SubMenu

NOKIA

MML Changes between Releases S10 and S10.5

Contents

1 About MML changes

The changes that have been made to MML programs between S10.5 and S10.5 Enhancement Delivery are described in chapter 2 and the changes made to MML programs between S10 and S10.5 are described in chapter 3.

MMLs with only a few internal changes or guide text changes are not listed in the MML changes documentation. It is possible that command sequences must be modified due to the changes summarised here.

The MML changes documentation may contain information which is irrelevant to the customer. The relevance of the information depends on the delivered software build. For example, some MML programs are optional and are not automatically included in the software build.

For more detailed descriptions please see the corresponding commands and instructions.

Note

Because the documentation is delivered before the software release, some changes may still occur before the release delivery.

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2 MML Changes Made in the S10.5 Enhancement Delivery

2.1 (CI) ISTHAN - Internal Routing States

Modified command:	C	MODIFY INTERNAL ROUTE STATE
Description of changes:		New decimal-defined parameter bit based circuit(s) (BCRCT) has been added to the second parameter block. Parameter indicates bit based circuit in pcm-tsl-subtsl.
Old syntax:		CII: (SWI | GSW | SSW) : (NCGR = <circuit group name>... | CGR = <circuit group number>... | CRCT = <circuit(s)...>) : (WO | BA) ;
New syntax:		CII: (SWI | GSW | SSW) : (NCGR = <circuit group name>... | CGR = <circuit group number>... | CRCT = <circuit(s)...> | BCRCT = <bit based circuit(s)...>) : (WO | BA) ; The command still works with the old syntax.
Description of changes:		New parameter BCRCT has been added to second parameter block.
Old semantics:		Second parameter block contains parameters CGR, NCGR and CRCT.
New semantics:		Second parameter block contains parameters CGR, NCGR, CRCTand BCRCT.

		The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:		New parameter bit based circuit (BCRCT) has been added to the execution printout text.
Additional information:		New BCRCT print-out is: BCRCT OLD STATE NEW STATE
Modified command:	I	INTERROGATE INTERNAL CIRCUIT OR CIRCUIT GROUP STATE
Description of changes:		New decimal-defined parameter bit based circuit(s) (BCRCT) has been added to the second parameter block. Parameter indicates bit based circuit in pcm-tsl-subtsl.
Old syntax:		CII: (SWI I GSW I SSW) : (NCGR = <circuit group name>... I CGR = <circuit group number>... I CRCT = <circuit(s)...>) : (WO I BA) ;
New syntax:		CII: (SWI I GSW I SSW) : (NCGR = <circuit group name>... I CGR = <circuit group number>... I CRCT = <circuit(s)...> I BCRCT = <bit based circuit(s)...>) : (WO I BA) ; The command still works with the old syntax.
Description of execution print-out changes:		New parameter bit based circuit (BCRCT) has been added to the execution printout text.
Additional information:		New BCRCT print-out is: BCRCT STATE INFO

2.2 (EB) BAZAAR - BCCH and Mobile Allocation Frequency List and RA Handling

Modified command:	C	CREATE BCCH FREQUENCY LIST
Description of changes:		New GSM 800/GSM 1800 frequency combinations are attached to the type MULTI of BCCH frequency type. The value range of dual band GSM 800/GSM 1800 is 128 - 251, 512 - 885. The frequency range depends on the active dual band feature.
Old semantics:		MULTI consists of two frequency bands, dual band for GSM 900/GSM 1800 and dual band for GSM 800/GSM 1900. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The frequency range depends on the active dual band feature.
New semantics:		MULTI consists of three frequency bands, dual band for GSM 900/GSM 1800, dual band for GSM 800/GSM 1900 and dual band for GSM 800/GSM 1800. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The value range of dual band GSM 800/GSM 1800 is 128 - 251, 512 - 885. The frequency range depends on the active dual band feature. The command entry continues in the same way as before after a semantic error.

Modified command:	M	MODIFY BCCH FREQUENCY LIST
Description of changes:		New GSM 800/GSM 1800 frequency combinations are attached to the type MULTI of BCCH frequency type. The value range of dual band GSM 800/GSM 1800 is 128 - 251, 512 - 885. The frequency range depends on the active dual band feature.
Old semantics:		MULTI consists of two frequency bands, dual band for GSM 900/GSM 1800 and dual band for GSM 800/GSM 1900. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The frequency range depends on the active dual band feature.

New semantics:	MULTI consists of three frequency bands, dual band for GSM 900/GSM 1800, dual band for GSM 800/GSM 1900 and dual band for GSM 800/GSM 1800. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The value range of dual band GSM 800/GSM 1800 is 128 - 251, 512 - 885. The frequency range depends on the active dual band feature. The command entry continues in the same way as before after a semantic error.
Description of changes:	New GSM 800/GSM 1800 frequency combinations are attached to the type MULTI of BCCH frequency type. The value range of dual band GSM 800/GSM 1800 is 128 - 251, 512 - 885. The frequency range depends on the active dual band feature.
Old semantics:	MULTI consists of two frequency bands, dual band for GSM 900/GSM 1800 and dual band for GSM 800/GSM 1900. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The frequency range depends on the active dual band feature.
New semantics:	MULTI consists of three frequency bands, dual band for GSM 900/GSM 1800, dual band for GSM 800/GSM 1900 and dual band for GSM 800/GSM 1800. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The value range of dual band GSM 800/GSM 1800 is 128 - 251, 512 - 885. The frequency range depends on the active dual band feature. The command entry continues in the same way as before after a semantic error.

2.3 (EE) PBCHAN - Base Station Controller Parameter Handling in BSC

Modified command:	I	OUTPUT RADIO NETWORK CONFIGURATION
Description of execution print-out changes:		Indication of the TRX's EDGE ability has been added to the execution printout.

Modified command:	Q	MODIFY MISCELLANEOUS PARAMETERS
Description of changes:		The value range of the parameter MNDL has changed from 1...16 to 1...9.
Old semantics:		The value range of MNDL parameter: 1...16
New semantics:		The value range of MNDL parameter: 1...9
		The command entry continues in the same way as before after a semantic error.

2.4 (EQ) PBTHAN - Base Transceiver Station Handling in BSC

Modified command:	C	CREATE BTS
Description of changes:		The parameter TRAT (transport type) has been removed.

Old syntax:		EQC : BCF = < BCF identification >, BTS = < BTS identification >, [[NAME = < BTS name > | < no name > def] [SEG = < SEG identification > < option > | < BTS identification > def] [SEGNAME = < SEG name > < option > | < BTS name > def] [REF = < reference BTS identification > | RNAME= < reference BTS name >]] : CI = < cell identity >, BAND = < frequency band in use > : NCC = < network colour code >, BCC = < BTS colour code > : MCC = < mobile country code >, MNC = < mobile network code >, LAC = < location area code > : [[HOP = < BTS hopping mode > | N def] [UHOP = < underlay BTS hopping mode > <option> | N def] HSN1 = < hopping sequence number 1 >| HSN2 = < hopping sequence number 2 > | UHSN = < underlay hopping sequence number > <option>] ... : [[GENA = < GPRS enabled > | N def] [RAC = < routing area code > | 255 def] NSEI = < network service entity identifier > | [TRAT = < transport type > | ANY def]] <option> ... ;
New syntax:		EQC : BCF = < BCF identification >, BTS = < BTS identification >, [[NAME = < BTS name > | < no name > def] [SEG = < SEG identification > < option > | < BTS identification > def] [SEGNAME = < SEG name > < option > | < BTS name > def] [REF = < reference BTS identification > | RNAME= < reference BTS name >]] : CI = < cell identity >, BAND = < frequency band in use > : NCC = < network colour code >, BCC = < BTS colour code > : MCC = < mobile country code >, MNC = < mobile network code >, LAC = < location area code > : [[HOP = < BTS hopping mode > | N def] [UHOP = < underlay BTS hopping mode > <option> | N def] HSN1 = < hopping sequence number 1 >| HSN2 = < hopping sequence number 2 > | UHSN = < underlay hopping sequence number > <option>] ... : [[GENA = < GPRS enabled > | N def] [RAC = < routing area code > | 255 def] NSEI = < network service entity identifier >] <option> ... ; The command does not work with the old syntax.
Modified command:	V	MODIFY BTS GPRS PARAMETERS
Description of changes:		The parameter TRAT (transport type) has been removed.

Old syntax:	EQV : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([GENA = < GPRS enabled > | EGENA = < EGPRS enabled > <option> | RAC = < routing area code > | CDED = < dedicated GPRS capacity > | CDEF = < default GPRS capacity > | CMAX = < max GPRS capacity > | BFG = < prefer BCCH frequency GPRS > | DLA = < DL adaption probability threshold >| ULA = < UL adaption probability threshold > | DLB = < DL BLER crosspoint for CS selection no hop > | ULB = < UL BLER crosspoint for CS selection no hop >| DLBH = < DL BLER crosspoint for CS selection hop > | ULBH = < UL BLER crosspoint for CS selection hop > | COD = < coding scheme no hop > | CODH = < coding scheme hop > | MCA = < initial MCS for acknowledged mode > <option> | MCU = < initial MCS for unacknowledged mode > <option> | BLA = < maximum BLER in acknowledged mode > <option> | BLU = < maximum BLER in unacknowledged mode > <option> | MBG = < mean BEP offset GMSK > <option> | MBP = < mean BEP offset 8PSK > <option>] ... : [NSEI = < network service entity identifier > | TRAT = < trasport type >]) ; < option >
New syntax:	EQV : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([GENA = < GPRS enabled > | EGENA = < EGPRS enabled > <option> | RAC = < routing area code > | CDED = < dedicated GPRS capacity > | CDEF = < default GPRS capacity > | CMAX = < max GPRS capacity > | BFG = < prefer BCCH frequency GPRS > | DLA = < DL adaption probability threshold >| ULA = < UL adaption probability threshold > | DLB = < DL BLER crosspoint for CS selection no hop > | ULB = < UL BLER crosspoint for CS selection no hop >| DLBH = < DL BLER crosspoint for CS selection hop > | ULBH = < UL BLER crosspoint for CS selection hop > | COD = < coding scheme no hop > | CODH = < coding scheme hop > | MCA = < initial MCS for acknowledged mode > <option> | MCU = < initial MCS for unacknowledged mode > <option> | BLA = < maximum BLER in acknowledged mode > <option> | BLU = < maximum BLER in unacknowledged mode > <option> | MBG = < mean BEP offset GMSK > <option> | MBP = < mean BEP offset 8PSK > <option>] ... : [NSEI = < network service entity identifier >]) ; < option > The command does not work with the old syntax.

