19 ResultsLQ08NetFilter Table

Table 12-19: Structure of the ResultsLQ08NetFilter table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Frequency	real	4	0…4000 for NB, 0…16000 for WB
Power	real	4	FrequencyResponse at the actual frequency

12.20 ResultsLQ08ClipAvg Table

Table 12-20: Structure of the ResultsLQ08ClipAvg table

Column Name	Type	Length	Description
MsgId	Bigint	8	Unique Id
TestId	Bigint	8	Link to 'TestInfo.TestId'
ClipId	Bigint	8	Link to 'ClipInfo.ClipId'

The rest of the fields are identical to the table ResultsLQ08Avg.

12.21 ResultsLQ08ClipTimeDom Table

Table 12-21: Structure of the ResultsLQ08ClipTimeDom table

Column Name	Type	Length	Description
MsgId	Bigint	8	Unique Id
TestId	Bigint	8	Link to 'TestInfo.TestId'
ClipId	Bigint	8	Link to 'ClipInfo.ClipId'

The rest of the fields are identical to the table ResultsLQ08TimeDom.

12.22 ResultsLQ08ClipNetFilter Table

Table 12-22: Structure of the ResultsLQ08ClipNetFilter table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
TestId	bigint	8	Link to 'TestInfo.TestId'
ClipId	bigint	8	Link to 'ClipInfo.ClipId'

The rest of the fields are identical to the table ResultsLQ08NetFilter.

13 Video Test Results

This chapter describes the structure of the tables that contain the video test results in the NQDI database.

13.1 ResultsVqTest Table

Each row in this table contains the results of one video test.

Table 13-1: Structure of the ResultsVqTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
startRec	datetime2 (3)	8	Time when recording starts
endRec	datetime2 (3)	8	Time when recording stops
offset	int	4	Time offset (ms) to first sync. Frame.
lipSync	int	4	Lipsync value
VideoRecDelay	int	4	Time when LS was measured

13.2 VideoStatusTrace Table

This table contains the trace logged by the DataVideoEngine for Video tests.

Table 13-2: Structure of the VideoStatusTrace table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Player	varchar	100	Player the message is from
Source	varchar	100	Source of the message
Event	varchar	500	Message itself

13.3 ResultsVq06Avg Table

This table contains VQUAD Results (Version 06). For more information about these results, see the `Manual - VMon and VQuad Results Description.pdf` document.

Table 13-3: Structure of the ResultsVq06Avg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Model	char	2	
VisualQuality	real	4	
ProblemCode	varchar	25	
SignalDist	varchar	25	
FrameRateCalc	real	4	
Black	real	4	
Freezing	real	4	
Jerkiness	real	4	
MatchedFrames	real	4	
FrameJitter	real	4	
Blurring	real	4	
Blockiness	real	4	
Tiling	real	4	
PSNR	real	4	
LumOffset	real	4	
LumGain	real	4	
Status	varchar	100	

13.4 ResultsVq06TimeDom Table

This table contains VQUAD Time domain Results (Version 06).

Table 13-4: Structure of the ResultsVq06TimeDom table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to ‘TestInfo.TestId’
DegTime	int	4	
DeltaTime	int	4	
RefFrameNr	smallint	2	
DegFrameNr	smallint	2	
Flag	smallint	2	
RepFrame	smallint	2	
Black	int	4	
RefInterFDiff	real	4	
DegInterFDiff	real	4	
Blurring	real	4	
Blockiness	real	4	
Tiling	real	4	
PSNR	real	4	
SceneChange	int	4	
GraphicsText	int	4	
AudioActive	int	4	
VerResolution	int	4	

13.5 ResultsVideoStream Table

This table contains the results of a video stream.

Table 13-5: Structure of the ResultsVideoStream table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
StartTime	datetime2 (3)	8	Start of the stream
Player	varchar	100	Player used to play the stream
Technology	varchar	50	Technology used for the stream
Setup	varchar	40	Is always ‘URL’
Protocol	varchar	20	Transport protocol
URL	varchar	2048	URL of the video

Column Name	Type	Length	Description
HorResolution	int	4	Resolution in pixels
VerResolution	int	4	Resolution in pixels
TimeToFirstPicture	int	4	Time in ms to display first picture
SuccessState	int	4	0 or 1
State	varchar	100	Status of the stream (COMPLETED, FAILED…)
AudioCodec	varchar	50	The audio codec used
VideoCodec	varchar	50	The video codec used
ImageSize	varchar	50	Size of the image in pixels
VideoDuration	real	4	Video duration given in Header
VideoResolution	varchar	50	Resolution of the original video
TotalBytes	int	4	Total transferred bytes

13.6 ResultsVideoStreamAvg Table

This table contains the average results of the reported clip results of a stream.

Table 13-6: Structure of the ResultsVideoStreamAvg table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
SessionQuality	real	4	Quality of the whole stream
TestQualityAvg	real	4	Average of the reported clip results
TestQualityMax	real	4	Max MOS of the reported clips
TestQualityMin	real	4	Min MOS of the reported clips
TestQualityStdDev	real	4	StdDev of the reported clips
FreezingPercent	real	4	Percent of freezing of the stream
Freezing	real	4	Time when freezing was active in s
Status	varchar	100	Status of the stream

13.7 ResultsVideoStreamTCPData Table

This table contains some values collected during measurement related to the stream.

Table 13-7: Structure of the ResultsVideoStreamTCPData table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
TimeToReadytoPlay	int	4	Time used until ready to play
TimeToFirstPicture	int	4	Time used up to first picture
TimeToStartBuffering	int	4	Time to start buffering
PreBufferingTime	int	4	Pre buffering time
Container	varchar	50	Used container for video (flash, mpeg, …)
BytesTotal	int	4	Total stream size
BytesReceived	int	4	Received bytes
TimeToFirstPicturePlayer	int	4	Time to first picture depending on player events
TimeToStartBufferingPlayer	int	4	Time to start buffering depending on player events
PreBufferingTimePlayer	int	4	Pre buffering time depending on player events

13.8 ResultsVQ08StreamAvg Table

This table contains the results of a video stream evaluation. Details of the results can be found in the video test description.

Table 13-8: Structure of the ResultsVQ08StreamAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
Model	char	2	
VisualQuality	real	4	
ProblemCode	varchar	25	
SignalDist	varchar	25	
FrameRateCalc	real	4	
Black	real	4	
Freezing	real	4	
Jerkiness	real	4	
MatchedFrames	real	4	
FrameJitter	real	4	
Blurring	real	4	

Column Name	Type	Length	Description
Blockiness	real	4	
Tiling	real	4	
PSNR	real	4	
LumOffset	real	4	
LumGain	real	4	
Status	varchar	100	

13.9 ResultsVQ08ClipAvg Table

This table contains the results of a single clip. Details of the results can be found in the video test description.

Table 13-9: Structure of the ResultsVQ08StreamAvg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
TestId	bigint	8	Link to 'TestInfo.TestId'
ClipId	bigint	8	Link to 'ClipInfo.ClipId'
Model	char	2	
VisualQuality	real	4	
ProblemCode	varchar	25	
SignalDist	varchar	25	
FrameRateCalc	real	4	
Black	real	4	
Freezing	real	4	
Jerkiness	real	4	
MatchedFrames	real	4	
FrameJitter	real	4	
Blurring	real	4	
Blockiness	real	4	
Tiling	real	4	
PSNR	real	4	
LumOffset	real	4	
LumGain	real	4	
Status	varchar	100	

13.10 ResultsVQ08ClipTimeDom Table

This table contains the results of a single clip. Details of the results can be found in the video test description.

Table 13-10: Structure of the ResultsVQ08ClipTimeDom table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
TestId	bigint	8	Link to 'TestInfo.TestId'
ClipId	bigint	8	Link to 'ClipInfo.ClipId'
DegTime	int	4	
DeltaTime	int	4	
RefFrameNr	smallint	2	
DegFrameNr	smallint	2	
Flag	smallint	2	
RepFrame	smallint	2	
Black	int	4	
RefInterFDiff	real	4	
DegInterFDiff	real	4	
Blurring	real	4	
Blockiness	real	4	
Tiling	real	4	
PSNR	real	4	
SceneChange	int	4	
GraphicsText	int	4	
AudioActive	int	4	
VerResolution	int	4	

13.11 ClipVideoInfo Table

This table contains information of the clip.

Table 13-11: Structure of the ClipVideoInfo table

Column Name	Type	Length	Description
ClipId	bigint	8	Link to 'ClipInfo.ClipId'
RefFileName	varchar	255	Reference filename
CodedFileName	varchar	255	Coded filename

Column Name	Type	Length	Description
SequenceLength	float	8	Length of clip
FrameRate	smallint	2	Frame rate
VerResolution	int	4	Vertical resolution
HorResolution	int	4	Horizontal resolution
RefFrame	int	4	Reference frame number of first real frame
CodedFrame	int	4	Coded frame number of first real frame
Offset	int	4	Internal use only
NrFramesEval	int	4	Unused
NoiseThresh	real	4	Unused
Application	int	4	Unused
SceneAnalysis	int	4	
AlgoVersion	int	4	Version of the video algorithm 0 = VQ 05 1 = VQ 06 2 = VQ 08

14 Map Table

This chapter describes the structure of the map tables in the NQDI database.

14.1 MapGrids Table

This table contains the configured Map Grid areas.

Table 14-1: Structure of the MapGrids table

Column Name	Type	Length	Description
GridId	int	4	Unique Grid Id
areaName	char	100	Grid Area Name
topLon	real	4	Longitude on top right
topLat	real	4	Latitude on top right
lonStepSize	real	4	Step size in Longitude direction
latStepSize	real	4	Step size in Latitude direction
lonNumSteps	int	4	Number of steps in Longitude direction
latNumSteps	int	4	Number of steps in Latitude direction
Width	real	4	unused

14.2 MapplotGroups Table

This table contains the groups for the mapplot definitions.

Table 14-2: Structure of the MapplotGroups table

Column Name	Type	Length	Description
groupID	int	4	Unique group identifier
grp	varchar	50	Name of the group
PlotType	smallint	2	Grid, point or polygon plot
name	varchar	50	Name to display
query	text	–	Query
query2	text	–	Query second part
queryFrom	text	–	From part from query
queryWhere	text	–	Where part from query

14.3 MapplotItems Table

This table contains the items for each mapplot.

Table 14-3: Structure of the MapplotItems table

Column Name	Type	Length	Description
itemID	int	4	Unique item identifier
Name	varchar	50	Name of the item
Filter	varchar	50	Filter
Fields	varchar	255	Collection of fields
labelSelected	bit	1	Is the label selected
Label	varchar	50	Text of label
FieldtoDisplay	varchar	50	Field to be displayed
groupID	int	4	Group identifier (MapplotGroups)
shadeID	int	4	Shade identifier (MapplotShades)

14.4 MapplotShades Table

This table contains the shade definition for the mapplots.

Table 14-4: Structure of the MapplotShades table

Column Name	Type	Length	Description
shadeID	int	4	Unique shade identifier
name	varchar	50	Name of the shade
ShadeType	varchar	50	Type of the shade
Thematic	bit	1	Thematic or not
Shade	text	–	Actual shade information
Circle	varchar	50	Circle information
SecondItem	text	–	Information about a second item

14.5 MapFavorites Table

This table contains the info of the user defined map favorite’s tree.

Table 14-5: Structure of the MapFavorites table

Column Name	Type	Length	Description
FavoritesId	int	4	Unique identifier
GroupName	varchar	100	Assigned group

Column Name	Type	Length	Description
Name	varchar	100	Name for the plot
OrderId	int	4	Sorting order within the group
Private	tinyint	1	Public or private plot
PCName	varchar	50	PC name for private plots
SplitMode	int	4	Selected split mode
OffsetPlot	bit	1	1: plot is plotted with offset
QueryValues	text	16	Pre defined values for dynamic queries
PlotType	smallint	2	Grid, point or polygon plot
Query	text	16	Query for the plot
Query2	text	16	Query part2 for the plot
QueryFrom	text	16	From part of the query
QueryWhere	text	16	Where part of the query
Filter	varchar	50	Filter of the plot
Fields	varchar	255	Fields to be shown/plotted
LabelSelected	bit	1	Indicates if label is shown or not
Label	varchar	50	Field for the label
FieldtoDisplay	varchar	50	Filed to plot
ShadeType	varchar	50	Shade type (range, individual…)
Thematic	bit	1	Indicates if thematic plot or not
Shade	text	16	Shade definition
Circle	varchar	50	Definition if plot is plotted as circle
SecondItem	Text	16	Definitions for a second item
GridName	varchar	100	Name of the selected grid
BPlot	bit	1	1 if plot for B Side, otherwise 0
IBWaveSplit	smallint	2	Selected spilt mode for iBwave

14.6 Binning Table

This table contains the info of the binning data.

Table 14-6: Structure of the Binning table

Column Name	Type	Length	Description
BinningId	bigint	8	Link to ‘BinningRelation.BinningId’
Name	varchar	100	Name of the binning

Column Name	Type	Length	Description
Type	varchar	50	Type of binning, currently this is only ‘Speed’
StepSize	int	4	Step size of binned value
MaxValue	float	8	Max value of binned value

14.7 BinningRelation Table

This table contains the info of the binning data.

Table 14-7: Structure of the BinningRelation table

Column Name	Type	Length	Description
BinningId	bigint	8	Link to ‘Binning.BinningId’
PosId	bigint	8	Link to ‘Position.PosId’
GroupId	int	4	Id of the group for binning

15 Scanner Tables

This chapter describes the structure of the NQDI database tables that contain the scanner measurement data.

15.1 MsgScannerData Table

This table contains the GSM scanner data, that is, GSM850/900 MHz and GSM1800/1900 Scanner messages, in binary format.

Table 15-1: Structure of the MsgScannerData table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
parseCode	char	5	Parse code
RFBand	int	4	RF Band
message	varchar	4050	Binary message
ScannerId	int	4	

15.2 MsgHotChannels Table

This table contains the C/I, BCCH, BSIC, RSSI, Serving/Neighbor/Adjacent information for the top 20 channels, that is, top 20 GSM 850/900 and top 20 GSM 1800/1900 channels.

Table 15-2: Structure of the MsgHotChannels table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
RFBand	int	4	RF Band
servingCell	char	31	‘Channel Description’ field
adjacentHigh	char	31	‘Channel Description’’ field
adjacentLow	char	31	‘Channel Description’’ field
top20	char	620	Sequence of ‘Channel Description’’ fields, sorted by RxLev. This field contains in maximum the 20 strongest channels of a whole RF band specified by RFBand
top20Op	char	620	Sequence of ‘Channel Description’’ fields, sorted by RxLev. This field contains in maximum the 20 strongest channels of the current serving operator in a whole RF band specified by RFBand. The channel allocation can be configured in NQDI. This has to be done before the data import.
LeeMode	tinyint	1	
top20HO	char	620	Sequence of ‘Channel Description’’ fields, sorted by RxLev. This field contains in maximum the 20 strongest channels of the home operator in a whole RF band specified by RFBand. The channel allocation can be configured in NQDI. This has to be done before the data import. If no Home operator is assigned, this field will be empty

The Channel Description field is stored as ASCII text in the following format: *573/-88/22/40/1/0/1/1/0/0¦ -> Length = 29*

Table 15-3: Structure of the Channel Description table

Field	Start	End	Length	Description
573	1	4	4	Channel: contains the channel number
-88	6	9	4	RxLev: in dBm
22	11	13	3	C/I: in dB
40	15	18	4	DVCC (BSIC)
1	20	20	1	DVCC Parity / Boolean: tells if the scanner was able to decode the BSIC correctly
0	22	22	1	DCCH (BCCH) / Boolean: tells if this channel is a BCCH
1	24	24	1	ServingCell / Boolean: tells if this channel is the serving cell
0	26	26	1	Adjacent Low / Boolean: tells if this channel is the low adjacent channel
0	28	28	1	Adjacent High/ Boolean: tells if this channel is the high adjacent channel
0	30	30	1	Neighbor / Boolean: tells if this channel is a Neighbor channel
¦	31	31	1	End character (‘¦’)

15.3 MsgScannerChn Table

Table 15-4: Structure of the MsgScannerChn table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
scannerBand	int	4	The scanned technology
grp	int	4	
chn	int	4	GSM channel number
CovI	int	4	C/I value
ColorCode1	int	4	
ColorCode2	int	4	
RxLev	int	4	
ScannerId	int	4	
ChannelType	int	4	

15.4 MsgScannerGSM850 Table

Table 15-5: Structure of the MsgScannerGSM850 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev_xxxx	Real	4	Rx Level of the Channel xxxx (xxxx = 128 to 251)

15.5 MsgScannerGSM900 Table

Table 15-6: Structure of the MsgScannerGSM900 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev_xxxx	Real	4	Rx Level of the Channel xxxx (xxxx = 1 to 124)

15.6 MsgScannerEGSM900 Table

Table 15-7: Structure of the MsgScannerEGSM900 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev_xxxx	Real	4	Rx Level of the Channel xxxx (xxxx = 975 to 1023 and 0)

15.7 MsgScannerGSM1800 Table

Table 15-8: Structure of the MsgScannerGSM1800 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'

Column Name	Type	Length	Description
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev_xxxx	Real	4	Rx Level of the Channel xxxx (xxxx = 512 to 885)

15.8 MsgScannerGSM1900 Table

Table 15-9: Structure of the MsgScannerGSM1900 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev_xxxx	Real	4	Rx Level of the Channel xxxx (xxxx = 512 to 810)

15.9 MsgScannerTopChannelInfo Table

Table 15-10: Structure of the MsgScannerTopChannelInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TopChnId	bigint	8	Link to MsgScannerTopChannel

15.10 MsgScannerTopChannel Table

Table 15-11: Structure of the MsgScannerTopChannel table

Column Name	Type	Length	Description
TopChnId	bigint	8	Link to MsgScannerTopChannelInfo
MCC	int	4	MCC

Column Name	Type	Length	Description
MNC	int	4	MNC
Chn_GSM850	smallint	2	Number of best channel for the defined operator GSM850
RxLev_GSM850	real	4	RxLev of the above channel
Chn_GSM900	smallint	2	Best operator channel GSM900
RxLev_GSM900	real	4	RxLev of the above channel
Chn_EGSM900	smallint	2	Best operator channel E-GSM900
RxLev_EGSM900	real	4	RxLev of the above channel
Chn_GSM1800	smallint	2	Best operator channel GSM1800
RxLev_GSM1800	real	4	RxLev of the above channel
Chn_GSM1900	smallint	2	Best operator channel GSM1900
RxLev_GSM1900	real	4	RxLev of the above channel
TopRFBand	int	4	Best channel technology
TopChn	smallint	2	Channel number
TopRxLev	real	4	RxLev of the above channel
BCCHChn_GSM850	smallint	2	Number of best BCCH channel for the defined operator GSM850
BCCHRxLev_GSM850	real	4	RxLev of the above channel
BCCHChn_GSM900	smallint	2	Best operator BCCH channel GSM900
BCCHRxLev_GSM900	real	4	RxLev of the above channel
BCCHChn_EGSM900	smallint	2	Best operator BCCH channel E-GSM900
BCCHRxLev_EGSM900	real	4	RxLev of the above channel
BCCHChn_GSM1800	smallint	2	Best operator BCCH channel GSM1800
BCCHRxLev_GSM1800	real	4	RxLev of the above channel
BCCHChn_GSM1900	smallint	2	Best operator BCCH channel GSM1900
BCCHRxLev_GSM1900	real	4	RxLev of the above channel
BCCHTopRFBand	int	4	Best channel technology
BCCHTopChn	smallint	2	Channel number
BCCHTopRxLev	real	4	RxLev of the above channel

15.11 MsgGSMScannerTopCovIInfo Table

Table 15-12: Structure of the MsgGSMScannerTopCovIInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TopCovIId	bigint	8	Link to MsgGSMScannerTopCovI

15.12 MsgGSMScannerTopCovI Table

Table 15-13: Structure of the MsgGSMScannerTopCovI table

Column Name	Type	Length	Description
TopCovIId	bigint	8	Link to MsgGSMScannerTopCovIInfo
MCC	int	4	MCC
MNC	int	4	MNC
Chn_GSM850	smallint	2	Number of best channel for the defined operator GSM850
CovI_GSM850	smallint	2	C/I of the above channel
RxLev_GSM850	smallint	2	RxLev of the above channel
Chn_GSM900	smallint	2	Best channel GSM900
CovI_GSM900	smallint	2	C/I of the above channel
RxLev_GSM900	smallint	2	RxLev of the above channel
Chn_GSM1800	smallint	2	Best channel GSM1800
CovI_GSM1800	smallint	2	C/I of the above channel
RxLev_GSM1800	smallint	2	RxLev of the above channel
Chn_GSM1900	smallint	2	Best channel GSM1900
CovI_GSM1900	smallint	2	C/I of the above channel
RxLev_GSM1900	smallint	2	RxLev of the above channel
TopChn	smallint	2	Overall best channel
TopCovI	smallint	2	C/I of the above channel

Column Name	Type	Length	Description
TopRxLev	smallint	2	RxLev of the above channel
TopRFBand	int	4	RFBand of the top channel

15.13 MsgScannerBCCHInfo Table

Table 15-14: Structure of the MsgScannerBCCHInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
BCCHScanId	bigint	8	Link to MsgScannerBCCH
ScannerId	int	4	Internal Id of the scanner
RFBand	int	4	Technology (use dbo.GetRFBand() to get name of the band)
Message	text	—	Binary message
NumChannels	smallint	2	Number of Pilots that belong to the message (see BCCHScanId)
Version	smallint	2	Version of message only for internal use

15.14 MsgScannerBCCH Table

Table 15-15: Structure of the MsgScannerBCCH table

Column Name	Type	Length	Description
BCCHScanId	bigint	8	Link to MsgScannerBCCHInfo
Channel	int	4	GSM Channel number
RSSI	real	4	RSSI of the above channel
NumCC	smallint	2	Number of decoded Color Codes
MCC_1	smallint	2	MCC decoded from first L3 message
MNC_1	smallint	2	MNC decoded from first L3 message
LAC_1	int	4	LAC decoded from first L3 message
CID_1	int	4	CID decoded from first L3 message

Column Name	Type	Length	Description
CC1_1	smallint	2	ColorCode part 1 (NCC)
CC2_1	smallint	2	ColorCode part 2 (BCC)
CoI_1	real	4	C/I of the above channel
L3d_1	varchar	50	Complete Layer 3 message
MCC_2	smallint	2	Same values above for 2nd and 3rd available ColorCode measurement
MNC_2	smallint	2	
LAC_2	int	4	
CID_2	int	4	
CC1_2	smallint	2	
CC2_2	smallint	2	
CoI_2	real	4	
L3d_2	varchar	50	
MCC_3	smallint	2	
MNC_3	smallint	2	
LAC_3	int	4	
CID_3	int	4	
CC1_3	smallint	2	
CC2_3	smallint	2	
CoI_3	real	4	
L3d_3	varchar	50	
SCH_1	real	4	SCH Power measurement
SCH_2	real	4	
SCH_3	real	4	

15.15 MsgWCDMAHotChannel Table

This table contains additional information for the MsgWCDMAScannerChnStatus table.

Table 15-16: Structure of the MsgWCDMAHotChannel table

Column Name	Type	Length	Description
WCDMAHCId	bigint	8	Link to 'MsgWCDMAHotChannel. WCDMAHCId'
SetValue	char	3	Character, can be one of the following: • A: Active Set • M, N: Monitored Set • D, E: Detected Set • H: Secondary Channel Active Set • L: List Set
PSC	smallint	2	Primary scrambling code

15.16 MsgWCDMAScannerChnStatus Table

This table contains the WCDMA scanner channel status data in binary format.

Table 15-17: Structure of the MsgWCDMAScannerChnStatus table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
parseCode	char	5	Parse code
message	varchar	2000	Binary message
rxLev	int	4	RxLevel in dBm (-10 to –120 dBm)
channel	int	4	Scanned channel (for example, 10550)
ScannerId	int	4	Internal id of the scanner
RFBand	int	4	Technology
Version	smallint	2	Used to distinguish old a new messages (content of column message is different)
WCDMAHCId	bigint	8	Link to 'MsgWCDMAHotChannel. WCDMAHCId'

15.17 WCDMAScannerTopCPICH Table

This table contains decoded data of the MsgWCDMAScannerChnStatus table.

Table 15-18: Structure of the WCDMAScannerTopCPICH table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RFBand	int	4	Technology, see function GetRFBand
Channel	int	4	UMTS channel
RSSI	real	4	RSSI of the above channel
SCode_xx	smallint	2	Scrambling Code (xx = 01 – 20)
TmRef_xx	int	4	Time Reference
SChip_xx	smallint	2	Spread Chips
P_SCH_xx	real	4	P-SCH Ec/No
S_SCH_xx	real	4	S-SCH Ec/No
CPICH_xx	real	4	CPICH Ec/No
B_CCH_xx	real	4	BCCH Ec/No

15.18 MsgWCDMAScannerTopChInfo Table

This table, together with MsgWCDMAScannerTopCh, contains the best Scode per defined operator.

