

Technical Document

Title: ZXUN USPPV4.14.10_interface specification
of command line(HLR&EPC-HSS fascicule)

Technical File No.:

Version: V4.14.10

File Quality Level:

Total Page 451

(Including the cover)

Drafted by ZTE HLR TEAM
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Announcement

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Modification Records

File No.	Version	Author/ Amender	Draft/ Modification Date	Modification Reason	Modified Contents (Main points)
	V4.12.10	Guohua	2012-4-5	Based on V4.11.20, 1. Add "Camel Control Strategy" parameter	[4.2.1] 、 [4.6.5] 、 [4.16.1.2] 、 [4.16.3] 、 [4.18.1] 、 [4.18.2] 、 [4.18.4] 、 [5.1] 、 [5.5]
	V4.12.10	Mahongli	2012-4-11	Call barring not check password	4.2.1/4.8.1/4.16.1.4/4.1 8.1
	V4.12.10	Luobao	2012-4-20	Support subscribe multiple GPRS Template	4.2.1 4.5 4.10.5 4.16.1.5 4.18.1
	V4.12.10	Luobao	2012-4-26	1. Add Errorcode about function "Support subscribe multiple GPRS Template" 2. EC611002871084 modify desc of ErrorCode "42", add Errorcode "43"	5.1
	V4.12.10	Wangjianxi ang	2012-4-28	Support subscribe multiple UCSI Template	4.2.1 4.13.15 4.16.1.6 4.18.1 5.1
	V4.12.10	Zhao Fengxian	2012-4-28	EC611002846377, remove the OriginFAID parameter from the interface of reg fn.	4.8.3
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002882021, GrpList3 error	4.16.1.17 4.25.1
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002880068 The TrigTCSI parameter miss"="	4.13.1 4.16.1.6
	V4.12.10	Ma YunPeng	2012-5-17	EC611002877658, Remove needless content	4.8.2

	V4.12.10	Ma YunPeng	2012-5-17	EC 611002860517 , Modify the max code length of the APN	4.2.1 4.5 4.10.2 4.10.3 4.10.4 4.16.1.5 4.16.1.14 4.18.1 4.23.1 4.23.2 4.23.3 4.23.4 4.26.4
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002863727 Description of SubType error	4.6.1 4.16.1.2 4.18.1
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002857588 Add description for the min length of IMSI/MSISDN	
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002878602 Modify the format of BsList to "x-x-x-x"	4.9.1 4.9.2 4.9.3
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002861644 Modify the length of Charge and PDPCharge	4.2.1 4.5 4.10.1 4.10.2 4.10.3 4.10.5 4.16.1.5 4.18.1
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002861476 Modify the length of PDPType	4.2.1 4.5 4.10.2 4.10.3 4.10.4 4.16.1.5 4.18.1 4.23.1 4.23.2 4.23.3
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002849799 Modify the length of SecVer	4.1.1 4.1.2 4.16.1.1
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002859225 Remove ICCID,NEWICCID	4.4.1
	V4.12.10	Ma YunPeng	2012-5-17	EC 611002857230	Appendix 5.5
	V4.12.10	Zhangxian gcai	2012-5-18	EC 611002812769,In the interface specifications add discription with some parameters being	4.2.1 4.6.1 4.10.2 4.10.3 4.12.2

				conflict with each other:SrvKey and SrvKeyID,SCFAddr and SCFAddrID,ROAMSCH and ROAMSCHID,PSROAMS CH and PSROAMSCHID,parameter of SIPID is conflict with CS CAMEL Service	4.13 4.16.1.2 4.18.1
	V4.12.10	Yangxiaoli	2012-5-17	Modify the Attribute of AMF from M or O to MC	4.1.1
	V4.12.10	Yangxiaoli	2012-5-17	Delete <Key flag> from 【Input format】	4.1.4
	V4.12.10	Yangxiaoli	2012-5-17	add [,EPCARD_0=] [,EPCARD_1=][,EPCARD_2=][,EPCARD_3=][,EPCARD_4=] [,EPCARD_5=] [,EPCCHARGCHRT=] [,EPCROAMSCH=][,EPCSTNSR=] [,EPCAMBRUP=][,EPCAMBRDOWN=] [,EPCAPNOIRep=][,EPCRFSR=] [,EPCICSIND=] into 【Input format】	4..6.5
	V4.12.10	Yangxiaoli	2012-5-17	Modify the Attribute of active from O to M	4.8.2
	V4.12.10	Yangxiaoli	2012-5-17	Modify the Attribute of SCFAddr、SrvKey from M to MC Modify the Attribute of NC from O to MC	4.13.4 4.13.5 4.13.6 4.13.7 4.13.9
	V4.12.10	Yangxiaoli	2012-5-17	Add [,PDPCharge1=] into 【Input format】	4.16.1.5
	V4.12.10	Yangxiaoli	2012-5-17	Add TrigTCSI into	4.16.1.6

				【Input format】	
	V4.12.10	Yangxiaoli	2012-5-17	Add CDS_ICA into 【Input format】	4.16.1.8
	V4.12.10	Yangxiaoli	2012-5-17	Add EPCAPNCPTPL into 【Input format】	4.16.1.14
	V4.12.10	zhangxiao an	2012-05-22	EC 611002857511 modified OriginFAID's "Para-value Description"	4.2.1 4.6.5 4.16.1.2 4.18.1
	V4.12.10	zhangxiao an	2012-05-22	EC 611002870929 modified DSAID's "Para-value Description"	4.16.4
	V4.12.10	zhangxiao an	2012-05-22	EC 611002876269 modified CFBNAddr's "Para-value Description"	4.16.1.4
	V4.12.10	zhangxiao an	2012-05-22	EC 611002870837 delete 4.18	4.18
	V4.12.10	zhangxiao an	2012-05-22	EC 611002882592 modified MSCNumber's "Para-value Description";modified VLRNumber's "Para-value Description";modified SGSNNumber's "Para-value Description"	4.11
	V4.12.10	zhangxiao an	2012-05-22	EC 611002882580 modified NewISDN's "Para-value Description";modified OldISDN's "Para-value Description"	4.17
	V4.12.10	zhangxiao an	2012-05-22	EC 611002882487 modified IDCount's "Para-value Description"	4.21



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	V4.12.10	Luobao	2012-05-31	EC 611002968714 Parameter "charge"and "pdpcharge" value explain	4.2.1
	V4.12.20	Zhangli	2012-06-13	1. mofify "EPSQCI" value range;mofify "EPCQOS" code length. 2. Add parameter "EPCRELAYNODEIND" 3. EC611003030597, Delete the parameter "EPCRELAYNODEIND" in the command of "Modify the Network Access mode" .	4.2.1 4.5 4.16.1.12 4.16.3 4.18.1 4.18.2 4.18.4 4.22.1 4.22.2 4.22.3 4.22.4
	V4.12.20	Yangxiaoli	2012-06-26	611003042452 Modify the MML Command from REG FTN to REG FN	3 (8) Supplementary services
	V4.12.20	Luobao	2012-06-26	EC611003041113 Interface that "Set TPLCAMEL" Support parameter "UCSITPLADD, UCSITPLDEL "	4.13.15
	V4.12.20	Luobao	2012-06-26	EC611003041132 Quote 4.20.1/4.20.2/4.20.3/4.2 0.4/4.19.1/4.19.2/4.19.3 /4.19.4 should modify 4.18.1/4.18.2/4.18.3/4.1 8.4	All about this quotion
	V4.12.20	Yangxiaoli	2012-06-27	611003041059 modify the Parameter Description of KEYID	4.1.1 4.16.1.1



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				and OPcKeyID	
	V4.12.20	Yangxiaoli	2012-6-27	611003040940 modify the Parameter Description from SMSSK1、SMSSCF1、SMSDC1、ARDFlag to ARDFG、SMSSK、SMSSCF、SMSDC	4.18.1
	V4.12.20	Yifei	2012-6-29	Add 'MIP6Fea'	4.22.1
	V4.12.20	Mayunpeng	2012-07-05	611003049107 Add notes for the interface of Query IMEISV Information	4.16.2
	V4.12.20	Mayunpeng	2012-07-05	611002878602 Modify the format of BsList to "x-x-x-x-x-x"	4.9.1 4.9.3 4.9.4 4.16.1.8
	V4.12.20	ZhaoFengxian	2012-07-09	611003064866 modify the attribute "M" to "C" of the parameter "NAM" 611002860948 modify the para-value Description of the parameter "KEEP"	4. 2.1 4.5 4.8.1 4.8.3
	V4.12.20	Bianyijing	2012-07-19	611003090292 Modify AddRCType's length	4.2.1 4.6.1 4.16.1.2 4.18.1
	V4.12.20	Bianyijing	2012-07-19	611002857588 Modify IMSI/MSISDN's length	
	V4.12.20	Bianyijing	2012-07-19	611003090252 Modify the Para-value Description of Reg、GrpType and ExtBsg	4.25.1



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	V4.12.20	Bianyijing	2012-07-19	611003090091 Modify BSG's Para_Description	4.8
	V4.12.20	Bianyijing	2012-07-19	611003103760 Modify Rate's Para_Description	4.12.1
	V4.12.20	Yangxiaoli	2012-07-20	611003056215 mod the Name of parameter from PLMNBS_1、...PLMNBS_3 to PLMNBS_1、...PLMNBS_F	4.18.1
	V4.12.20	Zhangli	2012-8-2	EC611003139032	4.6.5 the command "Mod BscEx" supports the parameter "EPCRELAYNODEIND"
	V4.12.20	Yifei	2012-8-2	611003152669	4.6.5 the command "Mod BscEx" supports the parameters of "MIP6"
	V4.12.20	Majun	2012-08-10	611003168646 mod active Description	4.8.3
	V4.12.20	Majun	2012-08-15	611003179145 Add CLIOpt and CFUNTC parameters default value	4.2.1 4.8.1 4.18.1
	V4.12.20	Zhao Fengxian	2012-08-03	611003152961 ,modify RestrictCF's para description, from Value: 0:Restrict 1:Unrestrict To Value: 0: Unrestrict 1: Restrict	4.2.1 4.6.5 4.16.1.2 4.18.1
	V4.12.20	Bianyijing	2012-08-30	611003220507	4.4.1

				Mod VALIDTIME's length	4.16.1
	V4.12.20	wangjianxiang	2012-09-05	611003208966	4.2.1 4.5 4.6.5 4.16.1.12 4.18.1 4.22.1 4.22.2 4.22.3
	V4.12.20	Zhao Fengxian	2012-09-05	611003224996 Verify the description of the parameter BFN	4.2.1 4.6.4 4.16.1.2 4.18.1
	V4.12.20	Zhao Fengxian	2012-09-05	611003230846 Verify the Code Length of DialNum to 1..16	4.13.14 4.16.1.6 4.18.1
	V4.12.20	Yangxiaoli	2012-09-11	Support the parameter EPCROAMSCHID , modify the description of the parameter EPCCHARGCHRT 、 EPCROAMSCH、PDNType	4.6.5 4.18.1 4.22.1 4.22.2
	V4.12.20	Yangxiaoli	2012-09-21	Modify the Notes of EPCPDNGWNUM 、 EPCPDNGWTYPE1 、 EPCPDNGWAddr1 、 EPCPDNGWTYPE2 、 EPCPDNGWAddr2	4.22.2
	V4.12.20	Zhao Fengxian	2012-10-08	611003312049 modify the parameter EPCRFS's minimum value to 0.	4.2.1 4.6.5 4.6.1.12 4.18.1 4.22.1
	V4.12.20	chengang	2012-10-11	Modify EPCCSGID value range 1-134217727	4.2.1 4.18.1 4.22.1 4.23.1 4.23.2
	V4.12.20	wuhongsh	2012-10-15	Modify EPCCSGID's code	4.2.1

		eng		length to 9	4.18.1 4.22.1 4.23.1 4.23.2
	V4.12.20	wuhongsheng	2012-10-18	EC 611003345431	4.2.1 4.6.5 4.16.1.12 4.18.1 4.22.1
	V4.12.20	Yangxiaoli	2012-10-22	611003359733 Add the description of OEPCAPN 、 OPDNTYPE and OEPCADDROPTION	4.22.3
	V4.12.20	Luobao	2012-10-23	Parameter "3DESKEYID" should rename "TRIDESKEYID",and modify the description	4.1.1 4.1.2 4.1.4 4.16.1.1
	V4.12.20	Luobao	2012-11-06	611003409810 Modify description of IMSI in chapter '4.1.4'.	4.1.4
	V4.12.20	Zhangxiangcai	2012-11-07	Modify Qry Auth interface, delete the description of "0,Ki is not encrypted ."	4.16.1.1
	V4.12.20	WangWei	2012-11-20	611003350216	4.10.2
	V4.12.20	WenJinliang	2012-11-26	Add the explains for how modify the PDNGW address	4.22.3
	V4.12.20	chengang	2012-11-28	Modify osk,osk1,osk2,tsk,smssk ,msk,vtsk,dsk,gprssk Code Length is 1-50.	4.2.1 4.16.1.6 4.18.1
	V4.12.20	DaiXudong	2012-11-28	1. Add parameters: QOSList, APNOIREPLIST 2. Modify the separator from '-' to '\$' in the	4.16.1.14

				explaining of such parameters: APNList, PDNGWHostList, PDNGWRealmList 3. The base number of all the fields of list type is changed to 50.	
	V4.12.20	ChenGang	2012-11-29	SrvCode1 delete It is compose of 4-digit Arabic numerals.	4.16.1.6
	V4.13.10	Guohua	2012-12-11	Camel Phase 1	4.2.1,4.13.2,4.13.3, 4.16.1.6,4.18.1
	V4.13.10	ChenGang	2012-12-20	Add active and NotiCSE eg for Camel	4.13.2 4.13.3 4.13.4 4.13.6 4.13.8 4.13.10
	V4.13.10	wangjianxi ang	2013-1-4	Add ErrorCode:44	5.1Appendix 1
	V4.13.10	Zhao Fengxian	2013-01-09	611003568641 , Modify the Code Length of NEWIMEISV	4.25.1
	V4.13.10	Ma Hongli	2013-1-21	1.Modify the valid value of DEFCALL 2.New parameter:BCID 3.Add Error code: 108223,108224,108225	4.2.1 4.6.5 4.12.1 4.16.1.2 4.16.1.9 4.18.1 5.1
	V4.13.10	Zhao Fengxian	2013-01-24	611003590269, modify the default value of dftCall to be 0. 611003598863, modify the length of dftCall to be 1.	4.13.2 4.13.3 4.13.6 4.13.7 4.13.8 4.13.10 4.13.12
	V4.13.10	Guohua	2013-2-6	Introduce "disable call forward" feature related	4.2.1 Add User 4.8.1 Mod SS

				parameters	4.8.2 Act SS 4.16.1.4 Qry User 4.18.1 Add Pro 4.18.2 Mod Pro
	V4.13.10	Zhao Fengxian	2013-02-18	611003603248 EPCPDNAddr should not be IPV4 or IPV6 simultaneously.	4.2.1 4.5 4.22.2 4.22.3
	V4.13.10	Zhao Fengxian	2013-02-18	611003630741 Modify the parameter GPRSCSITPL to GRPSCSITPL	4.16.1.6
	V4.13.10	Xupingle	2013-03-15	611003680423,modified VALIDTIME's "Para Description", add the value:2000-01-01 00-00-00 4.4.1	4.4.1
	V4.13.10	Zhao Fengxian	2013-03-18	611003675391 add notes to the interface of MOD APNPROF	4.22.3
	V4.13.10	ZhangXiangCai	2013-04-10	Modified the Command function description of the command code" Mod ISDN "	4.4.2
	V4.13.10	Zhao Fengxian	2013-04-12	611003728625 add TYPE, ATTR, Code Length description of the parameter CFF_A in the interface of Query subscription information of supplementary service	4.16.1.4
	V4.13.10	DaiXudong	2013-04-15	Modify the attribute of parameter "NAM" from "C" to "O". (EC 611003725188)	4.2.1
	V4.13.10	DaiXudong	2013-04-15	Modify the case of parameter "EPSQOSID". (EC 611003729118)	4.5
	V4.13.10	Guohua	2013-04-23	add SDSCtlName、SCCASNumber、IPSMGWNumber、UNRI	4.2.1、4.6.5、4.16.1.11、4.16.1.15、4.18.1

				、UNRR in VoLTE.	
	V4.13.10	DaiXudong	2013-04-25	Add ";" to MML commands and correct the wrong "IITEM". (EC: 611003751172 611003751150 611003751160 611003754411 611003753983)	4.15 4.16.1.10
	V4.13.10	Yangxiaoli	2013-05-02	611003748067 Modify the values of maxpri and defpri	4.8.1 4.16.1.4
	V4.13.10	Zhao Fengxian	2013-05-02	Combine ARD of WCDMA and LTE subscriber, enlarge the range of the parameter ARD from 0~3 to 0~63, delete the parameters EPCARD_0~EPCARD_5 .	4.2.1 4.6.1 4.6.5 4.16.1.2 4.18.1 4.22.1
	V4.13.10	DaiXudong	2013-05-10	Modify the description of parameter "GrpList1". (EC:611003764836)	4.24.1
	V4.13.20	WenJinliang	2013-05-29	Add Query Specific APN information	4.16.1.17
	V4.13.20	Chenxiaodong	2013-06-19	ADD MDT information	4.2.1 4.6.5 4.16.1.2 4.18.1
	V4.13.20	Luobao	2013-07-11	Add a new error code:110114	5.1
	V4.13.20	Guohua	2013-07-16	Add PDNGWVPLMNList information	4.16.1.14
	V4.13.20	YiFei	2013-07-22	Add APNRANGE	4.2.1 4.5 4.10.2 4.10.3 4.16.1.5 4.18.1
	V4.13.20	WenJinliang	2013-07-30	Add for LIPA and HGMLC	4.2.1 4.5

					4. 6. 5 4. 14. 4 4. 16. 1. 2 4. 16. 1. 7 4. 16. 1. 13 4. 16. 1. 14 4. 22. 2 4. 22. 3 4. 23. 1
	V4.13.20	Guohua	2013-8-9	Add PREIPSMGW、 SCADDRESS、 NOTIFYIMSAS information	4.2.1 4.6.5 4.16.1.2 4.18.1
	V4.13.20	Luobao	2013-08-12	Modify Qry WDSAUSER interface Add a new interface about License Usage	4.16.4 4.16.6
	V4.13.20	Luobao	2013-08-23	614003346351 Modify the Code length of parameter “VSTDNETIDLIST” ,the length is “1..128*50+49”	4.16.1.17
	V4.13.20	Luobao	2013-08-26	Modify interface by 614003348805 614003349784 614003349906 614003349941	4.16.4 4.16.6
	V4.13.20	Guohua	2013-10-18	Add ACTIVEDN、 RINGFIRST、GrpList4、 GrpList5 information	4.16.1.18 4.24.1
	V4.13.20	Wangdeyo ng	2013-10-25	Add CFDNRYTIME for REG FN; Add CFDNRYTIME/FAC_CFD NRYTIME/CDA_CFDNRY TIME/CDS_CFDNRYTIM E/PADA_CFDNRYTIME/P DS_CFDNRYTIME for Qry User;	4.8.3 4.16.1.4
	V4.13.20	Zhangxian	2013-10-27	Qry Tstate: 1. Modify the value of	4.16.5

		gcai		the parameter “OnHLR”. 2. Add the parameter of “LocationTime” infomation	
	V4.13.20	Zhangxian gcai	2013-11-11	Delete the parameter of SMSDN	4.16.1.18 4.24.1
	V4.13.20	DaiXudong	2013-11-11	Add examples for section 4.16.6 . (EC: 614003559561)	4.16.6
	V4.13.20	WenJinlian g	2013-12-13	Add the parameter of OPCTRIDESKEYID for OPC supports 3DES encryption function	4.1.1 4.1.2 4.16.1.1 5.1
	V4.13.20	Luobao	2013-12-20	614003626865 About Interface “MOD BSCEX”,the parameter “EPCDFTAPNType” is not use temporary.so the Para_value Description of parameter “EPCDFTAPN” should delete the “The parameters EPCDFTAPN and EPCDFTAPNType must appear in pairs.”	4.6.5
	V4.14.10	WenJinlian g	2013-12-25	Add the parameter of AESKEYID and OPCAESKEYID for USPP supports AES encryption function	4.1.1 4.1.2 4.16.1.1 5.1
	V4.14.10	Zhongweixi ang	2014-1-6	Add the parameter of EPCVSRVCC for USPP supports vSRVCC function	4.2.1 4.6.5 4.16.1.12 4.18.1 4.18.2 4.22.1
	V4.14.10	Wangdeyo ng	2014-1-7	Add LMU parameter For “Add User”,“Mod BscEx”,“Qry User”	4.2.1 4.6.5 4.16.1.2



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	V4.14.10	Guohua	2014-1-20	Add EOINR and ETINR information	4.2.1 4.6.5 4.16.1.2 4.18.1
	V4.14.10	Pengxiaohei	2014-1-20	614003727219 Delete the "The parameters EPCDFTAPN and EPCDFTAPNType must appear in pairs." for "ADD PRO" and "MOD PRO" interface.	4.18.1
	V4.14.10	Chenxiaodong	2014-1-21	614003763879 SUPLAUTIMER LAUTIMER SUPRAUTAUTIMER RAUTAUTIMER	4.2.1 4.6.5 4.16.1.2 4.18.1
	V4.14.10	Zhangzhenhua	2014-2-11	Add the parameter of MPSEPSPRIORITY for USPP supports MPS function	4.2.1 4.6.5 4.16.1.12 4.18.1 4.18.2 4.22.1
Note 1: Fill in the table each time the file is archived (to the product division or archives office)					
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ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)

1 Applicability

This specification is designed to specify the interface for service processing for 2G subscriber, 3G subscriber and LTE subscriber between NG HLR and BOSS.

For description about the communication protocol between ZXUN USPPV4.14.10_interface specification of command line (general).

This specification is developed and interpreted by ZTE Corporation only

2 Glossary, Definition and Acronyms

2.1 Glossary and Definition

HB interface: The interface between NG HLR system and BOSS.