Description of changes:	New EGPRS link adaptation (ELA) parameter has been added to the second parameter block. Possible values are: 0 (EGPRS link adaptation disabled) 1 (EGPRS link adaptation enabled for RLC akcnowledged mode) 2 (EGPRS enabled for both RLC acknowledged and RLC unacknowledged modes).
Old syntax:	EQV : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([GENA = < GPRS enabled > | EGENA = < EGPRS enabled > <option> | RAC = < routing area code > | CDED = < dedicated GPRS capacity > | CDEF = < default GPRS capacity > | CMAX = < max GPRS capacity > | BFG = < prefer BCCH frequency GPRS > | DLA = < DL adaption probability threshold >| ULA = < UL adaption probability threshold > | DLB = < DL BLER crosspoint for CS selection no hop > | ULB = < UL BLER crosspoint for CS selection no hop >| DLBH = < DL BLER crosspoint for CS selection hop > | ULBH = < UL BLER crosspoint for CS selection hop > | COD = < coding scheme no hop > | CODH = < coding scheme hop > | MCA = < initial MCS for acknowledged mode > <option> | MCU = < initial MCS for unacknowledged mode > <option> | BLA = < maximum BLER in acknowledged mode > <option> | BLU = < maximum BLER in unacknowledged mode > <option> | MBG = < mean BEP offset GMSK > <option> | MBP = < mean BEP offset 8PSK > <option>] ... : [NSEI = < network service entity identifier > | TRAT = < trasport type >]) ; < option >

New syntax:	EQV : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([GENA = < GPRS enabled > | EGENA = < EGPRS enabled > <option> | RAC = < routing area code > | CDED = < dedicated GPRS capacity > | CDEF = < default GPRS capacity > | CMAX = < max GPRS capacity > | BFG = < prefer BCCH frequency GPRS > | DLA = < DL adaption probability threshold >| ULA = < UL adaption probability threshold > | DLB = < DL BLER crosspoint for CS selection no hop > | ULB = < UL BLER crosspoint for CS selection no hop >| DLBH = < DL BLER crosspoint for CS selection hop > | ULBH = < UL BLER crosspoint for CS selection hop > | COD = < coding scheme no hop > | CODH = < coding scheme hop > | MCA = < initial MCS for acknowledged mode > <option> | MCU = < initial MCS for unacknowledged mode > <option> | BLA = < maximum BLER in acknowledged mode > <option> | BLU = < maximum BLER in unacknowledged mode > <option> | MBG = < mean BEP offset GMSK > <option> | MBP = < mean BEP offset 8PSK > <option> | ELA = < EGPRS link adaptation enabled > <option>] ... : [NSEI = < network service entity identifier > | TRAT = < trasport type >]) ; < option > The command still works with the old syntax.
Description of execution print-out changes:	New parameter EGPRS link adaptation enabled (ELA) has been added to the execution printout text. Parameter is shown if the option EGPRS is on.

2.5 (ER) PTRHAN - Transceiver Handling

Modified command:	O	OUTPUT TRANSCEIVER PARAMETERS
Description of execution print-out changes:		Indication of the TRX's EDGE ability has been added to the execution printout.

2.6 (FW) GNLHAN - GPRS NS Layer Handling

Modified command:	C	CREATE NETWORK SERVICE VIRTUAL CONNECTION
Description of changes:		The parameters for creation of network service virtual connection using GB over IP configuration have been removed. These parameters were: - BCSU, PCU and LPNBR in the second parameter block. - RIP, RPNBR, PRE, RDW and RSW in the third parameter block.
Old syntax:		FWC: NSVCI = <network service virtual connection identifier>, [NAME = <network service virtual connection name> | <no name> def], NSEI = <network service entity identifier>: ((BCSU = <BSCU logical index>, PCU = <PCU logical index> LPNBR = <local UDP port number>) | (DLCI = <data link connection identifier>, CIR = <committed information rate>)): [[RIP = <remote IP address>, RPNBR = <remote UDP port number>, PRE = <preconfigured SGSN IP endpoint>, RDW = <remote data weight>, RSW = <remote signalling weight>] | [BCI = <bearer channel identification> | BCN = <bearer channel name>]];
New syntax:		FWC: NSVCI = <network service virtual connection identifier>, [NAME = <network service virtual connection name> | <no name> def], NSEI = <network service entity identifier>: (DLCI = <data link connection identifier>, CIR = <committed information rate>) : (BCI = <bearer channel identification> | BCN = <bearer channel name>); The command does not work with the old syntax.

Additional information:		Previous S10.5 versions of GNLHAN had GB over IP functionality. The implementation of GB over IP is moved as a feature candidate to future releases.
Description of changes:		The value range of BCI parameter in BSC3i has changed.
Old semantics:		Value range of BCI parameter was 0...63 in all cases.
New semantics:		Allowed value for BCI parameter depends on the Network element type. If the type is BSC3i, value range of BCI is 0...95. In all other cases value range of BCI is 0...63. The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:		GB over IP functionality is now removed from S10.5. The print-out of C command does not show any GB over IP specific information, such as: - LOCAL UDP PORT number - RDW. Remote data weight - RSW. Remote signalling weight - REMOTE IP ADDRESS:UDP PORT. - PRE. Preconfigured sgsn IP endpoint type.
Additional information:		Previous S10.5 versions of GNLHAN have had GB over IP functionality. The implementation of GB over IP is moved as a feature candidate to future releases.
Modified command:	D	DELETE NETWORK SERVICE VIRTUAL CONNECTION
Description of execution print-out changes:		GB over IP functionality is now removed from S10.5. The print-out of D command does not show any GB over IP specific information, such as: - LOCAL UDP PORT number - RDW. Remote data weight - RSW. Remote signalling weight - REMOTE IP ADDRESS:UDP PORT. - PRE. Preconfigured sgsn IP endpoint type.
Additional information:		Previous S10.5 versions of GNLHAN had GB over IP functionality. The implementation of GB over IP is moved as a feature candidate to future releases.

Modified command:	M	MODIFY NETWORK SERVICE VIRTUAL CONNECTION DATA
Description of changes:		GB over IP parameters have been removed from the modification of network service virtual connection.
Old syntax:		FWM: (NSVCI = <network service virtual connection identifier> | NAME = <network service virtual connection name>): (NEWNAME = <new network service virtual connection name> | NEWRDW = <new remote data weight> | NEWRSW = <new remote signalling weight>) | (NEWNAME = <new network service virtual connection name> | NEWCIR = <new committed information rate>) | (NEWNAME = <new network service virtual connection name>);
New syntax:		FWM: (NSVCI = <network service virtual connection identifier> | NAME = <network service virtual connection name>): (NEWNAME = <new network service virtual connection name> | NEWCIR = <new committed information rate>); The command does not work with the old syntax.
Additional information:		Previous S10.5 versions of GNLHAN had GB over IP functionality. The implementation of GB over IP is moved as a feature candidate to future releases.
Description of execution print-out changes:		GB over IP functionality is now removed from S10.5. The print-out of M command does not show any GB over IP specific information, such as: - LOCAL UDP PORT number - RDW. Remote data weight - RSW. Remote signalling weight - REMOTE IP ADDRESS:UDP PORT. - PRE. Preconfigured sgsn IP endpoint type.
Additional information:		Previous S10.5 versions of GNLHAN had GB over IP functionality. The implementation of GB over IP is moved as a feature candidate to future releases.

Modified command:	O	OUTPUT NETWORK SERVICE VIRTUAL CONNECTION DATA
Description of execution print-out changes:		GB over IP functionality is now removed from S10.5. The print-out of O command does not show any GB over IP specific information, such as: - LOCAL UDP PORT number - RDW. Remote data weight - RSW. Remote signalling weight - REMOTE IP ADDRESS:UDP PORT. - PRE. Preconfigured sgsn IP endpoint type.
Additional information:		Previous S10.5 versions of GNLHAN had GB over IP functionality. The implementation of GB over IP is moved as a feature candidate to future releases.

2.7 (RR) ROUTES - Route Handling

Modified command:	M	MODIFY ROUTE
Description of changes:		The old optional parameter <IP application> (IP) has been removed. A new optional parameter <Network Element Function> (NEF) has been added. This optional parameter is used only in Call Processing Server (CPS) and can be given only to external route.
Old syntax:		RRM: ROUTE=<external route>, ...;
New syntax:		RRM :ROUTE=<internal or external route>, NEF=<Network Element Function>, ...; The command does not work with the old syntax.
Additional information:		IP-parameter cannot be given anymore otherwise command still works with the old syntax.

3 MML Changes Made in the S10.5 Delivery

3.1 (EA) PAEHAN - Adjacent Cell Handling

New command(s) and menu text(s):	E	CREATE WCDMA RAN ADJACENT CELL PARAMETERS
	G	DELETE WCDMA RAN ADJACENT CELL PARAMETERS
	H	MODIFY WCDMA RAN ADJACENT CELL PARAMETERS
	I	OUTPUT WCDMA RAN ADJACENT CELL PARAMETERS

Modified command:	C	CREATE ADJACENT CELL PARAMETERS
Description of changes:		The old parameter GTXP has been divided into two new parameters GTXP1 (for GSM 900/GSM 800) and GTXP2 (for GSM 1800/GSM 1900).