Table 15-19: Structure of the MsgWCDMAScannerTopChInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TopChnId	bigint	8	Link to MsgWCDMAScannerTopCh

15.19 MsgWCDMAScannerTopCh Table

Table 15-20: Structure of the MsgWCDMAScannerTopCh table

Column Name	Type	Length	Description
TopChnId	bigint	8	Link to MsgWCDMAScannerTopChInfo
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
Channel	smallint	2	Channel number
RSSI	real	4	Level of the best channel
SCode	smallint	2	Scrambling code
TmRef	Bigint	84	Time reference
SChip	smallint	2	Spread chips
P_SCH	real	4	P-SCH Ec/No
S_SCH	real	4	S-SCH Ec/No
CPICH	real	4	CPICH Ec/No
B_CCH	real	4	BCCH Ec/No
RFBand	int	4	Technology
SortMode	smallint	2	• 0 = CPICH • 1 = RSCP (= RSSI + CPICH) • 2 = RSSI
GroupMode	smallint	2	• 0 = Top of all bands per operator • 1 = Top per band per operator • 2 = Top of all bands (overall) • 3 = Top per band (overall)

15.20 MsgWCDMAScannerPilotInfo Table

Table 15-21: Structure of the MsgWCDMAScannerPilotInfo table

Column Name	Type	Length	Description
MsgId	Bigint	8	Unique Id
SessionId	Bigint	8	Link to ‘Sessions.SessionId’
TestId	Bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	Bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
WPilotId	bigint	8	Link to ‘MsgWCDMAScannerPilot.WPilotId’
ScannerId	int	4	Device id of scanner

Column Name	Type	Length	Description
RFBand	int	4	Band of measurement
Channel	int	4	UARFCN
Band	int	4	Unused
PNThreshold	real	4	Threshold of measurement
IO	real	4	RSSI of UARFCN
DwellingTime	int	4	Dwelling time
NumRecords	smallint	2	Number of Pilots for the scan
Version	smallint	2	Version of measurement
WCDMAHCId	bigint	8	Link to ‘MsgWCDMAHotChannel.WCDMAHCId’

15.21 MsgWCDMAScannerPilot Table

Table 15-22: Structure of the MsgWCDMAScannerPilot table

Column Name	Type	Length	Description
WPilotId	bigint	8	Link to ‘MsgWCDMAScannerPilotInfo.WPilotId’
SIBId	bigint	8	Link to ‘MsgWCDMAScannerSIB.SIBId’
Number	int	4	PSC(Primary Scrambling Code)
Status	int	4	Unused
EcIoData	real	4	CPICH Ec/No
TOffsetORPDelay	int	4	Time reference
Aggregate	real	4	Unused
EpsIo	real	4	P-SCH Ec/No
EssIo	real	4	S-SCH Ec/No
EpcIo	real	4	BCCH Ec/No
Ec2IoOrCC	real	4	Unused
DelaySpread	int	4	For version 2: Spread Chips
RakeFingerCnt	int	4	Rake finger count
SigIntRatio	real	4	Signal-to-Interference Ratio
ReceivedEnergy	real	4	Unused
TransportBlock	varchar	70	Unused
SFNPrime	int	4	Unused
ULInterference	real	4	UL interference
MCC	smallint	2	MCC decoded from SIB message

Column Name	Type	Length	Description
MNC	smallint	2	MNC decoded from SIB message
LAC	int	4	LAC decoded from SIB message
CID	int	4	CID decoded from SIB message
OrderId	smallint	2	Sorting id (sorted by CPICH Ec/No)

15.22 MsgWCDMAScannerSIB Table

Table 15-23: Structure of the MsgWCDMAScannerSIB table

Column Name	Type	Length	Description
SIBId	bigint	8	Link to 'MsgWCDMAScannerPilot.SIBId'
SIBType	varchar	25	SIB type (name)
Message	varchar	1000	RRC SIB message

15.23 MsgWCDMAScannerPilotPollution Table

Table 15-24: Structure of the MsgWCDMAScannerPilotPollution table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RFBand	int	4	Technology of results
Channel	int	4	UARFCN
PSC_Best	smallint	2	Best primary Scrambling code
CPICH_Best	real	4	CPICH Ec/No of best PSC
PSC_2nd	smallint	2	2nd PSC
CPICH_Delta_Best_2nd	real	4	CPICH Ec/No of 2nd PSC
PSC_3rd	smallint	2	3rd PSC
CPICH_Delta_Best_3rd	real	4	CPICH Ec/No of 3rd PSC
PSC_4th	smallint	2	4th PSC
CPICH_Delta_Best_4th	real	4	CPICH Ec/No of 4th PSC

Column Name	Type	Length	Description
PSC_5th	smallint	2	5th PSC
CPICH_Delta_Best_5th	real	4	CPICH Ec/No of 5th PSC
PSC_6th	smallint	2	6th PSC
CPICH_Delta_Best_6th	real	4	CPICH Ec/No of 6th PSC
PSC_7th	smallint	2	7th PSC
CPICH_Delta_Best_7th	real	4	CPICH Ec/No of 7th PSC
PSC_8th	smallint	2	8th PSC
CPICH_Delta_Best_8th	real	4	CPICH Ec/No of 8th PSC
PSC_9th	smallint	2	9th PSC
CPICH_Delta_Best_9th	real	4	CPICH Ec/No of 9th PSC
PSC_10th	smallint	2	10th PSC
CPICH_Delta_Best_10th	real	4	CPICH Ec/No of 10th PSC
PSC_11th	smallint	2	11th PSC
CPICH_Delta_Best_11th	real	4	CPICH Ec/No of 11th PSC
PSC_12th	smallint	2	12th PSC
CPICH_Delta_Best_12th	real	4	CPICH Ec/No of 12th PSC

15.24 MsgCDMAScannerSpectrum Table

Table 15-25: Structure of the MsgCDMAScannerSpectrum table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
ScannerId	int	4	
RFBand	int	4	
StartFreq	int	4	
EndFreq	int	4	
Samples	int	4	
message	varchar	4096	

Column Name	Type	Length	Description
Direction	smallint	2	
CDMASpectrumId	bigint	8	Link to MsgCDMAScannerPeakAvg

15.25 MsgCDMAScannerPeakAvg Table

Table 15-26: Structure of the MsgCDMAScannerPeakAvg table

Column Name	Type	Length	Description
CDMASpectru-mId	bigint	8	Link to MsgCDMAScannerSpectrum
MaxRSSI	float	8	Max RSSI value
MaxRSSIFreq	float	8	Frequency of max RSSI
AvgRSSI	float	8	Averaged RSSI

15.26 MsgLTEHotChannel Table

Table 15-27: Structure of the MsgLTEHotChannel table

Column Name	Type	Length	Description
LTEHCId	bigint	8	Link to 'MsgLTEScannerTopNSignal.LTEHCId'
SetValue	char	3	Character, can be one of the following: A: Active Set D: Detected Set
PhyCID	smallint	2	Physical CID

15.27 MsgLTEScannerTopNSignal Table

Table 15-28: Structure of the MsgLTEScannerTopNSignal table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Channel	int	4	LTE channel

Column Name	Type	Length	Description
Bandwidth	int	4	Bandwidth used
RSSI	int	4	RSSI
SortingValue	int	4	
ScannerId	int	4	Internal id of the scanner
RFBand	int	4	Band scanned
Message	text	16	Binary message
LTEHCId	bigint	8	Link to 'MsgLTEHotChannel.LTEHCId'
Version	smallint	2	Version of the message (1 or 2) The content of each version is different

15.28 MsgLTEScannerTopNInfo Table

Table 15-29: Structure of the MsgLTEScannerTopNInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTETopNId	bigint	8	Link to 'MsgLTEScannerTopN.LTETopNId'
LTEHCId	bigint	8	Link to 'MsgLTEHotChannel.LTEHCId'
ScannerId	int	4	Scanner device id
Version	smallint	2	Message version
RFBand	int	4	Scanned Band
Channel	int	4	EARFCN
Bandwidth	int	4	Bandwidth used
RSSI_0	smallint	2	RSSI of antenna 0
RSSI_1	smallint	2	RSSI of antenna 1
SortingValue	int	4	Unused
NumRecords	smallint	2	Number of MsgLTEScannerTopN
Message	text		Binary message

15.29 MsgLTEScannerTopN Table

Table 15-30: Structure of the MsgLTEScannerTopN table

Column Name	Type	Length	Description
LTETopNId	bigint	8	Link to 'MsgLTEScannerTopNInfo.LTETopNId'
OrderId	smallint	2	Ordering number of the results
Type	tinyint	1	0 = REF data, 1 = SYNC data
PhCId	int	4	Physical Cell Id
MIMO	tinyint	1	0 = MIMO values not present, 1 = MIMO values present
RSRP	real	4	RSRP
RSRQ	real	4	RSRQ
CINR	real	4	CINR
CN	smallint	2	Condition Number
PeakEThp	real	4	Peak estimated throughput = max value of estimated throughput
ECQI_TM2_0	smallint	2	Estimated CQI of a Transmit Diversity for receive antenna 0
ECQI_TM2_1	smallint	2	Estimated CQI of a Transmit Diversity for receive antenna 1
ECQI_TM3_SL	smallint	2	Estimated CQI of a single layer open-loop spatial multiplexing
ECQI_TM3_DL1	smallint	2	Estimated CQI for layer 1 of a dual layer open-loop spatial multiplexing
ECQI_TM3_DL2	smallint	2	Estimated CQI for layer 2 of a dual layer open-loop spatial multiplexing
ECQI_TM4_DL1	smallint	2	Estimated CQI for layer 1 of a dual layer closed-loop spatial multiplexing
ECQI_TM4_DL2	smallint	2	Estimated CQI for layer 2 of a dual layer closed-loop spatial multiplexing
ECQI_TM6	smallint	2	Estimated CQI (Channel Quality Indicator) of a single layer closed-loop spatial multiplexing (rank-1 precoding)
EThp_TM2_0	real	4	Estimated throughput of a Transmit Diversity for receive antenna 0 [Mbps]
EThp_TM2_1	real	4	Estimated throughput of a Transmit Diversity for receive antenna 1 [Mbps]
EThp_TM3_SL	real	4	Estimated throughput of a single layer open-loop spatial multiplexing [Mbps]
EThp_TM3_DL1	real	4	Estimated throughput for layer 1 of a dual layer open-loop spatial multiplexing [Mbps]
EThp_TM3_DL2	real	4	Estimated throughput for layer 2 of a dual layer open-loop spatial multiplexing [Mbps]
EThp_TM4_DL1	real	4	Estimated throughput for layer 1 of a dual layer closed-loop spatial multiplexing [Mbps]

Column Name	Type	Length	Description
EThp_TM4_DL2	real	4	Estimated throughput for layer 2 of a dual layer closed-loop spatial multiplexing [Mbps]
EThp_TM6	real	4	Estimated throughput of a single layer closed-loop spatial multiplexing (rank-1 precoding) [Mbps]
RSRP_0_0	int	4	RSRP of Tx0/Rx0
RSRQ_0_0	int	4	RSRQ of Tx0/Rx0
CINR_0_0	int	4	CINR of Tx0/Rx0
RSRP_0_1	int	4	RSRP of Tx0/Rx1
RSRQ_0_1	int	4	RSRQ of Tx0/Rx1
CINR_0_1	int	4	CINR of Tx0/Rx1
RSRP_1_0	int	4	RSRP of Tx1/Rx0
RSRQ_1_0	int	4	RSRQ of Tx1/Rx0
CINR_1_0	int	4	CINR of Tx1/Rx0
RSRP_1_1	int	4	RSRP of Tx1/Rx1
RSRQ_1_1	int	4	RSRQ of Tx1/Rx1
CINR_1_1	int	4	CINR of Tx1/Rx1

15.30 MsgLTEScannerTopNCellInfo Table

Table 15-31: Structure of the MsgLTEScannerTopNCellInfo table

Column Name	Type	Length	Description
LTETopNId	bigint	8	Link to 'MsgLTEScannerTopNInfo.LTETopNId'
OrderId	smallint	2	Ordering number of the results
CI	int	4	Cell Identity
TAC	int	4	Tracking Area Code

15.31 MsgLTEScannerTopNPLMN Table

Table 15-32: Structure of the MsgLTEScannerTopNPLMN table

Column Name	Type	Length	Description
LTETopNId	bigint	8	Link to 'MsgLTEScannerTopNInfo.LTETopNId'
OrderId	smallint	2	Ordering number of the results
PLMNId	smallint	2	Order id of the PLMN list

Column Name	Type	Length	Description
MCC	int	4	MCC
MNC	int	4	MNC

15.32 MsgLTEScannerTopChInfo Table

This table, together with MsgLTEScannerTopCh, contains the best PCI per defined operator/band or overall.

Table 15-33: Structure of the MsgLTEScannerTopChInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TopChnId	bigint	8	Link to MsgLTEScannerTopCh

15.33 MsgLTEScannerTopCh Table

Table 15-34: Structure of the MsgLTEScannerTopCh table

Column Name	Type	Length	Description
TopChnId	bigint	8	Link to MsgLTEScannerTopChInfo
MCC	int	4	Mobile Country Code
MNC	int	4	Mobile Network Code
RFBand	int	4	RF Band
Channel	int	4	Channel number
RSSI	real	4	Level of the best channel
PCI	smallint	2	Physical cell id
RP	real	4	RP
RQ	real	4	RQ
CINR	real	4	CINR

Column Name	Type	Length	Description
SortMode	smallint	2	• 0 = RP • 1 = RQ • 2 = CINR • 3 = RSSI
GroupMode	smallint	2	• 0 = Top of all bands per operator • 1 = Top per band per operator • 2 = Top of all bands (overall) • 3 = Top per band (overall)

15.34 MsgScannerWiFiInfo Table

Table 15-35: Structure of the MsgScannerWiFiInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
WiFiScanId	bigint	8	Link to MsgScannerWiFi.WiFiScanId
Count	smallint	2	Number of records in MsgScannerWiFi with the same WiFiScanId

15.35 MsgScannerWiFi Table

Table 15-36: Structure of the MsgScannerWiFi table

Column Name	Type	Length	Description
WiFiScanId	bigint	8	Link to MsgScannerWiFiInfo.WiFiScanId
SSID	varchar	100	Service Set IDentifier
BSSID	varchar	100	Basic Service Set Identifier
RSSI	smallint	2	Received signal strength indication in dBm.
Frequency	int	4	The frequency in MHz of the channel over which the client is communicating with the access point.
Capability	varchar	200	Describes the authentication, key management, and encryption schemes supported by the access point.

15.36 MsgScannerACDInfo Table

Table 15-37: Structure of the MsgScannerACDInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2(3)	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ACDScanId	bigint	8	Link to MsgScannerACD.ACDScanId
Count	smallint	2	Number of records in MsgScannerACD with the same ACDScanId

15.37 MsgScannerACD Table

Table 15-38: Structure of the MsgScannerACD table

Column Name	Type	Length	Description
ACDScanId	bigint	8	Link to MsgScannerACDInfo.ACDScanId
RFBand	int	4	Integer representation of the Technology
Channel	int	4	Channel number
Bandwidth	int	4	Bandwidth of the scanned channel
RSSI	smallint	2	RSSI measured
Type	smallint	2	1: ViCom 2: PCTel
TimeDiff	int	4	Time since last measurement
Status	smallint	2	0: Found 1: Confirmed 2: Active

15.38 MsgScannerDLAAInfo

Table 15-39: Structure of the MsgScannerDLAAInfo

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
DLAAScanId	bigint	8	Link to MsgScannerDLAA-Channel.DLAAScanId
ChannelCount	smallint	2	Number of records in MsgScannerDLAAChannel with the same DLAAScanId

15.39 MsgScannerDLAAChannel Table

Table 15-40: Structure of the MsgScannerDLAAChannel table

Column Name	Type	Length	Description
DLAAScanId	bigint	8	Link to MsgScannerDLAAInfo.DLAAScanId
ChannelId	bigint	8	Link to MsgScannerDLAABTS.ChannelId
RFBand	int	4	Integer representation of the Technology
Channel	int	4	Channel number
BTSCount	smallint	2	Number of records in MsgScannerDLAABTS with the same DLAAScanId and same ChannelId

15.40 MsgScannerDLAABTS Table

Table 15-41: Structure of the MsgScannerDLAABTS table

Column Name	Type	Length	Description
DLAAScanId	bigint	8	Link to MsgScannerDLAAInfo.DLAAScanId
ChannelId	bigint	8	Link to MsgScannerDLAAChannel.ChannelId
BTSId	bigint	8	Link to MsgScannerDLAAObservation.ChannelId
UsedCarriers	smallint	2	Number of used carriers
CID	int	4	28-bit unique CID, not valid when 0xFFFFFFFF
LAC	int	4	LAC, not valid when 0xFFFFFFFF
RBCount	int	4	Number of resource blocks used for this cell.
RBTotalCount	int	4	Total Number of available ResourceBlocks of all measured TTIs.
PCI	smallint	2	PCI

Column Name	Type	Length	Description
MCC	smallint	2	MCC, not valid when 0xFFFF
MNC	smallint	2	MNC, not valid when 0xFFFF
RNTICount	int	4	Number of RNTIs observed.
ObservationCount	smallint	2	Number of records in MsgScannerDLAABTS with the same DLAAScanId, ChannelId and same BTSId

15.41 MsgScannerDLAAObservation Table

Table 15-42: Structure of the MsgScannerDLAAObservation table

Column Name	Type	Length	Description
DLAAScanId	bigint	8	Link to MsgScannerDLAAInfo.DLAAScanId
ChannelId	bigint	8	Link to MsgScannerDLAAChannel.ChannelId
BTSId	bigint	8	Link to MsgScannerDLAABTS.ChannelId
ObservationId	bigint	8	Id of observation (just for ordering or sorting)
AvgCellThPut	real	4	Average scheduled throughput of the cell, calculated by the usage of resource blocks at the TTIs and the reported transport block size (TBS), within the specified Observation Interval. [Bytes/s]
AvgMCS	real	4	Average MCS.
AvgRNTIThPut	real	4	Average RNTI (UE) throughput. [Bytes/s]
AvgRBUsagePercent	real	4	Total number of used Resource Blocks in percent for the eNodeB.
LastTimeStamp	int	4	PC local time when the data was measured/calculated.
ObservationTime	smallint	2	Observation interval time value in seconds for the current DLAA statistic.
RNTICount	int	4	Number of all valid RNTIs currently seen by the cell.

16 GSM/GPRS Messages Tables

This chapter describes the structure of the GSM and GPRS message tables in the NQDI database.

16.1 MsgGPRSLayerStateSMInfo Table

This table contains the GPRS Layer State SM Information messages in binary format. The vGPRSLayerStateSMInfo SQL view decodes the binary message into meaningful fields.

Table 16-1: Structure of the MsgGPRSLayerStateSMInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
parseCode	char	5	Parse code ()
message	varchar	500	Binary message

16.2 HandoverInfo Table

This table contains information about handover and assignment procedures. Each Handover or Assignment procedure has one row in the table.

Table 16-2: Structure of the HandoverInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
HoStatus	varchar	50	Completed or failed
hoDuration	int	4	Duration in milliseconds

16.3 CodingScheme Table

This table contains information about GPRS Coding Scheme usage.

Table 16-3: Structure of the CodingScheme table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
DLCS	int	4	Downlink Coding Scheme
ULCS	int	4	Uplink Coding Scheme
duration	bigint	8	Duration in ms
Technology	varchar	10	

16.4 MsgGPRSInterLayerGMMSM Table

This table contains the GPRS interlayer GMM and SM messages in binary format.

Table 16-4: Structure of the MsgGPRSInterLayerGMMSM table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
parseCode	char	5	Parse code (61G1)
message	varchar	500	Binary message

16.5 RoutingInfo Table

This table contains information about the area routing info update procedures.

Table 16-5: Structure of the RoutingInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
status	varchar	50	'Completed' or 'Failed'
duration	int	4	Duration

16.6 TimeSlotAlloc Table

This table contains information about the GPRS time slot usage.

Table 16-6: Structure of the TimeSlotAlloc table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
numDLTS	int	4	Number of DL Timeslots used
numULTS	int	4	Number of UL Timeslots used
duration	bigint	8	Duration in ms

16.7 MsgGSMData Table

This table contains the GSM CC, MM, GMM and SM signalling messages in binary format.

Table 16-7: Structure of the MsgGSMData table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'

Column Name	Type	Length	Description
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
parseCode	char	5	Parse code (for example, 626)
message	varchar	500	Binary message

16.8 MsgGSMLayer1 Table

This table contains the GSM Layer1 data messages in decoded format.

Table 16-8: Structure of the MsgGSMLayer1 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
formatId	varchar	20	'IDLE' or 'DEDICATED'
BCCH	smallint	2	Current BCCH
TA	smallint	2	Unused. See 'MsgGSMReport' for TA value
TxPwr	smallint	2	Unused. See 'MsgGSMReport' for TxPwr value
RxLevFull	smallint	2	Unused. See 'vGSMRxLevRxQual' for RxLevFull value
RxLevSub	smallint	2	Unused. See 'vGSMRxLevRxQual' for RxLevSubl value
RxQualFull	smallint	2	Unused. See 'vGSMRxLevRxQual' for RxQualFull value
RxQualSub	smallint	2	Unused. See 'vGSMRxLevRxQual' for RxQualSub value
BCCH_RxLev	smallint	2	BCCH_RxLev
SC_BCCH	smallint	2	Serving Cell BCCH
SC_C1	smallint	2	Serving Cell C1
SC_C2	smallint	2	Serving Cell C2
SC_Rx_Lev_Access_Min	smallint	2	Serving Cell Rx_Lev_Access_Min
SC_MS_TXPWR_MAX_CCH	smallint	2	Serving Cell MS_TXPWR_MAX_CCH
SC_GPRSInd	smallint	2	Serving Cell GPRSInd

Column Name	Type	Length	Description
SC_NCC	smallint	2	Serving Cell NCC
SC_BCC	smallint	2	Serving Cell BCC
N1_NCC	smallint	2	1st Neighbor Cell NCC
N1_BCC	smallint	2	1st Neighbor Cell BCC
N1_BCCH	smallint	2	1st Neighbor Cell BCCH
N1_RxLev	smallint	2	1st Neighbor Cell RxLev
N1_Rx_Lev_Access_Min	smallint	2	1st Neighbor Cell Rx_Lev_Access_Min
N1_C1	smallint	2	1st Neighbor Cell C1
N1_C2	smallint	2	1st Neighbor Cell C2
N1_MS_TXPWR_MAX_CCH	smallint	2	1st Neighbor Cell MS_TXPWR_MAX_CCH
N1_GPRSInd	smallint	2	1st Neighbor Cell GPRSInd
N2_NCC	smallint	2	2nd Neighbor Cell NCC
N2_BCC	smallint	2	2nd Neighbor Cell BCC
N2_BCCH	smallint	2	2nd Neighbor Cell BCCH
N2_RxLev	smallint	2	2nd Neighbor Cell RxLev
N2_Rx_Lev_Access_Min	smallint	2	2nd Neighbor Cell Rx_Lev_Access_Min
N2_C1	smallint	2	2nd Neighbor Cell C1
N2_C2	smallint	2	2nd Neighbor Cell C2
N2_MS_TXPWR_MAX_CCH	smallint	2	2nd Neighbor Cell MS_TXPWR_MAX_CCH
N2_GPRSInd	smallint	2	2nd Neighbor Cell GPRSInd
N3_NCC	smallint	2	3rd Neighbor Cell NCC
N3_BCC	smallint	2	3rd Neighbor Cell BCC
N3_BCCH	smallint	2	3rd Neighbor Cell BCCH
N3_RxLev	smallint	2	3rd Neighbor Cell RxLev
N3_Rx_Lev_Access_Min	smallint	2	3rd Neighbor Cell Rx_Lev_Access_Min
N3_C1	smallint	2	3rd Neighbor Cell C1
N3_C2	smallint	2	3rd Neighbor Cell C2
N3_MS_TXPWR_MAX_CCH	smallint	2	3rd Neighbor Cell MS_TXPWR_MAX_CCH
N3_GPRSInd	smallint	2	3rd Neighbor Cell GPRSInd
N4_NCC	smallint	2	4th Neighbor Cell NCC
N4_BCC	smallint	2	4th Neighbor Cell BCC
N4_BCCH	smallint	2	4th Neighbor Cell BCCH
N4_RxLev	smallint	2	4th Neighbor Cell RxLev

Column Name	Type	Length	Description
N4_Rx_Lev_Access_Min	smallint	2	4th Neighbor Cell Rx_Lev_Access_Min
N4_C1	smallint	2	4th Neighbor Cell C1
N4_C2	smallint	2	4th Neighbor Cell C2
N4_MS_TXPWR_MAX_CCH	smallint	2	4th Neighbor Cell MS_TXPWR_MAX_CCH
N4_GPRSInd	smallint	2	4th Neighbor Cell GPRSInd
N5_NCC	smallint	2	5th Neighbor Cell NCC
N5_BCC	smallint	2	5th Neighbor Cell BCC
N5_BCCH	smallint	2	5th Neighbor Cell BCCH
N5_RxLev	smallint	2	5th Neighbor Cell RxLev
N5_Rx_Lev_Access_Min	smallint	2	5th Neighbor Cell Rx_Lev_Access_Min
N5_C1	smallint	2	5th Neighbor Cell C1
N5_C2	smallint	2	5th Neighbor Cell C2
N5_MS_TXPWR_MAX_CCH	smallint	2	5th Neighbor Cell MS_TXPWR_MAX_CCH
N5_GPRSInd	smallint	2	5th Neighbor Cell GPRSInd
N6_NCC	smallint	2	6th Neighbor Cell NCC
N6_BCC	smallint	2	6th Neighbor Cell BCC
N6_BCCH	smallint	2	6th Neighbor Cell BCCH
N6_RxLev	smallint	2	6th Neighbor Cell RxLev
N6_Rx_Lev_Access_Min	smallint	2	6th Neighbor Cell Rx_Lev_Access_Min
N6_C1	smallint	2	6th Neighbor Cell C1
N6_C2	smallint	2	6th Neighbor Cell C2
N6_MS_TXPWR_MAX_CCH	smallint	2	6th Neighbor Cell MS_TXPWR_MAX_CCH
N6_GPRSInd	smallint	2	6th Neighbor Cell GPRSInd

16.9 MsgGsmReport Table

This table contains the GSM Report message.