2.2 Acronyms

Acronyms	Full Name
AMF	Authentication Management Field
AOCC	Advice of Charge Charging
AOCI	Advice of Charge Information
APN	Access Point Name
BAIC	Barring of All Incoming Calls
BAOC	Barring of All Outgoing Calls
BICR	Barring of Incoming Calls when Roaming outside the home PLMN country
BOIC	Barring of Outgoing International Calls
BOICE	Barring of Outgoing International Calls except those directed to the Home PLMN Country
BOSS	Business Operation Support System
CAMEL	Customized Applications for Mobile Network Enhanced Logic
CC	Country Code
CD	Call Deflection
CFB	Call Forwarding on mobile subscriber Busy
CFNRC	Call Forwarding on mobile subscriber Not Reachable
CFNRY	Call Forwarding on No Reply
CFU	Call Forwarding Unconditional
CH	Call Hold
CI	Call Identity
CLIP	Calling Line Identification Presentation
CLIR	Calling Line Identification Restriction

COLP	Connected Line identification Presentation
COLR	Connected Line identification Restriction
CS	Circuit Switched
CSE	CAMEL Service Environment
CSI	CAMEL Subscriber Information
CUG	Closed User Group supplementary service
CW	Call Waiting
D_CSI	Dialed Service CAMEL Subscription Information
ECT	Explicit Call Transfer
eMLPP	enhanced Multi-Level Precedence and Pre-emption service
GERAN	GSM/EDGE Radio Access Network
GMLC	Gateway Mobile Location Centre
GPRS	General Packet Radio System
GPRS_CSI	GPRS CAMEL Subscription Information
GSM	Global System for Mobile communication
HLR	Home Location Register
IP	Internet Protocol
IMSI	International Mobile Subscriber Identity
Ki	Individual subscriber authentication key
LCS	Location Services
MCC	Mobile Country Code
M_CSI	Mobility Management event CAMEL Subscription Informationz
MML	Man-Machine Language
MNC	Mobile Network Code
MPTY	MultiParty
MSIN	Mobile subscriber identity number
MSISDN	Mobile Station International ISDN Number
NAEA	North America Equal Access
NAM	Network Architecture Model
NDC	National Destination Code(s)
O_CSI	Originating CAMEL Subscription Information
ODB	Operator Determined Barring
PDP	Packet Data Protocol
PLMN	Public Land Mobile Network
PS	Packet Switch
QoS	Quality of Service
RSZI	Regional Subscription Zone Identity
SCF	Service Control Functions
SMS_CSI	Short Message Service CAMEL Subscription Information
SN	Serial Number

SS	Supplementary Service
SS_CSI	Supplementary Service Notification CAMEL Subscription Information
T_CSI	Terminating CAMEL Subscription Information
TDP	Trigger Detection Point
TIF_CSI	Translation Information Flag CAMEL Subscription Information
U_CSI	USSD CAMEL Subscription Information
UTRAN	UMTS Radio Access Network
VPLMN	Visited PLMN
VT_CSI	VMSC Terminating CAMEL Subscription Information
DN	Directory Number
LRN	Location Routing Number
SHLR	Smart HLR

3 MML Command Set List

Description: The listed command codes in the following table are all request command codes sent from BOSS to HLR interface processor.

The response command code sent to BOSS interface processor by HLR interface processor can be obtained by adding "ACK" prefix before the request command code, and is not listed in the table.

S/N	Command Code	Description
(1)Authentication		
1	Add Auth	Add authentication
2	Mod Auth	Modify authentication
3	Del Auth	Delete authentication
4	Add EncAuth	Add Encrypt Authentication Information
5	Qry Auth	Query authentication
(2)Add and delete user		
1	ADD USER	Create new user
2	DEL USER	Delete existing user
(3)Modify IMSI state		
1	MOD STATE	Halt and resume
(4)Modify IMSI and ISDN		
1	MOD IMSI	Change SIM card
2	MOD ISDN	Change ISDN number
(5)Modify network access mode		
1	Mod NAM	Modify network access mode of users
(6)Basic services		

1	MOD BSC	Modify user type, CS assignment PRI, equal access and roaming scheme.
2	MOD TELE	Modify telecommunication service
3	MOD ODB	Modify operator determined barring data (ODB data)
4	MOD BEAR	Modify bearer service
5	MOD BSCEX	Enhanced command: Modify user type , CS assignment PRI, equal access, roaming scheme, telecommunication service, ODB data and bearer service.

(7)Region restriction

1	SET RSZI	Add or modify user region restriction
2	DEL RSZI	Delete user regional restriction

(8)Supplementary services

1	MOD SS	Subscribe and cancel subscription of supplementary service; Modify control authority of call barring password and call barring password, inform the caller on forwarding, inform the forwarder on forwarding, display the called number on forwarding and modify call identification expansion subscription; Set maximum PRI and default PRI of eMLPP.
2	ACT SS	Activate call waiting (CW), call forwarding (CF) and call barring (CB).
3	REG FN	Register and activate type CF forwarded-to number.

(9)CUG service

1	Mod Cug	Add or modify CUG
2	Del Cug	Delete CUG
3	Mod Cidx	Modify CUG priority index
4	Del Cidx	Delete CUG priority index

(10)GPRS service

1	Mod GBsc	Modify user's basic GPRS information
2	Add PDP	Add PDP context
3	Mod PDP	Modify PDP context
4	Del PDP	Delete PDP context
5	Set TPLGPRS	Modify GPRS Template of subscriber

(11)Modify Location Information

1	Mod Loc	Modify Location Information
---	---------	-----------------------------

(12)Multi-number

1	Add ISDN	Add multi-number
2	Del ISDN	Delete multi-number

(13)CAMEL services

1	Mod CBsc	Subscribe basic information of CAMEL service.
2	Set OCSI	Subscribe CAMEL service O_CSI
3	Set TCSI	Subscribe CAMEL service T_CSI
4	Set SSCSI	Subscribe CAMEL service SS_CSI

5	Set UCSI	Subscribe CAMEL service U_CSI
6	Set GPRSCSI	Subscribe CAMEL service GPRS_CSI
7	Set SMSCSI	Subscribe CAMEL service SMS_CSI
8	Set VTCSI	Subscribe CAMEL service VT_CSI
9	Set MCSI	Subscribe CAMEL service M_CSI
10	Set DCSI	Subscribe CAMEL service D_CSI
11	Set TIFCSI	Subscribe CAMEL service TIF_CSI
12	Set MTSCSI	Subscribe CAMEL service MT_SMS_CSI
13	Set MGCSI	Subscribe CAMEL service MG_CSI
14	Del CSI	Delete CAMEL services
15	Set TPLCAMEL	Modify Camel Template of subscriber
(14)Location services		
1	Set GMLC	Subscribe GMLC
2	Del GMLC	Delete GMLC
3	SET LCS	Subscribe MS location type
4	Set GMLCBSC	Subscribe GMLC Basic Information
(15)SCF address		
1	Set SCF	Add or modify SCF address
2	Del SCF	Delete SCF address
(16)Query		
1	Qry User	Query user information
2	Qry IMEISV	Query IMEISV information
3	Qry WDSAUser	Query DSA User information
4	Qry TState	Query Terminal State
(17)Number-change records		
1	Del ISDNChg	Delete number-change records
2	Qry ISDNChg	Modify number-change records
(18)Profile Used in Add User Command Maintenance		
1	Add Pro	Add profile
2	Mod Pro	Modify profile
3	Del Pro	Delete profile
4	Qry Pro	Query profile
(19)DualIMSI interface		
1	Mod DualIMSI	Subscribing DualIMSI Number
(20)Modify interface of subscriber's ALS service information		
1	Mod Als	Modify subscriber's ALS service information
(21)Query QoS Profile ID interface		
1	Qry QoSID	Query QoS Profile ID List Information
(22)EPC Service		
1	Set EPCBsc	Modify EPC basic Services
2	Add APNPROF	Add APN subscription
3	Del APNPROF	Delete APN subscription
4	Mod APNPROF	Modify APN subscription

5	Set TPLAPNCP	Modify APN template
(23)CSG Service		
1	Mod Csg	Add or Modify CSG information
2	Del Csg	Delete CSG information
(24)Extension Service		
1	Set ExtSrv	Set Extension Service
2	Qry ExtSrv	Query Extension Service
(25)ADC Service		
1	INF IMEISVCHG	IMEISVCHG change notice interface
2	INF DELUSER	Delete subscriber notice interface
3	INF IMEISVINIT	IMEISVINIT change notice interface
4	INF APNCHG	APNCHG change notice interface

4 Detailed Description of MML Commands

The parameter inside square brackets in command lines is optional, and "[" or "]" should not be input. .

The length of the parameters in the command parameter list is in the unit of byte. If the para_value is of a fixed length, the specific length value should be filled. If the para_value is variable, the length range should be filled, with ".." to separate.. This specification stipulates:

1. Parameter values involved in the MML commands are all in string, and there is no need to identify them with quotation mark ("").
2. An **IMSI** number is made up of MCC + MNC + MSIN. For example, IMSI Number: 460001512999001, among which MCC is 460; MNC is 00; MSIN. IMSI must be input in the format of MCC + MNC + MSIN, otherwise, the system will regard this parameter as illegal.
3. **MSISDN** consists of CC + NDC + SN. For example, MSISDN: 8613956431262, among which CC is 86; NDC is 139; SN is 56431262. MSISDN must be input in the format of CC+NDC+SN; otherwise the system will regard this parameter as illegal.
4. If two parameters are separated by "/", you can input only one at one time. Error will be returned if you input both of the parameters. For instance, "IMSI/MSISDN" means you can either input IMSI or MSISDN and error will be returned if you input both of them.
5. This specification is applicable to the subscriber of GSM,WCDMA and EPC. Parameters defined in this specification, except those as specified only for GSM,WCDMA or EPC subscribers, are available to both GSM,WCDMA and EPC subscribers.
6. The minimum length of IMSI and MSISDN is 6.
7. The command codes and parameter names are not case-sensitive. If no special instructions, the values of parameters are not case-sensitive.

4.1 Authentication

4.1.1 Add Authentication Information

[Command code] Add Auth

[Command function] Add Authentication Information

[Input format]

Format for adding WCDMA Authentication:

Add Auth: IMSI=,SecVer=,Ki=[,AMF=][,AKFg=][,reSynFg=][,KeyID=][,OPc
=][,OPcKeyID =][,OVID =][, HSMKeyNo=][, SRESDER=][, TriDESKeyID
=][,OPCTRIDESKEYID=][,AESKEYID=][,OPCAESKEYID=]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	Ki	Authentication Key	HEXSTR	M	32, 1..16	When the parameter SecVer's value is not 255, Ki must be a 32-digit hexadecimal number; When the parameter SecVer's value is 255,it means GT for Authentication forwarding,Ki should be a 1..16 digit decimal number.
3	SecVer	Authentication Algorithm	NUMSTR	M	1..3	0: COMP128-1 algorithm 1: COMP128-2 algorithm 2: COMP128-3 algorithm 3:COMP128-4 algorithm 4:Specific A3/A8 algorithm 5:Specific A3/A8-1 algorithm 20: Milenage algorithm 21: XOR algorithm 22:Default AKA Algorithm 23:Specific AKA-1 24:Specific AKA-2 255:Fake Ki

4	AKFg	Anonymous Key Flag	NUMSTR	O	1	0: Without anonymous key flag 1: With anonymous key flag Default value: 0 Effective only when the parameter SecVer is 20 or 22,23,24.
5	reSynFg	Resynchronization Anonymity Key Flag	NUMSTR	O	1	0: Without resynchronization anonymity key flag.1:With resynchronization anonymity key flag. Default value: 0.Effective only when the parameter SecVer is 20 or 22,23,24.
6	AMF	Authentication Management Domain	HEXSTR	C	4	Input the parameter AMF if the parameter SecVer is 20 or 22,23,24.
7	KeyID	Decryption key index	NUMSTR	O	1..3	Value range:0~255. 0: the parameter Ki is not encrypted 1~255: see the OMC configuration"AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration". Default value:0.
8	OPc	Operator decryption key of grade 2	HEXSTR	C	32	32-bit HEX figure that cannot be all "F". Effective Only when the parameter SecVer is 3 or 20,22,23,24, other value please refer to description.

9	OPcKeyID	OPc decryption key index	NUMSTR	O	1..3	<p>Value range: 0~255.</p> <p>0: the parameter OPc is not encrypted.</p> <p>1~255 : see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration".</p> <p>Default value: 0.</p> <p>Effective only when the parameter SecVer is 3 or 20,22,23,24.</p>
10	OVID	Milenage variable index	NUMSTR	C	1..4	<p>Value range: 0~5000.</p> <p>0 or not used: not subscribe.</p> <p>Others: see the OMC configuration "Global Service Configuration->WCDMA Global Service Configuration->Milenage Parameter Configuration".</p> <p>Default value: 0.</p> <p>Effective only when the parameter SecVer is 3 or 20,22,23,24.</p>
11	HSMKeyNo	HSM decryption key NO.	NUMSTR	O	1..3	<p>Value range: 0~255. Valid in case of Support HSM License.</p> <p>0 or not used: Ki would be encrypted by the smallest HSM decryption key NO. configured in OMC.</p> <p>1~255: see the OMC configuration "AdminDomain Public Configuration->HSM Configuration->HSM Encryption of AKey Configuration".</p> <p>Default value: 0.</p>

12	SRESDER	SRES Derivation Function	NUMSTR	O	1	0: Function #1 1: Function #2 Default value: 0. Effective when the parameter SecVer is 3.
13	TriDESKeyID	3DES Key ID	NUMSTR	O	1..5	Value range: 0~65535, 0: Ki is not encrypted with 3DES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". Default value:0. TriDESKeyID conflicts with KeyID,AESKeyID.
14	OPCTRIDESKEYID	OPC 3DES Key ID	NUMSTR	O	1..5	Value range: 0~65535, 0: OPC is not encrypted with 3DES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". Default value:0. OPCTriDESKeyID conflicts with OPCKeyID,OPCAESKeyID. Effective only when the parameter SecVer is 3 or 20,22,23,24.

15	AESKEYID	AES Key ID	NUMSTR	O	1..5	<p>Value range: 0~65535, 0: Ki is not encrypted with AES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->AES Deciphering Key Configuration". Default value:0. AESKeyID conflicts with KeyID,TriDESKeyID.</p>
16	OPCAESKEYID	OPC AES Key ID	NUMSTR	O	1..5	<p>Value range: 0~65535, 0: OPC is not encrypted with AES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->AES Deciphering Key Configuration". Default value:0. OPCAESKeyID conflicts with OPCKeyID,OPCTriDESKeyID. Effective only when the parameter SecVer is 3 or 20,22,23,24.</p>

[Notes]

- When the parameter SecVer's value is 3 or 20,22,23,24, either of OVID and OPc must be selected. If all of them exist, only OVID's value is effective. While the parameter SecVer's value is 3 or 20,22,23,24, and the parameter IMSI is in the code segment records in the OMC configuration "Global Service Configuration->WCDMA Global Service Configuration->IMSI Code Segment Configuration", neither of OVID or OPc is needed.
- When the parameter SecVer's value is 255, all the other optional parameters are ignored.

[Examples]

- Add a common IMSI:

Add Auth : IMSI=460001122334455 , SecVer=2 ,
Ki=12345678901234567890123456789012, KeyID=1;

2. Add a Milenage IMSI:

Add Auth : IMSI=460001122334455 ,
 SecVer=20 ,Ki=12345678901234567890123456789012, KeyID =1, OVID=1, AMF=1234;

3. Add a FakeKi IMSI:

ADD AUTH:IMSI=460001122334455,Ki=8613900000000,SECVER=255;

4.1.2 Modify the Authentication Information

[Command code] Mod Auth

[Command function] Modify Authentication Information

[Input format]

Mod Auth : IMSI= [,SecVer=][,Ki=][,AKFg=][,reSynFg=][,AMF=][,KeyID=][,OPC=][,OPcKeyID=][,OVID=][,HSMKeyNo=][,SRESDER=][,TriDESKeyID=][,OPCTRIDESKEYID=][,AESKEYID=][,OPCAESKEYID=]

[Parameter Description]

S/N	Para_Name		Para_Value				
	Name	Meaning	Type	Attr.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	
2	Ki	Authentication Key	HEXSTR	O	32,1..16	When the parameter SecVer's value is not 255, Ki must be 32-digit hexadecimal number, can not be all F; When the parameter SecVer's value is 255, it means GT for Authentication forwarding,Ki should be 1..16 digit decimal number.	
3	SecVer	Authentication Algorithm	NUMSTR	O	1..3	0: COMP128-1 algorithm 1: COMP128-2 algorithm 2: COMP128-3 algorithm 3:COMP128-4 algorithm 4:Specific A3/A8 algorithm	

						5:Specific A3/A8-1 algorithm 20: Milenage algorithm 21: XOR algorithm 22:Default AKA Algorithm 23:Specific AKA-1 24:Specific AKA-2 255:Fake Ki
4	AKFg	Anonymous Key Flag	NUMSTR	O	1	0: Without anonymous key flag 1: With anonymous key flag Effective only when the parameter SecVer is 20 or 22,23,24.
5	reSynFg	Resyncronization Anonymity Key Flag	NUMSTR	O	1	0: Without resynchronization anonymity key flag. 1:With resynchronization anonymity key flag. Effective only when the parameter SecVer is 20 or 22,23,24.
6	AMF	Authentication Management domain	HEXSTR	O	4	Input the parameter AMF if the parameter SecVer is modified from other value to 20 or 22,23,24.
7	KeyID	Decryption Key Index	NUMSTR	O	1..3	Value range: 0~255. 0: parameter Ki is not encrypted. 1~255: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration".
8	OPc	Operator decryption key of grade 2	HEXSTR	O	32	32-bit HEX figure, all "F" means to delete the OPc's value. Effective Only when the parameter SecVer is 3 or 20,22,23,24; other value please

						refer to the description.
9	OPcKeyID	OPc decryption key index	NUMSTR	O	1..3	<p>Value range: 0~255. 0: the parameter OPc is not encrypted. 1~255 : see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration". Effective only when the parameter SecVer is 3 or 20,22,23,24.</p>
10	OVID	Milenage variable index	NUMSTR	O	1..4	<p>Value range: 0~5000. 0: De-subscribed. Others: see the OMC configuration "Global Service Configuration->WCDMA Global Service Configuration->Milenage Parameter Configuration". Effective only when the parameter SecVer is 3 or 20,22,23,24.</p>
11	HSMKeyNo	HSM decryption key NO.	NUMSTR	O	1..3	<p>Value range: 0~255. Valid in case of Support HSM License. 0 or not used: Ki would be encrypted by the smallest HSM decryption key NO. configured in OMC. 1~255: see the OMC configuration "AdminDomain Public Configuration->HSM Configuration->HSM Encryption of AKey Configuration".</p>
12	SRESDER	SRES Derivation Function	NUMSTR	O	1	<p>0: Function #1 1: Function #2 Effective when the parameter SecVer's value is 3.</p>
13	TriDESKeyID	3DES Key ID	NUMSTR	O	1..5	<p>Value range: 0~65535, 0: Ki does not need to be encrypted with 3DES. 1~65535: see the OMC</p>

							configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". TriDESKeyID conflicts with KeyID,AESKeyID.
14	OPCTRIDESKEYID	OPC 3DES Key ID	NUMSTR	O	1..5		Value range: 0~65535, 0: OPC is not encrypted with 3DES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". OPCTriDESKeyID conflicts with OPCKeyID,OPCAESKeyID. Effective only when the parameter SecVer is 3 or 20,22,23,24.
15	AESKEYID	AES Key ID	NUMSTR	O	1..5		Value range: 0~65535, 0: Ki is not encrypted with AES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->AES Deciphering Key Configuration". Default value:0. AESKeyID conflicts with KeyID,TriDESKeyID.
16	OPCAESKEYID	OPC AES Key ID	NUMSTR	O	1..5		Value range: 0~65535, 0: OPC is not encrypted with AES. 1~65535: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->AES Deciphering Key Configuration". Default value:0.

						OPCAESKeyID conflicts with OPCKeyID,OPCTriDESKeyID. Effective only when the parameter SecVer is 3 or 20,22,23,24.
--	--	--	--	--	--	-------------------------------------------------------------------------------------------------------------------

[Notes]

- When the parameter SecVer's value is 3 or 20,22,23,24, either of OVID and OPc must be selected. If both of them exist, only OVID's value is effective. While the parameter SecVer's value is 3 or 20,22,23,24, and the parameter IMSI is in the code segment records in the OMC configuration "Global Service Configuration->WCDMA Global Service Configuration->IMSI Code Segment Configuration", neither of OVID nor OPc is needed.

[Examples]

- Modify not Milenage IMSI to Milenage IMSI:

Mod Auth : IMSI=460001122334455 , SecVer=20 ,
Ki=12345678901234567890123456789012 , KeyID =1, OVID=1,AMF= 1234;

- Modify Milenage IMSI's parameters:

Mod Auth : IMSI=460001122334455 , Ki=12345678901234567890123456789012,
OVID=2, AKFg=1, AMF= 2345;

4.1.3 Delete Authentication Information

[Command code] Del Auth

[Command function] Delete Authentication Information

[Input format]

Del Auth: IMSI=

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number

[Examples]

- Delete Authentication Information:

Del Auth : IMSI=460001122334455;

4.1.4 Add Encrypt Authentication Information

[Command code]Add EncAuth

[Command function]Add Encrypt Authentication Information

[Input format]

Add EncAuth: <IMSI>< KeyID ><Integritykeyid><SecVer>
 <Ki><AKFg><reSynFg><AMF><OPC><OPcKeyID><OVID>
 <HSMKeyNo>< SRESDER>< TriDESKeyID ><Reserve><Integritycheck>

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	16 Hex.digits	Less than 16 Hex.digits right up " F "
2	KeyID	Decryption Key Index	NUMSTR	M	4 Hex.digits	Value range:0000~00FF. 0000: the parameter Ki is not encrypted 0001~00FF: see the OMC configuration"AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration". Default value:0000.
3	Integritykeyid	Decryption Integrity Key Index	NUMSTR	M	4 Hex.digits	Value range:0000~00FF. 0000: Auth Info do not need check Integrity 0001~00FF: see the OMC configuration"AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration". Default value:0000.
4	SecVer	Authentication	NUMSTR	M	2	Value :

		Algorithm			Hex.digits	00:COMP128-1 Algorithm 01:COMP128-2 Algorithm 02:COMP128-3 Algorithm 03:COMP128-4 Algorithm 04:Specific A3/A8 algorithm 05:Specific A3/A8-1 algorithm 14:Milenage Algorithm 15:XOR Algorithm 16:Default AKA Algorithm 17:Specific AKA-1 18:Specific AKA-2
5	Ki	Authentication Key	NUMSTR	M	32 Hex.digits	32 bit hexadecimal number
6	AKFg	Anonymous Key Flag	NUMSTR	M	2 Hex.digits	00: Without anonymous key flag 01: With anonymous key flag Default value: 00 Effective only when the parameter SecVer is 20 or 22,23,24.
7	reSynFg	Resyncronization Anonymity Key Flag	NUMSTR	M	2 Hex.digits	00: Without resynchronization anonymity key flag. 01:With resynchronization anonymity key flag. Default value: 00 Effective only when the parameter SecVer is 20 or 22,23,24.
8	AMF	Authentication Management Domain	NUMSTR	M	4 Hex.digits	Default value:FFFF. Effective only when the parameter SecVer is 20 or

						22,23,24.
9	OPC	Operator decryption key of grade 2	NUMSTR	M	32 Hex.digits	32-bit HEX figure. Default value: FFFFFFFFFFFFFFFFFFFF FFFF. Effective Only when the parameter SecVer is 3 or 20,22,23,24.
10	OPcKeyId	OPc decryption key index	NUMSTR	M	4 Hex.digits	value range: 0000~00FF. 0000: the parameter OPc is not encrypted. 1~255 : see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration". Default value: 0000. Effective only when the parameter SecVer is 3 or 20,22,23,24.
11	OVID	Milenage variable index	NUMSTR	M	4 Hex.digits	value range: 0~5000. 0: not subscribe. Others: see the OMC configuration "Global Service Configuration->WCDMA Global Service Configuration->Milenage Parameter Configuration". Default value: 0000. Effective only when the parameter SecVer is 3 or 20,22,23,24.
12	HSMKeyNo	HSM decryption key NO	NUMSTR	M	2 Hex.digits	value range: 00~FF. Valid in case of Support HSM License. 0: Ki would be encrypted by the smallest HSM decryption key NO. configured in OMC. 1~255: see the OMC configuration "AdminDomain Public Configuration->HSM

						Configuration->HSM Encryption of AKey Configuration". Default value: 00.
13	SRESDER	SRES Derivation Function	NUMSTR	M	1	0: Function #1 1: Function #2 Default value: 0. Effective when the parameter SecVer is 3.
14	TriDESKeyID	3DES Key ID	NUMSTR	M	4 Hex.digits	Value range: 0000~FFFF, 0000: Ki is not encrypted with 3DES. 0001~FFFF: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". Default value:0000. TriDESKeyID conflicts with KeyID while both of them don't equal to 0000.
15	Reserve	Reserve field	NUMSTR	M	11 Hex.digits	all "0"
16	Integritycheck	MAC Integrity Value	NUMSTR	M	8 Hex.digits	Length :8

[Notes]

1. Content after ':' is valid in MML command.
2. The length of Content after ':' is 128. if it is not equal to 128, the authentication Information is not integral.