Old syntax:	EAC: (BTS = <BTS identification> I NAME = <BTS name> I SEG = < SEG identification > < option > I SEGNAME = < SEG name > < option >) : ((LAC = <location area code>, CI = <cell identification>) I ABTS = <adjacent cell identification> I ANAME = <adjacent cell name> I ASEG = < adjacent SEG identification > < option > I ASEGNAME = < adjacent SEG name > < option >) : [NCC = < network colour code >, BCC = < BTS colour code >, FREQ = < BCCH frequency >,] [[PMRG = <HO margin pbgt> I 6 def] [LMRG = <HO margin lev> I 3 def] [QMRG = <HO margin qual> I 0 def] [MRGS = <enable HO margin lev qual> I Y def] [PRI = <HO priority level> I 3 def] [OF = <HO load factor> I 1 def] [SL = <RX lev min cell> I -100 def] [AUCL = <HO level umbrella> I -47 def] [PMAX1 = <MS TX pwr max gsm> < option > I 33 def (GSM 900/GSM 850)] [PMAX2 = <MS TX pwr max gsm1x00> < option > I 30 def (GSM 1800/GSM 1900)] [SYNC = <synchronized> I N def] [TRHO = <TRHO target level> I N def] [ACL = <adjacent cell layer> <option> I N def] [FMT = <fast moving threshold> <option> I 0 def] [POPT = <MS pwr opt level> <option> I no optimization def] [CTY = <cell type> <option> I GSM def] [CHAIN= <chained adj cell> <option> I N def] [HOTA = <HO target area> <option> I 0 def] [DRT = <directed retry threshold> <option> I -100 def] [IC = <interfered cell> <option> I 0 (no interference) def] [DADL = <target cell of direct access to desired layer> <option> IN def] [DADLA = <AMR target cell of direct access to desired layer> <option>I N def] [AGENA = <adjacent GPRS enable> <option> I N def]

	[GRXP = <GPRS rxlev access min> <option> | ?105 def] [GTXP = <GPRS MS tx pwr max CCH> <option> | 33/30 def] [PRC = <priority class> <option> | 7 def] [HCS = <HCS signal level threshold> <option> | N (not on use) def] [GTEO = <GPRS temporary offset> <option> | 0 def] [GPET = <GPRS penalty time> <option> | 10 def] [GREO = <GPRS reselect offset> <option> | 0 def] [RAC = <routing area code> <option> | 255 def] [GBAR = <GPRS cell barred> <option> | 0 (normal) def]] ... ;
New syntax:	EAC: (BTS = <BTS identification> | NAME = <BTS name> | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ((LAC = <location area code>, CI = <cell identification>) | ABTS = <adjacent cell identification> | ANAME = <adjacent cell name> | ASEG = < adjacent SEG identification > < option > | ASEGNAME = < adjacent SEG name > < option >) : [NCC = < network colour code >, BCC = < BTS colour code >, FREQ = < BCCH frequency >,] [[PMRG = <HO margin pbgt> | 6 def] [LMRG = <HO margin lev> | 3 def] [QMRG = <HO margin qual> | 0 def] [MRGS = <enable HO margin lev qual> | Y def] [PRI = <HO priority level> | 3 def] [OF = <HO load factor> | 1 def] [SL = <RX lev min cell> | -100 def] [AUCL = <HO level umbrella> | -47 def]

	[PMAX1 = <MS TX pwr max gsm> < option > I 33 def (GSM 900/GSM 800)] [PMAX2 = <MS TX pwr max gsm1x00> < option > I 30 def (GSM 1800/GSM 1900)] [SYNC = <synchronized> I N def] [TRHO = <TRHO target level> I N def] [ACL = <adjacent cell layer> <option> IN def] [FMT = <fast moving threshold> <option> I0 def] [POPT = <MS pwr opt level> <option> Ino optimization def] [CTY = <cell type> <option> I GSM def] [CHAIN= <chained adj cell> <option> I N def] [HOTA = <HO target area> <option> I 0 def] [DRT = <directed retry threshold> <option> I -100 def] [IC = <interfered cell> <option> I0 (no interference) def] [DADL = <target cell of direct access to desired layer> <option> IN def] [DADLA = <AMR target cell of direct access to desired layer> <option>I N def] [AGENA = <adjacent GPRS enable> <option> I N def] [GRXP = <GPRS rxlev access min> <option> I ?105 def] [GTXP1 = <GPRS MS tx pwr max CCH> <option> I 33 def] [GTXP2 = <GPRS MS tx pwr max CCH1x00> <option> I 30 def] [PRC = <priority class> <option> I 7 def] [HCS = <HCS signal level threshold> <option> I N (not on use) def] [GTEO = <GPRS temporary offset> <option> I 0 def] [GPET = <GPRS penalty time> <option> I 10 def] [GREO = <GPRS reselect offset> <option> I 0 def] [RAC = <routing area code> <option> I 255 def] [GBAR = <GPRS cell barred> <option> I 0 (normal) def]] ... ;
Description of execution print-out changes:	The old parameter GTXP has been divided into two new parameters GTXP1 (for GSM 900/GSM 800) and GTXP2 (for GSM 1800/GSM 1900).

Modified command:	M	MODIFY ADJACENT CELL PARAMETERS
Description of changes:		The old parameter GTXP has been divided into two new parameters GTXP1 (for GSM 900/GSM 800) and GTXP2 (for GSM 1800/GSM 1900). A new block has been added and the parameters NEWLAC, NEWCI, NEWABTS, NEWNAME, NEWSEG, NEWSEGNAME have been moved in the new block.
Old syntax:		EAM: (BTS = <BTS identification> | NAME = <BTS name> | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ((LAC = <location area code>, CI = <cell identification>) | ABTS = <adjacent cell identification> | ANAME= <adjacent cell name> | ASEG = < adjacent SEG identification > < option > | ASEGNAME = < adjacent SEG name > < option >) : (NEWLAC = <new location area code> | NEWCI = <new cell identification> | NEWABTS = <new adjacent cell identification> | NEWANAME= <new adjacent cell name> | NEWASEG = <new adjacent SEG identification> < option > | NEWASEGNAME= <new adjacent SEG name> <option > |

NCC = <network colour code> |
BNCC = <background network colour code> |
BCC = <BTS colour code> |
BBCC = <background BTS colour code> |
FREQ = <BCCH frequency> |
BFREQ = <background BCCH frequency> |
PMRG = <HO margin pbgt> |
LMRG = <HO margin lev> |
QMRG = <HO margin qual> |
MRGS = <enable HO margin lev qual> |
PRI = <HO priority level> |
OF = <HO load factor> |
SL = <RX lev min cell> |
AUCL = <HO level umbrella> |
PMAX1 = <MS TX pwr max gsm> <option>|
PMAX2 = <MS TX pwr max gsm1x00> <option>|
SYNC = <synchronized> |
TRHO = <TRHO target level> |
ACL = <adjacent cell layer> <option> |
FMT = <fast moving threshold> <option> |
POPT = <MS pwr opt level> <option> |
CTY = <cell type> <option> |
CHAIN = <chained adj cell> <option> |
HOTA = <HO target area> <option> |
DRT = <directed retry threshold> <option> |
IC = <interfered cell> <option> |
BIC = <background interfered cell> <option>
DADL = <target cell of direct access to desired layer> <option> |
DADLA = <AMR target cell of direct access to desired layer> <option> |
AGENA = <adjacent GPRS enabled> <option> |
GRXP = <GPRS rxlev access min> <option> |
GTXP = <GPRS MS tx pwr max CCH> <option> |
PRC = <priority class> <option> |
HCS = <HCS signal level threshold> <option> |
GTEO = <GPRS temporary offset> <option> |
GPET = <GPRS penalty time> <option> |
GREO = <GPRS reselect offset> <option> |
RAC = <routing area code> <option> |
GBAR = <GPRS cell barred> <option>) ... ;

New syntax:	EAM: (BTS = <BTS identification> | NAME = <BTS name> | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ((LAC = <location area code>, CI = <cell identification>) | ABTS = <adjacent cell identification> | ANAME= <adjacent cell name> | ASEG = < adjacent SEG identification > < option > | ASEGNAME = < adjacent SEG name > < option >) : ([NEWLAC = <new location area code> | NEWCI = <new cell identification> | NEWABTS = <new adjacent cell identification> | NEWANAME= <new adjacent cell name> | NEWASEG = <new adjacent SEG identification> < option > | NEWASEGNAME= <new adjacent SEG name> <option >]: [NCC = <network colour code> | BNCC = <background network colour code> | BCC = <BTS colour code> | BBCC = <background BTS colour code> | FREQ = <BCCH frequency> | BFREQ = <background BCCH frequency> | PMRG = <HO margin pbgt> | LMRG = <HO margin lev> | QMRG = <HO margin qual> | MRGS = <enable HO margin lev qual> | PRI = <HO priority level> | OF = <HO load factor> | SL = <RX lev min cell> | AUCL = <HO level umbrella> | PMAX1 = <MS TX pwr max gsm> <option>| PMAX2 = <MS TX pwr max gsm1x00> <option>| SYNC = <synchronized> | TRHO = <TRHO target level> | ACL = <adjacent cell layer> <option> | FMT = <fast moving threshold> <option> | POPT = <MS pwr opt level> <option> | CTY = <cell type> <option> | CHAIN = <chained adj cell> <option> | HOTA = <HO target area> <option> | DRT = <directed retry threshold> <option> |

	IC = <interfered cell> <option> | BIC = <background interfered cell> <option> DADL = <target cell of direct access to desired layer> <option> | DADLA = <AMR target cell of direct access to desired layer> <option> | AGENA = <adjacent GPRS enabled> <option> | GRXP = <GPRS rxlev access min> <option> | GTXP1 = <GPRS MS tx pwr max CCH> <option> | GTXP2 = <GPRS MS tx pwr max CCH1x00> <option> | PRC = <priority class> <option> | HCS = <HCS signal level threshold> <option> | GTEO = <GPRS temporary offset> <option> | GPET = <GPRS penalty time> <option> | GREO = <GPRS reselect offset> <option> | RAC = <routing area code> <option> | GBAR = <GPRS cell barred> <option>]) ... ; The command does not work with the old syntax.
Description of execution print-out changes:	The old parameter GTXP has been divided into two new parameters GTXP1 (for GSM 900/GSM 800) and GTXP2 (for GSM 1800/GSM 1900).