Table 16-9: Structure of the MsgGSMReport table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev	smallint	2	RxLev Value in dBm
RxQual	smallint	2	RxQual value (0..7)
TxPwr	smallint	2	Transmission Power
ChType	char	1	Channel Type
BCCH	smallint	2	BCCH Channel
TCH	varchar	300	Traffic channel(s)
DTX	bit	1	DTX flag (0 = off, 1 = on)
Codec	int	4	Codec used (EFR, FR, HR...)
Hopping	bit	1	Hopping on (1) or off (0)
MAIO	int	4	MAIO if hopping
HSN	int	4	HSN if hopping
TA	smallint	2	Timing Advance
TS	smallint	2	Time Slot number
FER	smallint	2	Frame error rate
NCC	smallint	2	Network color code
BCC	smallint	2	Basestation color code
RFBand	int	4	Id indicating GSM band
RxLevScanServer	real	4	RxLev of the serving channel measured by the scanner (only available if a scanner is connected)
RxLevScanHAdj	real	4	RxLev of the serving + 1 channel
RxLevScanLAdj	real	4	RxLev of the serving - 1 channel
FERFull	smallint	2	GSM FER Full in %
FERSub	smallint	2	GSM FER Sub in %
DLDTX	bit	1	DL DTX flag (0 = off, 1 = on)

16.10 MsgChannelType Table

This table contains the channel Type for GSM.

Table 16-10: Structure of the MsgChannelType table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to 'TestInfo.TestId'
chType	char	1	
Codec	int	4	0 = Codec off; 1 = Codec on

16.11 MsgGSMCoverI Table

Table 16-11: Structure of the MsgGSMCoverI table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLev	smallint	2	RxLev of the channel
ARFCN	smallint	2	Channel number
CoverI	real	4	C/I of the channel

16.12 MsgCodecInfo Table

Table 16-12: Structure of the MsgCodecInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	varchar	2	Up or Downlink
Codec	int	4	See GetCodec
CodecRate	float	8	Rate of the codec (if avail)

Column Name	Type	Length	Description
NumFrames	int	4	Number of frames
LQE	float	8	Link Quality Estimate

16.13 VoiceCodecTest Table

This table contains the voice codec information per voice test. At the beginning the initial codec is written (with duration of 0).

Table 16-13: Structure of the VoiceCodecTest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up or Downlink
Codec	int	4	See GetCodec
CodecRate	float	8	Rate of the codec (if avail)
Duration	int	4	Duration of the active time of this codec

16.14 GSMMeasReport Table

This table contains the data extract from the layer 3 measurement Report.

Table 16-14: Structure of the GSMMeasReport table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxLevFull	int	4	Measurement report values, see 3GPP TS 04.18
RxLevSub	int	4	Measurement report values, see 3GPP TS 04.18

Column Name	Type	Length	Description
RxQualFull	int	4	Measurement report values, see 3GPP TS 04.18
RxQualSub	int	4	Measurement report values, see 3GPP TS 04.18
N1RxLev	int	4	Measurement report values, see 3GPP TS 04.18
N1BCCH	int	4	Measurement report values, see 3GPP TS 04.18
N1BSIC	int	4	Measurement report values, see 3GPP TS 04.18
N2RxLev	int	4	Measurement report values, see 3GPP TS 04.18
N2BCCH	int	4	Measurement report values, see 3GPP TS 04.18
N2BSIC	int	4	Measurement report values, see 3GPP TS 04.18
N3RxLev	int	4	Measurement report values, see 3GPP TS 04.18
N3BCCH	int	4	Measurement report values, see 3GPP TS 04.18
N3BSIC	int	4	Measurement report values, see 3GPP TS 04.18
N4RxLev	int	4	Measurement report values, see 3GPP TS 04.18
N4BCCH	int	4	Measurement report values, see 3GPP TS 04.18
N4BSIC	int	4	Measurement report values, see 3GPP TS 04.18
N5RxLev	int	4	Measurement report values, see 3GPP TS 04.18
N5BCCH	int	4	Measurement report values, see 3GPP TS 04.18
N5BSIC	int	4	Measurement report values, see 3GPP TS 04.18
N6RxLev	int	4	Measurement report values, see 3GPP TS 04.18
N6BCCH	int	4	Measurement report values, see 3GPP TS 04.18
N6BSIC	int	4	Measurement report values, see 3GPP TS 04.18
EnhancedReport	tinyint	1	0: record describes a Measurement Report 1: record describes an Enhanced Measurement Report
MeanBEP	int	4	Enhanced Measurement Report values
CvBEP	int	4	Enhanced Measurement Report values
NbrRcvdBlocks	int	4	Enhanced Measurement Report values

16.15 GSMWCDMANeighborSetInfo Table

Table 16-15: Structure of the GSMWCDMANeighborSetInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’

Column Name	Type	Length	Description
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
GSMWCDMAMeasId	bigint	8	Link to GSMWCDMANeighborSet
NumRecords	smallint	2	Number of messages with same GSMWCDMAMeasId

16.16 GSMWCDMANeighborSet Table

Table 16-16: Structure of the GSMWCDMANeighborSet table

Column Name	Type	Length	Description
GSMWCDMAMeasId	bigint	8	Link to GSMWCDMANeighborSetInfo
UARFCN	int	4	UMTS Frequency Number
PSC	smallint	2	Primary Scrambling Code
RSSI	smallint	2	Reported RSSI
RSCP	smallint	2	Reported RSCP
EcIo	real	4	Reported Ec/Io

16.17 GSMAMRParameters Table

Table 16-17: Structure of the GSMAMRParameters

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MultiRateSpeechVersion	smallint	2	1: Adaptive Multirate speech version 1 2: Adaptive Multirate speech version 2
CodecMode1	real	4	1st configured codec mode
CodecMode2	real	4	2nd configured codec mode, blank if not present
CodecMode3	real	4	3rd configured codec mode, blank if not present
CodecMode4	real	4	4th configured codec mode, blank if not present

Column Name	Type	Length	Description
InitialMode	real	4	Initial codec mode
Threshold1	real	4	the threshold of C/I in dB, blank if not present
Hysteresis1	real	4	hysteresis value associated to threshold above
Threshold2	real	4	the threshold of C/I in dB, blank if not present
Hysteresis2	real	4	hysteresis value associated to threshold above
Threshold3	real	4	the threshold of C/I in dB, blank if not present
Hysteresis3	real	4	hysteresis value associated to threshold above

16.18 GSML3Parameters Table

Table 16-18: Structure of the GSML3Parameters

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ProtDiscr	char	1	Protocol discriminator
MsgType	char	2	Message Type
Field	varchar	50	Field name of L3 message
Value	int	4	Transferred value of the field (= value in units if applicable)

16.19 ChannelRequest Table

Table 16-19: Structure of the ChannelRequest table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
ChReqType	smallint	2	0: Channel Request 1: EGPRS Packet Channel Request 2: Packet Channel Request (MAC) 3: EGPRS Packet Channel Request (MAC)
Message	varchar	100	L3 message content

16.20 GSMLayer3Messages Table

Table 16-20: Structure of the GSMLayer3Messages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	U: Uplink D: Downlink
ProtDiscr	char	1	Protocol discriminator
MsgType	char	2	Message type
Message	varchar	500	L3 message content

16.21 GPRSInterLayerGMMSM Table

Table 16-21: Structure of the GPRSInterLayerGMMSM table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	U: Uplink D: Downlink

Column Name	Type	Length	Description
ProtDiscr	char	1	Protocol discriminator
MsgType	char	2	Message type
Message	varchar	500	L3 message content

16.22 GPRSRLCMAC Table

Table 16-22: Structure of the GPRSRLCMAC table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	U: Uplink D: Downlink
MsgType	char	2	Message type
Message	varchar	500	L3 message content

16.23 GPRSDLRLCBLER Table

Table 16-23: Structure of the GPRSDLRLCBLER table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
DLRLCBLER	int	4	Downlink RLC BLER

16.24 GPRSDSCCounter Table

Table 16-24: Structure of the GPRSDSCCounter table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MaxDSCCounter	int	4	Maximum value for DSC
CurrentDSCCounter	int	4	Current value of DSC

16.25 GPRSLayerStateGMMInfo Table

Table 16-25: Structure of the GPRSLayerStateGMMInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NetworkModeOfOperation	char	1	Network Mode of Operation
AttachState	varchar	40	Attach state
GMMServiceState	varchar	20	GMM service state
P_TMSI	varchar	10	P-TMSI
TLLI	varchar	10	TLLI
MCC	varchar	5	MCC
MNC	varchar	5	MNC
LAC	varchar	5	LAC
RAC	varchar	5	RAC
T3314	int	4	T 3314

16.26 GPRSLayerStateLLCInfo Table

Table 16-26: Structure of the GPRSLayerStateLLCInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
CipheringKeyKc	varchar	20	Ciphering key
KcSequenceNumber	char	1	Sequence number
Ciphering	varchar	30	Ciphering state
Mode	varchar	20	ACK/UNACK mode
SAPI	varchar	5	SAPI

16.27 GPRSLayerStateMACInfo Table

Table 16-27: Structure of the GPRSLayerStateMACInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MSClass	char	2	MS class
ULTSAllocation	varchar	10	UL TS allocation
DLTSAllocation	varchar	10	DL TS allocation
NumULTS	smallint	2	Number of UL TS
NumDLTS	smallint	2	Number of DL TS
TypeOfAllocation	varchar	20	Type of allocation
MSOutputPower	int	4	MS output power
PC_MEAS_CHAN	varchar	10	On BCCH or PDCH
C_VALUE	char	2	C-Value

Column Name	Type	Length	Description
NetworkControlOrder	varchar	50	Network control order
SIGN_VAR	char	2	Signal variance
SPLIT_PG_CYCLE	varchar	30	SPLIT PG CYCLE CODE
RxQual	char	1	RX Qual
AccessBurstType	varchar	30	Access burst type
ControlAckType	char	1	Control ack type
PriorityAccessThr	varchar	40	Priority access threshold

16.28 GPRSLayerStateRLCInfo Table

Table 16-28: Structure of the GPRSLayerStateRLCInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
ULCS	bigint	8	UL coding scheme
ULTech	varchar	5	UL technology
DLCS	bigint	8	DL coding scheme
DLTech	varchar	5	DL technology
Mode	varchar	20	ACK/UNACK mode
ULTBF	varchar	10	UL Temporary Block Flow
ULTFI	char	5	UL Temporary Flow Identity
DLTBF	varchar	10	DL Temporary Block Flow
DLTFI	char	5	DL Temporary Flow Identity

16.29 GPRSLayerStateSMInfo Table

Table 16-29: Structure of the GPRSLayerStateSMInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NSAPI	char	1	Network Service Access Point Identifier
SMState	smallint	2	0: PDP inactive 1: PDP active pending 2: PDP inactive pending 3: PDP active
DelayClass	smallint	2	Delay class
ReliabilityClass	smallint	2	0: 0 1: 1, A-A-A-P 2: 2, U-A-A-P 3: 3, U-U-A-P 4: 4, U-U-U-P 5: 5, U-U-U-U
PeakThroughput	smallint	2	1: 1 000 octet/s 2: 2 000 octet/s 3: 4 000 octet/s 4: 8 000 octet/s 5: 16 000 octet/s 6: 32 000 octet/s 7: 64 000 octet/s 8: 128 000 octet/s 9: 256 000 octet/s
PrecedenceClass	smallint	2	0: 0 1: High Priority 2: Normal priority 3: Low priority

Column Name	Type	Length	Description
MeanThroughput	smallint	2	1: 100 octet/h 2: 200 octet/h 3: 500 octet/h 4: 1 000 octet/h 5: 2 000 octet/h 6: 5 000 octet/h 7: 10 000 octet/h 8: 20 000 octet/h 9: 50 000 octet/h 10: 100 000 octet/h 11: 200 000 octet/h 12: 500 000 octet/h 13: 1 000 000 octet/h 14: 2 000 000 octet/h 15: 5 000 000 octet/h 16: 10 000 000 octet/h 17: 20 000 000 octet/h 18: 50 000 000 octet/h 30: Reserved 31: Best effort
RadioPriority	smallint	2	1: Priority Level 1 (highest) 2: Priority Level 2 3: Priority Level 3 4: Priority Level 4 (lowest)
IPAddress	varchar	25	IP address

16.30 GPRSLayerStateSNDCPInfo Table

Table 16-30: Structure of the GPRSLayerStateSNDCPInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’

Column Name	Type	Length	Description
HeaderCompression	smallint	2	0: Inactive 1: Active
DataCompression	smallint	2	0: Inactive 1: Active

16.31 GPRSLLCThroughput Table

Table 16-31: Structure of the GPRSLLCThroughput table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
Throughput	int	4	Throughput in Bytes/s

16.32 GPRSRetransLLCFrameRate Table

Table 16-32: Structure of the GPRSRetransLLCFrameRate table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
RetransLLCFrameRate	int	4	Retransmission frame rate in %

16.33 GPRSRetransRLCBlockRate Table

Table 16-33: Structure of the GPRSRetransRLCBlockRate table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
RetransRLCBlockRate	int	4	Retransmission block rate in %

16.34 GPRSRLCMACThroughput Table

Table 16-34: Structure of the GPRSRLCMACThroughput table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
Throughput	int	4	Throughput in Bytes/s

16.35 GPRSRLPResumeRate Table

Table 16-35: Structure of the GPRSRLPResumeRate table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'

Column Name	Type	Length	Description
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
RLPResumeRate	int	4	Resume rate in %

16.36 GPRSTotLCCFramesTx Table

Table 16-36: Structure of the GPRSTotLCCFramesTx table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
LCCFramesTransmitted	bigint	8	LCC frames since last reporting

16.37 GPRSTotRLCBlocksTx Table

Table 16-37: Structure of the GPRSTotRLCBlocksTx table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	Up- or Downlink
RLCBlocksTransmitted	bigint	8	RLC blocks since last reporting

16.38 GSMRLC Table

Table 16-38: Structure of the GSMRLC table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MaxRLC	smallint	2	Max RLC
CurrentRLC	smallint	2	Current RLC

17 IP Trace Message Tables

This chapter describes the structure of the IP Trace Message tables in the NQDI database.

17.1 MsgIPTraceInfo Table

Each row in this table corresponds to one test and contains information about RTP activity.

Table 17-1: Structure of the MsgIPTraceInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
IPTraceId	bigint	8	Link to MsgIPTrace

17.2 MsgIPTrace Table

Currently not used.

Table 17-2: Structure of the MsgIPTrace table

Column Name	Type	Length	Description
IPTraceId	bigint	8	Link to MsgIPTraceInfo

17.3 MsgIPThroughput Table

This table contains throughput values on the IP Layer.

Table 17-3: Structure of the MsgIPThroughput table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
direction	varchar	20	Direction (uplink/downlink)
throughput	real	4	Throughput in bytes/sec
bytesTransferred	int	4	Number of bytes transferred

17.4 MsgIpTraceTCPPackets Table

This table contains TCP trace values on the IP Layer.

Table 17-4: Structure of the MsgIpTraceTCPPackets table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
dir	char	1	Direction
source	varchar	20	Source IP address
destination	varchar	20	Destination IP address
size	int	4	Size
fragFlags	int	4	FragFlags
srcPort	int	4	Source port
dstPort	int	4	Destination port
sequenceNr	bigint	8	Sequence number
ackNr	bigint	8	Acknowledge number
tcpFlags	int	4	Flags
windowSize	int	4	Size of the window

17.5 MsgIPTcpWindowSize Table

This table contains the TCP window size.

Table 17-5: Structure of the MsgIPTcpWindowSize table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ScaleFactor	int	4	Scale factor
WindowSize	int	4	Unscaled window size

17.6 MsgIPTraceHTTPInfo Table

Table 17-6: Structure of the MsgIPTraceHTTPInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Source	varchar	50	<SourceIP> :<SourcePort>
Destination	varchar	50	<DestinationIP> :<DestinationPort>
Encoding	varchar	100	content-encoding=<encoding type>

17.7 MsgEthereal Table

Table 17-7: Structure of the MsgEthereal table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'

Column Name	Type	Length	Description
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
src	varchar	50	Source address of packet
dst	varchar	50	Destination address of packet
protocol	varchar	20	Highest protocol used
msg	varchar	3000	Ethereal packet string

17.8 ProtocolInfo Table

This table contains protocol information for a test. Each test has one or more rows in the table.

Table 17-8: Structure of the ProtocolInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
source	varchar	50	Source address of packet
destination	varchar	50	Destination address of packet
port	int	4	Destination port
protocol	varchar	20	Protocol
size	int	4	Size of packet
type	varchar	20	-
direction	char	2	Direction (uplink/downlink)
info	varchar	250	Message

17.9 IMSSIPMessage Table

Table 17-9: Structure of the IMSSIPMessage table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	7	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Direction	smallint	2	See vIMSSIPMessage for the decoding of the following fields
SDPPresence	smallint	2	
MessageId	smallint	2	
ResponseCode	smallint	2	
CallId	int	4	
SIPCallId	varchar	256	
Message	varchar	8000	

17.10 IMSSIPState Table

Table 17-10: Structure of the IMSSIPState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
State	int	4	SIP State. 0 = not registered, 1 = registered

17.11 MsgRTPStatistics Table

Table 17-11: Structure of the MsgRTPStatistics table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
DLRTPPacketsTotal	int	4	Count of total DL RTP packets
DLRTPPacketsLost	int	4	Count of lost DL RTP packets
ULRTPPacketsTotal	int	4	Count of total UL RTP packets
ULRTPPacketsLost	int	4	Count of lost UL RTP packets
Duration	int	4	Reporting duration

17.12 RTPStatisticsInfo Table

Table 17-12: Structure of the RTPStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
RTPStatId	bigint	8	Link to RTPStatistics
Type	tinyint	1	0: intermediate value (approx. every second) 1: session values
NumRecords	smallint	2	Number of RTPStatistics records contained with this RTPStatId

17.13 RTPStatistics Table

Table 17-13: Structure of the RTPStatistics table

Column Name	Type	Length	Description
RTPStatId	bigint	8	Link to RTPStatisticsInfo
Mode	smallint	2	0: Rx, 1: Tx
SSRC	varchar	50	Synchronization source identifier
Payload	int	4	
AvgPayloadLength	int	4	
Codec	varchar	100	

Column Name	Type	Length	Description
CodecRate	int	4	
NumPackets	int	4	Number of packets
NumLostPackets	int	4	All next field are only present in Rx
MaxConseqLostPackets	int	4	
MinOneWayDelay	int	4	
MaxIPDV	int	4	Max inter-packet delay variation (RFC 5481)
MinIPDV	int	4	Min inter-packet delay variation (RFC 5481)
AvgIPDV	int	4	Average inter-packet delay variation (RFC 5481)
AvgJitter	int	4	An estimate of the statistical variance of the RTP data packet (RFC 1889)
AvgDPV	int	4	Average packet delay variation (RFC 5481)
AvgAJBQPending	int	4	
MaxAJBQPending	int	4	
NumOutOfOrderPackets	int	4	

17.14 ISPConfig Table

Summary of the IP connection of a data test/session.

Table 17-14: Structure of the ISPConfig table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
APN	varchar	100	AccessPointName
IP	varchar	50	IP address of the UE within the PDPContext session
PrimaryDNS	varchar	100	Primary DNS address of the UE within the PDPContext session
SecondaryDNS	varchar	100	Secondary DNS address of the UE within the PDPContext session
PDPActivationTime	int	4	PDP Context Activation Time
DNSServer	varchar	100	DNS server used for resolution of URL
DNSTime	int	4	DNS Resolution Time

Column Name	Type	Length	Description
URL	varchar	2000	URL Retrieved
IPResolved	varchar	50	IP address resolved by DNS for URL Requested
NumBytes	int	4	Number of bytes transferred
SignalStrength	float	8	Signal Strength at the beginning of test

17.15 PCAPData Table

IP trace recording for a session

Table 17-15: Structure of the PCAPData table

Column Name	Type	Length	Description
Data	image	16	Binary PCAP file
SessionId	bigint	8	Link to 'Sessions.SessionId'
FileName	varchar	255	Name of the original PCAP file

17.16 PCAPSummary Table

Summary of connection of a data test.

Table 17-16: Structure of the PCAPSummary table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Name of the original PCAP file
FrameCount	int	4	IP frame count
Bytes	int	4	Number of Bytes
FramesLost	int	4	Frames lost
FramesOutofOrder	int	4	Frames out of order
WindowFullEvent	int	4	Window full event

18 HSDPA Tables

This chapter describes the structure of the HSDPA tables in the NQDI database.

18.1 MsgHSDPAData Table

This table contains the raw data of the log code 0x4200 and 0x4210 of the Qualcomm Chipset trace records. For more information, refer to the Qualcomm ICD.

Table 18-1: Structure of the MsgHSDPAData table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ParseCode	char	5	Log code
Message	varchar	4096	Message in ASCII

18.2 HSDPAScch Table

This table contains the SCCH statistics, which are used to generate a SCCH success rate.

Table 18-2: Structure of the HSDPAScch table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NumSubFrames	smallint	2	Total number of subframes in the packet
NumSCCHDecodeAttempted	smallint	2	Total number of subframes in which SCCH decoding was attempted
NumSCCHValid	smallint	2	Number of subframes in which valid SCCH was received

Column Name	Type	Length	Description
SCCHAttemptsPercent	real	4	Attempt/NumFrames in percent
SCCHUsagePercent	real	4	Valid/NumFrames in percent
NumSubFrames_C0	smallint	2	Values as above for 1st carrier
NumSCCHDecodeAttempted_C0	smallint	2	Values as above for 1st carrier
NumSCCHValid_C0	smallint	2	Values as above for 1st carrier
SCCHAttemptsPercent_C0	real	4	Values as above for 1st carrier
SCCHUsagePercent_C0	real	4	Values as above for 1st carrier
NumSubFrames_C1	smallint	2	Values as above for 2nd carrier
NumSCCHDecodeAttempted_C1	smallint	2	Values as above for 2nd carrier
NumSCCHValid_C1	smallint	2	Values as above for 2nd carrier
SCCHAttemptsPercent_C1	real	4	Values as above for 2nd carrier
SCCHUsagePercent_C1	real	4	Values as above for 2nd carrier

18.3 HSDPAHarq Table

This table contains the HARQ statistics, which are used to measure the performance of HS-PDSCH.

Table 18-3: Structure of the HSDPAHarq table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Duration	int	4	Time between 2 records (in ms)
NumSubFrames	smallint	2	Number of subframes
NumHarqProc	smallint	2	Number of HARQ processes
AvgNumRxBits	int	4	Average of successfully decoded information bits over all HARQ processes
AvgNumNewTx	int	4	Average number of new transmissions over all HARQ processes

Column Name	Type	Length	Description
AvgNumBlkErrors	int	4	Average number of erroneous blocks over all HARQ processes
ThroughPutRx	float	8	AvgNumRxBits/Duration

18.4 HSDPAMacHeaders Table

This table contains information about the MAC data.

Table 18-4: Structure of the HSDPAMacHeaders table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Duration	int	4	Time between 2 records (in ms)
NumMacHeaders	smallint	2	Number of MAC headers
Data	int	4	Number of Bytes transferred
ThroughPut	float	8	Data/Duration

18.5 HSDPACQI Table

This table contains data for the UL DPCCH and logs the contents of uplink transmission in every subframe.