[Examples]

IMSI:**460000000000099**

KeyID:**11**

Integritykeyid:**12**

SecVer:**24**

Ki: **DF8B77D5DBB58B3703827401B7C11A6C**

AKFg:01

reSynFg:01

AMF:1AC2

OPC:无

OPcKeyId:0

OVID:3000

HSMKeyNo:00

SRESDER:0

TriDESKeyID: 0000

Reserve:0000000

Integritycheck: C8E7AE4F

The MML command is:

ADD

```
EncAuth:4600000000000099F000B000C18DF8B77D5DBB58B3703827401B7C11A6C01011
AC2FFFFFFFFFFFFFFF0000BB80000000000000000C8E7AE4F;
```

4.2 Adding User and Deleting User

4.2.1 Add User

[Command code] Add User

[Command function] Create A New Mobile Subscriber

[Input format]

```
Add User : IMSI=, MSISDN=,Profile=[,SubType=][,NAM=][,MSType=]
[,,CSPri=][,ARD=][,NAEA=][,Tele=][,EmegCall=][,RCType=]
[,,AddRCType=][,SMMO=][,SMMT=][,Fac3=][,AutoFac3=][,Fac4=]
[,,RoamSch=][,PsRoamSch=][,BOC=][,BIC=][,BSS=][,BR=][,BPR=]
[,,BFN=][,BCT=][,BICT=][,BFICT=][,BT=][,BIP=][,ODBPL_3=]
[,,ODBPL_4=][,BPOS=][,CLIP=][,CLIPOpt=][,CLIR=][,CLIROpt=]
[,,COLP=][,COLPOpt=][,COLR=][,CW=][,CH=][,CFU=][,CFUNTC=]
[,,CFURDP=][,CFB=][,CFBNTC=][,CFBNTF=][,CFBRDP=][,CFNRY=]
[,,CFNRYNTC=][,CFNRYNTF=][,CFNRYRDP=][,CFNRC=][,CFNRCNTC=]
[,,CFNRCRDP=][,BAOC=][,BOIC=][,BOICE=][,BAIC=][,BICR=]
[,,MPTY=][,ECT=][,CD=][,CDNTC=][,CDRDP=][,AOCC=][,AOCI=]
[,,CUG=][,eMLPP=][,CBCtrl=][,AIICDA=][,AIICDS=][,CDA300=]
[,,CDA1200=][,CDA75=][,CDA2400=][,CDA4800=][,CDA9600=]
[,,GenCDA=][,CDS1200=][,CDS2400=][,CDS4800=][,CDS9600=]
```

[,GenCDS=][,PA300=][,PA1200=][,PA75=][,PA2400=][,PA4800=]
[,PA9600=][,GenPACA=][,PDS2400=][,PDS4800=][,PDS9600=][,GenP
DS=][,ASCDA=][,ASCDS=][,SFCDA=][,SFCDS=][,PLMNBS_1=][,PLMN
BS_2=][,PLMNBS_3=][,PLMNBS_4=][,PLMNBS_5=][,PLMNBS_6=][,PL
MNBS_7=][,PLMNBS_8=][,PLMNBS_9=][,PLMNBS_A=][,PLMNBS_B=][
,PLMNBS_C=][,PLMNBS_D=][,PLMNBS_E=][,PLMNBS_F=][,PLSS_1=][
,PLSS_2=][,PLSS_3=][,PLSS_4=][,PLSS_5=][,PLSS_6=][,PLSS_7=][,P
LSS_8=][,PLSS_9=][,PLSS_A=][,PLSS_B=][,PLSS_C=][,PLSS_D=][,PL
S_E=][,PLSS_F=][,CFD=][,CFDNTC=][,CFDNTF=][,OVRCFB=][,OVRCF
NRY=][,OVRCFNRC=][,TIFFlag=][,State=][,LocInfo=][,TrigTCSI=][,OP
hase=][,ONotICSE=][,OAct=][,OTDP=][,OSK=][,OSCF=][,TPhase=][,T
NotICSE=][,TAct=][,TTDP=][,TSK=][,TSCF=][,SMOpt=][,Charge=][,P
DPTType=][,PDPAddr=][,VPLMN=][,QoS=]
[,APN=][,APNRANGE=][,PDPCharge=][,VGCS=][,VGCSRoam=][,VGCS
Lst=][,VBS=][,VBSRoam=][,VBSLst=][,ZCSet=][,SType=][,UUS1=][,U
US2=][,UUS3=][,OFAID=][,CFBN=][,MC=][,Nbr_SB=][,Nbr_User=][,C
NAP=][,CNAPOpt=][,CtrlSche=][,BORO=][,GPRSTPL=][,OCSITPL=][,T
CSITPL=][,UCSITPL=][,TRIMPTY=][,QOSID=][CB_PWD=][,EXTType=]
[,SSET=][,SMSRouterID=][,SIPID=][,DEFCALL=][,APNID=][,FM=][,FM
GRP=][,FMSUPER=][,OCCBS=][,TCCBS=][,OriginFAID=][,FRAUDID=][
,OINI=][,TINI=][,OINR=][,TINR=][,ISTAlertTimer=][,ISTAlertOpt=][,I
STVLROPT=][,ISTGMSCOPT=][,RestrictCF=][,ExtPDPType=][,ExtPDPA
ddr=][,CamelCtlName=][,CBNotChkPwd=][,BCID=][,CFF=][,MDTUSER
CONSENT=][,AREASRVID=][,EOINR=][,ETINR=]
[,EPCCHARGCHRT=][,EPCROAMSCH=][,EPCSTNSR=][,EPCAMBRUP=][
,EPCAMBRDOWN=][,EPCAPNOIRep=][,EPCRFPSP=][,EPCICSIND=][,EP
CCSGID=][,EPCEExpirationDate=][,EPCAPNCPTPL=][,EPCAPN=][,PDNTy
pe=][,EPCPDNNUM=][,EPCPDNTYPE1=][,EPCPDNAddr1=][,EPCPDNTY
PE2=][,EPCPDNAddr2=][EPSQOS=][,EPSQOSID=][,VPLMNDAA=][,PD
NGWATYPE=][,EPCPDNGWNUM=][,EPCPDNGWTYPE1=][,EPCPDNGWA
ddr1=][,EPCPDNGWTYPE2=][,EPCPDNGWAddr2=][,PDNGWFQDNHost
=][,PDNGWFQDNRealm=][,APNCHARGE=][,APNAMBRUP=][,APNAMBR
DOWN=][,APNOIRep=][,EPCN3ARD_0=][,EPCN3ARD_1=][,EPCN3ARD
_2=][,EPCN3ARD_3=][,EPCN3ARD_4=][,EPCN3IPACC=][,EPCN3IPACC
APN=][,EPCSTIMEOUT=][,NO3GPPROAMSCH=][,EPCRELAYNODEIND=]
][,EPCROAMSCHID=][,SupMIP6FeaVec=][,MIP6FeaVec_1=][,MIP6FeaV
ec_2=][,MIP6FeaVec_3=][,MIP6FeaVec_4=][,MIP6FeaVec_5=][,MIP6F
eaVec_6=][,MIP6FeaVec_7=][,MIP6FeaVec_8=][,MIP6FeaVec_9=][,SD
SCtlName=][,PREIPSMGW=][,SCADDRESS=][,NOTIFYIMSAS=][,APNLI
PAP=][,CSGAPN=][,EPCVSERVCC=][,LMU=][,SUPLAUTIMER=][,LAUTIM
ER=][,SUPRAUTAUTIMER=][,RAUTAUTIMER=][,MPSEPSPRIORITY=]

[Parameter Description]

S/	Para_Name	Para_Value	
----	-----------	------------	--

N	Name	Meaning	Type	At tr.	Code Length	Para_value Description	Network Access Mode
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number	CS PS-GPRS PS-EP S
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number	CS PS-GPRS PS-EP S
3.	Profile	The template index of default information for add user	NUMSTR	M	1..5	Value Range: 0~65535 See 4.18.1 for the example of profile template.	CS PS-GPRS PS-EP S
4.	SubType	Subscriber type	NUMSTR	O	1	0: GSM subscriber 1: WCDMA subscriber 2: LTE subscriber Default value: 1	CS PS-GPRS PS-EP S
5.	NAM	Network access mode	NUMSTR	O	1	0: Access CS and PS 1: Only access CS 2: Only access PS Default value: 0	CS PS-GPRS PS-EP S
6.	MSType	Mobile Station Category	NUMSTR	O	1..3	The valid value is as follows: 0: unknown source 1: operator, French 2: operator, English 3: operator, German 4: operator, Russian 5: operator, Spanish 6: language agreed by both parties (Chinese) 7: language agreed by both parties 8: language agreed by both parties (Japanese) 9: domestic operator 10: ordinary subscriber 11: subscriber with priority 12: data call 13: test call 14: EGSM subscriber	CS

						15: payphone 16~219: Operator-defined 240: ordinary, free 241: ordinary, regular 242: ordinary, user list, prompt 243: ordinary, printer, prompt 244: priority, free 245: priority, regular 248: ordinary user, used between local offices Default value: 0	
7.	CSPri	The assigned priority level of CS	NUMSTR	O	1..2	Choose one of the following values: 0~63 Default value: 0	CS
8.	ARD	Access restriction parameter	NUMSTR	O	1..2	0~63: 0-Allow to access GERAN、UTRAN、GAN、I-HSPA-Evolution 、 E-UTRAN 、 HO-To-Non-3GPP-Access; 1-Not allow to access UTRAN; 2-Not allow to access GERAN; 4-Not allow to access GAN; 8-Not allow to access I-HSPA-Evolution; 16-Not allow to access E-UTRAN; 32- Not allow to access HO-To-Non-3GPP-Access. Other value is combined with above values. Default value: 0	CS PS-GPRS PS-EP S
9.	NAEA	Equal Access	NUMSTR	O	6	The first two are constantly input as 22 and the latter four are taken from OMC configuration data "WCN	CS

						Domain Service Configuration->Custom Service Configuration-> NAEA Configuration” Default value: 000000; it means NAEA is not subscribed	
10.	Tele	Telephone	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
11.	EmegCall	Emergency Call	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
12.	SMMO	Point-to-Point Short Message Call Originating	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS PS-GPRS
13.	SMMT	Point-to-Point Short Message Call Terminating	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS PS-GPRS
14.	Fac3	Facsimile group and alternative voice	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
15.	AutoFac3	Automatic Facsimile Group3	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
16.	Fac4	Facsimile Group 4	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
17.	RoamSch	Roaming Scheme Name	STRING	O	1..30	Take value from OMC configuration data “WCN Domain Service Configuration->Roaming Data Configuration->Circuit-Switching Domain Roaming Scheme Configuration”. if the value is “*”, it means no roaming scheme.	CS
18.	BOC	(ODB)Barring of Outgoing Calls	NUMSTR	O	1	Select one from the followings: 0: no call barring 1: All outgoing calls	CS PS-GPRS PS-EP S

						barred 2: International outgoing calls barred 3: International outgoing calls barred except in the home PLMN 4: Barring of all outgoing calls roaming outside the home PLMN country 5: International region outgoing calls barred 6: International region outgoing calls barred except in the home PLMN. 7: International outgoing calls barred except in the home PLMN country and international region outgoing calls barred Default value: 0	
19.	BIC	(ODB)Barring of Incoming Calls	NUMSTR	O	1	The value is one of the followings: 0: No incoming call barred 1: Barring all incoming calls; 2: Barring incoming calls roaming outside the home PLMN country 3: Barring incoming calls roaming outside the zone of the home PLMN country. Default value: 0	CS
20.	BSS	(ODB)Barring of Supplementary Service	NUMSTR	O	1	0: No restriction 1: Restriction Default value: 0	CS
21.	BR	(ODB)Barring of Roaming	NUMSTR	O	1	The value is one of the followings: 0: No roaming barring 1: Barring of Roaming outside the home PLMN 2: Barring of Roaming outside the home PLMN	CS PS-GPRS PS-EP S

						country Default value: 0	
22.	BPR	(ODB)Barring of High Rate Calling	NUMSTR	O	1	The value is one of the following: 0: No barring 1: Barring of PRC Information calls 2: Barring of PRC Entertainment calls. 3: Barring of PRC Information & Entertainment calls Default value: 0	CS
23.	BFN	(ODB)Barring of Forwarding Number Registration	NUMSTR	O	1	The value is one of the followings: 0: No barring 1: Barring of registration of any call forwarded-to number 2: Barring of registration of any international call forwarded-to number; 3: Barring of registration of any international call forwarded-to number except in the HPLMN country 4: Barring of registration of any International region call forwarded-to number. 5: Barring of registration of any International region forwarded-to number except in the HPLMN country Default value: 0	CS
24.	BCT	(ODB)Barring of Call Transferring	NUMSTR	O	1	The value is one of the followings: 0: No barring of call transferring 1: Barring of call transferring 2: Barring of call	CS

						transferring when at least one of the two calls should be charged. 3: Barring of call transferring when at least one of the two calls should be charged at international rates, 4: Barring of call transferring when at least one of the two calls should be charged at international region rates Default value: 0	
25.	BICT	(ODB)Barring of call transfer when both calls should be charged.	NUMSTR	O	1	0: No barring 1: Barring Default value: 0	CS
26.	BFICT	(ODB)Barring of call transfer when there is already one ongoing transferred call for the subscriber in the same MSC/VLR	NUMSTR	O	1	0: No barring 1: Barring Default value: 0	CS
27.	BT	Self-define the first ODB service(ODB of long-distance calls unauthorized)	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->ODB Service Definition Configuration" and is valid after activation: 0: No barring of long-distance calls 1: Barring of long-distance calls Default value: 0	CS PS-GPRS PS-EP S



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28.	BIP	Self-define the second ODB service(ODB of IP calls authorized)	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->ODB Service Definition Configuration" and is valid after activation: 0: No barring of IP calls 1: Barring of IP calls Default value: 0	CS PS-GPRS PS-EPS
29.	ODBPL_3	Self-define the third ODB service	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->ODB Service Definition Configuration" and is valid after activation: 0: Not subscribed 1: Subscribed Default value: 0	CS PS-GPRS PS-EPS
30.	ODBPL_4	Self-define the forth ODB service	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->ODB Service Definition Configuration" and is valid after activation: 0: Not subscribed 1: Subscribed Default value: 0	CS PS-GPRS PS-EPS
31.	BPOS	Packet domain ODB incoming and outgoing call restriction	NUMSTR	O	1	Select one of the following values: 0: No restriction 1: Bar all packet domain incoming and outgoing	PS-GPRS PS-EPS

						calls 2: The subscriber is not allowed to originate service request from access point in the home network while roaming outside home network. 3: The subscriber is not allowed to originate service request from access point in the visiting network while roaming outside home network. Default value: 0	
32.	CLIP	Calling Line Identification Presentation	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS
33.	CLIPOpt	Calling Line Identification Presentation Extension	NUMSTR	O	1	Valid when CLIP=1 0: OverrideEnabled 1: OverrideDisabled Default value: 1.	CS
34.	CLIR	Calling Line Identification Restriction	NUMSTR	O	1	0: Not subscribed 1: Subscribe Default value: 0	CS
35.	CLIROpt	Calling Line Identification Restriction Extension	NUMSTR	O	1	Valid when CLIR=1 0: Permanent 1: TempDefaultRestricted 2: TempDefaultAllowed Default value: 0	CS
36.	COLP	Called Line Identification Presentation	NUMSTR	O	1	0: Not subscribed 1: Subscribe Default value: 0	CS
37.	COLPOpt	Called Line Identification Presentation Extension	NUMSTR	O	1	Valid when COLP=1 0: OverrideEnabled 1: OverrideDisabled Default value:1	CS
38.	COLR	Called Line Presentation Identification Restriction	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS
39.	CW	Call Waiting Subscription	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS
40.	CH	Call Holding	NUMSTR	O	1	0: Not subscribed	CS

		Subscription				1: Subscribed Default value: 0	
41.	CFU	Subscription of Call Forwarding unconditional	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS
42.	CFUNTC	Notify the caller of call forwarding unconditional	NUMSTR	O	1	Valid when CFU=1 0: not inform 1: inform Default value: 0.	CS
43.	CFURDP	Called number Presentation of call forwarding unconditional	NUMSTR	O	1	Valid when CFU=1 0: not show 1: show Default value: 0.	CS
44.	CFB	Subscription of Call Forwarding on Busy	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
45.	CFBNTC	Notify the caller of call forwarding on busy	NUMSTR	O	1	Valid when CFB=1 0: not inform 1: inform Default value: 0.	CS
46.	CFBNTF	Notify the forwarded-to subscriber of call forwarding on busy	NUMSTR	O	1	Valid when CFB=1 0: not inform 1: inform Default value: 0.	CS
47.	CFBRDP	Called number presentation of call forwarding on busy	NUMSTR	O	1	Valid when CFB=1 0: not show 1: show Default value: 0.	CS
48.	CFNRY	Subscription of Call Forwarding on No Reply	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
49.	CFNRYNTC	Notify the caller of call forwarding on no reply	NUMSTR	O	1	Valid when CFNRY=1 0: no notification 1: notification Default value: 0.	CS
50.	CFNRYNTF	Notify the forwarded-to subscriber of call forwarding	NUMSTR	O	1	Valid when CFNRY=1 0: No notification 1: notification Default value: 0.	CS

		on no reply					
51.	CFNRYRDP	Called number presentation of call forwarding on no reply	NUMSTR	O	1	Valid when CFNRY=1 0: not show 1: show Default value: 0.	CS
52.	CFNRC	Subscription of Call Forwarding on Not Reachable	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
53.	CFNRCNTC	Notify the caller of Call forwarding on not reachable	NUMSTR	O	1	Valid when CFNRC=1 0: not inform 1: inform Default value: 0.	CS
54.	CFNRCRDP	Called number presentation of call forwarding on not reachable	NUMSTR	O	1	Valid when CFNRC=1 0: not show 1:Show Default value: 0.	CS
55.	BAOC	(SS) Barring of all outgoing calls	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
56.	BOIC	(SS) Barring of international outgoing calls	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
57.	BOICE	(SS) Barring of international outgoing calls except in the home HPLMN	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
58.	BAIC	(SS) Barring of all incoming call	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
59.	BICR	(SS) Barring of incoming calls roaming abroad	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
60.	MPTY	Multi-party call	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
61.	ECT	Explicit call transfer	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
62.	CD	Call Diversion	NUMSTR	O	1	0: not subscribed	CS

						1: Subscribed Default value: 0.	
63.	CDNTC	Notify the caller of call diversion	NUMSTR	O	1	Valid when CD=1 0: not subscribed 1: Subscribed Default value: 0.	CS
64.	CDRDP	Called number presentation of call diversion	NUMSTR	O	1	Valid when CD=1 0: not subscribed 1: Subscribed Default value: 0.	CS
65.	AOCC	Advice of Charge Charging	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
66.	AOCI	Advice of Charge Information	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
67.	CUG	Subscription of Closing User Group	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
68.	eMLPP	enhanced Multi-Level Precedence and Pre-emption service	NUMSTR	O	1	0: not subscribed 1: Subscribed Default value: 0.	CS
69.	CBCtrl	Call Barring Password Control authority	NUMSTR	O	1	0: controlled by operator 1: controlled by subscriber Default value: 0.	CS
70.	AllCDA	All CDA services	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
71.	AllCDS	All CDS services	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
72.	CDA300	CDA data service (300)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
73.	CDA1200	CDA data service (1200)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS



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74.	CDA75	CDA data service (1200_75)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
75.	CDA2400	CDA data service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
76.	CDA4800	CDA data service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
77.	CDA9600	CDA data service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
78.	GenCDA	General DataCDA	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
79.	CDS1200	CDS data service (1200)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
80.	CDS2400	CDS data service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
81.	CDS4800	CDS data service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
82.	CDS9600	CDS data service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
83.	GenCDS	General DataCDS	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
84.	PA300	PadAccessCA service (300)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
85.	PA1200	PadAccessCA service (1200)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
86.	PA75	PadAccessCA service (1200_75)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
87.	PA2400	PadAccessCA service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
88.	PA4800	PadAccessCA	NUMSTR	O	1	0: not subscribed	CS



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		service (4800)				1: subscribed Default value: 0.	
89.	PA9600	PadAccessCA service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
90.	GenPACA	General PadAccessCA	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
91.	PDS2400	PDS data service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
92.	PDS4800	PDS data service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
93.	PDS9600	PDS data service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
94.	GenPDS	General DataPDS	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
95.	ASCDa	AllAlternateSpeech_DataCDA	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
96.	ASCDs	AllAlternateSpeech_DataCDS	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
97.	SFCDA	AllSpeechFollowedByDataCD A	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
98.	SFCDS	AllSpeechFollowedByDataCD S	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
99.	PLMNBS_1	Specific bear service 1	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
100.	PLMNBS_2	Specific bear service 2	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
101.	PLMNBS_3	Specific bear service 3	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
102.	PLMNBS_4	Specific bear service 4	NUMSTR	O	1	0: not subscribed 1: subscribed	CS