3.2 (EB) BAZAAR - BCCH and Mobile Allocation Frequency List and RA Handling

Modified command:	C	CREATE BCCH FREQUENCY LIST
Description of changes:		The parameter value 850 has been changed into 800. New GSM 800/GSM 1900 frequency combinations are attached to the type MULTI of the BCCH frequency type. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The frequency range depends on the active Dual Band feature. The maximum number of frequencies in one BCCH frequency list 32. If the Common BCCH feature is used, the maximum is 31. If the option ISHO_SUPPORT_IN_BSC is on, the maximum is 31. If the Common BCCH feature and the also the ISHO_SUPPORT_IN_BSC option is used, the maximum is 30.
Old semantics:		The possible values of the parameter BAND are 850, 900, 1800, 1900, and MULTI. MULTI consists of one frequency band, dual band for GSM 900/GSM 1800. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The maximum number of frequencies in one BCCH frequency list is 32. If Common BCCH feature is used, the maximum number of frequencies in one BCCH frequency list is 31.
New semantics:		The possible values of the parameter BAND are 800, 900, 1800, 1900, and MULTI. MULTI consists of two frequency bands, dual band for GSM 900/GSM 1800 and dual band for GSM 800/GSM 1900. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The frequency range depends on the active Dual Band feature. The maximum number of frequencies in one BCCH frequency list 32. If the Common BCCH feature is used, the maximum is 31. If the option ISHO_SUPPORT_IN_BSC is on, the maximum is 31. If the Common BCCH feature and the also the ISHO_SUPPORT_IN_BSC option is used, the maximum is 30.

		The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:		Frequency bands are printed as follows: 800, 900, 1800, 1900, MULTI. (Old frequency bands were printed 850, 900, 1800, 1900, MULTI.)
Modified command:	E	CREATE MOBILE ALLOCATION FREQUENCY LIST
Description of changes:		The value of the parameter has been changed from 850 to 800.
Old semantics:		Possible values: 850, 900, 1800, 1900.
New semantics:		Possible values: 800, 900, 1800, and 1900. The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:		Frequency bands are printed as follows: 800, 900, 1800, 1900. (Old frequency bands were printed 850, 900, 1800, 1900)
Modified command:	M	MODIFY BCCH FREQUENCY LIST
Description of changes:		New GSM 800/GSM 1900 frequency combinations are attached to the type MULTI of the BCCH frequency type. The frequency range for dual band (MULTI) depends on the active Dual Band feature.

Old semantics:		MULTI consists of one frequency band, dual band for GSM 900/GSM 1800. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The maximum number of frequencies in one BCCH frequency list is 32. If Common BCCH control feature is used, the maximum is 31.
New semantics:		MULTI consists of two frequency bands, dual band for GSM 900/GSM 1800 and dual band for GSM 800/GSM 1900. The value range of dual band GSM 900/GSM 1800 is 1 - 124, 512 - 885, 975 - 1023, 0. The value range of dual band GSM 800/GSM 1900 is 128 - 251, 512 - 810. The maximum number of frequencies in one BCCH frequency list is 32. If the Common BCCH control feature is used, the maximum is 31. If both the Common BCCH feature and Inter-System Handover feature are used, the maximum is 30. The command entry continues in the same way as before after a semantic error.
Modified command:	I	OUTPUT MOBILE ALLOCATION FREQUENCY LIST(S)
Description of execution print-out changes:		Frequency bands are printed as follows: 800, 900, 1800, and 1900. (Old frequency bands were printed 850, 900, 1800, 1900.)
Modified command:	O	OUTPUT BCCH FREQUENCY LIST(S)
Description of execution print-out changes:		Frequency bands are printed as follows: 800,900, 1800, 1900, and MULTI. (Old frequency bands were printed 850, 900, 1800,1900, MULTI.)

Modified command:	F	CREATE ROUTING AREA
Description of changes:		The maximum number of network service entity identifiers in one routing area has been changed from 16 to 24.
Old semantics:		The maximum number of network service entity identifiers in one routing area is 16
New semantics:		The maximum number of network service entity identifiers in one routing area is 24. The command entry continues in the same way as before after a semantic error.

Modified command:	H	MODIFY ROUTING AREA
Description of changes:		The maximum number of network service entity identifiers in one routing area has been changed from 16 to 24.
Old semantics:		The maximum number of network service entity identifiers in one routing area is 16
New semantics:		The maximum number of network service entity identifiers in one routing area is 24. The command entry continues in the same way as before after a semantic error.

3.3 (EE) PBCHAN - Base Station Controller Parameter Handling in BSC

Modified command:	O	OUTPUT BASE STATION CONTROLLER PARAMETERS
Description of execution print-out changes:		A new optional parameter pre-emption usage in handover (PRE) has been added to the output of the miscellaneous parameters. The parameter PRE is printed out, it the option preempt_usage_in_bsc is on.

3.4 (EG) GPAHAN - GSM Timer and BSC Parameter Handling

Modified command:	T	MODIFY TIMER
Description of changes:		One new timer has been added to PAFILE file and therefore the semantics of the command ZEGT has changed. A new allowed value is T3121.
New semantics:		The new allowed value is T3121. The command entry continues in the same way as before after a semantic error.
Modified command:	O	OUTPUT TIMERS/PARAMETERS
Description of execution print-out changes:		One new timer has been added to the execution printout of the ZEGO command. The timer is T3121. Example of the new execution printout:

```
EGO:TIM:;
PAGE  1
                                PRESET
PARAMETER         VALUE         VALUE       MODIFIABLE
----------------------------------------------------
T4                60.00 S       60.00 S       YES
T7                20.00 S       20.00 S       YES
T8                12.00 S       12.00 S       YES
T10                8.00 S        8.00 S       YES
T13               15.00 S       15.00 S       YES
T17                4.00 S        4.00 S       YES
T18               12.00 S       12.00 S       YES
T3101              3.00 S        3.00 S       YES
T3103              6.00 S        6.00 S       YES
T3105_D            0.28 S        0.28 S        NO
T3105_F            0.10 S        0.10 S        NO
T3107              6.00 S        6.00 S       YES
T3109             12.00 S       12.00 S       YES
T3111              0.50 S        0.50 S        NO
T3121             12.00 S       12.00 S       YES
T3122              6.00 S        6.00 S       YES
T3168              1.00 S        1.00 S       YES
T3192              0.50 S        0.50 S       YES

PAGE     2
                                PRESET
PARAMETER         VALUE         VALUE       MODIFIABLE
----------------------------------------------------
T9101             10.00 S       10.00 S        NO
T9103              2.00 S        2.00 S        NO
T9104             15.00 S       15.00 S       YES
T9105             10.00 S       10.00 S       YES
T9108              2.00 S        2.00 S        NO
T9113             13.00 S       13.00 S       YES

COMMAND EXECUTED
GSM TIMER AND BSC PARAMETERS HANDLING COMMAND <EG_>
<
```

3.5 (EH) HCPHAN - Handover Control Parameter Handling

Modified command:	N	MODIFY PARAMETERS RELATED TO ADJACENT CELL
Description of changes:		Eight new parameters have been added. The parameters QSRC, LTSC, LTNT, FDMR, UMIU, UAWS, UNOZ, UAAC are shown if the option ISHO_SUPPORT_IN_BSC is on. The value range of the parameter QSRC is 0-15. The default value is 15. The value range of the parameter LTSC is 0-100. The default value is 80. The value range of the parameter LTNT is 0-100. The default value is 0. The value range of the parameter FDMR is 0-3. The default value is 2. The value range of the parameter UMIU is 0-255. The default value is 3. The value range of the parameter UAWS is 1-32. The default value is 6. The value range of the parameter UNOZ is 0-32. The default value is 5. The value range of the parameter UAAC is Y or N. The default value is N.
Old syntax:		EHN: (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : (AWS = < adjacent cell averaging window size > | NOZ = < number of zero results > | AAC = < all adjacent cells averaged >)... ;

New syntax:		EHN: (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : (AWS = < adjacent cell averaging window size > | NOZ = < number of zero results > | AAC = < all adjacent cells averaged > | QSRC= < threshold for multi-RAT MS> < option > | LTSC= < minimum traffic load for a speech call> < option > | LTNT= < minimum traffic load for a non-transparent data call> < option > | FDMR= < number of measured FDD cells> < option > | UMIU= < minimum interval between unsuccessful ISHO attempts> < option > | UAWS= < adjacent UTRAN cell averaging window size> < option > | UNOZ= < number of UTRAN zero results> < option > | UAAC= < all adjacent UTRAN cells averaged> < option >)... ; The command still works with the old syntax.
Description of execution print-out changes:		The parameters QSRC, LTSC, LTNT, FDMR, UMIU, UAWS, UNOZ and UAAC are shown if the option ISHO_SUPPORT_IN_BSC is on.
Modified command:	S	MODIFY SIGNAL STRENGTH THRESHOLD PARAMETERS
Description of changes:		Four new parameters have been added. The parameters LAR, LER, LEP and LEN are shown if the option COMMON_BCCH_IN_USE_IN_BSC is on. The value range of the parameter LAR is -110 .. -47 dBm. The default value is -90. The value range of the parameter LER is -110 .. -47 dBm. The default value is -95. The value range of the parameter LEP is 1 - 32. The default value is 1. The value range of the parameter LEN is 1 - 32. The default value is 1.

Old syntax:	EHS: (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : (LDR = < threshold level downlink Rx level > | LDP = < threshold level downlink Px > | LDN = < threshold level downlink Nx > | LUR = < threshold level uplink Rx level > | LUP = < threshold level uplink Px > | LUN = < threshold level uplink Nx > | RPD = < threshold level uplink for rapid field drop > < option > | CNT = < count of successive rapid field drop thresholds > < option > | ERFD = < enable enhanced rapid field drop > < option > | ERT = < threshold deep dropping edge Rx level > < option > | ERP = < threshold deep dropping edge Px > < option > | ERN = < threshold deep dropping edge Nx > < option > | ERMW = < deep dropping edge monitoring window > < option > | ERAW = < modified averaging window > < option > | ERZ = < modified number of zero results > < option > | ERD = < enhanced rapid field drop duration > < option >) ... ;

New syntax:	EHS: (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : (LDR = < threshold level downlink Rx level > | LDP = < threshold level downlink Px > | LDN = < threshold level downlink Nx > | LUR = < threshold level uplink Rx level > | LUP = < threshold level uplink Px > | LUN = < threshold level uplink Nx > | RPD = < threshold level uplink for rapid field drop > < option > | CNT = < count of successive rapid field drop thresholds > < option > | ERFD = < enable enhanced rapid field drop > < option > | ERT = < threshold deep dropping edge Rx level > < option > | ERP = < threshold deep dropping edge Px > < option > | ERN = < threshold deep dropping edge Nx > < option > | ERMW = < deep dropping edge monitoring window > < option > | ERAW = < modified averaging window > < option > | ERZ = < modified number of zero results > < option > | ERD = < enhanced rapid field drop duration > < option >| LAR = < non bcch layer access threshold > < option >| LER = < non bcch layer exit threshold > < option >| LEP = < non bcch layer exit threshold px > < option >| LEN = < non bcch layer exit threshold nx > < option >) ... ; The command still works with the old syntax.
Description of execution print-out changes:	The parameters LAR, LER, LEP and LEN are shown if the option COMMON_BCCH_IN_USE_IN_BSC is on.