Table 18-5: Structure of the HSDPACQI table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NumSamples	smallint	2	Number of subframes
StartFN	smallint	2	Starting global subframe number

Column Name	Type	Length	Description
numCQI	smallint	2	Number of valid samples in the message
sumCQI	smallint	2	Number of cqis over all samples
numACK	smallint	2	Number of ACK in all samples
numNACK	smallint	2	Number of NACK in all samples
numDTX	smallint	2	Number of DTX in all samples
BLER	float	8	HS block error rate
EnabledDualCarrier	tinyint	1	1 if dual carrier is enabled, 0 otherwise
NumCQI_C0	smallint	2	Values as above for 1st carrier
SumCQI_C0	smallint	2	Values as above for 1st carrier
NumACK_C0	smallint	2	Values as above for 1st carrier
NumNACK_C0	smallint	2	Values as above for 1st carrier
NumDTX_C0	smallint	2	Values as above for 1st carrier
BLER_C0	float	8	Values as above for 1st carrier
NumSamples_C1	smallint	2	Values as above for 2nd carrier
NumCQI_C1	smallint	2	Values as above for 2nd carrier
SumCQI_C1	smallint	2	Values as above for 2nd carrier
NumACK_C1	smallint	2	Values as above for 2nd carrier
NumNACK_C1	smallint	2	Values as above for 2nd carrier
NumDTX_C1	smallint	2	Values as above for 2nd carrier
BLER_C1	float	8	Values as above for 2nd carrier

18.6 HSDPAModulation Table

This table contains data for the used HSDPA modulation.

Table 18-6: Structure of the HSDPAModulation table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
NumSamples	int	4	Total number of samples

Column Name	Type	Length	Description
ModScheme16QAM	int	4	Number of samples used 16QAM
ModSchemeQPSK	int	4	Number of samples used QPSK
Percent16QAM	real	4	Percentage of 16QAM
PercentQPSK	real	4	Percentage of QPSK
TransportBlock	int	4	Size of the transport block
AvgNumCodeChannels	int	4	Number of code channels
RateBLER1st	real	4	BLER 1st transmission
NumBLER1st	int	4	Number BLER 1st transmission
RateRetransmissions	real	4	Retransmission rate
NumRetransmissions	int	4	Number of retransmissions
RateResidualBlocks	real	4	Residual block rate
NumResidualBlocks	int	4	Number of residual blocks
Duration	int	4	
Enabled64QAM	tinyint	1	• 0: 64QAM is not enabled • 1: 64QAM is enabled
ModScheme64QAM	int	4	Number of samples used 64QAM
Percent64QAM	real	4	Percentage of 64QAM
EnabledMIMO	tinyint	1	• 0: MIMO is not enabled • 1: MIMO is enabled
DualTBs	tinyint	1	• 0: Dual TB (transport blocks) are not used • 1: Dual TBs are used
EnabledDualCarrier	tinyint	1	1 if dual carrier is enabled, 0 otherwise
NumSamples_C0	int	4	Values as above for 1st carrier
ModScheme16QAM_C0	int	4	Values as above for 1st carrier
ModSchemeQPSK_C0	int	4	Values as above for 1st carrier
Percent16QAM_C0	real	4	Values as above for 1st carrier
PercentQPSK_C0	real	4	Values as above for 1st carrier
TransportBlock_C0	int	4	Values as above for 1st carrier
AvgNumCodeChannels_C0	int	4	Values as above for 1st carrier
ModScheme64QAM_C0	int	4	Values as above for 1st carrier
Percent64QAM_C0	real	4	Values as above for 1st carrier
NumSamples_C1	int	4	Values as above for 2nd carrier
ModScheme16QAM_C1	int	4	Values as above for 2nd carrier
ModSchemeQPSK_C1	int	4	Values as above for 2nd carrier

Column Name	Type	Length	Description
Percent16QAM_C1	real	4	Values as above for 2nd carrier
PercentQPSK_C1	real	4	Values as above for 2nd carrier
TransportBlock_C1	int	4	Values as above for 2nd carrier
AvgNumCodeChannels_C1	int	4	Values as above for 2nd carrier
ModScheme64QAM_C1	int	4	Values as above for 2nd carrier
Percent64QAM_C1	real	4	Values as above for 2nd carrier
Enabled64QAM_C1	tinyint	1	64 QAM enabled on 2nd carrier
RateBLER1st_C1	real	4	BLER 1st transmission
NumBLER1st_C1	int	4	Number BLER 1st transmission
RateRetransmissions_C1	real	4	Retransmission rate
NumRetransmissions_C1	int	4	Number of retransmissions
RateResidualBlocks_C1	real	4	Residual block rate
NumResidualBlocks_C1	int	4	Number of residual blocks

18.7 HSDPAThroughput Table

This table contains data for the throughput in the HSDPA mode.

Table 18-7: Structure of the HSDPAThroughput table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Category	int	4	Category of the handset
Interval	int	4	Interval (link to category)
ReqCQI	int	4	Avg. over the duration
ReqNumCQI	int	4	Sum of all CQI values
ReqSumCQI	int	4	Num of all CQI values
ReqTBSize	bigint	8	Sum of TB size (within duration)
ReqDuration	int	4	In milliseconds
ReqThroughput	bigint	8	Requested throughput (bit/s)

Column Name	Type	Length	Description
SchTBSize	bigint	8	Sum of TB size (within duration)
SchDuration	int	4	In milliseconds
SchThroughput	bigint	8	Scheduled throughput (bit/s)
DSCHTBSize	bigint	8	Sum of TB size (within duration)
DSCHDuration	int	4	In milliseconds
DSCHThroughput	bigint	8	D-SCH throughput (bit/s)
ReqCQI_C0	int	4	Values as above for 1st carrier
ReqNumCQI_C0	int	4	Values as above for 1st carrier
ReqSumCQI_C0	int	4	Values as above for 1st carrier
ReqTBSize_C0	bigint	8	Values as above for 1st carrier
ReqThroughput_C0	bigint	8	Values as above for 1st carrier
SchTBSize_C0	bigint	8	Values as above for 1st carrier
SchThroughput_C0	bigint	8	Values as above for 1st carrier
DSCHTBSize_C0	bigint	8	Values as above for 1st carrier
DSCHThroughput_C0	bigint	8	Values as above for 1st carrier
ReqCQI_C1	int	4	Values as above for 2nd carrier
ReqNumCQI_C1	int	4	Values as above for 2nd carrier
ReqSumCQI_C1	int	4	Values as above for 2nd carrier
ReqTBSize_C1	bigint	8	Values as above for 2nd carrier
ReqThroughput_C1	bigint	8	Values as above for 2nd carrier
SchTBSize_C1	bigint	8	Values as above for 2nd carrier
SchThroughput_C1	bigint	8	Values as above for 2nd carrier
DSCHTBSize_C1	bigint	8	Values as above for 2nd carrier
DSCHThroughput_C1	bigint	8	Values as above for 2nd carrier

18.8 HSDPAParams Table

This table contains parameter data for the HSDPA connection.

Table 18-8: Structure of the HSDPAParams table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'

Column Name	Type	Length	Description
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
HRNTI	int	4	HS-DSCH Radio Network TemporaryIdentity
AckNackRepFactor	int	4	Ack/Nack repetition factor
OVSFCode_0	int	4	OVSF code 0
OVSFCode_1	int	4	OVSF code 1
OVSFCode_2	int	4	OVSF code 2
OVSFCode_3	int	4	OVSF code 3
UARFCN	int	4	UARFCN of 1st carrier
PrimScrCode	smallint	2	PSC of active cell of 1st carrier
HRNTI_C1	int	4	Values as above for 2nd carrier
AckNackRepFactor_C1	int	4	Values as above for 2nd carrier
OVSFCode_0_C1	int	4	Values as above for 2nd carrier
OVSFCode_1_C1	int	4	Values as above for 2nd carrier
OVSFCode_2_C1	int	4	Values as above for 2nd carrier
OVSFCode_3_C1	int	4	Values as above for 2nd carrier
UARFCN_C1	int	4	Values as above for 2nd carrier
PrimScrCode_C1	smallint	2	Values as above for 2nd carrier

18.9 HSDPAPacketDetails Table

Table 18-9: Structure of the HSDPAPacketDetails table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
CFN	int	4	Connection Frame number
FrameNumber	int	4	Frame number
SCCHIdx	int	4	SCCH channel index

Column Name	Type	Length	Description
Status	int	4	0 = decoded successfully, 1 = decoded incorrectly
NumChn	int	4	Number of code channels
ChnOffset	int	4	Channel offset
Modulation	int	4	0 = QPSK, 1 = 16QAM
HARQId	int	4	HARQ id
RedVer	int	4	Redundancy and constellation version
NewTrans	int	4	0 = no new transmission, 1 = new transmission
Ack	int	4	0 = ACK, 1 = NACK, 2 = DTX
CQI	int	4	CQI of the packet
NumTrans	int	4	Number of transmissions
NumAck	int	4	Number of received acks
TBSize	int	4	Transport block size

19 HSUPA Tables

This chapter describes the structure of the HSUPA tables in the NQDI database.

19.1 HSUPARLS Table

This table contains the HSUPA RLS (Radio Link State) data.

Table 19-1: Structure of the HSUPARLS table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
HSUPARLSId	bigint	8	Id to embrace identically timestamps
SC	int	4	Scrambling Code
RLSIndex	smallint	2	RLS index
SrvCell	tinyint	1	Serving Cell (0 or 1)
SrvRLS	tinyint	1	Serving RLS (0 or 1)
Active	tinyint	1	Indicates state (0 or 1 for active or inactive)
AGCH	tinyint	1	Indicates if it is a AGCH (0 or 1)
RGCH	tinyint	1	Indicates if it is a RGCH (0 or 1)
HICH	tinyint	1	Indicates if it is a HICH (0 or 1)

19.2 HSUPAMACStatistics Table

This table contains the HSUPA MAC statistics.

Table 19-2: Structure of the HSUPAMACStatistics table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Category	int	4	
StartFN	int	4	
TTI	int	4	
ETCITable	int	4	
NumFrames	int	4	
NumAGCHMsgs	int	4	
AverageAGCH	real	4	
ServingRGUpRate	real	4	
ServingRGDownRate	real	4	
ServingRGHoldRate	real	4	
NonServingRGDownRate	real	4	
NonServingRGHoldRate	real	4	
HappyRate	real	4	
PwrLimitTxRate	real	4	
SGLimitTxRate	real	4	
BufferLimitTxRate	real	4	
MaxPower	int	4	
NewTXRate	real	4	
RetransRate	real	4	
DTXRate	real	4	
MaxNACKTXRate	real	4	
AverageETFCI	real	4	
AverageSG	real	4	
AverageTBsize	int	4	
GrantedThroughput	real	4	
ScheduledThroughput	real	4	
EDCHThroughput	real	4	

19.3 HSUPAEDCHUL Table

This table contains the HSUPA E-DCH UL L1 data.

Table 19-3: Structure of the HSUPAEDCHUL table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TTI	smallint	2	
DPDCHPresent	tinyint	1	
HSDPCCHPresent	tinyint	1	
SlotFormat	smallint	2	
ChannelBitRate	int	4	
MaxEULSF	varchar	15	
UEMaxSF	varchar	15	
PowerOffset	smallint	2	
InitServingGrant	smallint	2	
MaxTxPwr	smallint	2	

19.4 HSUPAMACHeaders Table

This table contains the HSUPA MAC-e throughput.

Table 19-4: Structure of the HSUPAMACHeaders table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Duration	int	4	Time difference from last message to the current message
NumMacHeaders	smallint	2	Number of MAC headers within this message
Data	int	4	Bits sent within the above duration
ThroughPut	float	8	ThroughPut [kBit/s]

19.5 HSUPASpreadingFactor Table

This table contains the HSUPA spreading factor information per test.

Table 19-5: Structure of the HSUPASpreadingFactor table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
DurationSF42	int	4	Duration where 2*SF4 was active
DurationSF22	int	4	Duration where 2*SF2 was active
DurationSF4	int	4	Duration where SF4 was active
DurationSF22andSF42	int	4	Duration where 2*SF4+2*SF2 was active

20 CDMA/1xRTT Tables

20.1 CDMAActiveSet Table

Table 20-1: Structure of the CDMAActiveSet table

Column Name	Type	Length	Description
ActiveSetId	bigint	8	Link to 'CDMAActiveSetInfo.activeSetID'
PilotPN	int	4	PN offset of the pilot
NumCodes	int	4	Number of active supplemental channels
WCFFCH	int	4	Walsh code of the fundamental channel
WCSCCH1	int	4	Walsh code of the first supplemental channel
WCSCCH2	int	4	Walsh code of the second supplemental channel
WCSCCH3	int	4	Walsh code of the third supplemental channel
WCSCCH4	int	4	Walsh code of the fourth supplemental channel
WCSCCH5	int	4	Walsh code of the fifth supplemental channel
WCSCCH6	int	4	Walsh code of the sixth supplemental channel
WCSCCH7	int	4	Walsh code of the seventh supplemental channel

20.2 CDMAActiveSetInfo Table

Table 20-2: Structure of the CDMAActiveSetInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ActiveSetId	bigint	8	Link to 'CDMAActiveSet.activeSetID'
NumActiveSet	int	4	Number of Pilots in the active Set
duration	int	4	Time since the last msg in ms

20.3 CDMAFER Table

This table contains the cumulated number of bad and total frames of the various channels.

Table 20-3: Structure of the CDMAFER table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
BFFCH	int	4	Number of Bad Frames on the fundamental channel (cumulative since phone switched on)
BFSCCH1	int	4	Number of Bad Frames on the first supplemental channel (cumulative since phone switched on)
BFSCCH2	int	4	Number of Bad Frames on the second supplemental channel (cumulative since phone switched on)
BFSCCH3	int	4	Number of Bad Frames on the third supplemental channel (cumulative since phone switched on)
BFSCCH4	int	4	Number of Bad Frames on the fourth supplemental channel (cumulative since phone switched on)
BFSCCH5	int	4	Number of Bad Frames on the fifth supplemental channel (cumulative since phone switched on)
BFSCCH6	int	4	Number of Bad Frames on the sixth supplemental channel (cumulative since phone switched on)
BFSCCH7	int	4	Number of Bad Frames on the seventh supplemental channel (cumulative since phone switched on)
TFFCH	int	4	Total Number of Frames in the fundamental channel (cumulative since phone switched on)
TFFSCCH1	int	4	Total Number of Frames on the first supplemental channel (cumulative since phone switched on)
TFFSCCH2	int	4	Total Number of Frames on the second supplemental channel (cumulative since phone switched on)
TFFSCCH3	int	4	Total Number of Frames on the third supplemental channel (cumulative since phone switched on)
TFFSCCH4	int	4	Total Number of Frames on the fourth supplemental channel (cumulative since phone switched on)
TFFSCCH5	int	4	Number of Bad Frames on Total Number of Frames on the fifth supplemental channel (cumulative since phone switched on)

Column Name	Type	Length	Description
TFFSCCH6	int	4	Total Number of Frames on the sixth supplemental channel (cumulative since phone switched on)
TFFSCCH7	int	4	Total Number of Frames on the seventh supplemental channel (cumulative since phone switched on)

20.4 CDMAFingerInfo Table

This table contains finger and searcher information and holds basic information for the CDMAFingers.

Table 20-4: Structure of the CDMAFingerInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
FingerInfoId	bigint	8	Link to 'CDMAFingers.fingerinfoId'
TotalEcIo	real	4	Total Ec/Io of fingers
WinPos	int	4	Absolute window ending position in 1/8 chips
WinCen	int	4	Window center = WinPos –(WindowSize/2) in 1/8 chips
BndClass	int	4	Band Class
RxAGC	real	4	AGC value
TxAGC	real	4	Transmit power
TxGainAdj	real	4	Power control value
TxPwrLimit	int	4	CDMA transmit power limit
SrchState	int	4	Searcher state
duration	int	4	Time since last msg in ms

20.5 CDMAFingers Table

This table contains the information for the individual finger of the RAKE receiver.

Table 20-5: Structure of the CDMAFingers table

Column Name	Type	Length	Description
FingerInfoId	bigint	8	Link to 'CDMAFingers.fingerinfoId'
FingerId	int	4	Finger ID
PN	int	4	PN offset of pilot
Sector	int	4	Fingers sector in Active Set assignment
EcIo	real	4	Current Ec/Io value
Position	int	4	Absolute Finger position in 1/8 chips
Assigned	int	4	• 0 – Finger is not assigned • 1 – Finger is assigned
Locked	int	4	• 0 – Finger is not locked to the symbol combiner • 1 – Finger is locked to the symbol combiner

20.6 CDMAFrameType Table

This table holds the information of the individual frames.

Table 20-6: Structure of the CDMAFrameType table

Column Name	Type	Length	Description
FrameTypeInfoId	bigint	8	Link to 'CDMAFrameTypeInfo.FrameTypeinfoId'
MsgTime	datetime2 (3)	8	Message time according to mobile clock
SubRecordNr	int	4	Running number of subrecord per FrameTypeInfoID
Num	int	4	Number of Frames
SCH_0	int	4	Rate of supplemental channel 0
SCH_1	int	4	Rate of supplemental channel 1

20.7 CDMAFrameTypeInfo Table

This table holds the general information of the Frame Type.

Table 20-7: Structure of the CDMAFrameTypeInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'

Column Name	Type	Length	Description
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
FrameTypeInfoId	bigint	8	Link to 'CDMAFrameType.FrameTypeinfoId'
FrameOffset	int	4	Frame offset in 1.25 ms units
TimeStamp	bigint	8	Timestamp of mobile clock
Direction	char	1	F – Forward (Downlink) R – Reverse (Uplink)

20.8 CDMAFwdPowerControl Table

This table holds the individual fast forward power control information for each frame (20ms).

Table 20-8: Structure of the CDMAFwdPowerControl table

Column Name	Type	Length	Description
FwdPowerControlInfoId	bigint	8	Link to 'CDMAFwdPowerControlInfo .FwdPowerControlinfoId'
MsgTime	datetime2 (3)	8	Message time according to mobile clock
SubRecordNr	int	4	RunningNumber of subrecords per FwdPowerControlinfoId'
Num	int	4	Running Number of frame in that subrecord
Decision history	int	4	16 1-bit decisions for the previous frame
FCHSetpoint	real	4	F-FCH outer loop setpoint in 0.125dBm
SCH0Setpoint	real	4	F-SCH0 outer loop setpoint in 0.125dBm
SCH1Setpoint	real	4	F-SCH1 outer loop setpoint in 0.125dBm

20.9 CDMAFwdPowerControlInfo Table

This table holds the general fast forward power control information.

Table 20-9: Structure of the CDMAFwdPowerControlInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
FwdPowerControlInfoId	bigint	8	Link to 'CDMAFwdPowerControl .FwdPowerControlinfoId'

Column Name	Type	Length	Description
FrameOffset	int	4	Frame offset in 1.25 ms
TimeStamp	bigint	8	Timestamp of mobile clock

20.10 CDMAIS2000MUX Table

This table holds information of the IS-95-B Parameters. For more information on these parameters, see TIA/EIA-95-B.

Table 20-10: Structure of the CDMAIS2000MUX table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RevSCCH	varchar	120	IS-95-B Reverse Supplemental Code Channel Parameters
ForSCCH	varchar	120	IS-95-B Forward Supplemental Code Channel Parameters

20.11 CDMAIS95MUX Table

This table holds the IS-95-A Parameter. For more information, see the IS-95-A or J-STD-008.

Table 20-11: Structure of the CDMAIS95MUX table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RevTc	varchar	128	Reverse Traffic Channel Parameters
ForTx	varchar	128	Forward Traffic Channel Parameters
Paging	varchar	100	Paging Channel Parameters
Access	varchar	100	Access Channel Parameters

Column Name	Type	Length	Description
Layer2	varchar	100	Layer 2 Parameters
Mux2For	varchar	224	MUX2 Reverse Channel Parameters
Mux2Rev	varchar	224	MUX2 Forward Channel Parameters

20.12 CDMAMarkovStatistics Table

This table holds the Markov or voice frame statistics for the forward link.

Table 20-12: Table CDMAMarkovStatistics

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Count	int	4	Number of entries in array
MarkovStatistics	varchar	500	Markov Statistics see ICD for details

20.13 CDMAMiscMsg Table

This table holds the messages that were not decoded and stored in a dedicated table.

Table 20-13: Structure of the CDMAMiscMsg table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	4	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ParseCode	varchar	10	'UTQ0' or 'UTQ1'
LogCode	varchar	10	Log Code according to ICD
Message	varchar	2000	Binary Message

20.14 CDMAPhoneState Table

This table holds the information of the phone state.

Table 20-14: Structure of the CDMAPhoneState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PhoneState	int	4	

20.15 CDMAPilotInfo Table

This table holds the general information on the pilot sets of the mobile.

Table 20-15: Structure of the CDMAPilotInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PilotInfoId	bigint	8	Link to 'CDMAPilots.PilotInfoId'
TotalEcIo	real	4	Total Ec/Io of the Pilots in the active set
PilotIncrement	int	4	Pilot increment for the remaining set searches
NumActiveSet	int	4	Number of pilots in the active set
NumNeighborSet	int	4	Number of pilots in the neighbor set
NumCandidateSet	int	4	Number of pilots in the candidate set
duration	int	4	Time since the last message in ms
SumPackets	int	4	

20.16 CDMAPilots Table

This table holds the information of the individual pilots.

Table 20-16: Structure of the CDMAPilots table

Column Name	Type	Length	Description
PilotInfoId	bigint	8	Link to 'CDMAPilotInfo.PilotInfoId'
Setvalue	char	1	• 'A' – Active Set • 'C' – Candidate Set • 'N' – Neighbor Set
PN	int	4	PN offset of Pilot
EcIo	real	4	Ec/Io
MACIndex	int	4	
PacketCount	int	4	

20.17 CDMAPowerControl Table

This table holds information of the AGC closed loop power control.

Table 20-17: Structure of the CDMAPowerControl table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TxPower	real	4	Tx power averaged over the last 100 values in dBm
MaxTxPower	real	4	Max Tx power from the last 100 values in dBm

20.18 CDMARevPowerControl Table

Table 20-18: Structure of the CDMARevPowerControl table

Column Name	Type	Length	Description
RevPowerControlInfoId	bigint	8	Link to 'CDMARevPowerControlInfo. RevPowerControlInfoId'
MsgTime	datetime2 (3)	8	Message time according to mobile clock
SubRecordNr	int	4	bigint
Num	int	4	Running Number of frame in that subrecord

Column Name	Type	Length	Description
Decision history	int	4	16 1-bit decisions for the previous frame
RxAGC	real	4	Receive (Rx) Power value in dBm
TxPwr	real	4	Transmit (Tx) Power value in dBm

20.19 CDMARevPowerControlInfo Table

Table 20-19: Structure of the CDMARevPowerControlInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RevPowerControlInfoId	bigint	8	bigint
FrameOffset	int	4	Frame Offset in 1.25 ms units
TimeStamp	bigint	8	Timestamp of mobile clock

20.20 CDMARLPStatistics Table

This table contains information about the RLP statistics.

Table 20-20: Structure of the CDMARLPStatistics table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ServiceId	int	4	Service Identification number
ResetTime	varchar	20	Timestamp of mobile clock when the values were reset to zero
NaksRecvd	int	4	Total number of negative acknowledgement (NAK) frames received

Column Name	Type	Length	Description
ReXmitsNotFind	int	4	Number of retransmitted frames not found
LargContigErasure	int	4	Largest block of consecutive erasures
Resets	int	4	Number of resets
Aborts	int	4	Number of NAK aborts
LastRtt	int	4	Last Round trip measurement
RlpBlobUsed	int	4	Block of Bytes use: • 0 – 0 Not received • 1 – Specified NAK scheme • 2 – Specified RTT • 3 – Specified RTT and NAK scheme
RxRexmitFrCnt	int	4	Number of retransmitted frames
RxIdleFrCnt	int	4	Number of received idle frames
RxFillFrCnt	int	4	Number of received fill frames
RxBlankFrCnt	int	4	Number of received blank frames
RxNullFrCnt	int	4	Number of received null frames
RxNewDataFrCnt	int	4	Total number of received new data frames
Rx20MsFrCnt	int	4	Number of received fundamental data frames
RxTotalBytes	int	4	Total number of received bytes
RxRlpErasure	int	4	Number of Radio Link Protocol erasures received
RxMuxErasure	int	4	Number of Mulitplexer erasures received
TxRexmitFrCnt	int	4	Number of transmitted retransmitted frames
TxIdleFrCnt	int	4	Number of transmitted idle frames
TxNewDataFrCnt	int	4	Total number of transmitted Fundamental data frames
Tx20MsFrCnt	int	4	Number of transmitted Fundamental data frames
TxTotalBytes	int	4	Total number of transmitted bytes
TxNaksCnt	int	4	Number of TX_NAKs entries to follow
TxNaks	varchar	60	Array of sent NAKs counts: single NAKs, double NAKs, and so on.
TxThroughput	real	4	TxRLPThroughput in kbps
RxThroughput	real	4	TxRLPThroughput in kbps

20.21 CDMAStatus Table

This table holds IS 2000 status parameters.

Table 20-21: Structure of the CDMAStatus table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Band	int	4	Band class: • 0 – Cellular • 1 – PCS
Channel	int	4	Center frequency channel
SystemID	int	4	Current System ID
NetwkID	int	4	Current Network ID
NumOfPilots	int	4	Number of pilots in the active set
FSCHRate	int	4	Forward supplemental channel rate
RSCHRate	int	4	Reverse supplemental channel rate
duration	int	4	Time since last message in ms

20.22 CDMATempAnalyzer Table

This table contains information of the temporal analyzer graph.