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						Default value: 0.	
103.	PLMNBS_5	Specific bear service 5	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
104.	PLMNBS_6	Specific bear service 6	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
105.	PLMNBS_7	Specific bear service 7	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
106.	PLMNBS_8	Specific bear service 8	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
107.	PLMNBS_9	Specific bear service 9	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
108.	PLMNBS_A	Specific bear service 10	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
109.	PLMNBS_B	Specific bear service 11	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
110.	PLMNBS_C	Specific bear service 12	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
111.	PLMNBS_D	Specific bear service 13	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
112.	PLMNBS_E	Specific bear service 14	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
113.	PLMNBS_F	Specific bear service 15	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0.	CS
114.	RCType	Routing Type	NUMSTR	O	1..3	0..254 Default value: 0.	CS
115.	AddRCType	Additional routing type	NUMSTR	O	1,3..5	0,255..65789 Default value: 0.	CS
116.	PLSS_1	Self-define Supplementary Service 1	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custo	CS

						m Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	
117.	PLSS_2	Self-define Supplementary Service 2	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
118.	PLSS_3	Self-define Supplementary Service 3	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
119.	PLSS_4	Self-define Supplementary Service 4	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation:	CS

						0: not subscribed 1: subscribed Default value: 0.	
120.	PLSS_5	Self-define Supplementary Service 5	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
121.	PLSS_6	Self-define Supplementary Service 6	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
122.	PLSS_7	Self-define Supplementary Service 7	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
123.	PLSS_8	Self-define Supplementary	NUMSTR	O	1	The parameter is configured in OMC	CS

		Service 8				configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	
124.	PLSS_9	Self-define Supplementary Service 9	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
125.	PLSS_A	Self-define Supplementary Service 10	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
126.	PLSS_B	Self-define Supplementary Service 11	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN"	CS

						Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	
127.	PLSS_C	Self-define Supplementary Service 12	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
128.	PLSS_D	Self-define Supplementary Service 13	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
129.	PLSS_E	Self-define Supplementary Service 14	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS



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						Default value: 0.	
130.	PLSS_F	Self-define Supplementary Service 15	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed Default value: 0.	CS
131.	CFD	Call Forwarding Default	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
132.	CFDNTC	Notice the calling party when CFD occurs	NUMSTR	O	1	Valid when CFD=1 0: Not notice 1: Notice Default value: 0	CS
133.	CFDNTF	Notice the forwarding party when CFD occurs	NUMSTR	O	1	Valid when CFD=1 0: Not notice 1: Notice Default value: 0	CS
134.	OVRCFB	CFD overriding CFB	NUMSTR	O	1	Valid when CFD=1 0: not overriding 1: overriding Default value: 0	CS
135.	OVRCFNRY	CFD overriding CFNRY	NUMSTR	O	1	Valid when CFD=1 0: not overriding 1: overriding Default value: 0	CS
136.	OVRCFNRC	CFD overriding CFNRC	NUMSTR	O	1	Valid when CFD=1 0: not overriding 1: overriding Default value: 0	CS
137.	PsRoamSch	PS roaming scheme name	STRING	O	1..30	"*" indicates no roaming scheme subscription; Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->Roaming	PS-GPRS

						Data Configuration->Packet-Switching Domain Roaming Scheme Configuration".	
138.	TIFFlag	CAMEL service basic information contents: conversion information flag	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS
139.	State	CAMEL service basic information contents: Whether to send subscriber status to GMSC as part of call termination processing	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS PS-GPRS
140.	LocInfo	CAMEL service basic information contents: Whether to send location information to GMSC as part of call termination processing	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS PS-GPRS
141.	TrigTCSI	CAMEL service basic information contents: Whether to trigger TCSI in HPLMN by the subscriber	NUMSTR	O	1	1: Triggered 0: Not triggered Default value: 0	CS
142.	OPhase	OCSI version	NUMSTR	C	1	1: Phase 1; 2: Phase 2;	CS

						3: Phase 3; 4: Phase 4; Default value: 0,it means not subscribed. The OCSI parameters	
143.	ONotiCSE	OCSI notices CSE or not	NUMSTR	O	1	Valid when OPhase >=3: 0: do not notice CSE; 1: notice CSE Default value: 0 The OCSI parameters	CS
144.	OAct	Whether to activate OCSI	NUMSTR	O	1	Valid when OPhase >=3: 0: not activated; 1: activated Default value: 0 The OCSI parameters	CS
145.	OTDP	OCSI checking point	NUMSTR	C	1	Fill in OTDP with 2 when the parameter OPhase is 1 or 2; Fill in OTDP with 2 or 4 when the parameter OPhase is equal to or larger than 3 The OCSI parameters	CS
146.	OSK	OCSI service key description	STRING	C	1..50	Obtained from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration". The OCSI parameters	CS
147.	OSCF	OCSI SCF address	NUMSTR	C	1..15	Obtained from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". The OCSI parameters	CS
148.	TPhase	TCSI version	NUMSTR	C	1	1: Phase 1; 2: Phase 2; 3: Phase 3; 4: Phase 4; Default value: 0,it means not subscribed.	CS



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						The TCSI parameters	
149.	TNotiCSE	Whether to notice CSE by TCSI	NUMSTR	O	1	Valid when TPhase >=3: 0: do not notify CSE; 1: notify CSE Default value: 0 The TCSI parameters	CS
150.	TAct	Whether to activate TCSI	NUMSTR	O	1	Valid when TPhase >=3: 0: not activated; 1: activated Default value: 0 The TCSI parameters	CS
151.	TTDP	TCSI checking point	NUMSTR	C	1	Fill in 12 when the parameter TPhase is 1 or 2; Fill in 12, 13 or 14 when the parameter TPhase is equal to or larger than 3 The TCSI parameters	CS
152.	TSK	TCSI service key description	STRING	C	1..50	Obtained from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration". The TCSI parameters	CS
153.	TSCF	TCSI SCF address	NUMSTR	C	1..15	Obtained from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". The TCSI parameters	CS
154.	SMOpt	Short message sending item when GMSC does not support GPRS	NUMSTR	O	1	0: sent by MSC 1: sent by SGSN Fill in 1 in case of NAM=2 Default value: 0	PS-GPRS PS-EPS
155.	PDPType	PDP address type	NUMSTR	C	1	0: IP V4 1: IPV6 3: PPP Default value: 0 The PDP parameters	PS-GPRS PS-EPS
156.	PDPAddr	PDP address	STRING	O	2..39	If type is IPV4,	PS-GPRS PS-EPS

						Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits If the parameter PDPType is PPP, PDPAddr is not required to be filled in. The PDP parameters	
157.	QoS	PDP service quality	STRING	C	11..69	Ignored when QOSID exists. Refer to the note in Section 4.10.2 The PDP parameters	PS-GPRS PS-EPS
158.	VPLMN	Allow MS to use address dynamically distributed in VPLMN	NUMSTR	O	1	0: Not allowed 1: Allowed Default value: 0 The PDP parameters	PS-GPRS PS-EPS
159.	APN	PDP access point name	STRING	C	1..62	The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration". If subscriber signed both APN and APNID, then return failed. The PDP parameters	PS-GPRS PS-EPS
160.	APNRANGE	APN range	NUMSTR	O	1...5	APN range, the value is from PSRoamSchID, the default value is 0; 0 means available in all plmn.	PS-GPRS PS-EPS
161.	Charge	GPRS charging features	NUMSTR	O	1..5	Value:0~65535 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing	PS-GPRS PS-EPS

						16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4 256: Behaviour5 512: Behaviour6 1024: Behaviour7 2048: Behaviour8 4096: Behaviour9 8192 : Behaviour10 16384 : Behaviour11 32768 : Behaviour12 "0" indicates no charging characteristics Default value: 0	
162.	PDPCharge	PDP context charging features	NUMSTR	O	1..5	Refer to charge parameter The PDP parameters	PS-GPRS PS-EPS
163.	VGCS	VGCS subscription indication	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
164.	VGCSRoam	VGCS allowed to be used in VPLMN	NUMSTR	O	1	Valid when VGCS=1 0: not allowed 1: allowed Default value: 0	CS
165.	VGCSLst	VGCS group identifier list	STRING	O	1..349	Valid when VGCS=1 VGCS Group Id list,each GROUP ID is made up of 1-6 bit decimal numbers, and the maximal number is 50, GROUP ID can't be repeated, separated with "-" For example: 231-143-67987	CS
166.	VBS	VBS subscription indication	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	CS
167.	VBSRoam	VBS allowed in VPLMN	NUMSTR	O	1	Valid when VBS=1 0: not allowed 1: allowed Default value: 0	CS
168.	VBSLst	VBS group	STRING	O	1..449	Valid when VBS=1	CS

		identifier list				VBS Group Id list and whether the subscriber can originate group call; each GROUP ID is made up of 1-6 bit decimal number; the value is 0 or 1 for whether group call can be originated; these two come in pair, separated by "&"; there are up to 50 pairs of GroupID and whether group call can be originated. The GROUP ID can't be repeated; each of them are separated by ". ". For example: 231&1-143&0-67987&1, it indicates that the subscriber can originate group call with GROUP ID being 231; Indicate that the subscriber can't originate group call with GROUP ID being 143; Indicate that the subscriber can originate group call with GROUP ID 67987;	
169.	ZCSet	Zone Code Set	NUMSTR	O	1.5	The value is one of the followings: 1~65535 Take from OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->Zone Charge Configuration". If the value of ZCSet is 65535, then it means ZCSet is not subscribed Default value: 65535	CS PS-GPRS



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170.	Stype	Specifical Subscriber Type	NUMSTR	O	1..3	The value is one of the followings: 0~255 Default value: 0	CS PS-GPRS
171.	UUS1	User-to-User Signaling 1	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
172.	UUS2	User-to-User Signaling 2	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
173.	UUS3	User-to-User Signaling 3	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
174.	OFAID	ID of control table of black and white CF lists	NUMSTR	O	1..3	0~255; OFA ID is valid if value is in the range of 0~254; it can be taken from OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->Forwarding White-Black List Configuration". It is not registered if its value is 255. Default value: 255	CS
175.	CFBN	Network switch	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
176.	MC	MultiCall	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
177.	Nbr_SB	MAX number of co-existing bearer set by operator	NUMSTR	O	1	Value range: 2~7 Valid when MC=1 Default value is "Maximum Number of Bearers Nbr_SB" in OMC configuration data " WCN Domain Service Configuration->Service Option Configuration-> WCN Service Supporting Option Configuration"	CS

178.	Nbr_User	MAX number of co-existing bearer set by user	NUMSTR	O	1	Value range: 1~7 Valid when MC=1 and no greater than Nbr_SB Default value is the value of Nbr_SB	CS
179.	CNAP	Calling name presentation	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
180.	CNAPOpt	CNAP override option	NUMSTR	O	1	Valid when CNAP=1 0: OverrideEnabled 1: OverrideDisabled Default value:1	CS
181.	CtrlSche	Name of service control scheme	STRING	O	1..30	"*" means no control scheme has been subscribed. Others can be taken from OMC configuration data "WCN Domain Service Configuration->VPLMN Service Configuration->Control Scheme Configuration".	CS PS-GPRS
182.	BORO	Baring of all outgoing calls when roaming out of home PLMN	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
183.	GPRSTPL	GPRS Template ID	STRING	O	1..249	GPRSTPL value like: X-X-X-.,X is GPRS Template ID; Value range: 1~8192. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS Template Configuration". The maximum number of GPRS template ID is 50. The parameters related to PDP will be ignored when GPRSTPL exists in command.If GPRSTPL is	PS-GPRS PS-EPS



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						equal to 0, it means the subscriber does not subscribe PDP	
184.	OCSITPL	OCSI Template ID	NUMSTR	O	1..3	Obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->OCSI Template Configuration". The parameters related to OCSI except ONotCSE and OAct will be ignored when OCSITPL exists in command. Default value: 0, which means the subscriber does not subscribe OCSI	CS
185.	TCSITPL	TCSI Template ID	NUMSTR	O	1..3	Obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->TCSI Template Configuration". The parameters related to TCSI except TNotCSE and TAct will be ignored when TCSITPL exists in command. Default value: 0, which means the subscriber does not subscribe TCSI	CS
186.	UCSITPL	UCSI Template ID	STRING	O	1..359	UCSITPL value like: X-X-X-X.., X is UCSI Template ID; Value range: 1~65535. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->UCSI Template Configuration". The maximum number of	CS

						GPRS template ID is 60. The parameters related to UCSI will be ignored when UCSITPL exists in command. If UCSITPL is equal to 0, it means the subscriber does not subscribe UCSI	
187.	TRIMPTY	Triple MPTY	NUMSTR	O	1	Valid when MPTY=1: 0: No Triple MPTY 1: Triple MPTY Default value: 0	CS
188.	QOSID	QoS Profile ID	NUMSTR	C	1..3	1~255 Taken from OMC configuration data "Admin Domain Public Configuration->PS Service Configuration->Qos Profile Configuration". Default value: 0, which means not subscribed	PS-GPRS PS-EPS
189.	CB_PWD	Call barring password	NUMSTR	O	4	Character string of 4 digits Default value: 0000	CS
190.	EXTType	Extension subscriber type	STRING	O	1..30	"**" indicates that no extension subscriber type is subscribed. Other values are obtained from OMC configuration data "WCN Domain Service Configuration->Custom service Configuration->Extended Subscriber Type Configuration" the value of this parameter is case-sensitive.	CS PS-GPRS PS-EP S
191.	SSET	Service Set	NUMSTR	O	1..4	Value range: 1~1999 Default value: 0, which means not subscribed	CS



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192.	SMSRouter ID	SMS ROUTER ID	NUMSTR	O	1..3	Value range: 0~255, 1) 0 means SMS ROUTER desubscribed; 2) Not 0 means SMS ROUTER subscribed; Taken from OMC configuration data "WCN Domain Service Configuration->SMS Router Configuration->SMS Router Configuration". Default value: 0	CS PS-GPRS
193.	SIPID	SIP IN service	NUMSTR	O	1..5	Value range: 0~65535, The ID obtained from OMC configuration data "Admin Domain Public Configuration->SIP IN Service Configuration->SIP IN Configuration". parameter of SIPID is conflict with CS CAMEL Service. Default value: 0	CS
194.	DEFCALL	Default call service code	STRING	O	1..16	The default call service code used when BC is not applied in SendRoutingInfo request received by HLR. The values and descriptions are shown in the notes.	CS
195.	APNID	PDP access point ID	NUMSTR	C	1..3	The value is obtained from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration", if subscriber signed both APN and APNID then return failed. The PDP parameters	PS-GPRS PS-EPS
196.	FM	Follow Me	NUMSTR	O	1	0: not Subscribed 1: Subscribed	CS



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						Default value: 0	
197.	FMGRP	FM Group Name	STRING	O	1..30	“*” indicates that no FM Group is subscribed. Other values are obtained from OMC configuration data “WCN Domain Service Configuration->Follow Me Service Configuration->Follow Me Group Configuration”. Valid while FM=1	CS
198.	FMSUPER	Follow Me supervisor	NUMSTR	O	1	0: NO 1: YES Default value: 0 Valid while FM=1	CS
199.	OCCBS	Originating Call Completion to Busy subscriber	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
200.	TCCBS	Terminating Call Completion to Busy subscriber	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
201.	OriginFAID	Origin for Forwarded-to Number Analysis	STRING	O	1..3	*: not Subscribed Value range:0~511; the parameter is obtained from OMC configuration data “WCN Domain Service Configuration->Custom Service Configuration->Origin for Forwarded-to Number Analysis Configuration”.	CS
202.	OINI	Originating Intelligent Network Indication	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS
203.	TINI	Terminating Intelligent Network	NUMSTR	O	1	0: not Subscribed 1: Subscribed Default value: 0	CS

		Indication					
204.	OINR	Originating Intelligent Network Reference	NUMSTR	O	1..3	0: not Subscribed 1~999: Subscribed Default value: 0	CS
205.	TINR	Terminating Intelligent Network Reference	NUMSTR	O	1..3	0: not Subscribed 1~999: Subscribed Default value: 0	CS
206.	FRAUDID	The Fraud Profile ID for Subscriber	STRING	O	1..3	*: not Subscribed Value range:0~250 The parameter is obtained form OMC configuration data "WCN Domain Service Configuration->Fraud Profile Configuration".	CS
207.	ISTAlertTimmer	IST Alert Timer	NUMSTR	O	1..3	0, 15~255 Default value: 0	CS
208.	ISTAlertOpt	IST Alert Option	NUMSTR	O	1	0~3 0: Call allowed 1: Terminate call Activity referred 2: Continue monitor call activity 3: terminate all call activities Default value: 0 Valid when ISTAlertTimer is not equal to 0	CS
209.	ISTVLROPT	VLR Not Support IST Option	NUMSTR	O	1	0~3 0: ignore 1: Supplementary service Barring of Outgoing Call 2: Supplementary service Barring of Incoming Call 3: Supplementary service Barring of Outgoing call and Incoming Call Default value: 0 Valid when ISTAlertTimer is not equal to 0	CS
210.	ISTGMSCOPT	GMSC Not Support IST	NUMSTR	O	1	0~2 0: ignore	CS

		Option				1: Operator Determined Barring of all incoming calls 2: Supplementary service Barring of All Outgoing Calls Default value: 0 Valid when ISTAlertTimer is not equal to 0	
211.	RestrictCF	Restrict User register or unregister forward-number	NUMSTR	O	1	0: Unrestrict 1: Restrict Default value: 0	CS
212.	ExtPDPType	Extend PDP Address Type	NUMSTR	O	1	Valid whenNAM is 0 or 2. 0:IPV4; 1:IPV6; 4:NONE PDPType and ExtPDPType cannot be IPV4 or IPV6 in both When ExtPDPType =0/1, ExtPDPAddr and PDPAddr must also be dynamic address or static address. Default value: 0 The PDP parameters	PS-GPRS PS-EPS
213.	ExtPDPAddr	Extend PDP Address	STRING	O	2..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits The PDP parameters	PS-GPRS PS-EPS
214.	CamelCtlName	Camel Control Strategy Name	STRING	O	1..30	"* indicates no Camel Control Strategy subscription; Other data can be obtained from OMC configuration data "AdminDomain Public	CS PS-GPRS



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						Configuration->ITU IN Service Configuration->Camel Control Strategy Configuration”	
215.	CBNotChkP wd	Call barring not check password	NUMSTR	O	1	0:check 1:not check Default value: 0	CS
216.	BCID	Bearer capability index	NUMSTR	O	1..5	Value range: 0~65535 Take from OMC configuration data “Public Service Configuration->WCDMA Global Service Configuration->Bearer Capability Configuration” Default value: 0	CS
217.	CFF	Disable call forward	NUMSTR	O	1	0: Not subscribed 1: Subscribed Default value: 0	CS
218.	MDTUSERC ONSENT	MDT User Consent	NUMSTR	O	1	0 : CONSENT_NOT_GIVEN 1: CONSENT_GIVEN 255: NONE Default value: 255	CS PS-GPRS PS-EP S
219.	AREASRVI D	Service Area ID	NUMSTR	O	1..5	Value range: 0~65535 0: not Subscribed Other data can be Obtained from OMC configuration data “WCN Domain Service Configuration->Area Service Configuration->Roaming Service Configuration”. Default value: 0	CS PS-GPRS PS-EP S
220.	LMU	LMU Identifier	NUMSTR	O	1	0 : not Subscribed 1 : Subscribed	CS
221.	EOINR	Extended OCSI Reference	NUMSTR	O	1..3	0: not Subscribed 1~999: Subscribed Default value: 0	CS
222.	ETINR	Extended TCSI Reference	NUMSTR	O	1..3	0: not Subscribed 1~999: Subscribed	CS



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						Default value: 0	
223.	SUPLAUTI MER	Support LAU Timer	NUMSTR	O	1	0: Not Support 1: Support Default value: 0	CS
224.	LAUTIMER	LAU Timer	NUMSTR	O	1..10	0~4294967295 Default value: 0	CS
225.	SUPRAUTA UTIMER	Support RAU/TAU Timer	NUMSTR	O	1	0: Not Support 1: Support Default value: 0	PS-GPRS PS-EPS
226.	RAUTAUTI MER	RAU/TAU Timer	NUMSTR	O	1..10	0~4294967295 Default value: 0	PS-GPRS PS-EPS

It supports the following parameters only when the SubType is EPC

227.	EPCCHARG CHRT	Charging features of EPC subscription	NUMSTR	O	1..3	Value: 0~255 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4 "0" indicates no charging characteristics Default value: 0	PS-EPS
228.	EPCROAMS CH	EPC Roaming Scheme Name	STRING	O	1..30	"*" indicates no roaming scheme subscription; Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". If subscriber signed both EPCROAMSCHID and EPCROAMSCH, then return failed	PS-EPS
229.	EPCSTNSR	Session	NUMSTR	O	6..15	ISDN STRING	PS-EPS

		Transfer Number for SRVCC					
230.	EPCAMBRUP	Max-Requeste d-Bandwidth-U L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 Default value: 0	PS-EPS
231.	EPCAMBRDOWN	Max-Requeste d-Bandwidth-D L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 Default value: 0	PS-EPS
232.	EPCAPNOIRep	APN-OI-replacement	STRING	O	1..64	APN-OI-replacement , for example: mnc.mcc.gprs,"*" indicates not Subscribed	PS-EPS
233.	EPCRFSP	RAT-Frequency -Selection-Priority-ID	NUMSTR	O	1..3	0~256, 0 indicates not Subscribed	PS-EPS
234.	EPCICSIND	ICS flag	NUMSTR	O	1	1: True 0: Flase Default value: 0	PS-EPS
235.	EPCCSGID	CSG ID	NUMSTR	O	1..9	1~134217727 Default value: 0	PS-EPS
236.	EPCExpirationDate	CSG Expiration Date	STRING	O	14	Valid when EPCCSGID exists Format: YYYYMMDDHHMMSS From left to right: YYYY-year MM-month DD-day HH-hour MM-minute SS-second For example: 20070411130035means	PS-EPS



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						13:00:35, Apr 11, 2007	
237.	EPCAPNCP TPL	EPC APNCP Template ID	NUMSTR	O	1..3	0~255, EPC APNCP Template ID can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN CP Template Configuration". The parameters related to APN Configuration will be ignored when EPCAPNCPTPL exists in command.If EPCAPNCPTPL is equal to 0, which means the subscriber does not subscribe APNCP. Default value: 0	PS-EPS
238.	EPCAPN	APNConf Access name	STRING	C	1..62	obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration". It cannot be "*". The APN Configuration parameters	PS-EPS
239.	PDNType	The type of PDN Address	NUMSTR	C	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6 Default value: 0 The APN Configuration parameters	PS-EPS
240.	EPCPDNNU M	The number of PDN IP Address	NUMSTR	O	1	The valid value: 0~2 Default value: 0 The APN Configuration parameters	PS-EPS
241.	EPCPDNTY	The type of	NUMSTR	O	1	0: IP V4	PS-EPS