3.6 (EQ) PBTHAN - Base Transceiver Station Handling in BSC

Modified command:	C	CREATE BTS
Description of changes:		A new parameter has been added. The parameter transport type (TRAT) is shown if the option GPRS is on. With this parameter you can manually select the transport type of the NSEI that the BTS/SEG will use. The possible values are IP, FR and ANY. The default value is ANY. The possible values of the parameter (BAND) have changed.
Old syntax:		EQC : BCF = < BCF identification >, BTS = < BTS identification >, [[NAME = < BTS name > | < no name > def] [SEG = < SEG identification > < option > | < BTS identification > def] [SEGNAME = < SEG name > < option > | < BTS name > def] [REF = < reference BTS identification > | RNAME= < reference BTS name >]] : CI = < cell identity >, BAND = < frequency band in use > : NCC = < network colour code >, BCC = < BTS colour code > : MCC = < mobile country code >, MNC = < mobile network code >, LAC = < location area code > : [[HOP = < BTS hopping mode > | N def] [UHOP = < underlay BTS hopping mode > <option> | N def] HSN1 = < hopping sequence number 1 >| HSN2 = < hopping sequence number 2 > | UHSN = < underlay hopping sequence number > <option>] ... : [[GENA = < GPRS enabled > | N def] [RAC = < routing area code > | 255 def] NSEI = < network service entity identifier >] <option> ... ;

New syntax:	EQC : BCF = < BCF identification >, BTS = < BTS identification >, [[NAME = < BTS name > | < no name > def] [SEG = < SEG identification > < option > | < BTS identification > def] [SEGNAME = < SEG name > < option > | < BTS name > def] [REF = < reference BTS identification > | RNAME= < reference BTS name >]] : CI = < cell identity >, BAND = < frequency band in use > : NCC = < network colour code >, BCC = < BTS colour code > : MCC = < mobile country code >, MNC = < mobile network code >, LAC = < location area code > :[[HOP = < BTS hopping mode > | N def] [UHOP = < underlay BTS hopping mode > <option> | N def] HSN1 = < hopping sequence number 1 >| HSN2 = < hopping sequence number 2 > | UHSN = < underlay hopping sequence number > <option>] ... : [[GENA = < GPRS enabled > | N def] [RAC = < routing area code > | 255 def] NSEI = < network service entity identifier > | [TRAT = < transport type > | ANY def]] <option> ... ; The command still works with the old syntax.
Old semantics:	The possible values of the parameter BAND: 850, 900, 1800, and 1900.
New semantics:	The possible values of the parameter BAND: 800, 900, 1800, and 1900. The command entry does not continue in the same way as before after a semantic error.
Description of execution print-out changes:	A new parameter transport type (TRAT) has been added to the execution printout text. The parameter TRAT is shown if the option GPRS is on and the parameter GENA is Y.

Modified command:	M	MODIFY MISCELLANEOUS PARAMETERS
Description of changes:		Six new parameters have been added. The parameters QSRI, FDD and FDM are shown if the option ISHO_SUPPORT_IN_BSC is on. The parameters QSRP, GFDD and GFDM are shown if the options ISHO_SUPPORT_IN_BSC and BSC_GPRS_PARAM_ENABLED are on. The value range of the parameter threshold to search WCDMA RAN cells (QSRI) is 0...15. The default value is 15. The value range of the parameter gprs threshold to search WCDMA RAN cells (QSRP) is 0...15. The default value is 15. The value range of the parameter fdd cell reselect offset (FDD) is -28...28 dB and N. The default value is N. The value range of the parameter gprs fdd cell reselect offset (GFDD) is -28...28 dB and N. The default value is N. The value range of the parameter minimum fdd threshold (FDM) is -20...13 dB. The default value is -20. The value range of the parameter gprs minimum fdd threshold (GFDM) is -20...13 dB. The default value is -20.

Old syntax:	EQM : (BTS = < BTS identification > | NAME = < BTS name > SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([DTX = < DTX mode >| BMA = < BTS measure average >| PMAX1 = <MS tx pwr max gsm> | PMAX2 = <MS tx pwr max gsm1x00> | PMIN = < MS tx pwr min >| RET = < max number of retransmission >| NY1 = < max number of repetition >| SLO = < number of slots spread trans >| CB = < SMS CB used >| BLT = < BTS load threshold >| DMAX = < MS max distance in call setup >| TRP = < TRX priority in TCH allocation >| CLC = < cell load for channel search >| RDIV = < RX diversity >| TRIH = < TCH rate intra-cell handover > <option>| FRL = < lower limit for FR TCH resources > <option>| FRU = < upper limit for FR TCH resources > <option> | NECI = < new establishment causes support >| EXT = < radius extension > <option>| MBR = < multiband cell reporting > <option>| ESI = < early sending indication >| STR = < softblocking threshold on regular frequencies > <option>| STS = < softblocking threshold on super-reuse frequencies > <option> NBL = < non BCCH layer offset > <option> | LSEG = < BTS load in SEG > <option> | CALC = < calculation of minimum number of slots > <option> | GSLO = < GPRS number of slots spread transmission > <option> | GRET = < GPRS max number of retransmission > <option> ...] ... : [PI = < cell reselection parameter index >| QUA = < cell bar qualify >| REO = < cell reselect offset >| TEO = < temporary offset >| PET = < penalty time >] <option>) ... ;

New syntax:	EQM : (BTS = < BTS identification > |
	NAME = < BTS name >
	SEG = < SEG identification > < option > |
	SEGNAME = < SEG name > < option >) :
	([DTX = < DTX mode >|
	BMA = < BTS measure average >|
	PMAX1 = <MS tx pwr max gsm> |
	PMAX2 = <MS tx pwr max gsm1x00> |
	PMIN = < MS tx pwr min >|
	RET = < max number of retransmission >|
	NY1 = < max number of repetition >|
	SLO = < number of slots spread trans >|
	CB = < SMS CB used >|
	BLT = < BTS load threshold >|
	DMAX = < MS max distance in call setup >|
	TRP = < TRX priority in TCH allocation >|
	CLC = < cell load for channel search >|
	RDIV = < RX diversity >|
	TRIH = < TCH rate intra-cell handover > <option>|
	FRL = < lower limit for FR TCH resources > <option>|
	FRU = < upper limit for FR TCH resources > <option> |

	NECI = < new establishment causes support >| EXT = < radius extension > <option>| MBR = < multiband cell reporting > <option>| ESI = < early sending indication >| STR = < softblocking threshold on regular frequencies > <option>| STS = < softblocking threshold on super-reuse frequencies > <option> NBL = < non BCCH layer offset > <option> | LSEG = < BTS load in SEG > <option> | CALC = < calculation of minimum number of slots > <option> | GSLO = < GPRS number of slots spread transmission > <option> | GRET = < GPRS max number of retransmission > <option> ...] ... : [PI = < cell reselection parameter index >| QUA = < cell bar qualify >| REO = < cell reselect offset >| TEO = < temporary offset >| PET = < penalty time >] <option> ... : [QSRI = < threshold to search utran cells >| QSRP = < gprs threshold to search utran cells >| FDD = < fdd cell reselect offset >| GFDD = < gprs fdd cell reselect offset >| FDM = < minimum fdd threshold >| GFDM = < gprs minimum fdd threshold >] <option>) ... ; The command still works with the old syntax.
Description of execution print-out changes:	The parameters QSRI, FDD and FDM are shown if the option ISHO_SUPPORT_IN_BSC is on. The parameters QSRP, GFDD and GFDM are shown if the options ISHO_SUPPORT_IN_BSC and GPRS are on.

Modified command:	V	MODIFY BTS GPRS PARAMETERS
Description of changes:		A new name-defined parameter transport type (TRAT) has been added to the third parameter block. The possible values are IP, FR and ANY.

Old syntax:	EQV : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([GENA = < GPRS enabled > | EGENA = < EGPRS enabled > <option> | RAC = < routing area code > | CDED = < dedicated GPRS capacity > | CDEF = < default GPRS capacity > | CMAX = < max GPRS capacity > | BFG = < prefer BCCH frequency GPRS > | DLA = < DL adaption probability threshold >| ULA = < UL adaption probability threshold > | DLB = < DL BLER crosspoint for CS selection no hop > | ULB = < UL BLER crosspoint for CS selection no hop >| DLBH = < DL BLER crosspoint for CS selection hop > | ULBH = < UL BLER crosspoint for CS selection hop > | COD = < coding scheme no hop > | CODH = < coding scheme hop > | MCA = < initial MCS for acknowledged mode > <option> | MCU = < initial MCS for unacknowledged mode > <option> | BLA = < maximum BLER in acknowledged mode > <option> | BLU = < maximum BLER in unacknowledged mode > <option> | MBG = < mean BEP offset GMSK > <option> | MBP = < mean BEP offset 8PSK > <option>] ... : [NSEI = < network service entity identifier >]) ; < option >

New syntax:	EQV : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : ([GENA = < GPRS enabled > | EGENA = < EGPRS enabled > <option> | RAC = < routing area code > | CDED = < dedicated GPRS capacity > | CDEF = < default GPRS capacity > | CMAX = < max GPRS capacity > | BFG = < prefer BCCH frequency GPRS > | DLA = < DL adaption probability threshold >| ULA = < UL adaption probability threshold > | DLB = < DL BLER crosspoint for CS selection no hop > | ULB = < UL BLER crosspoint for CS selection no hop >| DLBH = < DL BLER crosspoint for CS selection hop > | ULBH = < UL BLER crosspoint for CS selection hop > | COD = < coding scheme no hop > | CODH = < coding scheme hop > | MCA = < initial MCS for acknowledged mode > <option> | MCU = < initial MCS for unacknowledged mode > <option> | BLA = < maximum BLER in acknowledged mode > <option> | BLU = < maximum BLER in unacknowledged mode > <option> | MBG = < mean BEP offset GMSK > <option> | MBP = < mean BEP offset 8PSK > <option>] ... : [NSEI = < network service entity identifier > | TRAT = < trasport type >]) ; < option > The command still works with the old syntax.
Description of execution print-out changes:	A new parameter transport type (TRAT) has been added to the execution printout text. The parameter is shown if the option GPRS is on and the parameter GENA is Y.