Table 20-22: Structure of the CDMATempAnalyzer table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TxAdjust	real	4	Current value of Tx Gain Adjust Register
TxVocoderRate	int	4	Current Vocoder Tx Rate

Column Name	Type	Length	Description
RxVocoderRate	int	4	Current Vocoder Rx Rate
duration	int	4	Time since last messages in ms

20.23 MsgCDMALayer3 Table

This table holds the CDMA layer 3 massages received through various channels.

Table 20-23: Structure of the msgCDMALayer3 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LogCode	varchar	6	Log Codes: • 1004 – Access Channel • 1005 – Reverse Link Channel • 1006 – Sync Channel • 1007 – Paging Channel • Message Type according to TIA IS-95 • 1008 – Forward Link Channel
MsgType	varchar	4	
Msg	varchar	600	Binary Message

20.24 MsgCDMASystemParameter Table

This table holds the information received in the (Extended) System Parameter Message.

Table 20-24: Structure of the MsgCDMASystemParameter table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
Pilot_PN	int	4	PN offset of pilot
SID	bigint	8	System ID
NID	int	4	Network ID
BID	int	4	Base Station ID
SearchWinA	int	4	Search Window Active Set in chips
SearchWinN	int	4	Search Window Neighbor set in chips
T_ADD	real	4	Threshold ADD in dB
T_DROP	real	4	Threshold Drop in dB
T_COMP	real	4	Threshold in dB
T_TDROP	real	4	Time to trigger Drop

21 UMTS/WCDMA Tables

This chapter describes the structure of the UMTS/WCDMA tables in the NQDI database.

21.1 Overview WCDMA

The following diagram provides an overview of the layer 1 table relations with respect to the existing NQDI database structure.

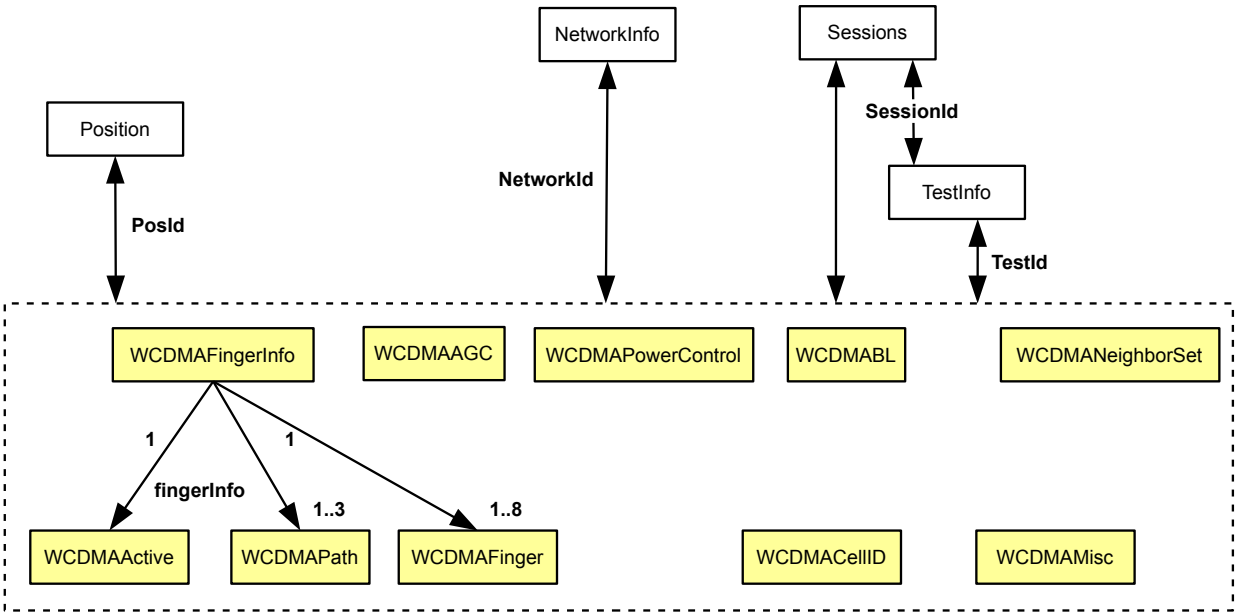


Figure 21-1: WCDMA Layer 1 table relations

21.2 WCDMAFingerInfo Table

This table is used to link Path Information, Finger Information and ActiveSetInformation together. This table is only available for Qualcomm chipset devices.

Table 21-1: Structure of the WCDMAFingerInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp

Column Name	Type	Length	Description
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
fingerInfoId	bigint	8	Link to ‘WCDMAFinger.FingerInfoId’ and ‘WCDMAActive-Set.FingerInfoId’
txPos	int	4	Transmit PN position in chipx8
cohIntLength	int	4	Coherent integration duration in units of 256 chips
nonCohIntLength	int	4	Non coherent integration
numPath	tinyint	1	Number of path (1..32)
numFinger	tinyint	1	Number of Fingers (0..8)

21.3 WCDMAActiveSet Table

This table contains the parameters of the active cell as defined in 3G TS 25.212/25.213/25.214. The table is updated each time the L1 receives an Active Set Update command from RRC.

Not all values will be provided by all devices.

The “_A1” values are only used for devices with 2 antennas; currently this is only supported by some Qualcomm chipset devices.

Table 21-2: Structure of the WCDMAActiveSet table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
FingerInfoId	bigint	8	Link to ‘WCDMAFingerInfo.FinderInfoId’
numCells	tinyint	1	Number of cells tracked
FreqDL	smallint	2	Downlink Frequency (0..16383)
RefCell	tinyint	1	• 0: not a reference cell • 1: reference cell
PrimScCode	smallint	2	Primary Scrambling code index (0..511)
AggrEcIo_PSC	real	4	Aggregate Ec/Io for this PSC
AggrEcIo	real	4	Aggregate Ec/Io for all PSC
DelaySpread	int	4	

Column Name	Type	Length	Description
Duration	real	4	
CellTPC	tinyint	1	Cell TPC, 0..5
CpiDivCell	tinyint	1	CPICH diversity per cell • 0: No diversity • 1: STTD • 2: TSTD • 3: SSTD
Scpich	tinyint	1	Secondary Pilot Channel in use (1=TRUE)
SecScCode	tinyint	1	Secondary Scrambling Code Index (0..15)
ChanCodeIdx	tinyint	1	Channelization code index (0..255)
AcellPos	int	4	Active Cell Position in chipx8
RSCP_PSC	real	4	RSCP of the PSC
AggrRSCP	real	4	Aggregate RSCP for all PSC
HSDPA_SC	tinyint	1	1 = HSDPA SC, 0 = not a HSDPA SC
AggrEcIo_PSC_A0	real	4	Aggregate Ec/Io for this PSC which are received by antenna 0
AggrEcIo_A0	real	4	Aggregate Ec/Io for all PSC which are received by antenna 0
AggrEcIo_PSC_A1	real	4	Aggregate Ec/Io for this PSC which are received by antenna 1
AggrEcIo_A1	real	4	Aggregate Ec/Io for all PSC which are received by antenna 1
ServiceBitMask	smallint	2	Bit mask defining the service: • Bit 0: HSDPA Service on this cell • Bit 1: HSUPA Service on this cell • Bit 2: R99 ASET Service on this cell • Bit 3: NBR Service on this cell • Bit 4: MBMS Service on this cell • Bit 5: MIMO Service on this cell • Bit 6-7: Reserved

21.4 WCDMAFinger Table

This table contains a record for each finger with a maximum of 8 fingers. This record provides important information about the demodulation of the fingers. The table is updated every 40 ms, depending on the import settings in NQDI.

Table 21-3: Structure of the WCDMAFinger table

Column Name	Type	Length	Description
FingerInfoId	bigint	8	Link to 'WCDMAFingerInfo.FinderInfoId'
FingId	tinyint	1	Finger Id (0..7):

Column Name	Type	Length	Description
LockStatus	tinyint	1	Finger Lock Bits • 1: Lock detection State • 2: Time Tracking Lock • 4: Data Combining Lock • 8: Power Control Lock
TpcIdx	smallint	2	
CpichChanCode	tinyint	1	OVSF of the CPICH that this finger is using for demodulation
FingPos	bigint	8	PN position where the finger is placed
PathIdx	smallint	2	
FingCpichDiv	smallint	2	Diversity indicator: • 1: Diversity Pilot available (STTD) • 0: no Diversity pilot (No STTD)
CpichEnr	real	4	CPICH energy as read from the finger (dB)
CpichEnrDiv	real	4	CPICH energy as read from the finger
PrimScCodeIdx	int	4	Finger Primary Scrambling Code index (0..511)
AntennaId	int	4	Id of the antenna where the finger is received

21.5 WCDMAPath Table

This table contains a record for every path. This table is only available for Qualcomm chipset devices.

Table 21-4: Structure of the WCDMAPath table

Column Name	Type	Length	Description
FingerInfoId	bigint	8	Link to 'WCDMAFingerInfo.FinderInfoId'
pathEcIo	real	4	Ec over Io of the path in dB
PnPosPath	int	4	Path PN position in chipx8
PrimScPathIdx	smallint	2	Primary Scrambling Code of the Primary CPICH (0..511)
SecScPathIdx	tinyint	1	Unused
SecScCodeIdx	tinyint	1	Secondary Scrambling Code of the secondary CPICH
FingChanCodeIdx	tinyint	1	OVSF code of the CPICH that this path is using for demodulation
FingIdx	tinyint	1	Index of the finger assigned to the path (0..7, FF = no finger)

21.6 WCDMAAGC Table

This table contains information about AGC.

Table 21-5: Structure of the WCDMAAGC table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RxPwr	real	4	Rx Power in dBm (-106 .. –21)
TxPwr	real	4	Tx Power in dBm (-57 .. 28)
RxAgcAdjPdm	smallint	2	Unused
TxAgcAdjPdm	smallint	2	Unused
MaxTxPwr	real	4	Tx Power limit in dBm (-57 .. 28dBm)
AgcInfo	int	4	
Inter_RxPwr	real	4	

21.7 WCDMABLER Table

This table contains the data to calculate the BLER.

Table 21-6: Structure of the WCDMABLER table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
TrChanId	tinyint	1	Number of transport channels
CRCRec	bigint	8	Number of received CRCs
CRCerror	bigint	8	Number of received CRCs in error
Win_size	int	4	Windows size for the BLER calculation in frames

21.8 WCDMACellId Table

This table contains the system information relevant to the UE and is generated when entering a new cell. Empty values are not provided by the device.

Table 21-7: Structure of the WCDMACellId table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
UL_ARFCN	int	4	UTRA Uplink ARFCN (see 34.121)
DL_ARFCN	int	4	UTRA Downlink ARFCN (see 34.121)
CellId	int	4	Cell Identity (28 Bit)
URAId	int	4	URA in use
CellAccessRest	tinyint	1	Bit Mask: • Cell barred • Cell reserved • Cell reserved for SoLSA • UE camped on a cell
CallAccess	tinyint	1	Allowed access: • 0: all calls • 1: emergency calls only
Inter_DL_ARFCN	int	4	

21.9 WCDMAMisc Table

This table contains all unparsed messages.

Table 21-8: Structure of the WCDMAMisc table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
ParseCode	varchar	10	
Msg	varchar	4096	

21.10 WCDMANeighborSet Table

This table contains the neighbor set information. Records are generated when the RRC receives a neighbor set update from the UTRAN (see 3G TS 25.331).

Table 21-9: Structure of the WCDMANeighborSet table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
FreqDL	smallint	2	Downlink Frequency (0..16383)
PrimScrCode	smallint	2	Primary Scrambling Code Index (0..511)
CPIDivCell	tinyint	1	Diversity indicator: • 0: No diversity • 1: Diversity
NcellPos	int	4	Neighbor cell position in chipsx8 0xFFFFFFFF indicates position unknown
EcIo_PSC	real	4	
RSCP_PSC	real	4	
SetValue	char	3	
Neighbor	smallint	2	
Inter	smallint	2	Intra (=0) or Inter (=1)
ServiceBitMask	smallint	2	Bit mask defining the service: • Bit 0: HSDPA Service on this cell • Bit 1: HSUPA Service on this cell • Bit 2: R99 ASET Service on this cell • Bit 3: NBR Service on this cell • Bit 4: MBMS Service on this cell • Bit 5: MIMO Service on this cell • Bit 6-7: Reserved

21.11 WCDMAPowerControl Table

This table contains the power control information.

Which values are present or not is device depending.

Table 21-10: Structure of the WCDMAPowerControl table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
SIR	real	4	SIR value in dB
SlotFmt	smallint	2	Format of the transmitted slot (see 25.211)
DlTpcHist	int	4	Difference between Power Up command counter and Power Down command counter in DL
UlTpcHist	int	4	Difference between Power Up command counter and Power Down command counter in UL
TxAgcAccu	bigint	8	unused
RateAdjIn	int	4	unused
A	int	4	unused
B	int	4	unused
C	int	4	unused
D	bigint	8	unused
TxInitPwr	real	4	First preamble TX power (3GPP 25.331 ch. 8.5.7)
TxPoParam	real	4	Power step when no acquisition indicator is received (3GPP 25.214 ch. 6.1)
TxParamCnt	int	4	Number of preamble transmissions (3GPP 25.214 ch. 6.1)
TxMsgPwr	real	4	First preamble TX power (3GPP 25.331 ch. 8.5.7)
TxPwrCtrlAlg	int	4	
TxPwrStep	int	4	
TxDivMode	int	4	Tx Closed loop diversity state (Not available with Nokia devices)
TxCMMode	int	4	CompressedModeState taken from WCDMA transmission gap (active or inactive)
RxBeforFIR	real	4	
RxAfterFIR	real	4	

Column Name	Type	Length	Description
TFCIBER	int	4	
BER	real	4	
FrameBitRate	int	4	
CurrentSIR	real	4	

21.12 WCDMARRCMessages Table

This table contains the RRC messages in binary format.

Table 21-11: Structure of the WCDMARRCMessages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LogChanType	tinyint	1	Channel Type • 0: UL CCCH • 1: UL DCCH • 2: DL CCCH • 3: DL DCCH • 4: DL BCCH: BCH • 5: DL BCCH: FACH • 6: DL PCCH
RB_Id	tinyint	1	ID assigned by the UTRAN (0..31)
Msg	varchar	4096	Fully assembled signaling message
msgType	char	50	Decoded Message Type
MsgIdent	char	3	Internal identification

21.13 WCDMARRCState Table

This table contains RRC State. A new record is generated upon RRC state change.

Table 21-12: Structure of the WCDMARRCState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'

Column Name	Type	Length	Description
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
RRCState	tinyint	1	• 0: Disconnected • 1: Connecting • 2: CELL FACH • 3: CELL DCH • 4: CELL PCH • 5: URA PCH
ErrRRCProc	tinyint	1	Current RRC Procedure
ErrRRCFailureCause	tinyint	1	RRC Failure cause
ErrProtocolErrorCause	tinyint	1	Protocol Error Cause

21.14 UMTS_GMM_MM_State Table

This table contains UMTS GMM and MM State messages as they appear from the Qualcomm TM5200/TM6200 or the Samsung Z100 phone.

Table 21-13: Structure of the UMTS_GMM_MM_State table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Type	tinyint	1	‘GMM’ or ‘MM’
State	tinyint	1	GMM or MM state
Substate	tinyint	1	GMM or MM substate
UpdateType	tinyint	1	GMM or MM update Type

21.15 UMTSNASMM Table

This table contains the relevant information on Mobility Management for the respective call. This record is generated upon call establishment.

This table is only for Qualcomm TM5200/TM6200 or the Samsung Z100 phones.

Table 21-14: Structure of the UMTSNASMM table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NetOpMode	tinyint	1	0:Class1; 1:Class2; 2:Class3
ServiceType	tinyint	1	
MCC	int	4	
MNC	int	4	
LAC	int	4	
RAI	int	4	

21.16 UMTSNASQoS Table

This table contains the QoS Parameters as given in 3G TS24.008 and is generated upon call establishment. To retrieve the decoded values, use the vUMTSNASQUS view.

Table 21-15: Structure of the UMTSNASQoS table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ConnectionId	tinyint	1	Connection Id (0..7)
DelayClass	tinyint	1	
ReliabilityClass	tinyint	1	
PeakThroughput	tinyint	1	
PrecendenceClass	tinyint	1	
MeanTroughput	tinyint	1	
TrafficClass	tinyint	1	

Column Name	Type	Length	Description
DeliveryOrder	tinyint	1	
DeliveryErrSDU	tinyint	1	
MaxSDU	tinyint	1	
MaxUlBitRate	tinyint	1	
MaxDlBitRate	tinyint	1	
ResidualBER	tinyint	1	
SDUErrRatio	tinyint	1	
TransferDelay	tinyint	1	
TrafficHandlingPrio	tinyint	1	
GuaranteedUlBitRate	tinyint	1	
GuaranteedDlBitRate	tinyint	1	

21.17 WCDMARLCState Table

Table 21-16: Structure of the WCDMARLCState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Direction	tinyint	1	Up or Downlink
State0	tinyint	1	
State1	tinyint	1	
State2	tinyint	1	
State3	tinyint	1	
State4	tinyint	1	
State5	tinyint	1	
State6	tinyint	1	
State7	tinyint	1	
State8	tinyint	1	
State9	tinyint	1	

Column Name	Type	Length	Description
State10	tinyint	1	
State11	tinyint	1	
State12	tinyint	1	
State13	tinyint	1	
State14	tinyint	1	
State15	tinyint	1	
State16	tinyint	1	
State17	tinyint	1	
State18	tinyint	1	
State19	tinyint	1	

21.18 WCDMARLCStatisticDetails Table

Table 21-17: Structure of the WCDMARLCStatisticDetails table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
Direction	tinyint	1	
RLCDetailId	int	4	
DataRLCId	tinyint	1	
CtlRLCId	tinyint	1	
ChanType	smallint	2	
numPDUBytes	bigint	8	
numSDUBytes	bigint	8	
numPDUGood	bigint	8	
numPDUError	bigint	8	
numPDUNAK	bigint	8	
duration	int	4	

21.19 WCDMARLCStatistics Table

Table 21-18: Structure of the WCDMARLCStatistics table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	tinyint	1	
RLCDetailId	int	4	
numAllPDUBytes	bigint	8	
numSDUBytes	bigint	8	
numPDUGood	bigint	8	
numPDUError	bigint	8	
numPDUNAK	bigint	8	
PDUThPut	float	8	
SDUThPut	float	8	
duration	bigint	8	

21.20 WCDMAMeasReportInfo Table

Table 21-19: Structure of the WCDMAMeasReportInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MeasReportId	bigint	8	Link to WCDMAMeasReport

21.21 WCDMAMeasReport Table

Table 21-20: Structure of the WCDMAMeasReport table

Column Name	Type	Length	Description
MeasReportId	bigint	8	Link to WCDMAMeasReportInfo
PSC	smallint	2	Primary Scrambling Code
EcIo	real	4	Ec/Io
RSCP	int	4	
SetValue	char	1	Active or Neighbor
UARFCN	int	4	Channel number

21.22 WCDMAEventReport Table

Table 21-21: Structure of the WCDMAEventReport table

Column Name	Type	Length	Description
MeasReportId	bigint	8	Link to WCDMAMeasReportInfo
Event	varchar	50	Event occurred
PSC	int	4	Primary Scrambling Code
EcIo	real	4	Ec/Io

21.23 WCDMANeighborSetInfo Table

Table 21-22: Structure of the WCDMAQCPNeighborSetInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
SetId	bigint	8	Link to WCDMAQCPNeighborSet
Count	int	4	Number of WCDMAQCPNeighborSet

21.24 WCDMAQCPNeighborSet Table

Table 21-23: Structure of the WCDMAQCPNeighborSet table

Column Name	Type	Length	Description
SetId	bigint	8	Link to WCDMAQCPNeighborSetInfo
FreqDL	int	4	DL frequency
PSC	smallint	2	Primary scrambling code
Diversity	bit	1	
NCellPos	int	4	

21.25 WCDMAValues Table

Table 21-24: Structure of the WCDMAValues table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
SFUL	smallint	2	Uplink Spreading Factor
SFDL	smallint	2	Downlink Spreading Factor

21.26 WCDMARLCThroughputInfo Table

Table 21-25: Structure of the WCDMARLCThroughputInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
RLCThrughPutId	bigint	8	Link to WCDMARLCThroughput
Duration	int	4	Duration between two messages

Column Name	Type	Length	Description
ThroughputUL	float	8	Average throughput over all messages with the same per RLCThrughPutId
ThroughputDL	float	8	

21.27 WCDMARLCThroughput Table

Table 21-26: Structure of the WCDMARLCThroughput table

Column Name	Type	Length	Description
RLCThrughPutId	bigint	8	Link to WCDMARLCThroughputInfo
RadioBearerId	int	4	Radio bearer id
NumBitsUL	int	4	Number of bits transferred in UL
NumBitsDL	int	4	Number of bits transferred in DL
ThroughputUL	float	8	UL throughput for this Radio bearer id
ThroughputDL	float	8	DL throughput for this Radio bearer id

21.28 WCDMAGSMNeighborSetInfo Table

Table 21-27: Structure of the WCDMAGSMNeighborSetInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
NeighborSetId	bigint	8	Link to WCDMAGSMNeighborSet
NumRecords	smallint	2	Number of messages with same NeighborSetId

21.29 WCDMAGSMNeighborSet Table

Table 21-28: Structure of the WCDMAGSMNeighborSet table

Column Name	Type	Length	Description
NeighborSetId	bigint	8	Link to WCDMAGSMNeighborSetInfo
ARFCN	smallint	2	GSM Channel number

Column Name	Type	Length	Description
RFBand	int	4	GSM Band
BSIC	smallint	2	Base Station Identifier Code
RxLev	real	4	Receive level of the channel

21.30 WCDMAFDDFreqListInfo Table

Table 21-29: Structure of the WCDMAFDDFreqListInfo table

Rh	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
FDDFreqListId	bigint	8	Link to WCDMAFDDFreqList
Intra	tinyint	1	0 = Inter frequency list, 1 = Intra
NumRecords	smallint	2	Number of messages with same FDDFreqListId

21.31 WCDMAFDDFreqList Table

Table 21-30: Structure of the WCDMAFDDFreqList table

Column Name	Type	Length	Description
FDDFreqListId	bigint	8	Link to WCDMAFDDFreqListInfo
UARFCN	int	4	Channel number
PSC	smallint	2	Primary scrambling code
CPICHTxPower	real	4	CPICh transmission power
ReadSFNIndicator	tinyint	1	
TxDiversityIndicator	tinyint	1	

21.32 WCDMAInterRATFreqListInfo Table

Table 21-31: Structure of the WCDMAInterRATFreqListInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
InterRATFreqListId	bigint	8	Link to WCDMAInterRATFreqList
NumRecords	smallint	2	Number of messages with same InterRATFreqListId

21.33 WCDMAInterRATFreqList Table

Table 21-32: Structure of the WCDMAInterRATFreqList table

Column Name	Type	Length	Description
InterRATFreqListId	bigint	8	Link to WCDMAInterRATFreqListInfo
ARFCN	smallint	2	GSM Channel number
RFBand	int	4	GSM Band
BSIC	smallint	2	Base Station Identifier Code
Id	tinyint	1	Id given in the L3 message

21.34 WCDMAInterRATFreqMeasInfo Table

Table 21-33: Structure of the WCDMAInterRATFreqMeasInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
InterRATFreqMeasId	bigint	8	Link to WCDMAInterRATFreqMeas
NumRecords	smallint	2	Number of messages with same InterRATFreqMeasId

21.35 WCDMAInterRATFreqMeas Table

Table 21-34: Structure of the WCDMAInterRATFreqMeas table

Column Name	Type	Length	Description
InterRATFreqMeasId	bigint	8	Link to WCDMAInterRATFreqMeasInfo
ARFCN	smallint	2	GSM Channel number
RFBand	int	4	GSM Band
BSIC	smallint	2	Base Station Identifier Code
RxLev	smallint	2	Receive level of the channel
Id	tinyint	1	Id given in the L3 message

21.36 WCDMARACHStatus Table

This table is only filled with Nokia devices.

The values are received by as RACH Status: Status information of PRACH transmission. Trace is sent after every PRACH transmission attempt.

Table 21-35: Structure of the WCDMARACHStatus table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
RACHStatus	smallint	2	• 0x00 = No ACK • 0x01 = ACK • 0x02 = Denied
SFNTimestamp	int	4	
RSCP	real	4	RSCP
OpenLoopPwrOffset	smallint	2	Open Loop Power offset (dB) used to calculate the initial preamble power (Ref. 3GPP 25.331 ch..5.7).