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	PE1	PDN IP Address1				1: IP V6 Default value: 0 The APN Configuration parameters	
242.	EPCPDNAd dr1	PDN IP Address1	STRING	O	1..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits When EPCPDNAddr1 exists in command, EPCPDNTYPE1 must exist. The APN Configuration parameters	PS-EPS
243.	EPCPDNTY PE2	The type of PDN IP Address2	NUMSTR	O	1	0: IP V4 1: IP V6 Default value: 0 The APN Configuration parameters	PS-EPS
244.	EPCPDNAd dr2	PDN IP Address2	STRING	O	1..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits The APN Configuration parameters When EPCPDNAddr2 exists in command, EPCPDNTYPE2 must exist.	PS-EPS
245.	EPSQOS	APN Configuration Service Quality	STRING	C	7..10	Ignored when EPSQOSID exists. Refer to the description in paragraph 4.22.2 The APN Configuration parameters	PS-EPS



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246.	EPSQOSID	EPS Qos Profile ID	NUMSTR	C	1..3	1~255 Obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->EPS Subscribed QOS Profile Configuration". One of EPSQOSID and EPSQOS parameters must be input. If all of them are input, EPSQOS will be ignored. Default value: 0,it means not subscribed. The APN Configuration parameters	PS-EPS
247.	VPLMNDA	Dynamic VPLMN allowed	NUMSTR	O	1	0:not permit 1:permit Default value: 0 The APN Configuration parameters	PS-EPS
248.	PDNGWAT YPE	PDN GW allocation type	NUMSTR	O	1	0: static 1: dynamic Default value:1 The APN Configuration parameters	PS-EPS
249.	EPCPDNG WNUM	The number of PDN-GW IP Address	NUMSTR	O	1	The valid value: 0~2 Default value: 0 The APN Configuration parameters	PS-EPS
250.	EPCPDNG WTYPE1	The type of PDN-GW IP Address1	NUMSTR	O	1	0: IP V4 1: IP V6 Default value: 0 The APN Configuration parameters	PS-EPS
251.	EPCPDNG WAddr1	PDN-GW IP Address1	STRING	O	1..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit	PS-EPS



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						If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits When EPCPDNGWAddr1 exists in command, EPCPDNGWTYPE1 must exist. The APN Configuration parameters	
252.	EPCPDNG WTYPE2	The type of PDN-GW IP Address2	NUMSTR	O	1	0: IP V4 1: IP V6 Default value: 0 The APN Configuration parameters	PS-EPS
253.	EPCPDNG WAddr2	PDN-GW IP Address2	STRING	O	1..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits When EPCPDNGWAddr2 exists in command, EPCPDNGWTYPE2 must exist. The APN Configuration parameters	PS-EPS
254.	PDNGWFQ DNHost	The Host of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z) , numbers (0~9), connectors (-) , the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.).	PS-EPS

						"*" indicates not Subscribed. The APN Configuration parameters	
255.	PDNGWFQ DNRealm	The Realm of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z) , numbers (0~9) , connectors (-) , the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.). "*" indicates not Subscribed. The parameters PDNGWFQDNHost and PDNGWFQDNRealm must appear in pairs. The APN Configuration parameters	PS-EPS
256.	APNCHARGE	Charging features of APNCONFIG	NUMSTR	C	1..3	Refer to EPCCHARGCHRT parameter	PS-EPS
257.	APNAMBRUP	Max-Requeste d-Bandwidth-U L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 Default value: 0 The APN Configuration parameters	PS-EPS
258.	APNAMBRDOWN	Max-Requeste d-Bandwidth-D L of UE-AMBR(Aggr egate Maximum Bit Rate	NUMSTR	O	1..10	0~4294967295 Default value: 0 The APN Configuration parameters	PS-EPS



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)					
259.	APNOIRep	APN-OI-replacement	STRING	O	1..64	<p>Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.).</p> <p>"*" indicates not Subscribed.</p> <p>The APN Configuration parameters</p>	PS-EPS
260.	EPCN3ARD_0	non-3GPP Access restriction parameter of WLAN Not Allowed	NUMSTR	O	1	<p>0: Allow to access WLAN 1: Not allow to access WLAN Default value: 0</p>	PS-EPS
261.	EPCN3ARD_1	non-3GPP Access restriction parameter of CDMA2000_1X Not Allowed	NUMSTR	O	1	<p>0: Allow to access CDMA2000_1X 1: Not allow to access CDMA2000_1X 0 by default</p>	PS-EPS
262.	EPCN3ARD_2	non-3GPP Access restriction parameter of HRPD Not Allowed	NUMSTR	O	1	<p>0: Allow to access HRPD 1: Not allow to access HRPD Default value: 0</p>	PS-EPS
263.	EPCN3ARD_3	non-3GPP Access restriction parameter of UMB Not Allowed	NUMSTR	O	1	<p>0: Allow to access UMB 1: Not allow to access UMB Default value: 0</p>	PS-EPS
264.	EPCN3ARD_4	non-3GPP Access restriction parameter of EHRPD Not	NUMSTR	O	1	<p>0: Allow to access EHRPD 1: Not allow to access EHRPD Default value: 0</p>	PS-EPS

		Allowed					
265.	EPCN3IPAC C	whether allow the user to access EPC from non-3GPP network	NUMSTR	O	1	0: allow to access EPC network by non-3GPP 1: do not allow to access EPC network by non-3GPP Default value: 0	PS-EPS
266.	EPCN3IPAC CAPN	whether disable all APNs for a subscriber at one time	NUMSTR	O	1	0: Enable all APNs for a subscriber 1: Disable all APNs for a subscriber Default value: 0	PS-EPS
267.	EPCSTIME OUT	the maximum period for a session measured in seconds	NUMSTR	O	1..10	0~2147483647(s) Default value: 0	PS-EPS
268.	NO3GPPRO AMSCH	No 3GPP Roaming Scheme Name.	STRING	O	1..30	"*" indicates no roaming scheme subscription; Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration".	PS-EPS
269.	EPCRELAY NODEIND	EPC Relay Node Indicator	NUMSTR	O	1..3	0: NOT_RELAY_NODE 1: RELAY_NODE 255:NONE Default value: 255	PS-EPS
270.	EPCROAMS CHID	EPC Roaming Scheme ID	STRING	O	1..5	Value range: 0~65535 0: not Subscribed Other data can be Obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". If subscriber signed both EPCROAMSCHID and	PS-EPS

						EPCROAMSCH, then return failed. Default value: 0	
271.	SupMIP6FeaVec	MIP6-Feature-Vector	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0	PS-EPS
272.	MIP6FeaVec_1	Whether support MIP6_INTEGRATED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
273.	MIP6FeaVec_2	Whether support LOCAL_HOME_AGENT_ASSIGNEDMENT	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
274.	MIP6FeaVec_3	Whether support PMIP6_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
275.	MIP6FeaVec_4	Whether support IP4_HOA_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
276.	MIP6FeaVec_5	Whether support LOCAL_MAG_R_OUTING_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
277.	MIP6FeaVec_6	Whether support ASSIGN_LOCATION_IP	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
278.	MIP6FeaVec_7	Whether support MIP4_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
279.	MIP6FeaVec_8	Whether support OPTIMIZED_I	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed	PS-EPS



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		DLE_MODE_MOBILITY				1: subscribed Default value: 0	
280.	MIP6FeaVec_9	Whether support GTPv2_SUPPOR TED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not subscribed 1: subscribed Default value: 0	PS-EPS
281.	SDSCtlName	SDS Control Strategy Name	STRING	O	1...30	"*” indicates no SDS Control Strategy subscription; Other data can be obtained from OMC configuration data “WCDMA Global Service Configuration->SDS Control Strategy Configuration”	CS PS-GPRS PS-EP S
282.	PREIPSMGW	Preconfigured IP-SM-GW	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates no subscription	CS PS-GPRS PS-EP S
283.	SCADDRES S	Service Centre Address	STRING	O	1..38	Character string of 1 to 38 digits “*” indicates no subscription	CS PS-GPRS PS-EP S
284.	NOTIFYIMSAS	Notify IMS AS	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates no subscription	CS PS-GPRS PS-EP S
285.	APNLIPAP	LIPA Permission	NUMSTR	O	1..3	0: LIPA Prohibited 1: LIPA Only 2: LIPA Conditional 255:NONE Default value: 255 The APN Configuration parameters	PS-EPS
286.	CSGAPN	APN List	STRING	O	1..62*50 +49	Valid when EPCCSGID exists Each APN can be obtained from OMC configuration	PS-EPS

						data "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration", and the maximal number is 50, separated with "\$". When the value of CSGAPN is \$, it means not subscribed.	
287.	EPCVSRVC C	Subscribed VSRVCC	NUMSTR	O	1	0: Not Subscribed 1: Subscribed Default value: 0	PS-EPS
288.	MPSEPPSPRI ORITY	MPS-EPS-PRI ORITY	NUMSTR	O	1	0: Not Subscribed 1: Subscribed Default value: 0	PS-EPS

[Notes]

1. If the Profile parameter is followed by other optional parameters, the default values in the Profile template will be replaced by these optional parameters.

2. The values and descriptions of parameter, DEFCALL

S/N	Value	Description
1.	Tele	telephony
2.	Fac3	facsimileGroup3AndAlterSpeech
3.	AutoFac3	automaticFacsimileGroup3
4.	Fac4	facsimileGroup4
5.	CDA300	dataCDA-300bps
6.	CDA1200	dataCDA-1200bps
7.	CDA2400	dataCDA-2400bps
8.	CDA4800	dataCDA-4800bps
9.	CDA9600	dataCDA-9600bps
10.	GenCDA	general-dataCDA
11.	CDS1200	dataCDS-1200bps
12.	CDS2400	dataCDS-2400bps
13.	CDS4800	dataCDS-4800bps

14.	CDS9600	dataCDS-9600bps
15.	GenCDS	general-dataCDS
16.	ASCDA	allAlternateSpeech-DataCDA
17.	ASCDS	allAlternateSpeech-DataCDS
18.	SFCDA	allSpeechFollowedByDataCDA
19.	SFCDS	allSpeechFollowedByDataCDS

3. If the number of OCSI records in subscription profile is 0, the OCSI-related parameters carried in subscription must contain Ophase, OTDP, OSK and OSCF; if the number of OCSI records in subscription profile is larger than 1, do not allow to carry the OCSI-related parameters in subscription.
4. If the number of TCSI records in subscription profile is 0, the TCSI-related parameters carried in subscription must contain Tphase, TTDP, TSK and TSCF; if the number of TCSI records in subscription profile is larger than 1, do not allow to carry the TCSI-related parameters in subscription
5. If the number of PDP Context records in subscription profile is 0, the PDP-related parameters carried in subscription must contain PDPType, QoS/QosID and APN/APNID; if the number of PDP Context records in subscription profile is larger than 1, do not allow to carry the PDP-related parameters in subscription
6. If the number of APN Configuration records in subscription profile is 0, the APN Configuration-related parameters carried in subscription must contain EPCAPN, PDNType, APNCHARGE and EPSQOS/EPSQOSID; if the number of APN Configuration records in subscription profile is larger than 1, do not allow to carry the APN Configuration-related parameters in subscription
7. There are some restrictions of APN Configuration-related parameters for Adding User:
 - If EPCPDNGWNUM is not carried, EPCPDNGWAddr1 must be carried with EPCPDNGWTYPE1, and EPCPDNGWAddr2 must be carried with EPCPDNGWTYPE2; * can be carried with EPCPDNGWAddr1 or EPCPDNGWAddr2, indicating that the address information would not be subscribed
 - If EPCPDNGWNUM is carried, * cannot be carried with EPCPDNGWAddr1 or EPCPDNGWAddr2
 - If the PDN GW allocation type is static, address information must be carried with one of EPCPDNGWAddr1, EPCPDNGWAddr2 or PDNGWFQDNHost

- If EPCPDNNUM is not carried, EPCPDNAddr1 must be carried with EPCPDNTYPE1, and EPCPDNAddr2 must be carried with EPCPDNTYPE2; * can be carried with EPCPDNAddr1 or EPCPDNAddr2, indicating that the address information would not be subscribed
- If EPCPDNNUM is carried, if EPCPDNTYPE2 and EPCPDNAddr2 exist, there must be EPCPDNTYPE1 and EPCPDNAddr1; the value of EPCPDNNUM must be the number of carried PDN address parameters; * cannot be carried with EPCPDNAddr1 or EPCPDNAddr2
- If both EPCPDNTYPE1 and EPCPDNTYPE2 exist, the address type of them cannot be the same.

[Examples]

1. Add a new user, use the data in No. 1 Profile template as the user's subscription information:

Add User:IMSI=460001122334455,MSISDN=8613954678912,Profile=1;

2. Add a new user, use the data in No. 1 Profile template as the user's subscription information. Use the value of an optional parameter MType carried with it to replace the value of corresponding parameter in Profile1 template:

Add User:IMSI=460001122334455,MSISDN=8613954678912,Profile=1, MType=1;

4.2.2 Delete User

[Command code]

[Command function] Delete A Mobile User

[Input format]

Del User : IMSI/MSISDN= [,DelAuth=]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3	DelAuth	Delete its authentication information or not when deleting a user .	NUMSTR	O	1	0: do not delete the authentication information 1: delete the authentication information Default value: 0

[Notes]

1. If the input parameter MSISDN is a non-basic number of user subscription, then the returned operation result error code is 101110.

[Examples]

1. Delete the mobile user and delete the authentication information:

Del User:IMSI=460001122334455,DelAuth=1;

2. Delete the mobile user, but the authentication information is not deleted:

Del User:MSISDN=8613954678912;

4.3 Halt and Resume

[Command code] Mod State

[Command function] Halt and resume service of the subscriber

[Input format]

Mod State : IMSI/MSISDN=,MSFg=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3	MSFg	MS New state	NUMSTR	M	1	Select one of the followings: 0: Available 1: Paused 2: Lost 3: Unpaid 4: Reproductive 6: Unpaid(Barring of Outgoing Calls) 7: Unpaid(Barring of Incoming Calls)

[Notes]

1. The interface for NAM=0/1/2 users.
2. If this command is used to modify the user as in unpaid state, then the subscriber's all incoming and outgoing calls are barred.

[Examples]

1. Set user(IMSI number: 460001122334455) as in lost state:

Mod State: IMSI=460001122334455, MSFg =2;

2. Set user(MSISDN number: 8613954678912) as in unpaid state:

Mod State: MSISDN=8613954678912, MSFg =3;

3. Set user(MSISDN number: 8613954678912) as in available state:

Mod State: MSISDN=8613954678912, MSFg =0;

4.4 Card Change and Number Change

4.4.1 Card Change

[Command code] Mod IMSI

[Command function] Change the User's SIM Card

[Input format]

Mod IMSI : IMSI/MSISDN =,NewIMSI = [,DelAuth=][,VALIDTIME=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	Original IMSI number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3.	NewIMSI	New IMSI Number	NUMSTR	M	6..15	New IMSI number
4.	DelAuth	Delete Authentication Info or Not When Changing the SIM Card.	NUMSTR	O	1	0: not delete the authentication information 1: delete the authentication information Default: 0, Ignored when VALIDTIME exists.
5.	VALIDTIME	SIM Validtime	STRING	O	19	Time Format yyyy-mm-dd HH-MM-SS, expressed as year - month - day hours - minutes - seconds, such as 2007-08-12 09-09-56. Value Range: 2000-01-01 00-00-00 ~ 2038-01-01 00-00-00. 2000-01-01 00-00-00 refers to SIM Validtime desubscription.

[Notes]

1. The interface for NAM=0/1/2 users.

2. After the successful card change, the original subscription information keeps unchanged.

[Examples]

1. Change the IMSI number of the mobile subscriber with IMSI:

Mod IMSI : IMSI=460001122334455, NewIMSI=460000512999001;

2. Change the IMSI number of the mobile subscriber with MSISDN:

Mod IMSI : MSISDN=8613954678912, NewIMSI=460000512999001;

4.4.2 Number Change

[Command code] Mod ISDN

[Command function] Change the User's ISDN Number

[Input format]

Mod ISDN : IMSI/MSISDN =,NewISDN=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Original MSISDN Number
3.	NewISDN	New MSISDN Number	NUMSTR	M	6..15	New MSISDN Number

[Notes]

1. The interface for NAM=0/1/2 users.
2. After the ISDN number is changed successfully, the original subscription information keeps unchanged.

[Examples]

1. Change the mobile user's phone number with IMSI:

Mod ISDN : IMSI=460001122334455, NewISDN=8613805123344;

2. Change the mobile user's phone number with MSISDN:

Mod ISDN : MSISDN=8613954678912, NewISDN=8613805123344;

4.5 Modify the Network Access Mode

[Command code] Mod NAM

[Command function] Modify the Network Access Mode

[Input format]

Mod NAM: IMSI/MSISDN=,NAM=[,PDPType=][,QoS=][,APN=][,APNRANGE=]
[,PDPAddr=][,VPLMN=][,PDPCharge=][,SMOpt=][,Charge=][,GPRSTPL=][,QOSID=]
[,KEEP=][,APNID=][,EPCAPNCPTPL=][,EPCAPN=][,PDNType=][,EPCPDNNUM=]



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[,EPCPDNTYPE1=][,EPCPDNAddr1=][,EPCPDNTYPE2=]
[,EPCPDNAddr2=][EPSQOS=][,EPSQOSID=][,VPLMNDA=]
[,PDNGWATYPE=][,EPCPDNGWNUM=] ,EPCPDNGWTYPE1=
[,EPCPDNGWAddr1=][,EPCPDNGWTYPE2=][,EPCPDNGWAddr2=]
[,PDNGWFQDNHost=][,PDNGWFQDNRealm=][,APNCHARGE=]
[,APNAMBRUP=][,APNAMBRDOWN=][,APNOIRep=] [ExtPDPType=][
ExtPDPAddr=][,APNLIPAP=]

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att.r.	Code Length	Para_value Description	
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number	CS PS-GPRS PS-EPS
3.	NAM	New Network Access Mode	NUMSTR	M	1	0: CS and PS accessible 1: only CS accessible 2: only PS accessible	CS PS-GPRS PS-EPS
4.	PDPType	PDP Address Type	NUMSTR	O	1	0: IP V4 1: IPV6 3: PPP	PS-GPRS PS-EPS
5.	PDPAddr	PDP Address	STRING	O	2..39	1 Refer to the description in Section 4.10.2	PS-GPRS PS-EPS
6.	QoS	PDP Service Quality	STRING	O	10..70	Ignored when QOSID exists. Refer to the description in Section 4.10.2	PS-GPRS PS-EPS
7.	VPLMN	MS is permitted to use the dynamic allocation address in VPLMN.	NUMSTR	O	1	0: not permit 1: permit	PS-GPRS PS-EPS
8.	APN	PDP Access	STRING	O	1..62	The value comes from OMC	PS-GPRS PS-EPS

		Point Name				configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration"	
9.	APNRANGE	APN range	NUMSTR	O	1...5	APN range, the value is from PSRoamSchID. 0 means available in all plmn.	PS-GPRS PS-EPS
10.	PDPCharge	PDP Context Charge Feature	NUMSTR	O	1..5	The same as the PDPCharge parameter in Section 4.2.1	PS-GPRS PS-EPS
11.	SMOpt	Short message sending item when GMSC does not support GPRS	NUMSTR	O	1	0:sent via MSC 1:sent via SGSN	PS-GPRS PS-EPS
12.	Charge	GPRS Charging Feature	NUMSTR	O	1..5	The same as the Charge parameter in Section 4.2.1	PS-GPRS PS-EPS
13.	GPRSTPL	GPRS Template ID	STRING	O	1..249	The format of GPRSTPL value is: X-X-X-X... X is GPRS Template ID; Value range: 1~8192 X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS Template Configuration". The maximum count of GPRS template ID is 50.	PS-GPRS PS-EPS
14.	QOSID	QoS Profile ID	NUMSTR	O	1..3	1~255 Take from OMC configuration data "Admin Domain Public Configuration->PS Service Configuration->Qos Profile Configuration".	PS-GPRS PS-EPS
15.	KEEP	when network	NUMSTR	O	1	1: when network access	CS PS-GPRS PS-EPS

		access mode changed to CS only, whether you want to keep the current PS subscription data, such as pdp info etc.				mode changed to CS only, keep the current PS subscription data; when network access mode changed from CS only to PS only or CS and PS, keep the current PS subscription data; 0 or without this parameter: when network access mode changed to CS only, delete the current PS subscription data at the same time. When network access mode changed from CS only to PS only or CS and PS, delete the current PS subscription data at the same time.	
16.	APNID	PDP access point ID	NUMSTR	O	1..3	The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration", if subscriber signed APN and APNID, then return failed	PS-GPRS PS-EPS
17.	ExtPDPType	Extend PDP Address Type	NUMSTR	O	1	ExtPDPType is valid when NAM is 0 or 2. Value: 0:IPV4; 1:IPV6;	PS-GPRS PS-EPS

						4:NONE PDPType and ExtPDPType should not be IPV4 or IPV6 simultaneously.	
18.	ExtPDPAddr	Extend PDP Address	STRING	O	2..39	Refer to PDPAddr parameter	PS-GPRS PS-EPS
It supports the following parameters only when the SubType is EPC							
19.	EPCAPNCPTPL	EPC APNCP Template ID	NUMSTR	O	1...3	0~255 EPC APNCP Template ID is obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN CP Template Configuration". The parameters related to APN Configuration will be ignored when EPCAPNCPTPL exists in command. If EPCAPNCPTPL is equal to 0, it means the subscriber does not subscribe APNCP	PS-EPS
20.	EPCAPN	APNConf Access name	STRING	O	1..62	Obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration". The APN Configuration parameters	PS-EPS
21.	PDNType	The type of PDN Address	NUMSTR	O	1	Choose a value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6 The APN Configuration parameters	PS-EPS
22.	EPCPDNNUM	The number of PDN IP Address	NUMSTR	O	1	The valid value: 0~2 The APN Configuration	PS-EPS

						parameters	
23.	EPCPDNTYP E1	The type of PDN IP Address1	NUMSTR	O	1	<p>Choose a value from the following:</p> <p>0: IP V4 1: IP V6</p> <p>When EPCPDNTYPE1 exists in command, EPCPDNAddr1 must exist.</p> <p>The APN Configuration parameters</p>	PS-EPS
24.	EPCPDNAdd r1	PDN Address1	IP STRING	O	1..39	<p>If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit</p> <p>If type is IPV6, Format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx, xxxx is hexadecimal digits. "**" indicates to delete.</p> <p>The APN Configuration parameters</p>	PS-EPS
25.	EPCPDNTYP E2	The type of PDN IP Address2	NUMSTR	O	1	<p>Choose a value from the following:</p> <p>0: IP V4 1: IP V6</p> <p>When EPCPDNTYPE2 exists in command, EPCPDNAddr2 must exist.</p> <p>EPCPDNTYPE1 and EPCPDNTYPE2 should not be IPV4 or IPV6 simultaneously.</p> <p>The APN Configuration parameters</p>	PS-EPS
26.	EPCPDNAdd r2	PDN Address2	IP STRING	O	1..39	<p>If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit</p> <p>If type is IPV6, Format: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx, xxxx is hexadecimal digits. "**" indicates to delete</p> <p>EPCPDNAddr1 and</p>	PS-EPS