Modified command:	G	MODIFY RADIO LINK CONTROL DL PARAMETERS

Description of changes:

New name-defined parameters Ms Tx pwr Max CCH (TXP1), Ms Tx Pwr Max CCH1x00 (TXP2), GPRS ms txpwr max cch (GTXP1) and GPRS ms txpwr max cch1x00 (GTXP2) have been added to the second parameter block.

The parameter Ms Tx pwr Max CCH defines the maximum transmission power an MS may use when accessing a CCH in the cell. This parameter is used when the bcch of the cell is either on GSM 800 or GSM 900 frequency band. The value range of the parameter is 5...43 dBm with 2dBm step.

The parameter MS txpwr max CCH1x00 defines the maximum transmission power an MS may use when accessing a CCH in the cell. This parameter is used when the bcch of the cell is either on GSM 800 or GSM 900 frequency band. The value range ot the parameter for GSM 1800 is 0...30 dBm with 2dBm step and for GSM 1900 0...32 dBm with 2dBm step and 33 dBm with 1dBm step.

The parameter GPRS ms txpwr max cch defines the maximum transmission power level an MS may use when accessing a packet control channel in the cell. This parameter is used when the packet control channel of the cell is either on GSM 800 or GSM 900 frequency band. The value range of the parameter is 5...43 dBm with 2dBm step.

The parameter GPRS ms txpwr max cch1x00 defines the maximum transmission power level an MS may use when accessing a packet control channel in the cell. This parameter is used when the packet control channel of the cell is either on GSM 800 or GSM 900 frequency band.The value range of the parameter for GSM 1800 is 0...36 dBm with 2dBm step and for GSM 1900 0...32 dBm with 2dBm step and 33 dBm with 1dBm step.

The value range of the parameter (DIRE) has changed from -10...10 to -40...40.

Old syntax:	EQG : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : (HYS = < cell reselect hysteresis >| TXP = < MS txpwr max CCH > | RXP = < rxlev access min >| RLT = < radio link timeout >| PO = < power offset > | GRXP = < GPRS rxlev access min > <option> | GTXP = < GPRS ms txpwr max cch > <option> | GHYS = < GPRS cell reslect hysteresisi > <option> | GPU = < GPRS non BCCH layer rxlev upper limit > <option> | GPL = < GPRS non BCCH layer rxlev lower limit > <option> | DIRE = < direct GPRS access > <option> | RRH = < ra reselect hysteresis > <option> | CHYS = < C31 hysteresis > <option> | QUAL = < C32 qual > <option> | RAR = < random access retry > <option> | RES = < reslection time > <option> | PRC = < priority class > <option> | HCS = < HCS threshold > <option>) ... ;

New syntax:	EQG : (BTS = < BTS identification > | NAME = < BTS name > | SEG = < SEG identification > < option > | SEGNAME = < SEG name > < option >) : (HYS = < cell reselect hysteresis >| TXP1 = < MS txpwr max CCH > | TXP2 = < MS txpwr max CCH1x00 > | RXP = < rxlev access min >| RLT = < radio link timeout >| PO = < power offset > | GRXP = < GPRS rxlev access min > <option> | GTXP1= < GPRS ms txpwr max cch > <option> | GTXP2= < GPRS ms txpwr max cch1x00 > <option> | GHYS = < GPRS cell reselect hysteresis > <option> | GPU = < GPRS non BCCH layer rxlev upper limit > <option> | GPL = < GPRS non BCCH layer rxlev lower limit > <option> | DIRE = < direct GPRS access threshold > <option> | RRH = < reselect hysteresis > <option> | CHYS = < C31 hysteresis > <option> | QUAL = < C32 qual > <option> | RAR = < random access retry > <option> | RES = < reselection time > <option> | PRC = < priority class > <option> | HCS = < HCS threshold > <option>) ... ; The command does not work with the old syntax.
Old semantics:	DIRE values: -10...10
New semantics:	DIRE values: -40...40 The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:	New parameters MS txpwr max CCH (TXP1), MS txpwr max CCH1x00 (TXP2), GPRS MS txpwr max cch (GTXP1) and GPRS MS txpwr max cch1x00 (GTXP2) have been added to the execution printout text. The parameters GTXP1 and GTXP2 are shown if the option GPRS is on.

3.7 (ES) ABKONF - Abis Interface Configuration

New command(s) and menu text(s):	E	CREATE DYNAMIC ABIS POOL
	G	DELETE DYNAMIC ABIS POOL
	I	OUTPUT DYNAMIC ABIS POOL INFORMATION
	M	MODIFY DYNAMIC ABIS POOL

3.8 (EX) POBHAN - Position Based Services Handling

Modified command:	A	CREATE LMU AREA
Description of changes:		The value range of the parameters LCSE, RLCS, MLCS has changed from (1...65533) - (1...65535) to (0...65535) - (0...65535).
Old semantics:		The value range of the parameters LCSE, RLCS, MLCS: (1...65533) - (1...65535).
New semantics:		The value range of the parameters LCSE, RLCS, MLCS: (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.
Modified command:	B	MODIFY LMU AREA PARAMETERS
Description of changes:		The value range of the parameters RLCS and MLCS has changed from (1...65533) - (1...65535) to (0...65535) - (0...65535).

Old semantics:		The value range of the parameters RLCS and MLCS: (1...65533) - (1...65535).
New semantics:		The value range of the parameters RLCS and MLCS: (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.
Modified command:	C	CREATE LCS ELEMENT
Description of changes:		The value ranges of the parameters LAC and CI have changed from 1...65533 to 0...65535. The value range of the parameter LCSN has changed from (1...65533) - (1...65535) to (0...65535) - (0...65535).
Old semantics:		The value range of the parameters LAC and CI : 1...65533. The value range of the parameter LCSN : (1...65533) - (1...65535).
New semantics:		The value range of the parameters LAC and CI : 0...65535. The value range of the parameter LCSN : (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.
Modified command:	D	DELETE LCS ELEMENT
Description of changes:		The value range of the parameters LAC and CI has changed from 1...65533 to 0...65535.
Old semantics:		The value range of the parameters LAC and CI : 1...65533.
New semantics:		The value range of the parameters LAC and CI : 0...65535. The command entry continues in the same way as before after a semantic error.

Modified command:	G	MODIFY RIT TRANSFER TABLE PARAMETERS
Description of changes:		The value range of the parameters TS, SGW, TRT has changed from (1...65533) - (1...65535) to (0...65535)-(0...65535).
Old semantics:		The value range of the parameters TS, SGW, TRT : (1...65533) - (1...65535).
New semantics:		The value range of the parameters TS, SGW, TRT : (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.

Modified command:	H	CREATE REPEATER
Description of changes:		The value range of the parameter RELCS has changed from (1...65533) - (1...65535) to (0...65535)-(0...65535).
Old semantics:		The value range of the parameter RELCS: (1...65533) - (1...65535).
New semantics:		The value range of the parameter RELCS : (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.

Modified command:	E	CREATE RIT TRANSFER TABLE
Description of changes:		The value range of the parameters TS, SGW, TRT has changed from (1...65533) - (1...65535) to (0...65535) - (0...65535).
Old semantics:		The value range of the parameters TS, SGW, TRT : (1...65533) - (1...65535).
New semantics:		The value range of the parameters TS, SGW, TRT : (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.

Modified command:	O	OUTPUT LCS ELEMENT PARAMETERS
Description of changes:		The value range of the parameter LCSE has changed from (1...65533) - (1...65535) to (0...65535) - (0...65535).
Old semantics:		The value range of the parameter LCSE: (1...65533) - (1...65535).
New semantics:		The value range of the parameter LCSE: (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.

Modified command:	M	MODIFY LCS ELEMENT PARAMETERS
Description of changes:		The value range of the parameters LAC, CI, NLAC and NCI has changed from 1...65533 to 0...65535. The value range of the parameter LCSN has changed from (1...65533) - (1...65535) to (0...65535) - (0...65535).
Old semantics:		The value range of the parameters LAC, CI, NLAC and NCI : 1...65533. The value range of the parameter LCSN : (1...65533) - (1...65535).
New semantics:		The value range of the parameters LAC, CI, NLAC and NCI : 0...65535. The value range of the parameter LCSN : (0...65535) - (0...65535). The command entry continues in the same way as before after a semantic error.

3.9 (FW) GNLHAN - GPRS NS Layer Handling

Modified command(s) and menu text(s):	S	CHANGE STATE OF NETWORK SERVICE VIRTUAL CONNECTION - Optional - BSS9006, BSS10103
	O	OUTPUT NETWORK SERVICE VIRTUAL CONNECTION DATA - Optional - BSS9006, BSS10103
	M	MODIFY NETWORK SERVICE VIRTUAL CONNECTION DATA - Optional - BSS9006, BSS10103
	D	DELETE NETWORK SERVICE VIRTUAL CONNECTION - Optional - BSS9006, BSS10103
	C	CREATE NETWORK SERVICE VIRTUAL CONNECTION - Optional - BSS9006, BSS10103

Modified command:	C	CREATE NETWORK SERVICE VIRTUAL CONNECTION

Description of changes:

New parameters have been added for creation of network service virtual connection using Gb over IP configuration. These new parameters are:

- BCSU, PCU and LPNBR for the second parameter block.