Column Name	Type	Length	Description
PreambleStepSize	smallint	2	Power step when no acquisition indicator is received (3GPP 25.214 ch. 6.1)
MessageOffset	smallint	2	Power step between last preamble and message control part (3GPP 25.214 ch. 6.1)
InitialPower	smallint	2	First preamble TX power (3GPP 25.331 ch. 8.5.7)
PreambleCount	smallint	2	Number of preamble transmissions (3GPP 25.214 ch. 6.1)
MessageCtrlWeight	smallint	2	Message control part weight (3GPP 25.214 ch. 5.1.1.2)
MessageDataWeight	smallint	2	Message data part weight (3GPP 25.214 ch. 5.1.1.2)
MessageTxPower	smallint	2	Message TX power (3GPP 25.214 ch. 6.1)
PreambleRetransMax	smallint	2	Preamble retransmission max value (3GPP 25.214 ch. 6.1)
CPICHTXPower	smallint	2	Primary CPICH Tx Power from SIB 5
ULInterference	smallint	2	UL interference from SIB 7

21.37 UMTSCellParams Table

Table 21-36: Structure of the UMTSCellParams table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
CellParamId	bigint	8	Internal id
MIBValueTag	tinyint	1	Layer 3 decoded values (taken from MIB, SIB1 and SIB3)
MCC	int	4	
MNC	int	4	
LAC	int	4	
CID	int	4	
RNCID	int	4	
TReselection	smallint	2	
QHyst1S	smallint	2	
QHyst2S	smallint	2	
SIntraSearch	smallint	2	

Column Name	Type	Length	Description
QRxQualMin	smallint	2	
QRxLevMin	smallint	2	
SSearchRAT	smallint	2	
SInterSearch	smallint	2	
t312	smallint	2	
n312	smallint	2	
t313	smallint	2	
n313	smallint	2	
t314	smallint	2	
t315	smallint	2	
n315	smallint	2	
t323	smallint	2	

21.38 UMTSSIB11Data Table

Table 21-37: Structure of the UMTSSIB11Data table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
CellParamId	bigint	8	Internal id
MIBValueTag	tinyint	1	Layer 3 decoded values (taken from SIB11)
Inter	tinyint	1	
UARFCN	int	4	
PSC	smallint	2	
CellIndividualOffset	smallint	2	
QOffset1	smallint	2	
QOffset2	smallint	2	
QRxLevMin	smallint	2	

21.39 UMTSSIB19DataInfo Table

Table 21-38: Structure of the UMTSSIB19DataInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
CellParamId	bigint	8	Internal id
SIB19Id	bigint	8	Id linked to UMTSSIB19Data
NumEUTRA	smallint	2	Number of EUTRA entries
MIBValueTag	tinyint	1	Layer 3 decoded values (taken from SIB19)
Priority	smallint	2	Layer 3 decoded values (taken from SIB19)
SPrioritySearch1	smallint	2	Layer 3 decoded values (taken from SIB19)
SPrioritySearch2	smallint	2	Layer 3 decoded values (taken from SIB19)
ThreshServingLow	smallint	2	Layer 3 decoded values (taken from SIB19)

21.40 UMTSSIB19Data Table

Table 21-39: Structure of the UMTSSIB19Data table

Column Name	Type	Length	Description
SIB19Id	bigint	8	Id linked to UMTSSIB19DataInfo
OrderId	smallint	2	Sorting id
EARFCN	int	4	Layer 3 decoded values (taken from SIB19)
Bandwidth	real	4	Layer 3 decoded values (taken from SIB19)
Priority	smallint	2	Layer 3 decoded values (taken from SIB19)
QRxLevMinEUTRA	smallint	2	Layer 3 decoded values (taken from SIB19)
ThreshXhigh	smallint	2	Layer 3 decoded values (taken from SIB19)

21.41 WCDMAActiveSetAverage Table

Table 21-40: Structure of the WCDMAActiveSetAverage table

Column Name	Type	Length	Description
SessionId	bigint	8	Link to 'Sessions.SessionId'
UARFCN	int	4	
PSC	smallint	2	
Counte1a	smallint	2	Number of e1a events
Counte1b	smallint	2	Number of e1b events
Duration	int	4	Duration in the active set
BestCompressedModeDuration	int	4	Duration in the active while in compressed mode and the PSC is the best in the active set

21.42 WCDMAMeasControlEventInfo Table

Table 21-41: Structure of the WCDMAMeasControlEventInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MeasControlEventId	bigint	8	Link to WCDMAMeasControlEvent
EventCount	int	4	Number of messages with same MeasControlEventId

21.43 WCDMAMeasControlEvent Table

Table 21-42: Structure of the WCDMAMeasControlEvent table

Column Name	Type	Length	Description
MeasControlEventId	bigint	8	Link to WCDMAMeasControlEventInfo
Event	varchar	50	Name of the event (for example, "e1a")
Hysteresis	int	4	Hysteresis of the event
TimeToTrigger	int	4	Time to trigger in ms
ReportingCellStatus	varchar	100	Reporting cell status

Column Name	Type	Length	Description
TriggeringCondition	varchar	50	Trigger condition
ReportingRange	int	4	Reporting range
Threshold	int	4	First threshold if available
Threshold2	int	4	Second threshold if available
ReportingAmount	varchar	50	Reporting amount
ULTChId	varchar	50	UL transport channel id
PendingAfterTrigger	int	4	Pending time after trigger
TxInterruptionAfterTrigger	varchar	50	Tx interruption after trigger
TransportChannelIdentity	varchar	50	Transport channel identity
TotalCRC	int	4	Total CRC
BadCRC	int	4	Bad CRC

Table 21-43: Available fields per event

Name of field	Occurrence
Hysteresis	1a-l; 2a-f; 3a-d;
TimeToTrigger	1a-l; 2a-f; 3a-d; 4a,b; 6a-g
ReportingCellStatus	1a-l; 2a-f; 3a-d;
TriggeringCondition	1a,b,e,f;
ReportingRange	1a,b;
Threshold	• 1a (ReportDeactivationThreshold) • 1c (ReplacementActivationThreshold) • 1e,f,h,i (ThresholdUsedFrequency) • 2b,d,f (UsedFreqThreshold) • 3a (ThresholdOwnSystem) • 4a,b (ReportingThreshold) • 6a,b (TransmittedPowerThreshold) • 6f,g (ue_RX_TX_TimeDifferenceThreshold)
Threshold2	3a,b,c (ThresholdOtherSystem)
ReportingAmount	1c;
ULTChId	4a,b
PendingAfterTrigger	4a,b; 5a
TxInterruptionAfterTrigger	4a,b
TransportChannelIdentity	5a
TotalCRC	5a
BadCRC	5a

22 LTE Tables

This chapter describes the structure of the LTE tables in the NQDI database.

Some columns are only represented as integer which is mapped to a string value. If this is the case, the possible values are listed in the table's appropriate view (`dbViews.sql`)

22.1 LTERRCMessages Table

This table contains the LTE RRC Layer3 messages.

Table 22-1: Structure of the LTERRCMessages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
RRCRelease	int	4	RRC release number
RRCVersion	int	4	RRC version number
RB_Id	int	4	Radio bearer id
PhyCellId	int	4	Physical cell id
Freq	int	4	E-ARFCN
SFN	int	4	Subframe number
ChnType	int	4	Channel type: • 2: BCCH_DL_SCH Message • 3: PCCH Message • 4: DL_CCCH Message • 5: DL_DCCH Message • 6: UL_CCCH Message • 7: UL_DCCH Message
MsgType	int	4	Internal id
MsgTypeName	varchar	50	Name of the message
Msg	varchar	4096	Message content

22.2 LTENASMessages Table

This table contains the LTE ESM and EMM messages.

Table 22-2: Structure of the LTENASMessages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	char	1	U or D for up or downlink
NASVersion	int	4	NAS release number
NASVersionMajor	int	4	NAS version major number
NASVersionMinor	int	4	NAS version minor number
Protocol	char	3	EMM or ESM
MsgType	int	4	Internal id
MsgTypeName	varchar	50	Name of the message
Msg	varchar	4096	Message content

22.3 LTEEMMState Table

Table 22-3: Structure of the LTEEMMState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
State	int	4	Current state (vLTEEMMState)
SubState	int	4	Current sub state (vLTEEMMState)
PLMNID	char	6	MCC MNC
GUTI	char	22	Globally Unique Temporary Identifier

22.4 LTEServingCellInfo Table

Table 22-4: Structure of the LTEServingCellInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTECACellInfoId	bigint	8	Link to 'LTECACellInfo.LTECACellInfoId'
PhyCellId	int	4	Physical cell id
DL_EARFCN	int	4	DL Channel number
UL_EARFCN	int	4	UL Channel number
DLBandWidth	real	4	UL Bandwidth in MHz
ULBandWidth	real	4	DL Bandwidth in MHz
CellIdentity	int	4	Cell Identity received in SIB1
TAC	int	4	Tracking Area Code
BandIndicator	int	4	Frequency band indicator
MCC	int	4	MCC
MNC	int	4	MNC
AllowedAccess	int	4	0 = Full, 1 = Limited
DetectedAntennas	int	4	Number of detected antennas
QRxLevMin	int	4	qRxLev Min
PMax	int	4	P-Max
MaxTxPower	int	4	Max Ue Tx power
SRxLev	int	4	S Rx Level
SIntraSearch	int	4	S intra search
SNonIntraSearch	int	4	S non intra search

22.5 LTECACellInfo Table

Table 22-5: Structure of the LTECACellInfo table. The values are parsed from the L3 RRCConnectionReconfiguration message

Column Name	Type	Length	Description
LTECACellInfoId	bigint	8	Link to 'LTECACellInfo.LTECACellInfoId'
CarrierIndex	smallint	2	Index of the SCC
RFBand	int	4	RF band
EARFCN	int	4	DL channel number
PCI	int	4	Physical cell id
DLBandWidth	real	4	DL band width
AntennaPortCount	smallint	2	Number of antennas
TransmissionMode	varchar	20	Transmission mode

22.6 LTEPRACH Table

Table 22-6: Structure of the LTEPRACH table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Config	tinyint	1	Random Access Preamble timing for preamble format
MaxAttempts	tinyint	1	MAX preamble attempts
StepSize	tinyint	1	Step power. In units of dB.
InitPower	int	4	Preamble initial power
Reason	tinyint	1	Trigger reason (vLTEPRACH)
Pathloss	tinyint	1	Pathloss
CRNTI	int	4	CRNTI of the UE
TxPower	int	4	PRACH Tx Power
Result	tinyint	1	The result of the RACH attempt (vLTEPRACH)
NumTx	tinyint	1	Number of attempts

Column Name	Type	Length	Description
Type	tinyint	1	• 0: Contention Free RACH procedure • 1: Contention Based RACH procedure
BackOFF	int	4	BackOFF value in ms
NumContentionFailed	int	4	Number of failed contentions
NumContentionPassed	int	4	Number of passed contentions

22.7 LTEChannelConfig Table

Table 22-7: Structure of the LTEChannelConfig table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LogCode	varchar	10	Qualcomm specific log code
Message	varchar	8000	Qualcomm specific binary data

22.8 LTEMeasurementReport Table

Table 22-8: Structure of the LTEMeasurementReport table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEMeasReportId	bigint	8	Link to 'LTENeighbors.LTEMeasReportId'
FrameNumber	int	4	Last reported frame number
EARFCN	int	4	E-ARFCN
PhyCellId	int	4	Physical cell id
RSRP	real	4	RSRP

Column Name	Type	Length	Description
RSRQ	real	4	RSRQ
RSSI	real	4	RSSI
SINR0	real	4	SINR0
SINR1	real	4	SINR1
NumMeasuredCells	smallint	2	Number of measured neighbor cells
NumDetectedCells	smallint	2	Number of detected neighbor cells
RSRP_Rx0	real	4	RSRP of first antenna
RSRQ_Rx0	real	4	RSRQ of first antenna
RSSI_Rx0	real	4	RSSI of first antenna
RSRP_Rx1	real	4	RSRP of second antenna
RSRQ_Rx1	real	4	RSRQ of second antenna
RSSI_Rx1	real	4	RSSI of second antenna

22.9 LTEMeasurementReportCarrier Table

Table 22-9: Structure of the LTEMeasurementReportCarrier table

Column Name	Type	Length	Description
LTEMeasReportId	bigint	8	Link to 'LTEMeasurementReport.LTEMEasReportId'
CarrierIndex	smallint	2	1..7: SCC 1..7
FrameNumber	int	4	Last reported frame number
EARFCN	int	4	E-ARFCN
PhyCellId	int	4	Physical cell id
RSRP	real	4	RSRP
RSRQ	real	4	RSRQ
RSSI	real	4	RSSI
SINR0	real	4	SINR0
SINR1	real	4	SINR1
NumMeasuredCells	smallint	2	Number of measured neighbor cells
NumDetectedCells	smallint	2	Number of detected neighbor cells
RSRP_Rx0	real	4	RSRP of first antenna
RSRQ_Rx0	real	4	RSRQ of first antenna
RSSI_Rx0	real	4	RSSI of first antenna
RSRP_Rx1	real	4	RSRP of second antenna

Column Name	Type	Length	Description
RSRQ_Rx1	real	4	RSRQ of second antenna
RSSI_Rx1	real	4	RSSI of second antenna

22.10 LTENeighbors Table

Table 22-10: Structure of the LTENeighbors table

Column Name	Type	Length	Description
LTEMeasReportId	bigint	8	Link to 'LTEMeasurementReport'
PhyCellId	int	4	Physical cell id
Detected	tinyint	1	• 0 = Measured • 1 = Detected
CPType	smallint	2	Always 0, not used yet
NumberAntennas	smallint	2	Number of antennas
RSRP	real	4	RSRP
RSRQ	real	4	RSRQ
RSSI	real	4	RSSI
EARFCN	int	4	EARFCN of the neighbor
CarrierIndex	smallint	2	0: PCC 1..7: SCC 1..7

22.11 LTEPDSCHStatisticsInfo Table

Table 22-11: Structure of the LTEPDSCHStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPDSCHInfoId	bigint	8	Link to 'LTEPDSCHStatistics'
NumRecords	int	4	Number of frames used in this message
NumRank2	int	4	Number of frames wher number of TB present is > 1
MaxNumLayer	int	4	Max number of layers

Column Name	Type	Length	Description
MaxRBsFrame	int	4	Max number of RBs allocated (per Frame)
MinRBsFrame	int	4	Min number of RBs allocated
AvgRBsFrame	int	4	Average of allocated RBs
BytesTransferred	int	4	Bytes transferred
RequestedPDSCHThroughput	real	4	Requested throughput
ScheduledPDSCHThroughput	real	4	Scheduled throughput
NetPDSCHThroughput	real	4	Scheduled throughput - discarded
BLER	real	4	Block error rate
FER	real	4	Frame error rate
TBRate	real	4	TB rate
MaxTBSize	int	4	Max TB size
MinTBSize	int	4	Min TB size
AvgTBSize	real	4	Average TB size
NumTBs	int	4	Number of TBs
NumNewData	int	4	Number of new data indication
NumCRCPass	int	4	Number of TBs with CRC pass
NumPassOnFirstAttempt	int	4	Number of TBs passed on first attempt
NumRecombining	int	4	Number of recombined TBs
NumDiscardedRetransmis-sions	int	4	Number of discarded retransmissions
NumNotTransmittedTBs	int	4	Number of not transmitted TBs
NumRBs	int	4	Number of RBs (overall TBs)
AvgMCS	real	4	Average MCS index
TransmissionMode	smallint	2	Transmission mode (vLTEPDSCHStatisticsInfo)
NumQPSK	int	4	Number of TBs using QPSK
Num16QAM	int	4	Number of TBs using 16QAM
Num64QAM	int	4	Number of TBs using 64QAM
NumRetrans1	int	4	Number of TBs with 1 retransmission
NumRetrans2	int	4	Number of TBs with 2 retransmissions. These TBs are also counted in NumRetrans1.
NumRetrans3orMore	int	4	Number of TBs with 3 or more retransmission. These TBs are also counted in the above counters.
NumCarriers	smallint	2	Number of reported carriers since last reporting

22.12 LTEPDSCHStatisticsCarrier Table

Table 22-12: Structure of the LTEPDSCHStatisticsCarrier table

Column Name	Type	Length	Description
LTEPDSCHInfoId	bigint	8	Link to 'LTEPDSCHStatisticsInfo'
CarrierIndex	smallint	2	0 : PCC 1..7: SCC1..7
NumRecords	int	4	Number of frames used in this message
NumRank2	int	4	Number of frames wher number of TB present is > 1
MaxNumLayer	int	4	Max number of layers
MaxRBsFrame	int	4	Max number of RBs allocated (per Frame)
MinRBsFrame	int	4	Min number of RBs allocated
AvgRBsFrame	int	4	Average of allocated RBs
BytesTransferred	int	4	Bytes transferred
RequestedPDSCHThroughput	real	4	Requested throughput
ScheduledPDSCHThroughput	real	4	Scheduled throughput
NetPDSCHThroughput	real	4	Scheduled throughput - discarded
BLER	real	4	Block error rate
FER	real	4	Frame error rate
TBRate	real	4	TB rate
MaxTBSize	int	4	Max TB size
MinTBSize	int	4	Min TB size
AvgTBSize	real	4	Average TB size
NumTBs	int	4	Number of TBs
NumNewData	int	4	Number of new data indication
NumCRCPass	int	4	Number of TBs with CRC pass
NumPassOnFirstAttempt	int	4	Number of TBs passed on first attempt
NumRecombining	int	4	Number of recombined TBs
NumDiscardedRetransmis-sions	int	4	Number of discarded retransmissions
NumNotTransmittedTBs	int	4	Number of not transmitted TBs
NumRBs	int	4	Number of RBs (overall TBs)
AvgMCS	real	4	Average MCS index
TransmissionMode	smallint	2	Transmission mode (vLTEPDSCHStatisticsInfo)
NumQPSK	int	4	Number of TBs using QPSK
Num16QAM	int	4	Number of TBs using 16QAM

Column Name	Type	Length	Description
Num64QAM	int	4	Number of TBs using 64QAM
NumRetrans1	int	4	Number of TBs with 1 retransmission
NumRetrans2	int	4	Number of TBs with 2 retransmissions. These TBs are also counted in NumRetrans1.
NumRetrans3orMore	int	4	Number of TBs with 3 or more retransmission. These TBs are also counted in the above counters.

22.13 LTEPDSCHStatistics Table

Table 22-13: Structure of the LTEPDSCHStatistics table

Column Name	Type	Length	Description
LTEPDSCHInfoId	bigint	8	Link to 'LTEPDSCHStatisticsInfo'
TimeDifference	real	4	Difference in ms when message was received compared to parents table MsgTime
LogCode	varchar	10	Qualcomm log code
Message	varchar	8000	Qualcomm binary message

22.14 LTEPUSCHStatisticsInfo Table

Table 22-14: Structure of the LTEPUSCHStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPUSCHInfoId	bigint	8	Link to 'LTEPUSCHStatistics'
BytesTransferred	int	4	Bytes transferred
GrantedPUSCHThroughput	real	4	Granted throughput
ScheduledPUSCHThroughput	real	4	Scheduled throughput
NetPUSCHThroughput	real	4	Throughput of first transmissions
RetransmissionRate	real	4	Retransmission rate
TBRate	real	4	TB rate

Column Name	Type	Length	Description
MaxTBSize	int	4	Max TB size
MinTBSize	int	4	Min TB size
AvgTBSize	real	4	Average TB size
NumTBs	int	4	Number of TBs
PuschTxPower	real	4	Average total Tx power
NumRBs	int	4	Number of RBs
NumBPSK	int	4	Number of RBs using BPSK
NumQPSK	int	4	Number of RBs using QPSK
Num16QAM	int	4	Number of RBs using 16QAM
Num64QAM	int	4	Number of RBs using 64QAM
NumPassOnFirstAttempt	int	4	Number of TBs passed on first attempt
NumRetrans1	int	4	Number of TBs with 1 retransmission
NumRetrans2	int	4	Number of TBs with 2 retransmissions. These TBs are also counted in NumRetrans1.
NumRetrans3orMore	int	4	Number of TBs with 3 or more retransmission. These TBs are also counted in the above counters.
NumResidual	int	4	Number of residual (not transmitted) TBs
AvgMCS	real	4	MCS index
NumRecords	int	4	Number of records since last reporting
NumULGrant	int	4	Number of records where UL Grant was valid

22.15 LTEPUSCHStatistics Table

Table 22-15: Structure of the LTEPUSCHStatistics table

Column Name	Type	Length	Description
LTEPUSCHInfoId	bigint	8	Link to ‘LTEPUSCHStatisticsInfo‘
TimeDifference	real	4	Difference in ms when message was received compared to parents table MsgTime
LogCode	varchar	10	Qualcomm log code
Message	varchar	8000	Qualcomm binary message

22.16 LTEPUCCHCQI Table

Table 22-16: Structure of the LTEPUCCHCQI table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPUCCHCQIId	bigint	8	Link to 'LTEPUCCHCQICarrier'
TxMode	tinyint	1	Transmission mode (vLTEPUCCHCQI)
ReportingMode	tinyint	1	Reporting mode (vLTEPUCCHCQI)
ReportType	tinyint	1	Report type (vLTEPUCCHCQI)
NumSubbands	tinyint	1	Number of subbands
BWPIndex	tinyint	1	BWP index
RankIndex	tinyint	1	Rank index
PMI	tinyint	1	Wideband PMI
NumSamplesCQI0	int	4	Number of reported CQI_0
NumSamplesCQI1	int	4	Number of reported CQI_1
CQI0	real	4	Average CQI_0
CQI1	real	4	Average CQI_1
TxPower	int	4	Total PUCCH Tx power

22.17 LTEPUCCHCQICarrier Table

Table 22-17: Structure of the LTEPUCCHCQICarrier table

Column Name	Type	Length	Description
LTEPUCCHCQIId	bigint	8	Link to 'LTEPUCCHCQI'
CarrierIndex	smallint	2	1..7: SCC 1..7
TxMode	tinyint	1	Transmission mode (vLTEPUCCHCQI)
ReportingMode	tinyint	1	Reporting mode (vLTEPUCCHCQI)
ReportType	tinyint	1	Report type (vLTEPUCCHCQI)
NumSubbands	tinyint	1	Number of subbands
BWPIndex	tinyint	1	BWP index

Column Name	Type	Length	Description
RankIndex	tinyint	1	Rank index
PMI	tinyint	1	Wideband PMI
NumSamplesCQI0	int	4	Number of reported CQI_0
NumSamplesCQI1	int	4	Number of reported CQI_1
CQI0	real	4	Average CQI_0
CQI1	real	4	Average CQI_1
LTEPUCCHCQIId	bigint	8	Total PUCCH Tx power

22.18 LTEDLAckNack Table

Table 22-18: Structure of the LTEDLAckNack table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NumAck	int	4	Number of ACKs
NumNack	int	4	Number of NACKs

22.19 LTEULAckNack Table

Table 22-19: Structure of the LTEULAckNack table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'

Column Name	Type	Length	Description
NumAck	int	4	Number of ACKs
NumNack	int	4	Number of NACKs

22.20 LTEMACDLStatistics Table

Table 22-20: Structure of the LTEMACDLStatistics table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Duration	real	4	Duration since last reported message
TotalNumPDU	int	4	Number of PDUs received
NumPDU	int	4	Number of PDUs to decode
NumDataBytes	int	4	Number of data bytes
NumHdrBytes	int	4	Number of header bytes
NumPaddingBytes	int	4	Number of padding bytes
NumRLCPDU	int	4	Sum of RLC PDUs

22.21 LTEMACULStatistics Table

Table 22-21: Structure of the LTEMACULStatistics table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Duration	real	4	Duration since last reported message
TotalNumPDU	int	4	Number of PDUs received

Column Name	Type	Length	Description
NumPDU	int	4	Number of PDUs to decode
NumDataBytes	int	4	Number of data bytes
NumHdrBytes	int	4	Number of header bytes
NumPaddingBytes	int	4	Number of padding bytes
NumGrantedBytes	int	4	Sum of uplink grant bytes
NumRLCPDU	int	4	Sum of RLC PDUs

22.22 LTERLCDLConfigInfo Table

Table 22-22: Structure of the LTERLCDLConfigInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
LTERLCDLCfgId	bigint	8	Link to ‘LTERLCDLConfig’
CfgReason	smallint	2	Configuration reason (vLTERLCDLConfigInfo)
NumReleased	smallint	2	Number of RBs released
NumAdded	smallint	2	Number of RBs added
NumActive	smallint	2	Number of active RBs

22.23 LTERLCDLConfig Table

Table 22-23: Structure of the LTERLCDLConfig table

Column Name	Type	Length	Description
LTERLCDLCfgId	bigint	8	Link to ‘LTERLCDLConfigInfo’
RBCfgIdx	tinyint	1	Radio bearer config id
Status	tinyint	1	Status (vLTERLCDLConfig)
LogicalChnId	tinyint	1	Logical channel id
RadioBearerId	tinyint	1	Radio bearer id
Mode	tinyint	1	Mode (vLTERLCDLConfig)

Column Name	Type	Length	Description
Type	tinyint	1	Type (vLTERLCDLConfig)
TReordering	int	4	T-reordering timer in ms
TStatusProhibit	int	4	T status prohibit timer in ms (AM only)
LengthSNField	tinyint	1	SN field length (UM only) (vLTERLCDLConfig)