						EPCPDNAddr2 should not be IPV4 or IPV6 simultaneously. The APN Configuration parameters	
27.	EPSQOS	APN Configuration Service Quality	STRING	O	7.10	Ignored when EPSQOSID exists. Refer to the description in Section 4.23.2 The APN Configuration parameters	PS-EPS
28.	EPSQOSID	EPS Qos Profile ID	NUMSTR	O	1..3	1~255 It is obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->EPS Subscribed QOS Profile Configuration". One of EPSQOSID and EPSQOS parameters must be input. If all of them are input, EPSQOS will be ignored. The APN Configuration parameters	PS-EPS
29.	VPLMNDA	Dynamic VPLMN allowed	NUMSTR	O	1	0:not permit 1:permit The APN Configuration parameters	PS-EPS
30.	PDNGWATYP E	PDN GW allocation type	NUMSTR	O	1	0: static 1: dynamic The APN Configuration parameters	PS-EPS
31.	EPCPDNGW NUM	The number of PDN-GW IP Address	NUMSTR	O	1	The valid value: 0~2 The APN Configuration parameters	PS-EPS
32.	EPCPDNGW TYPE1	The type of PDN-GW IP Address1	NUMSTR	O	1	Choose a value from the following: 0: IP V4 1: IP V6	PS-EPS

							When EPCPDNGWTYPE1 exists in command, EPCPDNGWTYPE1 must exist. The APN Configuration parameters	
33.	EPCPDNGW Addr1	PDN-GW IP Address1	IP	STRING	O	1..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx: xxxx:xxxx:xxxx, xxxx is hexadecimal digits “*” indicates to be delete. The APN Configuration parameters	PS-EPS
34.	EPCPDNGW TYPE2	The type of PDN-GW IP Address2	IP	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 When EPCPDNGWTYPE2 exist in command, EPCPDNGWTYPE2 must exist. The APN Configuration parameters	PS-EPS
35.	EPCPDNGW Addr2	PDN-GW IP Address2	IP	STRING	O	1..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx: xxxx:xxxx:xxxx, xxxx is hexadecimal digits . “*” indicates to be delete. The APN Configuration parameters	PS-EPS
36.	PDNGWFQDN NHost	The Host of FQDN of PDN GW		STRING	O	1..128	Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only by letters or numbers to the beginning and the	PS-EPS

						end, cannot have a continuous separator (.). "*" indicates De-subscribe. When PDNGWFQDNHost exists in command, PDNGWFQDNRealm must exist. The APN Configuration parameters	
37.	PDNGWFQDNRealm	The Realm of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only by letters or numbers to the beginning and the end, cannot have a continuous separator (.). "*" indicates De-subscribe. The APN Configuration parameters	PS-EPS
38.	APNCHARGE	Charging features of APNCONFIG	NUMSTR	O	1..3	Refer to EPCCHARGCHRT parameter	PS-EPS
39.	APNAMBRUP	Max-Requested-Bandwidth-UL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 The APN Configuration parameters	PS-EPS
40.	APNAMBRDOWN	Max-Requested-Bandwidth-DL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 The APN Configuration parameters	PS-EPS
41.	APNOIRep	APN-OI-replacement	STRING	O	0..64	Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only by letters or numbers	PS-EPS

						to the beginning and the end, cannot have a continuous separator (.). “*” indicates De-subscribe. The APN Configuration parameters	
42.	APNLIPAP	LIPA Permission	NUMSTR	O	1..3	0: LIPA Prohibited 1: LIPA Only 2: LIPA Conditional 255:NONE The APN Configuration parameters	PS-EPS

[Notes]

1. There are all together six types of network access mode conversion:

1) Access CS&PS->access CS only

Only the following parameters need to be input:

Mod NAM : IMSI/MSISDN =XXXXXXXXXXXXXX, NAM=1, other input parameters will be ignored.

2) Access CS&PS->access PS only

Only the following parameters need to be input:

Mod NAM : IMSI/MSISDN=XXXXXXXXXXXXXX, NAM=2 [,charge=]

Other input parameters will be ignored.

3) Access CS only ->access CS&PS

Only the following parameters need to be input:

Mod NAM : IMSI/MSISDN =XXXXXXXXXXXXXX,
NAM=0[,PDPType=][,QoS=][,APN=][,PDPAddr=][,VPLMN=][,PDPCharge=][,SMOpt=][,Charge=][,GPRSTPL=][,QosID=][,EPCAPNCPTPL=][,EPCAPN=][,PDNType=][,EPCPDNNUM=]
[,EPCPDNTYPE1=][,EPCPDNAaddr1=][,EPCPDNTYPE2=]
[,EPCPDNAaddr2=][EPSQOS=][,EPSQOSID=][,VPLMNDAA=]
[,PDNGWATYPE=][,EPCPDNGWNUM=] ,EPCPDNGWTYPEn=]
[,EPCPDNGWAddr1=][,EPCPDNGWTYPEn=][,EPCPDNGWAddr2=]
[,PDNGWFQDNHost=][,PDNGWFQDNRealm=][,APNCHARGE=]
[,APNAMBRUP=][,APNAMBRDOWN=][,APNOIRep=][,ExtPDPType=]
[, ExtPDPAddr=]

If you need to add a PDP context, PDPType, QoS(QOSID) and APN shall be input.

If PDPAddr is not input, it will be regarded by default that PDP address will be allocated by network dynamically.

The parameters related to PDP will be ignored when GPRSTPL exists in command.

If GPRSTPL is zero, it means the subscriber does not subscribe PDP.

The following is only for EPC SubType:

If you need to add an EPC APN context, EPCAPN, PDNType, EPSQOS(EPSQOSID) shall be input.

The parameters related to APN Configuration will be ignored when EPCAPNCPTPL exists in command.

If EPCAPNCPTPL is zero, it means the subscriber does not subscribe APNCP.

4) Access CS only ->access PS only

Only the following parameters need to be input;

```
Mod          NAM      :IMSI/MSISDN=XXXXXXXXXXXXXX,  
NAM=2[,PDPType=][,QoSID=][,QoS=][,APN=][,PDPAddr=][,VPLMN=]  
][,PDPCharge=][,SMOpt=][,Charge=][,GPRSTPL=][,QoSID=][,EPCAP  
NCPTPL=][,EPCAPN=][,PDNType=][,EPCPDNNUM=]  
[,EPCPDNTYPE1=][,EPCPDNAaddr1=][,EPCPDNTYPE2=]  
[,EPCPDNAaddr2=][EPSQOS=][,EPSQOSID=][,VPLMNDAA=]  
[,PDNGWATYPE=][,EPCPDNGWNUM=],EPCPDNGWTYPE1=]  
[,EPCPDNGWAddr1=][,EPCPDNGWTYPE2=][,EPCPDNGWAddr2=]  
[,PDNGWFQDNHost=][,PDNGWFQDNRealm=][,APNCHARGE=]  
[,APNAMBRUP=][,APNAMBRDOWN=][,APNOIRep=][,ExtPDPType=]  
[,ExtPDPAddr=]
```

If you need to add a PDP context, PDPType, QoS(QOSID) and APN shall be input.

If PDPAddr is not input, it will be regarded by default that PDP address will be allocated by network dynamically.

The parameters related to PDP will be ignored when GPRSTPL exists in command

If GPRSTPL is zero, it means the subscriber does not subscribe PDP.

The following is only for EPC SubType:

If you need to add an EPC APN context, EPCAPN, PDNType, EPSQOS(EPSQOSID) shall be input.

The parameters related to APN Configuration will be ignored when EPCAPNCPTPL exists in command.

If EPCAPNCPTPL is zero, it means the subscriber does not subscribe APNCP.

5) Access PS only ->access CS&PS

Only the following parameters need to be input:

Mod NAM : IMSI/MSISDN=XXXXXXXXXXXXXX, NAM=0[,charge=][,SMOpt=]

Other input parameters will be ignored.

6) Access PS only ->access CS only

Only the following parameters need to be input:

Mod NAM : IMSI/MSISDN =XXXXXXXXXXXXXX, NAM=1

Other input parameters will be ignored.

4.6 Basic Service

4.6.1 Modify Subscriber's Basic Information

[Command code] Mod Bsc

[Command function] Modify Subscriber Type, CS Assigned Priority, Equal Access, Roaming Scheme

[Input format]

Mod Bsc: IMSI/MSISDN= [,MSType =][,CSPri=][,ARD=][,SubType=][,NAEA=]
[,RoamSch=][,RCType=][,AddRCType=][,PsRoamSch=][,ZCSet=][,Stype=][,CtrlSche=]

[Parameter Description]

S / N	Para_Name		Para_Value					Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description		
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EP S	
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number	CS PS-GPRS PS-EP S	
3.	MSType	Mobile Station Category	NUMSTR	O	1..3	Refer to MSType parameter in Section 4.2.1.	CS	
4.	CSPri	CS Assigned Priority	NUMSTR	O	1..2	0..63	CS	
5.	SubType	Subscriber type	NUMSTR	O	1	0: GSM subscriber 1: WCDMA subscriber 2: LTE subscriber	CS PS-GPRS PS-EP S	
6.	NAEA	Equal Access	NUMSTR	O	6	Refer to NAEA parameter in Section 4.2.1	CS	
7.	ARD	Access restriction parameter	NUMSTR	O	1..2	0~63: 0-Allow to access GERAN、UTRAN、GAN、I-HSPA-Evolution、E-UTRAN、HO-To-Non-3GPP-Access;	CS PS-GPRS PS-EP S	

						1-Not allow to access UTRAN; 2-Not allow to access GERAN; 4-Not allow to access GAN; 8-Not allow to access I-HSPA-Evolution; 16-Not allow to access E-UTRAN; 32- Not allow to access HO-To-Non-3GPP-Access. Other value is combined with above values.	
8.	RoamSch	Roaming scheme name	STRING	O	1..30	Refer to RoamSch parameter in Section 4.2.1.	CS
9.	RCType	Routing type	NUMSTR	O	1..3	0..254 0 indicates deleting subscription.	CS
10.	AddRCType	Additional routing type	NUMSTR	O	1..5	0, 255..65789 Value 0 indicates deleting subscription of additional routing type	CS
11.	PsRoamSch	PS roaming scheme name	STRING	O	1..30	Refer to PsRoamSch parameter in Section 4.2.1.	PS-GPRS
12.	ZCSet	Zone Code Set	NUMSTR	O	1..5	Refer to ZCSet parameter in Section 4.2.1	CS PS-GPRS
13.	Stype	Specific subscriber type	NUMSTR	O	1..3	Refer to Stype parameter in Section 4.2.1	CS PS-GPRS
14.	CtrlSche	Service control scheme name	STRING	O	1..30	Refer to CtrlSche parameter in Section 4.2.1	CS PS-GPRS

[Examples]

1. Modify Subscriber's Basic Information

Mod

Bsc:IMSI=4600000000000000,MSTYPE=11,SUBTYPE=1,CTRLSCHE=bbb,ARD=1,CSPRI=2,
NAEA=220002,STYPE=1;

4.6.2 Modify Telecom Service

[Command code] Mod Tele

[Command function] Modify Telecommunication Service

[Input format]

Mod Tele :
IMSI/MSISDN=[,Tele=][,EmegCall=][,SMMO=][,SMMT=][,Fac3=][,AutoFac3=]

[,Fac4=][,PLMNTS_1=][,PLMNTS_2=][,PLMNTS_3=][,PLMNTS_4=]
[,PLMNTS_5=][,PLMNTS_6=][,PLMNTS_7=][,PLMNTS_8=][,PLMNTS_9=]
[,PLMNTS_A=][,PLMNTS_B=][,PLMNTS_C=][,PLMNTS_D=][,PLMNTS_E=]
[,PLMNTS_F=][,VGCS=][,VGCSRoam=][,VGCSLst=][,VBS=][,VBSRoam=]
[,VBSLst=]

[Parameter Description]

S / N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EP S
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN	CS PS-GPRS PS-EP S
3	Tele	Telephone	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
4	EmegCall	Emergency Call	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
5	SMMO	Short message call originating	NUMSTR	O	1	0: delete subscription 1: subscribe	CS PS-GPRS
6	SMMT	Short message call terminating	NUMSTR	O	1	0: delete subscription 1: subscribe	CS PS-GPRS
7	Fac3	Facimile group 3 and alternative speech	NUMSTR	O	1	0: delete subscription 1: subscribe	CS



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ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)

8	AutoFac3	Automatic Facimile group 3	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
9	Fac4	Facimile group 4	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
10	PLMNTS_1	Specific telecom service 1	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
11	PLMNTS_2	Specific telecom service 2	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
12	PLMNTS_3	Specific telecom service 3	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
13	PLMNTS_4	Specific telecom service 4	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
14	PLMNTS_5	Specific telecom service 5	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
15	PLMNTS_6	Specific telecom service 6	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
16	PLMNTS_7	Specific telecom service 7	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
17	PLMNTS_8	Specific telecom service 8	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
18	PLMNTS_9	Specific telecom service 9	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
19	PLMNTS_A	Specific telecom service 10	NUMSTR	O	1	0: delete subscription 1: subscribe	CS



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ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)

20	PLMNTS_B	Specific telecom service 11	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
21	PLMNTS_C	Specific telecom service 12	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
22	PLMNTS_D	Specific telecom service 13	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
23	PLMNTS_E	Specific telecom service 14	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
24	PLMNTS_F	Specific telecom service 15	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
25	VGCS	VGCS subscription indication	NUMSTR	O	1	0: delete subscription 1: subscribed	CS
26	VGCSRoam	VGCS being allowed for use in VPLMN	NUMSTR	O	1	valid only in case of VGCS=1 0: not allowed 1: allowed	CS
27	VGCSLst	VGCS group identifier list	STRING	O	1..349	The parameter is necessary in case of VGCS=1 VGCS Group Id list; each GROUP ID is made up of 1~6 bit decimal numbers, and the maximal number is 50, separated with "-". GROUP ID can't be repeated. For example: 231-143-67987	CS
28	VBS	VBS subscription indication	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
29	VBSRoam	VBS allowed in VPLMN	NUMSTR	O	1	Valid in case of VBS=1 0: not allowed 1: allowed	CS

30	VBSLst	VBS group identifier list	STRING	O	3..449	Valid when VBS=1 VBS Group Id list and whether the subscriber can originate group call; each GROUP ID is made up of 1-6 bit decimal number; the value is 0 or 1 for whether group call can be originated; these two come in pair, separated by "&"; there are up to 50 pairs of GroupID and whether group call can be originated. The GROUP ID can't be repeated; each of them are separated by "-". For example: 231&1-143&0-67987&1, it indicates that: the subscriber can originate group call with GROUP ID 231; the subscriber can't originate group call with GROUP ID 143; the subscriber can originate group call with GROUP ID 67987	CS
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[Examples]

1. Modify Telecommunication Service

Mod

Tele:IMSI=4600000000000000,FAC3=1,AUTOFAC3=1,FAC4=1,PLMNTS_1=1,PLMNTS_2=1,PLMNTS_6=0,PLMNTS_7=1,VGCS=1,VGCSROAM=1,VGCSLST=1234,VBS=1,VBSROAM=1,VBSLST=11&0;

4.6.3 Modify Bearer Service**[Command code]** Mod Bear**[Command function]** Modify Bearer Service**[Input format]**

Mod Bear : IMSI/MSISDN=[,AllCDA=][,AllCDS=][,CDA300=][,CDA1200=][,CDA75=][,CDA2400=][,CDA4800=][,CDA9600=][,GenCDA=][,CDS1200=][,CDS2400=]

[,CDS4800=][,CDS9600=][,GenCDS=][,PA300=][,PA1200=][,PA75=][,PA2400=]
 [,PA4800=][,PA9600=][,GenPACA=][,PDS2400=][,PDS4800=][,PDS9600=]
 [,GenPDS=][,ASCDA=][,ASCDs=][,SFCDA=][,SFCDS=][,PLMNBS_1=]
 [,PLMNBS_2=][,PLMNBS_3=][,PLMNBS_4=][,PLMNBS_5=][,PLMNBS_6=]
 [,PLMNBS_7=][,PLMNBS_8=][,PLMNBS_9=][,PLMNBS_A=][,PLMNBS_B=]
 [,PLMNBS_C=][,PLMNBS_D=][,PLMNBS_E=][,PLMNBS_F=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3.	AIICDA	All CDA service	NUMSTR	O	1	0: delete subscription 1: subscribe
4.	AIICDS	All CDS service	NUMSTR	O	1	0: delete subscription 1: subscribe
5.	CDA300	CDA data service (300)	NUMSTR	O	1	0: delete subscription 1: subscribe
6.	CDA1200	CDA data service (1200)	NUMSTR	O	1	0: delete subscription 1: subscribe
7.	CDA75	CDA data service (1200_75)	NUMSTR	O	1	0: delete subscription 1: subscribe
8.	CDA2400	CDA data service(2400)	NUMSTR	O	1	0: delete subscription 1: subscribe
9.	CDA4800	CDA data service (4800)	NUMSTR	O	1	0: delete subscription 1: subscribe
10.	CDA9600	CDA data service (9600)	NUMSTR	O	1	0: delete subscription 1: subscribe
11.	GenCDA	General CDA	NUMSTR	O	1	0: delete subscription 1: subscribe
12.	CDS1200	CDS data service (1200)	NUMSTR	O	1	0: delete subscription 1: subscribe
13.	CDS2400	CDS data service (2400)	NUMSTR	O	1	0: delete subscription

						1: subscribe
14.	CDS4800	CDS data service (4800)	NUMSTR	O	1	0: delete subscription 1: subscribe
15.	CDS9600	CDS data service (9600)	NUMSTR	O	1	0: delete subscription 1: subscribe
16.	GenCDS	General CDS	NUMSTR	O	1	0: delete subscription 1: subscribe
17.	PA300	PadAccessCA Service (300)	NUMSTR	O	1	0: delete subscription 1: subscribe
18.	PA1200	PadAccessCA Service (1200)	NUMSTR	O	1	0: delete subscription 1: subscribe
19.	PA75	PadAccessCA Service (1200_75)	NUMSTR	O	1	0: delete subscription 1: subscribe
20.	PA2400	PadAccessCA Service (2400)	NUMSTR	O	1	0: delete subscription 1: subscribe
21.	PA4800	PadAccessCA Service (4800)	NUMSTR	O	1	0: delete subscription 1: subscribe
22.	PA9600	PadAccessCA Service (9600)	NUMSTR	O	1	0: delete subscription 1: subscribe
23.	GenPACA	General PadAccessCA	NUMSTR	O	1	0: delete subscription 1: subscribe
24.	PDS2400	PDS data service (2400)	NUMSTR	O	1	0: delete subscription 1: subscribe
25.	PDS4800	PDS data service (4800)	NUMSTR	O	1	0: delete subscription 1: subscribe
26.	PDS9600	PDS data service (9600)	NUMSTR	O	1	0: delete subscription 1: subscribe
27.	GenPDS	General DataPDS	NUMSTR	O	1	0: delete subscription 1: subscribe
28.	ASCDCA	AllAlternateSpeech_DataCDA	NUMSTR	O	1	0: delete subscription 1: subscribe
29.	ASCDSD	AllAlternateSpeech_DataCDS	NUMSTR	O	1	0: delete subscription 1: subscribe
30.	SFCDA	AllSpeechFollowedByDataCDA	NUMSTR	O	1	0: delete subscription

						1: subscribe
31.	SFCDS	AllSpeechFollowedByDataCDS	NUMSTR	O	1	0: delete subscription 1: subscribe
32.	PLMNBS_1	Specific bear service 1	NUMSTR	O	1	0: delete subscribe 1: subscribe
33.	PLMNBS_2	Specific bear service 2	NUMSTR	O	1	0: delete subscription 1: subscribe
34.	PLMNBS_3	Specific bear service 3	NUMSTR	O	1	0: delete subscribe 1: subscribe
35.	PLMNBS_4	Specific bear service 4	NUMSTR	O	1	0: delete subscription 1: subscribe
36.	PLMNBS_5	Specific bear service 5	NUMSTR	O	1	0: delete subscribe 1: subscribe
37.	PLMNBS_6	Specific bear service 6	NUMSTR	O	1	0: delete subscription 1: subscribe
38.	PLMNBS_7	Specific bear service 7	NUMSTR	O	1	0: delete subscribe 1: subscribe
39.	PLMNBS_8	Specific bear service 8	NUMSTR	O	1	0: delete subscription 1: subscribe
40.	PLMNBS_9	Specific bear service 9	NUMSTR	O	1	0: delete subscribe 1: subscribe
41.	PLMNBS_A	Specific bear service 10	NUMSTR	O	1	0: delete subscription 1: subscribe
42.	PLMNBS_B	Specific bear service 11	NUMSTR	O	1	0: delete subscribe 1: subscribe
43.	PLMNBS_C	Specific bear service 12	NUMSTR	O	1	0: delete subscription 1: subscribe
44.	PLMNBS_D	Specific bear service 13	NUMSTR	O	1	0: delete subscribe 1: subscribe
45.	PLMNBS_E	Specific bear service 14	NUMSTR	O	1	0: delete subscription 1: subscribe
46.	PLMNBS_F	Specific bear service 15	NUMSTR	O	1	0: delete subscribe 1: subscribe

[Notes]

1. The interface for NAM=0/1 users

[Examples]

1 Modify Bearer Service

Mod

Bear:IMSI=4600000000000000,CDA300=1,CDA1200=1,CDA75=1,CDA2400=1,CDA4800=1,CDA9600=1,GENCDA=1,PA300=1,PA1200=1,PA75=1,PA2400=1,PA4800=1,PA9600=1,GENPACA=1,CDS1200=1,CDS2400=1,CDS4800=1,CDS9600=1,GENCDS=1,PDS2400=1,PDS4800=1,PDS9600=1,GENPDS=1,ASCDA=1,ASCD=1,SFCDA=1,SFCDS=1,PLMNBS_1=1,PLMNBS_2=1,PLMNBS_3=1,PLMNBS_4=1,PLMNBS_5=1,PLMNBS_6=1,PLMNBS_7=1,PLMNBS_8=1,PLMNBS_9=1,PLMNBS_A=1,PLMNBS_B=1,PLMNBS_C=1,PLMNBS_D=1,PLMNBS_E=1,PLMNBS_F=1;