- RIP, RPNBR, PRE, RDW and RSW for the third parameter block.

All the new and old parameters in the second and third parameter block are now name-defined.

When creating NS_VC, the allowed parameter combinations depend on the first given parameter of the second parameter block. If the first given parameter of the second parameter block is BCSU, PCU or LPNBR, the user is creating IP type NS_VC. If the first given parameter of the second parameter block is DLCI or CIR, the user is creating FR type NS_VC.

In IP-creation, the allowed parameters in the second parameter block are: BCSU, PCU or LPNBR and in the third parameter block the allowed parameters are: RIP, RPNBR, PRE,RDW and RSW.

If the parameter value of PRE in the third parameter block is N, then the user must enter a value also for RDW and RSW. If PRE value is Y, the user cannot enter values for RDW and RSW.

In FR-creation, the allowed parameters in the second parameter block are: DLCI and CIR and in the third parameter block the allowed parameters are BCI or BCN.

Old syntax:	FWC: NSVCI = <network service virtual connection identifier>, [NAME = <network service virtual connection name> | <no name> def], NSEI = <network service entity identifier>: <data link connection identifier>, <committed information rate>: (<bearer channel identification> | <bearer channel name>);
New syntax:	FWC: NSVCI = <network service virtual connection identifier>, [NAME = <network service virtual connection name> | <no name> def], NSEI = <network service entity identifier>: ((BCSU = <BSCU logical index>, PCU = <PCU logical index> LPNBR = <local UDP port number>) | (DLCI = <data link connection identifier>, CIR = <committed information rate>)): [[RIP = <remote IP address>, RPNBR = <remote UDP port number>, PRE = <preconfigured SGSN IP endpoint>, RDW = <remote data weight>, RSW = <remote signalling weight>] | [BCI = <bearer channel identification> | BCN = <bearer channel name>]]; The command does not work with the old syntax.
New semantics:	In IP-creation, the allowed values for the BCSU parameter depend on the network element type. If the type is BSC3i, the value range of the BCSU is 0...6. In all other cases the value range of the BCSU is 0...8. The command entry continues in the same way as before after a semantic error.

Description of execution print-out changes:		The user is now able to create also an IP type NS_VC. In the print-out, there is a following structure: First column: NS_VC ID number Second column: NS_VC NAME Third column: LOCAL UDP PORT number Fourth column: RDW. Remote data weight Fifth column: RSW. Remote signalling weight Sixth column: REMOTE IP ADDRESS:UDP PORT. Seventh colum: PRE. Preconfigured sgsn IP endpoint type
Modified command:	D	DELETE NETWORK SERVICE VIRTUAL CONNECTION
Description of changes:		There is a new error text printed if the user tries to delete the IP type NS_VC, whose preconfigured sgsn ip endpoint type is not static or dynamic.
New error text(s):		/*** DELETION OF AUTOCONFIGURED NS_VC NOT ALLOWED ***/
Description of execution print-out changes:		The user is now able to delete also IP type NS_VC. In the print-out, there is a following structure: First column: NS_VC ID number Second column: NS_VC NAME Third column: LOCAL UDP PORT number Fourth column: RDW. Remote data weight Fifth column: RSW. Remote signalling weight Sixth column: REMOTE IP ADDRESS:UDP PORT. Seventh colum: PRE. Preconfigured sgsn IP endpoint type.

Modified command:	M	MODIFY NETWORK SERVICE VIRTUAL CONNECTION DATA
Description of changes:		New parameters have been added for the modification of network service virtual connection. If the NS_VC type is Frame relay, the user is allowed to modify only the parameters NEWNAME or NEWCIR. If the NS_VC type is IP and the preconf_sgsn_IP_endpoint type is dynamic, the user is allowed to modify only the parameter NEWNAME. If the NS_VC type is IP and the preconf_sgsn_IP_endpoint type is static, the user is allowed to modify only the parameters NEWNAME, NEWRSW or NEWRDW. In all cases, only one parameter is allowed to be modified in one modifying command.
Old syntax:		FWM: (NSVCI = <network service virtual connection identifier> | NAME = <network service virtual connection name>): (NEWNAME = <new network service virtual connection name> | NEWCIR = <new committed information rate>);
New syntax:		FWM: (NSVCI = <network service virtual connection identifier> | NAME = <network service virtual connection name>): (NEWNAME = <new network service virtual connection name> | NEWRDW = <new remote data weight> | NEWRSW = <new remote signalling weight>) | (NEWNAME = <new network service virtual connection name> | NEWCIR = <new committed information rate>) | (NEWNAME = <new network service virtual connection name>); The command still works with the old syntax.

Old semantics:		The user is allowed to modify only the parameters NEWNAME or NEWCIR. The parameter NEWNAME can contain from 1 to 10 characters. The first character must be a letter. The name must be unique in the BSC. The parameter NEWCIR is given in steps of 16 kbits/s. The range is 16...1984 kbit/s in ETS and 16...1536 kbit/s in ANSI.
New semantics:		The parameter NEWNAME can contain from 1 to 10 characters. The first character must be a letter. The name must be unique in the BSC. The parameter NEWCIR is given in steps of 16 kbits/s. The range is 16...1984 kbit/s in ETSI and 16...1536 kbit/s in ANSI. The value range of the parameter NEWRSW : 0...255. The value range of the parameter NEWRDW: 0...255. The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:		The user is now able to modify also an IP type NS_VC. In the print-out of the IP type NS_VC, there is a following structure: First column: NS_VC ID number Second column: NS_VC NAME Third column: LOCAL UDP PORT number Fourth column: RDW. Remote data weight Fifth column: RSW. Remote signalling weight Sixth column: REMOTE IP ADDRESS:UDP POR. PRE. Preconfigured sgsn IP endpoint type
Modified command:	O	OUTPUT NETWORK SERVICE VIRTUAL CONNECTION DATA
Description of changes:		The value range of the parameter BCSU has been changed to depend on the network element type.

Old semantics:		The value range of the parameter BCSU is 0...8.
New semantics:		If the network element type is BSC3i, the value range of the BCSU is 0...6. In all other cases the value range of the BCSU is 0...8. The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:		The user is now able to output also an IP type NS_VC data. In the print-out of the IP type NS-VC, there is a following structure: First column: NS_VC ID number Second column: NS_VC NAME Third column: ADM STA Fourth column: OP STATE Fifth column: LOCAL UDP PORT number Sixth column: RDW. Remote data weight Seventh column: RSW. Remote signalling weight Eight column: REMOTE IP ADDRESS:UDP PORT. Ninth column: PRE. Preconfigured sgsn IP endpoint type
Modified command:	S	CHANGE STATE OF NETWORK SERVICE VIRTUAL CONNECTION
Description of changes:		There is a new error text printed if the user tries to change the state of the IP type NS_VC, whose preconfigured sgsn ip endpoint type is dynamic.
New error text(s):		/*** STATE CHANGE NOT ALLOWED FOR DYNAMIC NS_VC ***/

3.10 (IA) AUTHOR - MMI System Authority Handling

Modified command:	H	CREATE USER ID
Description of changes:		The error text has been changed. One new error text has been added.
New error text(s):		/*** USERID CREATION NOT POSSIBLE FROM OLD SYSTEM LEVEL ***/

3.11 (QR) YOOHOO - TCP/IP Stack Data Handling

Modified command:	N	CONFIGURE NETWORK INTERFACE
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not obligatory and it is useable only with BCSUs. The possible values for the plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRN: <unit type>, [<unit index> | [<unit group>, <unit index>]]: <interface name>: [<IP address>], [<L>| <P> | <L> def], [del ;]: [<netmask length> | 8/16/24 def]: [<state> | <current> def];
New syntax:		QRN: <unit type>, [<unit index> | [<unit group>, <unit index>]]: <plug-in unit type>, <plug-in unit index>: <interface name>: [<IP address>], [<L>| <P> | <L> def], [del ;]: [<netmask length> | 8/16/24 def]: [<state> | <current> def];

		The command does not work with the old syntax.
Description of execution print-out changes:		The header of execution printout has been changed. The parameter unit name (UNIT NAME) has been stretched to the execution printout text. The new header of execution printout:

```
              PHYSICAL         LOGICAL     ADM
UNIT NAME    IP ADDRESS     NML IP ADDRESS  NML STATE
---------------- ------ --------------- --- --------
```

Modified command:	G	REMOVE NETWORK INTERFACE
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not obligatory and it is useable only with BCSUs. The possible values for the plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRG: <unit type>, [<unit index> | [<unit group>, <unit index>]]: <interface name>;
New syntax:		QRG: <unit type>, [<unit index> | [<unit group>, <unit index>]]: <plug-in unit type>, <plug-in unit index>: <interface name>; The command does not work with the old syntax.
Description of execution print-out changes:		The header of the execution printout has been changed. The parameter unit name (UNIT NAME) has been stretched to the execution printout text. The new header of execution printout:

```
              PHYSICAL         LOGICAL     ADM
UNIT NAME    IP ADDRESS     NML IP ADDRESS  NML STATE
---------------- ------ --------------- --- --------
```

Modified command:	I	INTERROGATE NETWORK INTERFACE
Description of changes:		New Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not compulsory and it is useable only with BCSUs. The possible values for plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRI: [<unit type>, [<unit index> | [<unit group> , <unit index>] | <all> def]: [<interface name> | <all> def]: [<display unit's attached network interfaces> | NO def]] | <interrogate all interfaces of all units> def;
New syntax:		QRI: [<unit type>, [<unit index> | [<unit group> , <unit index>] | <all> def]: <plug-in unit type>, <plug-in unit index>: [<interface name> | <all> def]: [<display unit's attached network interfaces> | NO def]] | <interrogate all interfaces of all units> def; The command does not work with the old syntax.
Description of execution print-out changes:		The header of the execution printout has been changed. The parameter unit name (UNIT NAME) has been stretched to the execution printout text. The new header of execution printout:

```
                          ADDR         ADM
UNIT NAME    IP ADDRESS   TYPE NML ASSIGNED STATE
---------------- ------ --------------- --- --------
```