22.24 LTERLCULConfigInfo Table

Table 22-24: Structure of the LTERLCULConfigInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTERLCULCfgId	bigint	8	Link to 'LTERLCULConfig'
CfgReason	smallint	2	Configuration reason (vLTERLCULConfigInfo)
NumReleased	smallint	2	Number of RBs released
NumAdded	smallint	2	Number of RBs added
NumActive	smallint	2	Number of active RBs

22.25 LTERLCULConfig Table

Table 22-25: Structure of the LTERLCULConfig table

Column Name	Type	Length	Description
LTERLCULCfgId	bigint	8	Link to 'LTERLCULConfigInfo'
RBCfgIdx	tinyint	1	Radio bearer config id
Status	tinyint	1	Status (vLTERLCULConfig)
LogicalChnId	tinyint	1	Logical channel id
RadioBearerId	tinyint	1	Radio bearer id
Mode	tinyint	1	Mode (vLTERLCULConfig)
Type	tinyint	1	Type (vLTERLCULConfig)
PollByte	bigint	8	Poll byte constant (AM only) (vLTERLCULConfig)

Column Name	Type	Length	Description
PollPDU	int	4	Poll PDU constant (AM only) (vLTERLCULConfig)
TPollReTrans	int	4	T poll retransmit timer in ms (AM only)
MaxReTransThreshold	tinyint	1	Maximum number of transmission (AM only)
LengthSNField	tinyint	1	SN field length (UM only) (vLTERLCDLConfig)

22.26 LTERLCDLStatisticsInfo Table

Table 22-26: Structure of the LTERLCDLStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
LTERLCDLStatId	bigint	8	Link to ‘LTERLCDLStatistics’
Duration	real	4	Duration of collected data
NumRadioBearer	smallint	2	Number of RBs

22.27 LTERLCDLStatistics Table

Table 22-27: Structure of the LTERLCDLStatistics table

Column Name	Type	Length	Description
LTERLCDLStatId	bigint	8	Link to ‘LTERLCDLStatisticsInfo’
RBCfgIdx	tinyint	1	Radio bearer config id
Mode	tinyint	1	Mode (vLTERLCDLStatistics)
LogicalChnId	tinyint	1	Logical channel id
RadioBearerId	tinyint	1	Radio bearer id
NumRst	int	4	Total Number of rlc re-establishments since radio bearer activation
NumDataPDU	int	4	Number of RLC data PDUs received
NumDataBytes	int	4	RLC Data PDUs in Bytes received
NumStatusPDU	int	4	Number of RLC status PDUs received

Column Name	Type	Length	Description
NumStatusBytes	int	4	Number of RLC status PDUs received in bytes
NumInvalidPDU	int	4	Number of invalid RLC PDU received
NumInvalidBytes	int	4	Number of invalid RLC PDU received in bytes
NumReTxPDU	int	4	Number of retransmitted PDUs
NumReTxBytes	int	4	Number of retransmitted PDUs in bytes
NumDuplPDU	int	4	Number of complete duplicate RLC PDUs received
NumDuplBytes	int	4	Number of complete duplicate RLC PDUs received in bytes
NumDropPDU	int	4	Number of PDUs dropped
NumDropBytes	int	4	Number of bytes dropped
NumDropPDUFC	int	4	Number of PDUs dropped due to flow control
NumDropBytesFC	int	4	Number of bytes dropped due to flow control
NumSDU	int	4	Number of RLC SDUs reassembled
NumSDUBytes	int	4	Number of bytes reassembled
NumNonSeqSDU	int	4	Number of Out of Order SDUs
NumCTRLPDU	int	4	Number of Control PDUs sent
NumCompNACK	int	4	Number of Complete RLC PDU NACKs sent
NumSegmNACK	int	4	Number of RLC Segments NACK sent
NumTReordExp	int	4	Number of times T reordering timer expired

22.28 LTERLCULStatisticsInfo Table

Table 22-28: Structure of the LTERLCULStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
LTERLCULStatId	bigint	8	Link to ‘LTERLCULStatistics’
Duration	real	4	Duration of collected data
NumRadioBearer	smallint	2	Number of RBs

22.29 LTERLCULStatistics Table

Table 22-29: Structure of the LTERLCULStatistics table

Column Name	Type	Length	Description
LTERLCULStatId	bigint	8	Link to 'LTERLCDLStatisticsInfo'
RBCfgIdx	tinyint	1	Radio bearer config id
Mode	tinyint	1	Mode (vLTERLCDLStatistics)
LogicalChnId	tinyint	1	Logical channel id
RadioBearerId	tinyint	1	Radio bearer id
NumRst	int	4	Total Number of rlc re-establishment during this call
NumDataPDU	int	4	Number of New RLC data PDUs transmitted
NumDataBytes	int	4	Number of New Data PDU Bytes transmitted, including RLC headers
NumSDU	int	4	Number of RLC SDUs transmitted
NumSDUBytes	int	4	Number of RLC SDU bytes transmitted
NumCTRLPDU	int	4	Number of RLC control PDUs transmitted
NumCtrlBytes	int	4	Number of RLC control PDU bytes transmitted
NumReTxPDU	int	4	Number of RLC PDUs re-transmitted
NumReTxBytes	int	4	Number of PDU Bytes re-transmitted
NumCtrlPDUReTx	int	4	Number of Control PDUs received
NumCompNACK	int	4	Number of Complete RLC PDU NACKs received
NumSegmNACK	int	4	Number of NACKs for RLC Segments received
NumInvalidCtrlPDU	int	4	Number of invalid control PDU received
NumPoll	int	4	Number of RLC PDUs transmitted with Poll Bit set
NumTPollRetTxExpiry	int	4	Number of times T poll retransmit timer expired

22.30 LTEPDCPDLConfigInfo Table

Table 22-30: Structure of the LTEPDCPDLConfigInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'

Column Name	Type	Length	Description
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPDCPDLCfgId	bigint	8	Link to 'LTEPDCPDLConfig'
CfgReason	smallint	2	Configuration reason (see vLTEPDCPDLConfigInfo)
NumReleased	smallint	2	Number of releases RBs
NumAdded	smallint	2	Number of added RBs
NumActive	smallint	2	Number of active RBs

22.31 LTEPDCPDLConfig Table

Table 22-31: Structure of the LTEPDCPDLConfig table

Column Name	Type	Length	Description
LTEPDCPDLCfgId	bigint	8	Link to 'LTEPDCPDLConfigInfo'
RBCfgIdx	tinyint	1	Radio bearer config id
Status	tinyint	1	Status (see vLTEPDCPDLConfig)
RadioBearerId	tinyint	1	Radio bearer id
EPSId	tinyint	1	EPS id
Mode	tinyint	1	Mode (see vLTEPDCPDLConfig)
Type	tinyint	1	Type (see vLTEPDCPDLConfig)
LengthSNField	tinyint	1	Length SN field (see vLTEPDCPDLConfig)

22.32 LTEPDCPULConfigInfo Table

Table 22-32: Structure of the LTEPDCPULConfigInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPDCPDLCfgId	bigint	8	Link to 'LTEPDCPULConfig'
CfgReason	smallint	2	Configuration reason (see vLTEPDCPULConfigInfo)
NumReleased	smallint	2	Number of releases RBs

Column Name	Type	Length	Description
NumAdded	smallint	2	Number of added RBs
NumActive	smallint	2	Number of active RBs

22.33 LTEPDCPULConfig Table

Table 22-33: Structure of the LTEPDCPULConfig table

Column Name	Type	Length	Description
LTEPDCPULCfgId	bigint	8	Link to 'LTEPDCPULConfigInfo'
RBCfgIdx	tinyint	1	Radio bearer config id
Status	tinyint	1	Status (see vLTEPDCPULConfig)
RadioBearerId	tinyint	1	Radio bearer id
EPSId	tinyint	1	EPS id
Mode	tinyint	1	Mode (see vLTEPDCPULConfig)
Type	tinyint	1	Type (see vLTEPDCPULConfig)
LengthSNField	tinyint	1	Length SN field (see vLTEPDCPULConfig)

22.34 LTEPDCPDLStatisticsInfo Table

Table 22-34: Structure of the LTEPDCPDLStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPDCPDLStatId	bigint	8	Link to 'LTEPDCPDLStatistics'
Duration	real	4	Duration of data collected
NumReportedErrors	int	4	Number of reported errors
NumRadioBearer	smallint	2	Number of RBs

22.35 LTEPDCPDLStatistics Table

Table 22-35: Structure of the LTEPDCPDLStatistics table

Column Name	Type	Length	Description
LTEPDCPDLStatId	bigint	8	Link to 'LTEPDCPDLStatisticsInfo'
RBCfgIdx	tinyint	1	Radio bearer config id
Mode	tinyint	1	Status (see vLTEPDCPDLStatistics)
RadioBearerId	tinyint	1	Radio bearer id
HeaderLen	int	4	Header length in bytes
NumRst	int	4	Total Number of PDCP re-establishments since radio bearer activation
NumFlowCtrlTrigger	int	4	Number of timer flow control is trigger
NumDataPDU	int	4	Number of PDCP data PDUs received
NumDataBytes	int	4	PDCP data PDUs received in bytes
NumControlPDU	int	4	Number of PDCP control PDUs received
NumControlBytes	int	4	PDCP control PDUs received in bytes
NumControlPDUGen	int	4	Number of PDCP control PDUs generated
NumControlGenBytes	int	4	PDCP control PDUs generated in bytes
NumStatRepCtrlPDU	int	4	Number of PDCP status report control PDUs received
NumROHCCtrlPDU	int	4	Number of PDCP ROHC control PDUs received
NumROHCFailedPDU	int	4	Number of PDCP PDUs ROHC decompression failed
NumIntegrityPDU	int	4	Number of PDCP PDUs integrity verification failed
NumMissingSDUUp	int	4	Number of PDCP missing SDUs when SDUs are delivered to upper layer
NumMissingSDULow	int	4	Number of PDCP missing SDUs from RLC when reestablishment happen
NumDupPDU	int	4	Number of PDCP duplicated PDUs
NumDupBytes	int	4	PDCP duplicated PDUs in bytes
NumOutofWinPDU	int	4	Number of PDCP out of windows PDUs
NumOutofWinBytes	int	4	PDCP out of windows PDUs in bytes
NumInvalidPDU	int	4	Number of PDCP invalid PDUs
NumInvalidBytes	int	4	PDCP invalid PDUs in bytes

22.36 LTEPDCPULStatisticsInfo Table

Table 22-36: Structure of the LTEPDCPULStatisticsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEPDCPULStatId	bigint	8	Link to 'LTEPDCPULStatistics'
Duration	real	4	Duration of data collected
NumReportedErrors	int	4	Number of reported errors
NumRadioBearer	smallint	2	Number of RBs

22.37 LTEPDCPULStatistics Table

Table 22-37: Structure of the LTEPDCPULStatistics table

Column Name	Type	Length	Description
LTEPDCPULStatId	bigint	8	Link to 'LTEPDCPULStatisticsInfo'
RBCfgIdx	tinyint	1	Radio bearer config id
Mode	tinyint	1	Status (see vLTEPDCPULStatistics)
RadioBearerId	tinyint	1	Radio bearer id
HeaderLen	int	4	Header length in bytes
NumRst	int	4	Total Number of PDCP re-establishments since radio bearer activation
NumFlowCtrlTrigger	int	4	Number of timer flow control is trigger
NumDataPDU	int	4	Number of PDCP data PDUs transmitted
NumDataBytes	int	4	PDCP data PDUs transmitted in bytes
NumCTRLPDU	int	4	Number of PDCP control PDUs transmitted
NumCtrlBytes	int	4	PDCP control PDUs transmitted in bytes
NumStatRepCtrlPDU	int	4	Number of PDCP status report control PDU transmitted
NumROHCFailedPDU	int	4	Number of PDCP ROHC compression failed
NumROHCCtrlPDU	int	4	Number of PDCP ROHC control PDUs transmitted
NumDiscardSDU	int	4	Number of PDCP SDUs discarded (timer discard)

Column Name	Type	Length	Description
NumDiscardBytes	int	4	PDCP discarded SDUs in bytes (timer discard)
NumReTxPDU	int	4	Number of PDCP PDUs retransmitted
NumReTxBytes	int	4	PDCP PDUs retransmitted in bytes

22.38 LTEPBCH Table

Table 22-38: Structure of the LTEPBCH table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
FER	int	4	FER of PBCH decoding attempts

22.39 LTEFrameTiming Table

Table 22-39: Structure of the LTEFrameTiming table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
DLFrameTimingOffset	int	4	Downlink frame timing offset
ULFrameTimingOffset	int	4	Uplink frame timing offset
TimingAdvance	int	4	Starting NTA value Timing Advance command T_A = 0, 1, 2, ..., 1282

22.40 LTENASQoS Table

For interpretation of the values refer section 9.9.4.3 of the spec TS 24.301 or the view vLTENASQoS.

Table 22-40: Structure of the LTENASQoS table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
QCI	smallint	2	QCI
MaxBitRateUL	smallint	2	Maximum bit rate for uplink
MaxBitRateDL	smallint	2	Maximum bit rate for downlink
GuaranteedBitRateUL	smallint	2	Guaranteed bit rate for uplink
GuaranteedBitRateDL	smallint	2	Guaranteed bit rate for downlink
MaxBitRateULExt	smallint	2	Maximum bit rate for uplink (extended)
MaxBitRateDLExt	smallint	2	Maximum bit rate for downlink (extended)
GuaranteedBitRateULExt	smallint	2	Guaranteed bit rate for uplink (extended)
GuaranteedBitRateDLExt	smallint	2	Guaranteed bit rate for downlink (extended)

22.41 LTERRCMeasurementConfig Table

This and the following tables do contain values read from LTE RRCConnectionReconfiguration L3 messages.

Table 22-41: Structure of the LTERRCMeasurementConfig table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTEMeasConfigId	bigint	8	Link to LTERRCMeasObject, LTERRCReportConfig and LTERRCMeasurements

Column Name	Type	Length	Description
NumMeasObjects	smallint	2	Num recs in LTERRCMeasObject
NumReportConfig	smallint	2	Num recs in LTERRCReportConfig
NumMeasurements	smallint	2	Num recs in LTERRCMeasurements
GapOffset	int	4	Gap offset given in RRCConnectionReconfiguration
SMeasure	smallint	2	s-Measure given in RRCConnectionReconfiguration

22.42 LTERRCMeasObject Table

Table 22-42: Structure of the LTERRCMeasObject table

Column Name	Type	Length	Description
LTEMeasConfigId	bigint	8	Link to LTERRCMeasurementConfig
ObjectId	int	4	Id of measurement object. The same id is used in LTERRCMeasurements.
Type	varchar	20	Type of the measurement (for example, ‘EUTRA’)
CarrierFreq	int	4	Carrier frequency
Bandwidth	real	4	Transmission bandwidth (in MHz)

22.43 LTERRCReportConfig Table

Table 22-43: Structure of the LTERRCReportConfig table

Column Name	Type	Length	Description
LTEMeasConfigId	bigint	8	Link to LTERRCMeasurementConfig
ConfigId	int	4	Id of report configuration. The same id is used in LTERRCMeasurements.
Config	varchar	20	Configuration (e.g. ‘EUTRA’)
Event	varchar	20	Event name
Hysteresis	real	4	Hystersis value
TimeToTrigger	int	4	Time to trigger in ms
ThresholdType	varchar	30	Type of threshold (e.g. ‘RSRP’)
Threshold	real	4	For event A1, A2 and A4: Threshold value; for other events: offset value.
TriggerQuantity	varchar	30	Quantity of trigger (e.g. ‘RSRP’)
ReportInterval	int	4	Interval in ms
ReportAmount	varchar	10	Report amount (e.g. ‘infinity’)

Column Name	Type	Length	Description
ReportQuantity	varchar	30	Report Quantity
ThresholdType2	varchar	30	Second threshold type (if available)
Threshold2	real	4	Threshold value for second threshold

22.44 LTERRCMeasurements Table

Table 22-44: Structure of the LTERRCMeasurements table

Column Name	Type	Length	Description
LTEMeasConfigId	bigint	8	Link to LTERRCMeasurementConfig
MeasId	int	4	Id of this measurement, same id will then be used in the measurement results (see LTERRCMeasReportInfo)
ObjectId	int	4	Id of the measurement object
ConfigId	int	4	Id of the report configuration

22.45 LTERRCMeasReportInfo Table

This and the following tables do contain values read from LTE MeasurementReport L3 messages.

Table 22-45: Structure of the LTERRCMeasReportInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
LTERRCMeasReportId	bigint	8	Link to LTERRCMeasReport
MeasId	int	4	Measurement id given in the LTE RRCConnectionReconfiguration
NumMeasurements	smallint	2	Number of measurements

22.46 LTERRCMeasReport Table

Table 22-46: Structure of the LTERRCMeasReport table

Column Name	Type	Length	Description
LTERRCMeasReportId	bigint	8	Link to LTERRCMeasReportInfo
Type	varchar	15	ServingCell or EUTRA (= neighbor cell)
PhyCellId	int	4	Physical Cell Id, only available for neighbors
RSRP	int	4	RSRP measurement result
RSRQ	real	4	RSRQ measurement result

22.47 LTERRCSIBDataInfo Table

This and the following tables do contain values read from LTE SIB L3 messages.

Table 22-47: Structure of the LTERRCSIBDataInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2	7	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
LTERRCSIBId	bigint	8	Link to LTERRCSIBData
NumSIBData	smallint	2	Number of LTERRCSIBData entries connected to this entry

22.48 LTERRCSIBData Table

Table 22-48: Structure of the LTERRCSIBData table

Column Name	Type	Length	Description
LTERRCSIBId	bigint	8	Link to LTERRCSIBDataInfo
OrderId	smallint	2	Sorting id
Type	varchar	5	Type of SIB message
Carrier	int	4	L3 value from SIB messages
PMax	smallint	2	L3 value from SIB messages
QRxLevMin	smallint	2	L3 value from SIB messages
QHyst	smallint	2	L3 value from SIB messages

Column Name	Type	Length	Description
QQualMin	smallint	2	L3 value from SIB messages
Threshold	smallint	2	L3 value from SIB messages
CellReselectionPriority	smallint	2	L3 value from SIB messages
SIntraSearch	smallint	2	L3 value from SIB messages
SNonIntraSearch	smallint	2	L3 value from SIB messages
TReselectionEUTRA	smallint	2	L3 value from SIB messages
MappedSIB	varchar	255	L3 value from SIB messages

23 IS-136 Tables

This chapter describes the structure of the IS-136 tables in the NQDI database.

23.1 MsgIS136Layer3 Table

This table contains the IS-136 Layer3 messages.

Table 23-1: Structure of the MsgIS136Layer3 table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
NoType	int	4	Number type
Type	varchar	10	Type
Direction	varchar	2	UL / DL
MSG	varchar	255	The Layer3 Message

23.2 MsgIS136Report Table

This table contains the IS-136 report information.

Table 23-2: Structure of the MsgIS136Report table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
msgType	int	4	Type of message
Channel	int	4	Channel Number
RxLev	int	4	Receive level in dBm

Column Name	Type	Length	Description
CCType	varchar	4	Type of color code
CC	int	4	Color code
Mode	varchar	8	Mode
StateType	varchar	10	Type of state
Phonestate	int	4	State of Phone
BER	int	4	Bit error rate
txpwr	int	4	Transmit power
SystemID	int	4	System ID
Band	int	4	Band
Subband	varchar	1	Subband
TimeSlot	int	4	Time slot
TA	int	4	Timing advance

24 iDEN Tables

24.1 MsgIDENReport Table

Table 24-1: Structure of the MsgIDENReport table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Carrier	int	4	iDEN Channel number
RSSI	float	8	RSSI of the above channel
CarrierNplusI	float	8	C/(N+I) for the carrier
SQE	int	4	Signal Quality Estimate
Frequency	int	4	Frequency of the carrier in Hz

25 WiMAX Tables

This chapter describes the structure of the WiMAX tables in the NQDI database.

25.1 WiMAXMACMessages Table

Table 25-1: Structure of the WiMAXMACMessages table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Direction	smallint	2	Up or Downlink
CurrentFrame	int	4	Current frame number
Header	varchar	13	IEEE 802.16e/D11 6.3.2.3, 11 Actual for Rx TLV only. (6 bytes before MAC Management Message Type. Sub headers not supported.)
MsgType	smallint	2	IEEE 802.16e/D11 6.3.2.3
Msg	varchar	4096	IEEE 802.16e/D11 6.3.2.3, 11

25.2 WiMAXLinkState Table

Table 25-2: Structure of the WiMAXLinkState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
BaseId	bigint	8	
ULCellId	smallint	2	Permutation Base for specified UL AAS Zone

Column Name	Type	Length	Description
PreambleIndex	smallint	2	See, IEEE 802.16e/D11 8.4.6.1.1
CINRmean	real	4	
CINRDeviation	real	4	
RSSI	real	4	
FrameNumber	int	4	
LocalFrameNumber	int	4	
PER	real	4	
ULPDUNumber	bigint	8	MSS send PDU counter
ULSDUNumber	bigint	8	MSS send SDU counter
DLPDUNumber	bigint	8	MSS receive PDU counter
DLSDUNumber	bigint	8	MSS receive SDU counter
DLDiscardFrameNumber	int	4	DL Frame lost counter
ULBitDataRate	int	4	
ULPacketDataRate	int	4	
DLBitDataRate	int	4	
DLPacketDataRate	int	4	
ULTrafficConnections	int	4	
DLTrafficConnections	int	4	
TXReferencePower	smallint	2	
TxPowerHeadroom	smallint	2	
TxPower	smallint	2	
InitialRangingCodeStart	smallint	2	
InitialRangingCodeEnd	smallint	2	
PeriodicRangingCodeStart	smallint	2	
PeriodicRangingCodeEnd	smallint	2	
BandwidthRequestRangingCo-deStart	smallint	2	
BandwidthRequestRangingCo-deEnd	smallint	2	
MACState	varchar	50	
ULRangingCode	smallint	2	
ULRangingSeed	int	4	
PowerWorkMode	smallint	2	

Column Name	Type	Length	Description
RSSIDeviationfield	int	4	
TxPowerBSOffset	int	4	

25.3 WiMAXPhyState Table

Table 25-3: Structure of the WiMAXPhyState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
UplinkBurstDataZone	varchar	10	• 0: PUSC • 1: OPUSC • 2: AMC
DownlinkBurstDataZone	smallint	2	
UplinkBurstDataFECScheme	varchar	20	• 0: AIR_MAC_DEF_QPSK_CC_1_2_FEC_CODE • 1: AIR_MAC_DEF_QPSK_CC_3_4_FEC_CODE • 2: AIR_MAC_DEF_16QAM_CC_1_2_FEC_CODE • 3: AIR_MAC_DEF_16QAM_CC_3_4_FEC_CODE • 4: AIR_MAC_DEF_64QAM_CC_1_2_FEC_CODE • 5: AIR_MAC_DEF_64QAM_CC_2_3_FEC_CODE • 6: AIR_MAC_DEF_64QAM_CC_3_4_FEC_CODE • 13: AIR_MAC_DEF_QPSK_CTC_1_2_FEC_CODE • 14: AIR_MAC_DEF_QPSK_CTC_2_3_FEC_CODE • 15: AIR_MAC_DEF_QPSK_CTC_3_4_FEC_CODE • 16: AIR_MAC_DEF_16QAM_CTC_1_2_FEC_CODE • 17: AIR_MAC_DEF_16QAM_CTC_3_4_FEC_CODE • 18: AIR_MAC_DEF_64QAM_CTC_1_2_FEC_CODE • 19: AIR_MAC_DEF_64QAM_CTC_2_3_FEC_CODE • 20: AIR_MAC_DEF_64QAM_CTC_3_4_FEC_CODE • 21: AIR_MAC_DEF_64QAM_CTC_5_6_FEC_CODE
DLMAPFECScheme	varchar	50	• 1: QPSK (CTC) ½ (00–no coding repetition) • 2: QPSK (CTC) ½ (01–repetition coding2) • 4: QPSK (CTC) ½ (10–repetition coding4) • 6: QPSK (CTC) ½ (11–repetition coding6)
FrameNumber	int	4	
LocalFrameNumber	int	4	
UplinkBurstDataDuration	int	4	
DownlinkBurstDataDuration	int	4	

Column Name	Type	Length	Description
UplinkBurstDataSize	int	4	
DownlinkBurstDataSize	int	4	
UplinkRangingSeed	int	4	
UplinkBurstDataCID	int	4	
DownlinkBurstDataCID	int	4	
UplinkBurstDataUIUC	smallint	2	
DownlinkBurstDataDIUC	smallint	2	
UplinkBurstDataFECRepetition	smallint	2	
DownlinkBurstDataFECRepeti-tion	smallint	2	
ULFrameRatio	smallint	2	
DLFrameRatio	smallint	2	
CurrentFrequency	int	4	

25.4 WiMAXCSInfo Table

Table 25-4: Structure of the WiMAXCSInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
WiMAXCSId	bigint	8	Link to ‘WiMAXCS’
Count	smallint	2	Number of WiMAXCS message with the same id as above

25.5 WiMAXCS Table

Table 25-5: Structure of the WiMAXCS table

Column Name	Type	Length	Description
WiMAXCSId	bigint	8	Link to WiMAXCSInfo
SFID	int	4	Service Flow ID

Column Name	Type	Length	Description
Direction	varchar	10	Uplink or Downlink
CID	int	4	Connection Id
SrcPortLow	int	4	Source Port Range low value
SrcPortHigh	int	4	Source Port Range high value
DstPortLow	int	4	Destination Port Range low value
DstPortHigh	int	4	Destination Port Range high value
CSType	varchar	20	CS Specification: • CS_SPEC_NO_CS = 0 • CS_SPEC_IPV4 = 1 • CS_SPEC_IPV6 = 2 • CS_SPEC_ETHERNET =3 • CS_SPEC_VLAN = 4 • CS_SPEC_IPV4_ETHERNET = 5 • CS_SPEC_IPV6_ETHERNET = 6 • CS_SPEC_IPV4_VLAN = 7 • CS_SPEC_IPV6_VLAN = 8 • CS_SPEC_ATM = 9 • CS_SPEC_RESERVED = 10~255 :Reserved
QoSSetFlagProvisioned	varchar	10	Enable =1, Disable=0
QoSSetFlagAdmitted	varchar	10	Enable =1, Disable=0
QoSSetFlagActive	varchar	10	Enable =1, Disable=0
PHSI	smallint	2	Index of PHS rule
PHSS	smallint	2	PHS size of PHS rule
PHSV	smallint	2	PHS valid of PHS rule
ClassifierPriority	smallint	2	Define classifier's priority.
IPProtocolNumber	smallint	2	• CLSF_IP_PROTO_IPV4 (4) • CLSF_IP_PROTO_IPV6 (6) • CLSF_IP_PROTO_ICMP (1) • CLSF_IP_PROTO_UDP (17) • CLSF_IP_PROTO_TCP (6) • CLSF_IP_PROTO_ICMPV6 (58)
TosLow	smallint	2	Type Of Service or DSCPs low
TosHigh	smallint	2	Type Of Service or DSCPs high
TosMask	smallint	2	Type Of Service or DSCPs mask
PHSM	int	4	PHS mask of PHS rule
IPSrcAddress	varchar	16	
IPSrcMaskAddress	varchar	16	
IPDstAddress	varchar	16	
IPDstMaskAddress	varchar	16	

Column Name	Type	Length	Description
PHSF	varchar	21	PHS field value of PHS rule
ServiceClassName	varchar	11	

25.6 WiMAXCellInfo Table

Table 25-6: Structure of the WiMAXCellInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
WiMAXCellId	bigint	8	Link to 'WiMAXCell'
Count	smallint	2	Number of WiMAXCell message with the same id as above

25.7 WiMAXCell Table

Table 25-7: Structure of the WiMAXCell table

Column Name	Type	Length	Description
WiMAXCellId	bigint	8	Link to 'WiMAXCellInfo'
FAIndex	smallint	2	The index (zero based) of a frequency in a pre-determined Frequency Table, known to both the BS and the MS (the table is configurable in the MS). Can be used in the MOB_NBR-ADV message, when specifying the Neighbor frequency
PreambleIndex	smallint	2	
CINRmean	smallint	2	
RSSImean	smallint	2	
SNRmean	smallint	2	
CellId	smallint	2	A parameter of the BS (range 0-31), which is also linked to the permutation used by the transmitter
BSId	bigint	8	
Frequency	bigint	8	
SCell	smallint	2	

26 EVDO Tables

This chapter describes the structure of the EVDO tables in the NQDIdatabase.