4.6.4 Modify Operator Determined Barring Data (ODB data)**[Command code]** Mod ODB**[Command function]** Modify ODB Data**[Input format]**

Mod ODB : IMSI/MSISDN=
 [,BOC=][,BIC=][,BSS=][,BR=][,BPR=][,BFN=][,BCT=][,BICT=]
 [,BFICT=][,BT=][,BIP=][,ODBPL_3=][,ODBPL_4=][,BPOS=]

[Parameter Description]

S/ N	Para_Name		Para_Value					Network Access Mode
	Name	Value	Type	At tr.	Code Length	Para_value Description		
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EP S	
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number	CS PS-GPRS PS-EP S	
3	BOC	(ODB)Barring of outgoing calls	NUMSTR	O	1	Select one of the following values: 0: no call barring 1: All outgoing calls barred 2: International outgoing calls barred 3: International outgoing calls barred except in the	CS PS-GPRS PS-EP S	

						home PLMN 4: Barring of all outgoing calls roaming outside the home PLMN country 5: International region outgoing calls barred 6: International region outgoing calls barred except in the home PLMN. 7: International outgoing calls barred except in the home PLMN country and international region outgoing calls barred	
4	BIC	(ODB)Barring of incoming calls	NUMSTR	O	1	Select one of the following values: 0: No incoming call barring 1: Barring incoming calls; 2: Barring all incoming calls roaming outside the home PLMN country 3: Barring all incoming calls roaming outside the zone of the home PLMN country.	CS
5	BSS	(ODB)Barring of supplementary service	NUMSTR	O	1	0: No barring 1: Barring	CS
6	BR	(ODB)Barring of roaming	NUMSTR	O	1	The value is one of the following: 0: No roaming barring 1: Barring of roaming outside the home PLMN 2: Barring of roaming outside the home PLMN	CS PS-GPRS PS-EP S

						country	
7	BPR	(ODB)Barring of High Rate Calling	NUMSTR	0	1	Select one of the following values: 0: No barring 1: Barring of PRC (Information) 2: Barring of PRC (Entertainment). 3: Barring of PRC (Information & Entertainment)	CS
8	BFN	(ODB)Barring of Forwarding Number Registration	NUMSTR	0	1	The value is one of the following: 0: No barring 1: Barring of registration of any call forwarded-to number 2: Barring of registration of any international call forwarded-to number; 3: Barring of registration of any international call forwarded-to number except in the HPLMN country 4: Barring of registration of any International region call forwarded-to number. 5: Barring of registration of any International region forwarded-to number except in the HPLMN country	CS
9	BCT	(ODB)Barring of Call Transferring	NUMSTR	0	1	Select one of the following values: 0: No barring of call transferring	CS

						1: Barring of call transfer 2: Barring of call transfer when at least one of the two calls should be charged. 3: Barring of call transfer when at least one of the two calls should be charged at international rates, 4: Barring of call transfer when at least one of the two calls should be charged at international zone I rates	
10	BICT	(ODB)Barring of call transferring when both calls should be charged	NUMSTR	O	1	0: No barring 1: Barring	CS
11	BFICT	(ODB)Barring of call transferring when for the subscriber call transferring is being made in the same MSC/VLR.	NUMSTR	O	1	0: No barring 1: Barring	CS
12	BT	Self-define the first ODB service(ODB of long-distance calls unauthorized)	NUMSTR	O	1	0: No barring of toll calls 1: Barring of toll calls Effective in case of being activated in OMC configuration data	CS PS-GPRS PS-EP S



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						"WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration"	
13	BIP	Self-define the second ODB service(ODB of IP calls authorized)	NUMSTR	O	1	0: IP phone available 1: IP phone not available Effective in case of being activated in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration"	CS PS-GPRS PS-EP S
14	ODBPL_3	Self-define the third ODB service	NUMSTR	O	1	0: not subscribed 1: subscribed Effective in case of being activated in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration"	CS PS-GPRS PS-EP S
15	ODBPL_4	Self-define the forth ODB service	NUMSTR	O	1	0: not subscribed 1: subscribed Effective in case of being activated in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration"	CS PS-GPRS PS-EP S

16	BPOS	Packet domain ODB incoming and outgoing call restriction	NUMSTR	O	1	Select one of the following values: 0: No restriction 1: Bar all packet domain incoming and outgoing calls 2: The subscriber is not allowed to originate service request from access point in the home network while roaming outside home network. 3: The subscriber is not allowed to originate service request from access point in the visiting network while roaming outside home network.	PS-GPRS PS-EPS
----	------	----------------------------------------------------------	--------	---	---	------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	----------------

[Examples]

1. Modify the ODB data:

Mod

ODB:IMSI=4600000000000000,BOC=1,BR=2,BPOS=2,BT=1,BIP=1,ODBPL_3=0,ODBPL_4=0,BIC=1,BPR=1,BFN=2,BCT=2,BICT=1,BFICT=1,BSS=1;

4.6.5 Modify Basic Service Enhanced Command

[Command code] Mod BscEx

[Command function] Modify Subscriber Type, CS Assigned Priority, Equal Access, Roaming Scheme, Telecom Service, Bearer Service, Operator Determined Barring data(ODB Data)

Supporting Subscription/Un-subscription the extension part of Telecom Service (PLMNTS, 0: De-subscription, 1: Subscription)

Supporting Subscription/Un-subscription the extension part of Bearer Service (PLMBTS, 0: De-subscription, 1: Subscription)

[Input format]

Mod BscEx : IMSI/MSISDN=[,MSType
=][,CSPri=][,ARD=][,SubType=][,NAEA=][,RoamSch=]
[,Tele=][,EmegCall=][,SMMO=][,SMMT=][,Fac3=][,AutoFac3=][,Fac4=]

[,PLMNTS_1=][,PLMNTS_2=][,PLMNTS_3=][,PLMNTS_4=][,PLMNTS_5=]
 [,PLMNTS_6=][,PLMNTS_7=][,PLMNTS_8=][,PLMNTS_9=][,PLMNTS_A=]
 [,PLMNTS_B=][,PLMNTS_C=][,PLMNTS_D=][,PLMNTS_E=][,PLMNTS_F=]
 [,AIICDA=][,AIICDS=][,CDA300=][,CDA1200=][,CDA75=][,CDA2400=]
 [,CDA4800=][,CDA9600=][,GenCDA=][,CDS1200=][,CDS2400=]
 [,CDS4800=][,CDS9600=][,GenCDS=][,PA300=][,PA1200=][,PA75=]
 [,PA2400=][,PA4800=][,PA9600=][,GenPACA=][,PDS2400=][,PDS4800=]
 [,PDS9600=][,GenPDS=][,ASCDCA=][,ASCDSD=][,SFCDA=][,SFCDS=]
 [,PLMNBS_1=][,PLMNBS_2=][,PLMNBS_3=][,PLMNBS_4=][,PLMNBS_5=]
 [,PLMNBS_6=][,PLMNBS_7=][,PLMNBS_8=][,PLMNBS_9=][,PLMNBS_A=]
 [,PLMNBS_B=][,PLMNBS_C=][,PLMNBS_D=][,PLMNBS_E=][,PLMNBS_F=]
 [,BOC=][,BIC=][,BSS=][,BR=][,BPR=][,BFN=][,BCT=][,BICT=][,BFICT=]
 [,BT=][,BIP=][,BPOS=][,ODBPL_3=][,ODBPL_4=][,RCType=][,AddRCType=]
 [,PsRoamSch=][,VGCS=][,VGCSRoa=][,VGCSLst=][,VBS=][,VBSRoam=]
 [,VBSLst=][,ZCSel=][,Stype=][,OFAID=][,CtrlSche=][,CMSISDN=]
 [,EXTTtype=][,SMSRouterID=][,SIPID][,DEFCALL=][,OriginFAID=]
 [,FRAUDID=][,OINI=][,TINI=][,OINR=][,TINR=]
 [,ISTAlertTimer=][,ISTAlertOpt=][,ISTVLROPT=][,ISTGMSOPT=]
 [,RestrictCF=][,CamelCtlName=][,BCID=][,MDTUSERCONSENT=]
 [,AREASRVID=][,EOINR=][,ETINR=]
 [,EPCCHARGCHRT=][,EPCROAMSCH=][,EPCSTNSR=][,EPCAMBRUP=]
 [,EPCAMBRDOWN=][,EPCAPNOIRep=][,EPCRFSR=][,EPCICSIND=]
 [,EPCDFTAPN=][,EPCDFTAPNType=][,EPCDFTAPNID=]
 [,EPCN3ARD_0=][,EPCN3ARD_1=][,EPCN3ARD_2=][,EPCN3ARD_3=]
 [,EPCN3ARD_4=][,EPCN3IPACC=][,EPCN3IPACCAPN=]
 [,EPCSTIMEOUT=][,NO3GPPROAMSCH=][EPCRELAYNODEIND=]
 [,SupMIP6FeaVec=][,MIP6FeaVec_1=][,MIP6FeaVec_2=][,MIP6FeaVec_3=]
 [,MIP6FeaVec_4=][,MIP6FeaVec_5=][,MIP6FeaVec_6=][,MIP6FeaVec_7=]
 [,MIP6FeaVec_8=][,MIP6FeaVec_9=][,EPCROAMSCHID=][,SDSCtlName=]
 [,PREIPSMGW=][,SCADDRESS=][,NOTIFYIMSAS=][,EPCVSRVCC=][,LMU=]
 [,SUPLAUTIMER=][,LAUTIMER=][,SUPRAUTAUTIMER=][,RAUTAUTIMER=]
 [,MPSEPSPRIORIT=]

See 4.6.1, 4.6.2, 4.6.3 and 4.6.4 for the meaning and description of each parameter.

See 4.2.1 for the meaning and description of ZCSel, OFAID and Stype parameters.

[Parameter Description]

S/ N	Para_Name		Para_Value					Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description		
1.	IMSI	International Mobile	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EP S	

		Subscriber Identity					
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number	CS PS-GPRS PS-EP S
3.	CMSISDN	Common MSISDN Number	STRING	O	6..15	<p>Principal card subscriber number associated to Multi-SIM subscriber.</p> <p>If the inputted parameter is then same as MSISDN number, then Multi-SIM principal card subscriber is subscribed.</p> <p>If the inputted parameter is different from MSISDN number, then Multi-SIM supplementary card subscriber is subscribed.</p> <p>If "*" is inputted, then Multi-SIM service is deleted. The subscriber becomes a common one.</p>	CS PS-GPRS PS-EP S
4.	EXTType	Extension subscriber type	STRING	O	1..30	"*" indicates no extansion subscriber type; Other values are obtained from OMC configuration "WCN Domain Service Configuration->Custom service Configuration->Extended Subscriber Type Configuration".	CS PS-GPRS PS-EP S

						the value of this parameter is case-sensitive.	
5.	SMSRouter ID	SMS ROUTER ID	NUMSTR	O	1..3	Value range: 0~255, 1)0 means SMS ROUTER desubscribed; 2)Not 0 means SMS ROUTER subscribed; Please refer to OMC configuration "WCN Domain Service Configuration->SMS Router Configuration->SMS Router Configuration".	CS PS-GPRS
6.	SIPID	SIP IN service	NUMSTR	O	1..5	Value range: 0~65535, Please refer to OMC configuration "Admin Domain Public Configuration->SIP IN Service Configuration->SIP IN Configuration". SIPID conflicts with CS CAMEL Service.	CS
7.	DEFCALL	Default call service code	STRING	O	1..16	The default call service code used when BC is not applied in SendRoutingInfo request received by HLR. The values and descriptions are shown in chapter 4.2.1. * means deleting default service code.	CS
8.	OriginFAID	Origin for Forwarded-to Number	STRING	O	1..3	*:De-subscribe Value range: 0~511, Please refer to OMC	CS

		Analysis				configuration "WCN Domain Service Configuration->Custom Service Configuration->Origin for Forward-to Number Analysis".	
9.	FRAUDID	The Fraud Profile ID for Subscriber	NUMSTR	O	1..3	0~250, Please refer to OMC configuration "WCN Domain Service Configuration->Froud Profile Configuration"	CS
10.	OINI	Originating Intelligent Network Indication	NUMSTR	O	1	0: De-subscribe 1: Subscribe	CS
11.	TINI	Terminating Intelligent Network Indication	NUMSTR	O	1	0:De-subscribe 1:Subscribe	CS
12.	OINR	Originating Intelligent Network Reference	NUMSTR	O	1..3	0:De-subscribe 1~999: Subscribe	CS
13.	TINR	Terminating Intelligent Network Reference	NUMSTR	O	1..3	0:De-subscribe 1~999:Subscribe	CS
14.	ISTAlertTimer	IST Alert Timer	NUMSTR	O	1..3	0,15~255	CS
15.	ISTAlertOpt	IST Alert Option	NUMSTR	O	1	0~3 0:Call allowed 1:Terminate call Activity referred 2:Continue monitor call	CS

						activity 3:terminate all call activities	
16.	ISTVLROPT	VLR Not Support IST Option	NUMSTR	O	1	0~3 0:Ignore 1:Supplementary service Barring of Outgoing Call 2:Supplementary service Barring of Incoming Call 3:Supplementary service Barring of Outgoing call and Incoming Call	CS
17.	ISTGMSCO PT	GMSC Not Support IST Option	NUMSTR	O	1	0~2 0:ignore 1:Operator Determined Barring of all incoming calls 2:Supplementary service Barring of All Outgoing Calls	CS
18.	RestrictCF	Restrict User register or unregister forward-numb er	NUMSTR	O	1	Value: 0: Unrestrict 1: Restrict	CS
19.	CamelCtlNa me	Camel Control Strategy Name	STRING	O	1..30	"*indicates no Camel Control Strategy subscription; Other data can be obtained from OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->Camel Control Strategy Configuration"	CS PS-GPRS
20.	BCID	Bearer	NUMSTR	O	1..5	Value range: 0~65535	CS



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		capability index				Refer to OMC configuration data "Public Service Configuration->WCDMA Global Service Configuration->Bearer Capability Configuration"	
21.	MDTUSERC ONSENT	MDT User Consent	NUMSTR	O	1	0 : CONSENT_NOT_GIVEN 1: CONSENT_GIVEN 255: NONE	CS PS-GPRS PS-EP S
22.	AREASRVI D	Service Area ID	NUMSTR	O	1..5	Value range: 0~65535 0: De-subscribe Other data can be Obtained from OMC configuration data "WCN Domain Service Configuration->Area Service Configuration->Roaming Service Configuration".	CS PS-GPRS PS-EP S
23.	LMU	LMU Identifier	NUMSTR	O	1	0 : De-subscribe 1 : Subscribed	CS
24.	EOINR	Extended OCSI Reference	NUMSTR	O	1..3	0: De-subscribe 1~999: Subscribed	CS
25.	ETINR	Extended TCSI Reference	NUMSTR	O	1..3	0: De-subscribe 1~999: Subscribed	CS
26.	SUPLAUTI MER	Support LAU Timer	NUMSTR	O	1	0: Not Support 1: Support	CS
27.	LAUTIMER	LAU Timer	NUMSTR	O	1..10	0~4294967295	CS
28.	SUPRAUTA UTIMER	Support RAU/TAU Timer	NUMSTR	O	1	0: Not Support 1: Support	PS-GPRS PS-EPS
29.	RAUTAUTI MER	RAU/TAU Timer	NUMSTR	O	1..10	0~4294967295	PS-GPRS PS-EPS
It supports the following parameters only when the SubType is EPC							
30.	EPCCHARG CHRT	Charging features of EPC subscription	NUMSTR	O	1..3	Value:0~255 1:Hot Billing 2:Flat Rate 4:Prepaid Service	PS-EPS

						8:Normal Billing 16:Behaviour1 32:Behaviour2 64:Behaviour3 128:Behaviour4 "0" indicates no charging characteristics	
31.	EPCROAMS CH	EPC Roaming Scheme Name	STRING	O	1..30	"*" indicates no roaming scheme subscription; Other data can be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". If both of EPCROAMSCHID and EPCROAMSCH exist, it will fail.	PS-EPS
32.	EPCSTNSR	Session Transfer Number for SRVCC	NUMSTR	O	6..15	ISDN STRING	PS-EPS
33.	EPCAMBRU P	Max-Requeste d-Bandwidth-U L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295	PS-EPS
34.	EPCAMBRD OWN	Max-Requeste d-Bandwidth-D	NUMSTR	O	1..10	0~4294967295	PS-EPS

		L of UE-AMBR(Aggr egate Maximum Bit Rate)					
35.	EPCAPNOI Rep	APN-OI-replac ement	STRING	O	1..64	The valid value is like: mnc.mcc.gprs '*' indicates no subscription.	PS-EPS
36.	EPCRfsp	RAT-Frequency -Selection-Prio rity-ID	NUMSTR	O	1..3	0~256, 0 indicates no subscription	PS-EPS
37.	EPCICSIND	ICS flag	NUMSTR	O	1	1:True 0:Flase	PS-EPS
38.	EPCDFTAP N	APNConf defalt Access name	STRING	O	1..62	It should not be '*', Other data could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration".	PS-EPS
39.	EPCDFTAP NType	The type of defalt Access PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6	PS-EPS
40.	EPCDFTAP NID	defalt APN Configration flag	NUMSTR	O	1..2	0~50, EPCDFTAPN and EPCDFTAPNID should not exist simultaneously.	PS-EPS
41.	EPCN3ARD _0	non-3GPP Access restriction parameter of WLAN Not Allowed	NUMSTR	O	1	0:Allow to access WLAN 1:Not allow to access WLAN	PS-EPS

42.	EPCN3ARD _1	non-3GPP Access restriction parameter of CDMA2000_1X Not Allowed	NUMSTR	O	1	0:Allow to access CDMA2000_1X 1:Not allow to access CDMA2000_1X	PS-EPS
43.	EPCN3ARD _2	non-3GPP Access restriction parameter of HRPD Not Allowed	NUMSTR	O	1	0:Allow to access HRPD 1:Not allow to access HRPD	PS-EPS
44.	EPCN3ARD _3	non-3GPP Access restriction parameter of UMB Not Allowed	NUMSTR	O	1	0:Allow to access UMB 1:Not allow to access UMB	PS-EPS
45.	EPCN3ARD _4	non-3GPP Access restriction parameter of EHRPD Not Allowed	NUMSTR	O	1	0:Allow to access EHRPD 1:Not allow to access EHRPD	PS-EPS
46.	EPCN3IPAC C	whether allow the user to access EPC from non-3GPP network	NUMSTR	O	1	0: allow to access EPC network by non-3GPP 1: do not allow to access EPC network by non-3GPP	PS-EPS
47.	EPCN3IPAC CAPN	whether disable all APNs for a subscriber at one time	NUMSTR	O	1	0: Enable all APNs for a subscriber 1: Disable all APNs for a subscriber	PS-EPS
48.	EPCSTIME OUT	the maximum period for a session measured in seconds	NUMSTR	O	1..10	0~2147483647(s)	PS-EPS



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49.	NO3GPPRO AMSCH	No 3GPP Roaming Scheme Name.	STRING	O	1..30	“*” indicates no roaming scheme subscription; Other data can be obtained from HLR configuration “WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration”	PS-EPS
50.	EPCRELAY NODEIND	EPC Relay Node Indicator	NUMSTR	O	1..3	0: NOT_RELAY_NODE 1: RELAY_NODE 255:NONE	PS-EPS
51.	SupMIP6Fe aVec	MIP6-Feature- Vector	NUMSTR	O	1	1: subscribe 0: not subscribe	PS-EPS
52.	MIP6FeaVe c_1	Whether support MIP6_INTEGR ATED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
53.	MIP6FeaVe c_2	Whether support LOCAL_HOME _AGENT_ASSI GNMENT	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
54.	MIP6FeaVe c_3	Whether support PMIP6_SUPPO RTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
55.	MIP6FeaVe c_4	Whether support IP4_HOA_SUP ORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
56.	MIP6FeaVe c_5	Whether support LOCAL_MAG_R OUTING_SUPP ORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
57.	MIP6FeaVe c_6	Whether support ASSIGN_LOCA L_IP	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS



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58.	MIP6FeaVe c_7	Whether support MIP4_SUPPOR TED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
59.	MIP6FeaVe c_8	Whether support OPTIMIZED_I DLE_MODE_M OBILITY	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
60.	MIP6FeaVe c_9	Whether support GTPv2_SUPPO RTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0:not support 1:support	PS-EPS
61.	EPCROAMS CHID	EPC Roaming Scheme ID	STRING	O	1..5	Value range: 0~65535 , 0: desubscribe, other value refer to the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". If both of EPCROAMSCID and EPCROAMSCCH exist, it will fail.	PS-EPS
62.	SDSCtlNam e	SDS Control Strategy Name	STRING	O	1..30	"*”indicates de-subscribe SDS Control Strategy; Other data can be obtained from OMC configuration data "WCDMA Global Service Configuration->SDS Control Strategy Configuration"	CS PS-GPRS PS-EP S
63.	PREIPSMG W	Preconfigured IP-SM-GW	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates delete the IP-SM-GW	CS PS-GPRS PS-EP S
64.	SCADDRES S	Service Centre Address	STRING	O	1..38	Character string of 1 to 38 digits	CS PS-GPRS PS-EP S

						“*” indicates delete the address	
65.	NOTIFYIM SAS	Notify IMS AS	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates delete the IMS AS	CS PS-GPRS PS-EP S
66.	EPCVSRVC C	Subscribed VSRVCC	NUMSTR	O	1	0: De-subscribe 1: Subscribed	PS-EPS
67.	MPSEPSPRI ORITY	MPS-EPS-PRIORITY	NUMSTR	O	1	0: De-subscribe 1: Subscribed	PS-EPS

[Notes]

1. ISTAlertOpt, ISTVLROPT, ISTGMSCOPT will be effective when the IST Alert timer value is in a range from 15 to 255.
2. The Parameter “EPCDFTAPNType” is not use temporary.