Modified command:	C	CREATE STATIC ROUTE
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not obligatory and it is useable only with BCSUs. The possible values for plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRC: <unit type>, [<unit index> | [<unit group>, <unit index>]]: [<destination IP address> | <default route> def, [<netmask length> | 0 def]]: [<next hop type> | GW def]: <address type>: (IP = <IP address> | MAC = <link level mac address>);
New syntax:		QRC: <unit type>, [<unit index> | [<unit group>, <unit index>]]: <plug-in unit type>, <plug-in unit index>: [<destination IP address> | <default route> def, [<netmask length> | 0 def]]: [<next hop type> | GW def]: <address type>: (IP = <IP address> | MAC = <link level mac address>); The command does not work with the old syntax.
Description of execution print-out changes:		The header of tthe execution printout has been changed. The parameter unit name (UNIT NAME) has been stretched to the execution printout text. The new header of execution printout:

```
                       NEXT ADDR
UNIT    DESTINATION    HOP  TYPE ADDRESS           NBR
---------------- ------ -------------- --- --------
```

Modified command:	D	DELETE STATIC ROUTE
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not obligatory and it is useable only with BCSUs. The possible values for plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRD: (<route number>: <unit type>, [<unit index> | [<unit group>, <unit index>]];
New syntax:		QRD: (<route number>: <unit type>, [<unit index> | [<unit group>, <unit index>]]: <plug-in unit type>, <plug-in unit index>); The command does not work with the old syntax.
Description of execution print-out changes:		The header of the execution printout has been changed. The parameter unit name (UNIT) has been stretched to the execution printout text. The new header of execution printout:

```
                      NEXT ADDR
UNIT    DESTINATION   HOP  TYPE ADDRESS           NBR
--------------- ------ --------------- --- --------
```

Modified command:	L	INTERROGATE STATIC ROUTES
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not obligatory and it is useable only with BCSUs. The possible values for plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRL: [<unit type>, [<unit index> | [<unit group>, <unit index>] | <all> def]: <interrogate all routes of all units> def;

New syntax:		QRL: [<unit type>, [<unit index> | [<unit group>, <unit index>] | <all> def]: <plug-in unit type>, <plug-in unit index>: <interrogate all routes of all units> def; The command does not work with the old syntax.
Description of execution print-out changes:		The header of the execution printout has been changed. The parameter unit name (UNIT NAME) has been stretched to the execution printout text. The new header of execution printout:

```
                      NEXT ADDR
UNIT    DESTINATION   HOP  TYPE ADDRESS           NBR
--------------- ------ -------------- --- --------
```

Modified command:	X	TEST HOST REACHABILITY (PING)
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not obligatory and it is useable only with BCSUs. The possible values for plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRX: [<unit type>, [<unit index> | [<unit group>, <unit index>]] | <active OMU> def]: (HOST = <host> | IP = <IP address>);
New syntax:		QRX: [<unit type>, [<unit index> | [<unit group>, <unit index>]] | <active OMU> def]: <plug-in unit type>, <plug-in unit index>: (HOST = <host> | IP = <IP address>); The command does not work with the old syntax.

Modified command:	S	INTERROGATE NETWORK STATUS
Description of changes:		A new Plug-in unit parameter block has been added. The parameter block indicates the used plug-in unit type and index. The parameter block is not compulsory and it is useable only with BCSUs.The possible values for plug-in unit type are PCU, PCUS, PCUT and PCUB.
Old syntax:		QRS: <unit type>, [<unit index> | [<unit group> , <unit index>]]: [<mode> | <ALL> def], [<interface name>]: [SYM = <addresses as symbols> | NO def];
New syntax:		QRS: <unit type>, [<unit index> | [<unit group> , <unit index>]]: <plug-in unit type>, <plug-in unit index>: [<mode> | <ALL> def], [<interface name>]: [SYM = <addresses as symbols> | NO def]; The command does not work with the old syntax.

3.12 (TP) HSMMML - GSM Measurement Handling

Modified command:	M	MODIFY GSM MEASUREMENT CHARACTERISTICS
Description of changes:		New optional parameters utlow and uthigh are introduced with the new Utran Ncell Signal Level measurement. These values are related only to UT_LEVEL so the other measurements remain unchanged. New possible values for the parameter have been added to the measurement groups MEASUR and OBSERV.

Old syntax:	1. ZTPM: MEASUR, <measurement type>: <measurement day>, <measurement interval>, <output interval> ; 2. ZTPM: MEASUR, FER: <measurement day>, <measurement interval>, <output interval>:<CL1=xx>,<CL2=yy>,<CL3=zz>,<CL4=aa>, <CL5=bb>,<CL6=cc>,<CL7=dd>,<WIN=ee>; The range of the values xx, yy, zz, aa, bb, cc, dd is 1 ... 255 and yy must be greater than xx, zz must be greater than yy and so on. The range of ee is 1 ... 32. When the measurement is modified for the first time and no class and win values are given, default values are used. The default values are: CL1=20, CL2=40, CL3=60, CL4=80, CL5=100, CL6=120, CL7=140, WIN=2. The measurement unit for the classes is 0.1%. 3. ZTPM: OBSERV, PBS_OBS: <measurement day>, <measurement interval>, <output interval>: <LC=xx> ... ; Example: ZTPM:OBSERV,PBS_OBS:ALL,0-0-24-0,15:LC=115; The values for LAC and CI range from 0 ... 65535.
New syntax:	ZTPM: MEASUR, UT_LEVEL: <measurement day>, <measurement interval>: UTLOW=xx, UTHIGH=yy; yy must be greater than xx. xx value area is 0 to 48 and yy value area is 1 to 49. The command does not work with the old syntax.
Old semantics:	ZTPM:MEASUR,: ... Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" ZTPM:OBSERV,: ... Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS"

New semantics:	ZTPM:MEASUR,: ... Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" "UT_HOADJ" "UT_LEVEL" "GBIP" ZTPM:OBSERV,: ... Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS" The command entry continues in the same way as before after a semantic error.
Description of execution print-out changes:	A new execution printout is introduced with the new Utran Ncell Signal Level measurement. This printout shows the values of the optional parameters utlow and uthigh after the measurement has been modified with the ZTPM command. Example 1:TPM:MEASUR,UT_LEVEL:MON,8-0-16-0,30:UTLOW=3,UTHIGH=40; EXECUTION STARTED GSM MEASUREMENT MODIFIED TYPE: UT_LEVEL EC/NO LOW: 3 EC/NO HIGH: 40 MEASUREMENT INTERVAL: MON 08:00-16:00 OUTPUT INTERVAL: 00:30 COMMAND EXECUTED

Modified command:	E	STOP GSM MEASUREMENT
Description of changes:		New possible values for the parameter have been added in the measurement groups MEASUR and OBSERV.
Old semantics:		ZTPE:MEASUR,; Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" ZTPI:OBSERV,; Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS"
New semantics:		ZTPE:MEASUR,: ... Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" "UT_HOADJ" "UT_LEVEL" "GBIP" ZTPM:OBSERV,: ... Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS" The command entry continues in the same way as before after a semantic error.
Modified command:	S	START GSM MEASUREMENT
Description of changes:		New possible values for the parameter have been added in the measurement groups MEASUR and OBSERV.

Old semantics:		ZTPS:MEASUR,; Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" ZTPI:OBSERV,; Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS"
New semantics:		ZTPS:MEASUR,: ... Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" "UT_HOADJ" "UT_LEVEL" "GBIP" ZTPM:OBSERV,: ... Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS" The command entry continues in the same way as before after a semantic error.
Modified command:	I	INTERROGATE GSM MEASUREMENT
Description of changes:		New possible values for the parameter have been added to the measurement groups MEASUR and OBSERV.

Old semantics:	ZTPI:MEASUR,; Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" ZTPI:OBSERV,; Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS"
New semantics:	ZTPI:MEASUR,: ... Values for : "TRAFFIC" "RES_AVAIL" "CCCH_ACC" "HO" "POWER" "LOAD" "AVAIL" "OSI" "UNDEF_ADJ" "RXQUAL" "HOADJ" "BSC_CC" "CC_PM" "UNDERL" "RXLEVEL" "LINKBAL" "TIMING_ADV" "AVAIL_BSC" "CC_SERLEV" "MSSPEED" "DUAL" "C/I_RATIO" "HOTSPOT" "HIGH_SPEED" "CHAN_FIN" "MS_CAP" "PCU" "RLC_BLOCKS" "FR" "DAC" "DYNAMIC_ABIS" "FER" "PBS" "C_SCHEME" "REV_HUNT" "QOS" "PBCCH" "NBL_OFFSET" "UT_HOADJ" "UT_LEVEL" "GBIP" ZTPM:OBSERV,: ... Values for : "SDCCH_OBS" "TCH_OBS" "INT_HO_OBS" "INC_HO_OBS" "OUT_HO_OBS" "CC_OBS" "ISDN_ABIS" "DC_OBS" "PBS_OBS" The command entry continues in the same way as before after a semantic error.

3.13 (TV) DXCMML - BSC Counter Inquiry

Modified command:	S	SHOW DESCRIPTION OF THE COUNTERS
Description of changes:		There is a new allowed counter range due to the added S10.5-related counter descriptions.

Old semantics:	ZTVS:...; The allowed values for the counter number: 300...374, 400...408, 500...524, 600...639, 700...715, 800...829, 900...944, 51000...51150, and 57000...57038
New semantics:	ZTVS: ; The new allowed values for the counter number: 300...374, 400...408, 500...524, 600...639, 700...715, 800...829, 900...944, 51000...51153, and 57000...57046 The command entry continues in the same way as before after a semantic error.

3.14 (WG) TCKONF - Transcoder Configuration

Modified command:	C	CREATE TRANSCODER PCM
Description of execution print-out changes:		New confirmation "CREATE TRANSCODER PCM WITHOUT ATER SPEECH CIRCUITS." has been added to the command execution. This confirmation text is conditional and it is aligned to the left.
Additional information:		Confirmation text appears only when transcoder PCM to be created will be 'dummy' and cannot have normal traffic circuits. This kind of transcoder PCM can be used for through connections only.