26.1 EVDOAirLinkSummary Table

Table 26-1: Structure of the EVDOAirLinkSummary table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ASPIndex	int	4	Best ASP index
SINRValue	real	4	SINR value (Best ASP)
FilteredSINR	real	4	Filtered SINR value (Best ASP)
DRCCurrent	real	4	Data rate current
DRCShort	real	4	Data rate short term
DRCLong	real	4	Data rate long term
PERCurrent	real	4	Packet error rate current
PERShort	real	4	Packet error rate short term
PERLong	real	4	Packet error rate long term
RPCFiltered0	real	4	RPC filtered (Slot 1)
RPCFiltered1	real	4	RPC filtered (Slot 2)
RPCFiltered2	real	4	RPC filtered (Slot 3)
RPCFiltered3	real	4	RPC filtered (Slot 4)
RPCFiltered4	real	4	RPC filtered (Slot 5)
RPCFiltered5	real	4	RPC filtered (Slot 6)

26.2 EVDOMUPForwardStat Table

Table 26-2: Structure of the EVDOMUPForwardStat table

Column Name	Type	Length	Description
MUPForwardStatsInfoId	bigint	8	Info Id
Id	int	4	Id of the sub record
GoodPackets	bigint	8	Good packets
BadPackets	bigint	8	Bad packets
Slot1	bigint	8	Slot 1
Slot2	bigint	8	Slot 2
Slot3	bigint	8	Slot 3
Slot4	bigint	8	Slot 4

26.3 EVDOMUPForwardStatInfo Table

Table 26-3: Structure of the EVDOMUPForwardStatInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
MUPForwardStatsInfoId	bigint	8	Id of the sub records
PER	real	4	Packet error rate
ServedThpt	real	4	Served throughput
InstThpt	real	4	Instantaneous throughput
InstThptSec	real	4	Instantaneous throughput (Sequence)
SeqNum	real	4	Sequence number

26.4 EVDOPowerControl Table

Table 26-4: Structure of the EVDOPowerControl table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PowerAmplifierState	int	4	PAState (0=off/1=on)
TXOpenLoop	real	4	Signed; Tx power determined by the open loop adjust mechanism.
TXClosedLoop	real	4	Signed; Tx power determined by the closed loop adjust mechanism.
TXPilot	real	4	Signed; represents the pilot power that is transmitted over the pilot channel; this is calculated based on the TxOpenLoopPower and the TxClosedLoopAdjust.
TXTotal	real	4	Signed; register holds the total Tx power as determined by the entire Tx AGC mechanism.
RXAntenna0	real	4	Signed; represents this field that holds the total receive power as seen by Antenna 0.
RXAntenna1	real	4	Signed; represents this field that holds the total receive power as seen by Antenna 1.

26.5 EVDORLinkGain Table

Table 26-5: Structure of the EVDORLinkGain table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PAState	int	4	PA state
ACKPilotRatio	real	4	ACK/Pilot
DRCPilotRatio	real	4	DRC/Pilot

Column Name	Type	Length	Description
RRIPilotRatio	real	4	RRI/Pilot
DSCPilotRatio	real	4	DSC/Pilot
DATAPilotRatio	real	4	DATA/Pilot
AUXPilotRatio	real	4	AUX/Pilot

26.6 EVDORLMetrics Table

Table 26-6: Structure of the EVDORLMetrics table

Column Name	Type	Length	Description
MetricsInfoId	bigint	8	Id of the sub record
PSId	int	4	Metrics Id
HICapSP0	int	4	HI Cap subpacket 0
HICapSP1	int	4	HI Cap subpacket 1
HICapSP2	int	4	HI Cap subpacket 2
HICapSP3	int	4	HI Cap subpacket 3
HICapPARQNaks	int	4	HI Cap PARQ NAKs
LOLatSP0	int	4	Lo Lat subpacket 0
LOLatSP1	int	4	Lo Lat subpacket 1
LOLatSP2	int	4	Lo Lat subpacket 2
LOLatSP3	int	4	Lo Lat subpacket 3
LOLatPARQNaks	int	4	Lo Lat PARQ NAKs
PacketsSent	int	4	Packets sent total
GoodPackets	int	4	Good Packets
PacketTermination	real	4	Packet termination
PER	real	4	Packet error rate
PacketTime	int	4	Packet time
TransmittedThpt	real	4	Transmitted throughput
OverallThpt	real	4	Overall throughput
SessionPacketsSent	real	4	Session packets sent

26.7 EVDORLMetricsInfo Table

Table 26-7: Structure of the EVDORLMetricsInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	MsgId
SessionId	bigint	8	SessionId
TestId	bigint	8	TestId
MsgTime	datetime2 (3)	8	MsgTime
PosId	bigint	8	PosId
NetworkId	bigint	8	NetworkId
MetricsInfoId	bigint	8	MetricsInfoId
PERTotal	real	4	Packet error rate (Total)
InstPERTotal	real	4	Instantaneous packet error rate (Total)
TransThptTotal	real	4	Transmitted throughput (Total)
OverallThptTotal	real	4	Overall throughput (Total)
InstThptTotal	real	4	Instantaneous throughput (Total)
AvgLatencyTotal	real	4	Average latency (Total)
PERHICap	real	4	Packet error rate (HI Cap)
InstPERHICap	real	4	Instantaneous packet error rate (HI Cap)
TransThptHICap	real	4	Transmitted throughput (HI Cap)
OverallThptHICap	real	4	Overall throughput (HI Cap)
InstThptHICap	real	4	Instantaneous throughput (HI Cap)
AvgLatencyHICap	real	4	Average latency (HI Cap)
PERLoLat	real	4	Packet error rate (Lo Lat)
InstPERLoLat	real	4	Instantaneous packet error rate (Lo Lat)
TransThptLoLat	real	4	Transmitted throughput (Lo Lat)
OverallThptLoLat	real	4	Overall throughput (Lo Lat)
InstThptLoLat	real	4	Instantaneous throughput (Lo Lat)
AvgLatencyLoLat	real	4	Average latency (Lo Lat)
PacketsSentTotal	int	4	Packets sent total
UnexpectedNAKsTotal	int	4	Unexpected NAKs (Total)
PacketsSentInterlace0	int	4	Packets sent (Interlace 0)
UnexpectedNAKsInterlace0	int	4	Unexcepted NAKs (Interlace 0)
PacketsSentInterlace1	int	4	Packets sent (Interlace 1)
UnexpectedNAKsInterlace1	int	4	Unexcepted NAKs (Interlace 1)

Column Name	Type	Length	Description
PacketsSentInterlace2	int	4	Packets sent (Interlace 2)
UnexpectedNAKsInterlace2	int	4	Unexcepted NAKs (Interlace 2)
HARQPARQMissmatchRate	real	4	HARQ/NARQ mismatch rate

26.8 EVDORLPForward Table

Table 26-8: Structure of the EVDORLPForward table

Column Name	Type	Length	Description
RLPForwardInfoId	bigint	8	Id of the sub record
RLPFlow	int	4	Identifies RLP
Version	int	4	Specifies the version of this log packet
ReXmitsNotFound	int	4	Number of retransmissions not found
ANNakBytesRequested	int	4	Number of bytes requested by the AN for retransmission
RxReXmitBytes	int	4	Number of transmitted retransmitted bytes
RxNewDataBytes	int	4	Number of new data bytes transmitted
RxTotalBytes	int	4	Total number of bytes transmitted
NakTimeouts	int	4	Nak timeouts or aborts
ResetCount	int	4	Total resets that have occurred, initiated by either the AN or the AT
ATResetRequestCount	int	4	Number of resets requested by the AT
ANResetAckCount	int	4	Number of Acks received from the AN
ANResetRequestCount	int	4	Number of times the reset was requested by the AN
ResetTime	bigint	8	Timestamp for last statistics reset

26.9 EVDORLPForwardInfo Table

Table 26-9: Structure of the EVDORLPForwardInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	MsgId
SessionId	bigint	8	SessionId
TestId	bigint	8	TestId
MsgTime	datetime2 (3)	8	MsgTime
PosId	bigint	8	PosId

Column Name	Type	Length	Description
NetworkId	bigint	8	NetworkId
RLPForwardInfoId	bigint	8	Id of the sub records

26.10 EVDORLPReverse Table

Table 26-10: Structure of the EVDORLPReverse table

Column Name	Type	Length	Description
RLPReverseInfoId	bigint	8	Id of the sub record
RLPFlow	int	4	Identifies RLP
Version	int	4	Specifies the version of this log packet
ReXmitsNotFound	int	4	Number of retransmissions not found
ANNakBytesRequested	int	4	Number of bytes requested by the AN for retransmission
TxReXmitBytes	int	4	Number of transmitted retransmitted bytes
TxNewDataBytes	int	4	Number of new data bytes transmitted
TxTotalBytes	int	4	Total number of bytes transmitted
ResetCount	int	4	Total resets that have occurred, initiated by either the AN or the AT
ATResetRequestCount	int	4	Number of resets requested by the AT
ANResetAckCount	int	4	Number of Acks received from the AN
ANResetRequestCount	int	4	Number of times the reset was requested by the AN
ResetTime	bigint	8	Timestamp for last statistics reset

26.11 EVDORLPReverseInfo Table

Table 26-11: Structure of the EVDORLPReverseInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	MsgId
SessionId	bigint	8	SessionId
TestId	bigint	8	TestId
MsgTime	datetime2 (3)	8	MsgTime
PosId	bigint	8	PosId
NetworkId	bigint	8	NetworkId
RLPReverseInfoId	bigint	8	Id of the sub records

26.12 EVDORLT2PStat Table

Table 26-12: Structure of the EVDORLT2PStat table

Column Name	Type	Length	Description
MsgId	bigint	8	MsgId
SessionId	bigint	8	SessionId
TestId	bigint	8	TestId
MsgTime	datetime2 (3)	8	MsgTime
PosId	bigint	8	PosId
NetworkId	bigint	8	NetworkId
NormalHDR	int	4	(0=No/1=Yes)
FRAB	real	4	Filtered Reverse Activity Bit
QRABFlow0	int	4	Flow specific QRAB
T2POutflowFlow0	real	4	Raw value of actual T2P resource withdrawn from this flow's bucket in proportion to its allotment
DeltaT2PInflowFlow0	real	4	Raw value of the T2P inflow increment or decrement for this flow
T2PInflowFlow0	real	4	Raw value of the average T2P resource added to bucket for this flow
BucketLevelFlow0	real	4	Raw value of current bucket level
BucketSaturationLevelFlow0	real	4	Raw value of the bucket saturation level
BucketFactorFlow0	real	4	Raw value of the BucketFactor
QRABFlow1	int	4	Flow specific QRAB
T2POutflowFlow1	real	4	Raw value of actual T2P resource withdrawn from this flow's bucket in proportion to its allotment
DeltaT2PInflowFlow1	real	4	Raw value of the T2P inflow increment or decrement for this flow
T2PInflowFlow1	real	4	Raw value of the average T2P resource added to bucket for this flow
BucketLevelFlow1	real	4	Raw value of current bucket level
BucketSaturationLevelFlow1	real	4	Raw value of the bucket saturation level
BucketFactorFlow1	real	4	Raw value of the BucketFactor
QRABFlow2	int	4	Flow specific QRAB
T2POutflowFlow2	real	4	Raw value of actual T2P resource withdrawn from this flow's bucket in proportion to its allotment
DeltaT2PInflowFlow2	real	4	Raw value of the T2P inflow increment or decrement for this flow
T2PInflowFlow2	real	4	Raw value of the average T2P resource added to bucket for this flow

Column Name	Type	Length	Description
BucketLevelFlow2	real	4	Raw value of current bucket level
BucketSaturationLevelFlow2	real	4	Raw value of the bucket saturation level
BucketFactorFlow2	real	4	Raw value of the BucketFactor
QRABFlow3	int	4	Flow specific QRAB
T2POutflowFlow3	real	4	Raw value of actual T2P resource withdrawn from this flow's bucket in proportion to its allotment
DeltaT2PInflowFlow3	real	4	Raw value of the T2P inflow increment or decrement for this flow
T2PInflowFlow3	real	4	Raw value of the average T2P resource added to bucket for this flow
BucketLevelFlow3	real	4	Raw value of current bucket level
BucketSaturationLevelFlow3	real	4	Raw value of the bucket saturation level
BucketFactorFlow3	real	4	Raw value of the BucketFactor
QRABFlow4	int	4	Flow specific QRAB
T2POutflowFlow4	real	4	Raw value of actual T2P resource withdrawn from this flow's bucket in proportion to its allotment
DeltaT2PInflowFlow4	real	4	Raw value of the T2P inflow increment or decrement for this flow
T2PInflowFlow4	real	4	Raw value of the average T2P resource added to bucket for this flow
BucketLevelFlow4	real	4	Raw value of current bucket level
BucketSaturationLevelFlow4	real	4	Raw value of the bucket saturation level
BucketFactorFlow4	real	4	Raw value of the BucketFactor

26.13 EVDOSUPForwardStat Table

Table 26-13: Structure of the EVDOSUPForwardStat table

Column Name	Type	Length	Description
SUPForwardStatsInfoId	bigint	8	Id of the sub record
Id	int	4	Id
Type	char	2	Channel type
GoodPackets	bigint	8	Good packets
BadPackets	bigint	8	Bad packets
Slot1	bigint	8	Slot1
Slot2	bigint	8	Slot2
Slot3	bigint	8	Slot3

Column Name	Type	Length	Description
Slot4	bigint	8	Slot4
Slot5	bigint	8	Slot5
Slot6	bigint	8	Slot6
Slot7	bigint	8	Slot7
Slot8	bigint	8	Slot8
Slot9	bigint	8	Slot9
Slot10	bigint	8	Slot10
Slot11	bigint	8	Slot11
Slot12	bigint	8	Slot12
Slot13	bigint	8	Slot13
Slot14	bigint	8	Slot14
Slot15	bigint	8	Slot15
Slot16	bigint	8	Slot16

26.14 EVDOSUPForwardStatInfo Table

Table 26-14: Structure of the EVDOSUPForwardStatInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	MsgId
SessionId	bigint	8	SessionId
TestId	bigint	8	TestId
MsgTime	datetime2 (3)	8	MsgTime
PosId	bigint	8	PosId
NetworkId	bigint	8	NetworkId
SUPForwardStatsInfoId	bigint	8	Id of the sub records
PER	real	4	Packet error rate
ServedThptTC	real	4	Served throughput (traffic channel)
InstThptTC	real	4	Instantaneous throughput (traffic channel)
InstThptSecTC	real	4	Instantaneous throughput (Sequence) (traffic channel)
ServedThptCC	real	4	Served throughput (control channel)
InstThptCC	real	4	Instantaneous throughput (control channel)
InstThptSecCC	real	4	Instantaneous throughput (Sequence) (control channel)

Column Name	Type	Length	Description
SeqNum	int	4	Sequence number
Revision	char	1	Rev. 0 or Rev. A

26.15 MsgEVDOLayer3 Table

Table 26-15: Structure of the MsgEVDOLayer3 table

Column Name	Type	Length	Description
MsgId	bigint	8	MsgId
SessionId	bigint	8	SessionId
TestId	bigint	8	TestId
MsgTime	datetime2 (3)	8	MsgTime
PosId	bigint	8	PosId
NetworkId	bigint	8	NetworkId
LogCode	varchar	6	Log code of the log item
MsgType	varchar	4	Msg type of the log item
Msg	varchar	600	Complete layer3 message (hex)

26.16 EVDOFingerInfo Table

Table 26-16: Structure of the EVDOFingerInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to ‘Sessions.SessionId’
TestId	bigint	8	Link to ‘TestInfo.TestId’
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to ‘Position.PosId’
NetworkId	bigint	8	Link to ‘NetworkInfo.NetworkId’
FingerInfoId	bigint	8	Link to ‘EVDOFingers.FingerInfoId’
TotalCtoI	real	4	Total C/I of fingers
WinPos	int	4	Absolute window ending position in 1/8 chips
SrchState	int	4	Searcher state

26.17 EVDOFingers Table

Table 26-17: Structure of the EVDOFingers table

Column Name	Type	Length	Description
FingerInfoId	bigint	8	Link to 'EVDOFingerInfo'
FingerId	int	4	Finger ID
PN	int	4	PN offset of pilot
C/I	real	4	Current C/I value
Position	int	4	Absolute Finger position in 1/8 chips
Assigned	int	4	
Locked	int	4	• 0 – Finger is not assigned • 1 – Finger is assigned

26.18 EVDOPilotInfo Table

Table 26-18: Structure of the EVDOPilotInfo table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
PilotInfoId	bigint	8	Link to 'EVDOPilots.FingerInfoId'
TotalEcIo	real	4	Total Ec/Io of the Pilots in the active set
PilotIncrement	int	4	Pilot increment for the remaining set searches
NumActiveSet	int	4	Number of pilots in the active set
NumNeighborSet	int	4	Number of pilots in the neighbor set
NumCandidateSet	int	4	Number of pilots in the candidate set
duration	int	4	Time since the last message in ms
Channel	int	4	
State	int	4	

26.19 EVDOPilots Table

Table 26-19: Structure of the EVDOPilots table

Column Name	Type	Length	Description
PilotInfoId	bigint	8	Link to 'EVDOPilotInfo'
PNType	char	1	• 'A' – Active Set • 'C' – Candidate Set • 'N' – Neighbor Set
PN	int	4	PN offset of pilot
EcIo	real	4	Ec/Io value
MacID	int	4	
DRCCover	int	4	
RPCIndex	int	4	
ASPIndex	int	4	
DropTimerActive	int	4	
DropTimerExpired	int	4	

26.20 EVDODebugDisplay Table

Table 26-20: Structure of the EVDODebugDisplay table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Channel	int	4	Channel number
Band	int	4	Band class
RxAGC0	real	4	total receive power as seen by Antenna0
RxAGC1	real	4	total receive power as seen by Antenna1
TxAGC	real	4	transmit signal strength in the Connected state
ServingPN	int	4	PN offset of the serving active set pilot
SleepMode	int	4	EVDO sleep mode
SrchState	int	4	Denotes the state of the searcher task
RxDiv	int	4	Receive Diversity

Column Name	Type	Length	Description
ProtState	int	4	Summary of the AT protocol states
SessionState	int	4	Summary of the Session layer states
UATI	int	4	UATI for the AT

26.21 EVDOHandoffState Table

Table 26-21: Structure of the EVDOHandoffState table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ModemState	int	4	Indicates the state of EVDO SRCH

26.22 EVDORLPacketSummary Table

Table 26-22: Structure of the EVDORLPacketSummary table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
ReverseRateLimit	int	4	Rate limit value as specified by the reverse rate limit message.
CurrentRate	int	4	Provides the CurrentRate at which the AT has sent the last packet over the ReverseTrafficChannel.
CombinedBusyBit	int	4	Busy bit used to calculate the new rate; if any of the reverse activity bits from the sectors of the AT active set is 1, then this is set to 1; otherwise, it is set to 0.
RandomVariable	int	4	Represents the random variable that was used to calculate the new reverse rate; this is multiplied by a factor of 255 to produce a value from 0 to 255.

Column Name	Type	Length	Description
TransitionProbability	int	4	Transition probability (in units of ½55) that was used to calculate the new reverse rate.
PAMAx	int	4	PA headroom at which the AT is restricted to transmit.
ConditionRRI	int	4	Provides the reverse rate that was calculated based on the above factor.
ActualRRI	int	4	RRI at which the ReverseLinkPacket was transmitted; this should be < ConditionRRI.
NumPadBytes	int	4	Number of pad bytes included in the reverse link packets.

26.23 EVDORTrafficRateCount Table

Table 26-23: Structure of the EVDORTrafficRateCount table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
Rate9600	int	4	Number of packets transmitted at 9600 bps between two messages.
Rate19200	int	4	Packets at 19200
Rate38400	int	4	Packets at 38400
Rate76800	int	4	Packets at 76800
Rate153600	int	4	Packets at 153600
AvgThroughput	real	4	Average throughput

27 WiFi Tables

This chapter describes the structure of the WiFi tables in the NQDI database.

27.1 WiFiConnectionData Table

Table 27-1: Structure of the WiFiConnectionData table

Column Name	Type	Length	Description
MsgId	bigint	8	Unique Id
SessionId	bigint	8	Link to 'Sessions.SessionId'
TestId	bigint	8	Link to 'TestInfo.TestId'
MsgTime	datetime2 (3)	8	Timestamp
PosId	bigint	8	Link to 'Position.PosId'
NetworkId	bigint	8	Link to 'NetworkInfo.NetworkId'
SSID	varchar	100	Service Set IDentifier
BSSID	varchar	100	Basic Service Set Identifier
RSSI	smallint	2	Received signal strength indication in dBm.
Frequency	int	4	The frequency in MHz of the channel over which the client is communicating with the access point.
Capability	varchar	200	Describes the authentication, key management, and encryption schemes supported by the access point.
Linkspeed	int	4	Speed in Mbps
Status	varchar	50	Detailed state of the supplicant's negotiation with an access point. Possible states are: • AUTHENTICATING: Network link established, performing authentication. • BLOCKED: Access to this network is blocked. • CONNECTED: IP traffic should be available. • CONNECTING: Currently setting up data connection. • DISCONNECTED: IP traffic not available. • DISCONNECTING: Currently tearing down data connection. • FAILED: Attempt to connect failed. • IDLE Ready to start data connection setup. • OBTAINING_IPADDR: Awaiting response from DHCP server in order to assign IP address information. • SCANNING: Searching for an available access point. • SUSPENDED: IP traffic is suspended • VERIFYING_POOR_LINK: Link has poor connectivity.
IP	varchar	50	IP address