[Examples]

1. Modify Basic Service Enhanced Command

Mod

```
Bscex:IMSI=4600000000000000,CDA300=1,CDA1200=1,CDA75=1,CDA2400=1,CDA4800=1,CDA9600=1,GENCDA=1,PA300=1,PA1200=1,PA75=1,PA2400=1,PA4800=1,PA9600=1,GENPACA=1,CDS1200=1,CDS2400=1,CDS4800=1,CDS9600=1,GENCDS=1,PDS2400=1,PDS4800=1,PDS9600=1,GENPDS=1,ASCDCA=1,ASCDSD=1,SFCDA=1,SFCDS=1,PLMNBS_1=1,PLMNBS_2=1,PLMNBS_3=1,PLMNBS_4=1,PLMNBS_5=1,PLMNBS_6=1,PLMNBS_7=1,PLMNBS_8=1,PLMNBS_9=1,PLMNBS_A=1,PLMNBS_B=1,PLMNBS_C=1,PLMNBS_D=1,PLMNBS_E=1,PLMNBS_F=1;
```

4.7 Region Restriction

4.7.1 Set User Region Restriction

[Command code] Set RSZI

[Command function] Set User Region Restriction

[Input format]

Set RSZI : IMSI/MSISDN=,CCNDC=, ZCList=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN	NUMSTR	M	6..15	MSISDN

		Number				
3	CCNDC	CC and NDC	NUMSTR	M	2..12	CC: country code NDC: network destination code
4	ZCList	Zone Code List	STRING	M	4..49	Each zone code has a 4-digit length; “-” (hyphen) is used to separate two adjacent zones; at most 10 code zones can be set.

[Notes]

1. The interface for NAM=0/1/2 users.
2. If CCNDC already exists, use the input new zone code to override the existing zone code. CCNDC remains unchanged. If CCNDC does not exist, then use the input parameter to insert a new entry. 10 ZCLists can be added at most.

[Examples]

1. Set User Region Restriction:

Set RSZI : IMSI=460001122334455, CCNDC =86139 , ZCList =1111-2222;

4.7.2 Delete User Region Restriction

[Command code] Del RSZI

[Command function] Delete User Region Restriction

[Input format]

Del RSZI : IMSI/MSISDN=,CCNDC=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
3	CCNDC	CC and NDC	NUMSTR	M	2..12	CC: country code NDC: network destination code

[Examples]

1. Delete User Region Restriction:

Del RSZI : MSISDN=8613954678912, CCNDC=86137;

4.8 Supplementary Service

4.8.1 Modify Supplementary Service

[Command code] Mod SS

[Command function] Subscribe and de-subscribe supplementary service; modify call barring password control authority and call barring password; modify the followings: notifying the caller of call forwarding, notifying the forwarded-to party of call forwarding, and called number presentation of call forwarding; set the maximum priority and the default priority of eMLPP; modify the call identity extension subscription information.

[Input format]

```
Mod SS : IMSI/MSISDN=[,CLIP=][,CLIPOpt=][,CLIR=][,CLIROpt=][,COLP=]
          [,COLPOpt=][,COLR=][,CW=][,CH=][,CFU=][,CFUNTC=][,CFURDP=]
          [,CFB=][,CFBNTC=][,CFBNTF=][,CFBRDP=][,CFNRY=][,CFNRYNTC=]
          [,CFNRYNTF=][,CFNRYRDP=][,CFNRC=][,CFNRCNTC=][,CFNRCRDP=]
          [,CBCtrl=][,CB_PWD=][,BAOC=][,BOIC=][,BOICE=][,BAIC=][,BICR=]
          [,MPTY=][,ECT=][,AOCC=][,AOCI=][,CUG=][,eMLPP=][,MaxPri=]
          [,DefPri=][,CD=][,CDNTC=][,CDRDP=][,PLSS_1=][,PLSS_2=]
          [,PLSS_3=][,PLSS_4=][,PLSS_5=][,PLSS_6=][,PLSS_7=][,PLSS_8=]
          [,PLSS_9=][,PLSS_A=][,PLSS_B=][,PLSS_C=][,PLSS_D=][,PLSS_E=]
          [,PLSS_F=][,CFD=][,CFDNTC=][,CFDNTF=][,OVRCFB=][,OVRCFNRY=]
          [,OVRCFNRC=][,UUS1=][,UUS2=][,UUS3=][,CFBN=][,MC=][,Nbr_SB=]
          [,Nbr_User=][,CNAP=][,CNAPOpt=][,BORO=][,TRIMPTY=][,SSET=]
          [,RDI=][,KEEP=][,FM=][,FMGRP=][,FMSUPER=][,OCCBS=]
          [,TCCBS=][,CBNotChkPwd=][,CFF=]
```

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3.	CLIP	Calling Line Identification Presentation	NUMSTR	O	1	0: De-subscribed 1: subscribed
4.	CLIOpt	Calling Line Identification Presentation	NUMSTR	O	1	0: Override-Enabled 1: Override-Disabled

		Extension				Valid when CLIP=1
5.	CLIR	Calling Line Identification Restriction	NUMSTR	0	1	0: De-subscribed 1: subscribed
6.	CLROpt	Calling Line Identification Restriction Extension	NUMSTR	0	1	0: Permanent 1: temporary mode with presentation is restricted 2: temporary mode with presentation is allowed Valid when CLIR=1
7.	COLP	Called Line Identification Presentation	NUMSTR	0	1	0: De-subscribed 1: subscribed
8.	COLPOpt	Called Line Identification Presentation Extension	NUMSTR	0	1	0: Override-Enabled 1: Override-Disabled Valid when COLP=1
9.	COLR	Called Line Presentation Identification Restriction	NUMSTR	0	1	0: De-subscribed 1: subscribed
10.	CW	Call Waiting	NUMSTR	0	1	0: De-subscribed 1: subscribed
11.	CH	Call Holding	NUMSTR	0	1	0: De-subscribed 1: subscribed
12.	CFU	Call Forwarding unconditional	NUMSTR	0	1	0: De-subscribed 1: Subscribed
13.	CFUNTC	Notify the caller of call forwarding unconditional	NUMSTR	0	1	0: not notify 1: notify Valid when CFU=1
14.	CFURDP	Called number presentation for call forwarding unconditional	NUMSTR	0	1	0: not show 1: show Valid when CFU=1
15.	CFB	Call Forwarding on busy	NUMSTR	0	1	0: De-subscribed 1: subscribed

16.	CFBNTC	Notify the caller of call forwarding on busy	NUMSTR	0	1	0: not notify 1: notify Valid when CFB=1
17.	CFBNTF	Notify the forwarded-to party of call forwarding on busy	NUMSTR	0	1	0: not notify 1: notify Valid when CFB=1
18.	CFBRDP	Called number Presentation for call forwarding on busy	NUMSTR	0	1	0: not show 1: show Valid when CFB=1
19.	CFNRY	Call Forwarding on No Reply	NUMSTR	0	1	0: De-subscribed 1: Subscribed
20.	CFNRYNTC	Notify the caller of call forwarding on no reply	NUMSTR	0	1	0: Not notify 1: Notify Valid when CFNRY=1
21.	CFNRYNTF	Notify the forwarded-to party of call forwarding on no reply	NUMSTR	0	1	0: Not notify 1: Notify Valid when CFNRY=1
22.	CFNRYRDP	Called number Presentation for call forwarding on no reply	NUMSTR	0	1	0: not show 1: show Valid when CFNRY=1
23.	CFNRC	Call Forwarding on Not Reachable	NUMSTR	0	1	0: De-subscribed 1: Subscribed
24.	CFNRCNTC	Notify the caller of call forwarding on not reachable	NUMSTR	0	1	0: not notify 1: notify Valid when CFNRC=1
25.	CFNRCRDP	Called number presentation for call forwarding on not reachable	NUMSTR	0	1	0: not show 1: show Valid when CFNRC=1
26.	CBCtrl	Call barring password control authority	NUMSTR	0	1	0: Controlled by operator 1: Controlled by subscriber

27.	CB_PWD	Call barring password	NUMSTR	0	4	Character string of 4 digits
28.	BAOC	(SS) Barring of all outgoing calls	NUMSTR	0	1	0: De-subscribed 1: Subscribed
29.	BOIC	(SS) Barring of international outgoing call	NUMSTR	0	1	0: De-subscribed 1: Subscribed
30.	BOICE	(SS) Barring of outgoing calls except those in home PLMN	NUMSTR	0	1	0: De-subscribed 1: Subscribed
31.	BAIC	(SS) Barring of all incoming calls	NUMSTR	0	1	0: De-subscribed 1: Subscribed
32.	BICR	(SS) Barring of incoming calls when roaming outside HPLMN country	NUMSTR	0	1	0: De-subscribed 1: Subscribed
33.	MPTY	Multi-party calls	NUMSTR	0	1	0: De-subscribed 1: Subscribed
34.	ECT	Explicit call transfer	NUMSTR	0	1	0: De-subscribed 1: Subscribed
35.	CD	Call Diversion	NUMSTR	0	1	0: De-subscribed 1: Subscribed
36.	CDNTC	Notify the caller of call diversion	NUMSTR	0	1	0: Not notification 1: Notification Valid when CD=1
37.	CDRDP	Called number Presentation on call diversion	NUMSTR	0	1	0: not show 1: show Valid when CD=1
38.	AOCC	Advice of Charge-- Charging	NUMSTR	0	1	0: De-subscribed 1: Subscribed
39.	AOCI	Advice of Charge --Information	NUMSTR	0	1	0: De-subscribed 1: Subscribed
40.	CUG	Close User Group	NUMSTR	0	1	0: De-subscribed 1: Subscribed

41.	eMLPP	Enhanced Multi-Level Precedence and Pre-emption service	NUMSTR	0	1	0: De-subscribed 1: Subscribed
42.	MaxPri	eMLPP maximum priority	NUMSTR	0	1	values:0~6 Valid when eMLPP =1
43.	DefPri	eMLPP default priority	NUMSTR	0	1	values:0~6 Valid when eMLPP =1
44.	PLSS_1	Self-defined supplementary service 1	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
45.	PLSS_2	Self-defined supplementary service 2	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
46.	PLSS_3	Self-defined supplementary service 3	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN

						Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
47.	PLSS_4	Self-defined supplementary service 4	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
48.	PLSS_5	Self-defined supplementary service 5	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
49.	PLSS_6	Self-defined supplementary	NUMSTR	0	1	The parameter is configured in OMC

		service 6				configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
50.	PLSS_7	Self-defined supplementary service 7	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
51.	PLSS_8	Self-defined supplementary service 8	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
52.	PLSS_9	Self-defined	NUMSTR	0	1	The parameter is

		supplementary service 9				configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
53.	PLSS_A	Self-defined supplementary service 10	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
54.	PLSS_B	Self-defined supplementary service 11	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed

55.	PLSS_C	Self-defined supplementary service 12	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
56.	PLSS_D	Self-defined supplementary service 13	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
57.	PLSS_E	Self-defined supplementary service 14	NUMSTR	0	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed

						1: Subscribed
58.	PLSS_F	Self-defined supplementary service 15	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: De-subscribed 1: Subscribed
59.	CFD	Defaulted as CFD	NUMSTR	O	1	0: De-subscribed 1: Subscribed
60.	CFDNTC	Notice the calling party	NUMSTR	O	1	0: Not notice 1: Notice Valid when CFD =1
61.	CFDNTF	Notice the forwarding party	NUMSTR	O	1	0: Not notice 1: Notice Valid when CFD =1
62.	OVRCFB	CFD overriding CFB	NUMSTR	O	1	0: not overriding 1: overriding Valid when CFD =1
63.	OVRCFNRY	CFD overriding CFNRY	NUMSTR	O	1	0: not overriding 1: overriding Valid when CFD =1
64.	OVRCFNRC	CFD overriding CFNRC	NUMSTR	O	1	0: not overriding 1: overriding Valid when CFD =1
65.	UUS1	User-to-User Signaling 1	NUMSTR	O	1	0: De-subscribed 1: Subscribed
66.	UUS2	User-to-User Signaling 2	NUMSTR	O	1	0: De-subscribed 1: Subscribed

67.	UUS3	User-to-User Signaling 3	NUMSTR	O	1	0: De-subscribed 1: Subscribed
68.	CFBN	Network switch	NUMSTR	O	1	0: De-subscribed 1: Subscribed
69.	MC	MultiCall	NUMSTR	O	1	0: De-subscribed 1: Subscribed
70.	Nbr_SB	MAX number of coexisting bearers set by operator	NUMSTR	O	1	Value range: 2~7 Valid when MC=1
71.	Nbr_User	MAX number of coexisting bearers set by user	NUMSTR	O	1	Value range: 1~7 And value shall not be larger than Nbr_SB Valid when MC=1
72.	CNAP	Calling name presentation	NUMSTR	O	1	0: De-subscribed 1: Subscribed
73.	CNAPOpt	CNAP override option	NUMSTR	O	1	0: OverrideEnabled 1: OverrideDisabled Valid when CNAP=1
74.	BORO	Roming out of all outgoing call barring of the homing PLMN country	NUMSTR	O	1	0: De-subscribed 1: Subscribed
75.	TRIMPTY	Triple MPTY	NUMSTR	O	1	0: No Triple MPTY 1: Triple MPTY Valid when MPTY=1
76.	SSET	Service Set	NUMSTR	O	1..4	1~1999: subscribe, 0: de-subscribe
77.	RDI	redirection destination index	STRING	O	1..2	0~32: subscribe, *: de-subscribe
78.	KEEP	when De-subscribed CFD , whether you want to keep Defaulted CFD number which the user registered	NUMSTR	O	1	1: when de-subscribed CFD, keep a defaulted CFD number the user registered before; 0 or without this parameter: when

		before				De-subscribed CFD, delete Defaulted CFD number which the user registered before;
79	FM	Follow Me	NUMSTR	0	1	0: De-subscribed 1: Subscribed
80	FMGRP	FM Group Name	STRING	0	1..30	"*" indicates that no FM Group is subscribed. Other values are obtained from OMC configuration data "WCN Domain Service Configuration->Follow Me Service Configuration->Follow Me Group Configuration". Valid while FM=1
81	FMSUPER	Follow Me supervisor	NUMSTR	0	1	0: NO 1: YES Valid while FM=1
82	OCCBS	Originating Call Completion to Busy subscriber	NUMSTR	0	1	0: De-subscribed 1: Subscribed
83	TCCBS	Terminating Call Completion to Busy subscriber	NUMSTR	0	1	0: De-subscribed 1: Subscribed
84	CBNotChkPwd	Call barring not check password	NUMSTR	0	1	0:check 1:not check
85	CFF	Disable call forward	NUMSTR	0	1	0: De-subscribed 1: Subscribed

[Notes]

1. The interface for NAM=0/1 users.
2. 6 is the highest priority of eMLPP, while 4 is the lowest,priority from high to low are respectively 6 , 5, 0, 1, 2, 3, 4. The default priority DefPri cannot be higher than the highest priority MaxPri. For example, the highest priority of eMLPP is two, while its default priority can only be selected from two, three or four.
3. Value of Nbr_User parameter shall be no smaller than 0 and no larger than value of

Nbr_SB. If no Nbr_SB is carried when the parameter is subscribed, "Maximum Number of Bearers Nbr_SB" in OMC configuration data "WCN Domain Service Configuration->Service Option Configuration->WCN Service Supporting Option Configuration" will be copied and given to Nbr_SB. If no Nbr_User is carried, the Nbr_SB will be copied and given to Nbr_User.

[Examples]

1. Subscribe the CLIP:

Mod SS : MSISDN=8613954678912,CLIP=1,CLIPOpt=1;

2. Modify the CB control authority and the CB password:

Mod SS : IMSI=460001122334455,CBCtrl=1,CB_PWD=1234;

4.8.2 Activate Supplementary Service

[Command code] Act SS

[Command function] Activate or Deactivate Services of Call Waiting (CW), Call Forwarding (CF) and Call Barring (CB).

[Input format]

Act SS : IMSI/MSISDN=, SS=[, Bsg=], Active=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3	SS	Supplementary Service Name	STRING	M	2..5	Select one of the following values: CW: call waiting CFU: call forwarding unconditional CFB: call forwarding on busy CFNRY: call forwarding on no reply CFNRC: call forward on not reachable BAOC: barring of all outgoing calls BOIC: barring of international outgoing calls BOICE: barring of all outgoing calls except in home PLMN.

						BAIC: barring of all incoming calls BICR: barring of incoming calls when roaming abroad BORO: barring of all outgoing calls when roaming out of home PLMN CFF: Disable call forward
4	Bsg	Basic Service	NUMSTR	O	1	Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS) When SS=CW, CFB, or CFNRY, SMS is not supported in basic services. If without BSG, it indicates to operate on all the subscribed BSGs When SS=CFF, BSG is ignored.
5	Active	Activate basic service or not	NUMSTR	M	1	0: deactivate 1: activate

[Notes]

1. The interface for NAM=0/1 users.

[Examples]

1. Activate call waiting for the mobile user:

Act SS :IMSI=460001122334455,SS=CW,Bsg=0,Active=1;

2. Deactivate barring of international outgoing calls (BOIC) for the mobile user:

Act SS :MSISDN=8613954678912,SS=BOIC,Bsg=0,Active=0;

4.8.3 Register Forwarded-to Number

[Command code] Reg FN

[Command function]register and activate call forwarded-to number

[Command Format]

Reg FN : IMSI/MSISDN=,SS= [,Bsg=][,Register=][,Active=][,FwdNum=][,Time=]
[,CFDBAddr=][,CFDNRyAddr=][,CFDNRcAddr=][,CFBNAddr=]
[,KEEP=][,CFDBAVI=][,CFDNRyAVI=][,CFDNRcAVI=][,CFDNRYTIME=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
3	SS	Call Forwarding Name	STRING	M	3.5	CFU: call forwarding unconditional CFB: call forwarding on busy CFNRY: call forwarding on no reply CFNRC: call forward on not reachable CFD: call forward default CFBN: Network switch
4	Bsg	Basic Service	NUMSTR	O	1	Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS) When SS=CFB, CFNRY, or CFD, SMS is not supported in basic services. When SS=CFBN, support speck service only, If BSG

						is of other values, all are 0 by default. If without BSG, indicated operation to all subscribed BSG.
5	Register	Register flag	NUMSTR	O	1	0: unregister 1:register
6	Active	Activate or deactivate	NUMSTR	O	1	0: deactivate 1: activate When SS=CFD or CFBN, not need this parameter.
7	FwdNum	Forwarded-to Number	NUMSTR	O	2..15	When SS=CFU,CFB,CFNRY,or CFNRC has this parameter.
8	Time	Time with no reply	NUMSTR	O	1..2	When SS=CFNRY, the values can be one of 5, 10, 15, 20, 25, 30 seconds.
9	CFDBAddr	Defaulted CFD number	STRING	O	1..28	Input "*" means deleting registered number. Other values are Character string of 2 to 28 digits
10	CFDNRYAddr	Defaulted CFDNRY number	STRING	O	1..28	Input "*" means deleting registered number. Other values are Character string of 2 to 28 digits
11	CFDNRcAddr	Defaulted CFDNRc number	STRING	O	1..28	Input "*" means deleting registered number. Other values are Character string of 2 to 28 digits
12	CFBNAddr	Network HON	STRING	O	1..16	Input "*" means deleting registered network switch number. Other values are Character string of 2 to 16 digits
13	KEEP	when De-subscribed CFD , whether you	NUMSTR	O	1	1: when De-subscribed CFD, keep Defaulted

		want to keep Defaulted CFD number which the user registered before				CFD number which the user registered before; 0 or without this parameter : when De-subscribed CFD, delete Defaulted CFD number which the user registered before;
14	CFDBAVI	CFDB available area	NUMSTR	0	1	0: NONE 1: HPLMN 2: ALLPLMN Valid when SS=CFD
15	CFDNRyAVI	CFDNRy available area	NUMSTR	0	1	0: NONE 1: HPLMN 2: ALLPLMN Valid when SS=CFD
16	CFDNRcAVI	CFDNRc available area	NUMSTR	0	1	0: NONE 1: HPLMN 2: ALLPLMN
17	CFDNRyTIME	Time with no reply for CFDNRy	NUMSTR	0	1..2	0 : not subscribed. FE will use configuration in OMM. Other : the values can be one of 5, 10, 15, 20, 25, 30 seconds. Valid when SS=CFD

[Notes]

1. The interface for NAM=0/1 users.

[Examples]

1. Register and activate CFU forwarded-to Number:

Reg

FN :IMSI=460001122334455,SS=CFU,Bsg=0,Register=1,Active=1,FwdNum=862528700
64;

2. Register CFNRy forwarded-to Number:

Reg

FN :IMSI=460001122334455,SS=CFNRY,Bsg=0,Register=1,FwdNum=862528700641122
3344,Time=25;

3. Deactivate CFNRc for the mobile user:

Reg FN : IMSI=460001122334455,SS=CFNRC,Bsg=0,Active=0;

4. Register defaulted CFDNRy number:

Reg

FN:IMSI=460001122334455,SS=CFD,Bsg=0,Register=1,CFDNRyAddr=86252870064;

4.9 CUG Service

4.9.1 Subscribe CUG Group

[Command code] Mod Cug

[Command function] Add or modify CUG group

[Input format]

Mod Cug : IMSI/MSISDN=,CugIC=,Index=,BsList=[,ICR=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3	CugIC	Identity of CUG group	HEXSTR	M	8	Value range: 00000000~270FFFFF, 8-digit hexadesimal
4	Index	Index of CUG group	NUMSTR	M	1..5	0~32767
5	BsList	Base Service List	STRING	M	11	See notes below.
6	ICR	Intra CUG Restrictions	NUMSTR	O	1	0: no call barring in CUG group 1: incoming call barring in CUG group 2: outgoing call barring in CUG group

[Notes]

1. The interface for NAM=0/1 users.
2. If command parameter CugIC exists in DB, it means to update the subscribed CUG data. If CugIC does not exist in DB, it means to subscribe a new CUG group.

3. Parameter BsList is composed of "x-x-x-x-x-x" character string, in which, "x" stands for "0" or "1". 0 means not subscribed, and 1 means subscribed. The first "x" stands for voice subscription or not, the second "x" for facsimile subscription or not, the third for asynchronous data subscription (CDA) or not, and the fourth for synchronous data subscription (CDS) or not, and the fifth for synchronous data subscription (PADA) or not, and the sixth for synchronous data subscription (PDS) or not. For example, 1-1-0-0-0-0 means CUG group has subscribed voice and facsimile; but not subscribed asynchronous and synchronous data.
4. At most 10 groups of CUGs can be subscribed.

[Examples]

1. Subscribe CUG group:

Mod Cug : IMSI=460001122334455, CugIC =12345678, Index=1023, BsList=1-0-0-0-0-0, ICR=1;

4.9.2 Delete CUG Group

[Command code] Del Cug

[Command function] Delete a CUG group

[Input format]

Del Cug : IMSI/MSISDN=,CugIC=

[Parameter Description]

S/ N	Para_Name			Para_Value			
	Name	Meaning		Type	Attr.	Code Length	Para_value Description
1	IMSI	International Identity	Mobile Subscriber	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Number	Station International ISDN	NUMSTR	M	6..15	MSISDN number
3	CugIC	Identity of CUG group		HEXSTR	M	8	Value range: 00000000~270FFFFF, 8-digit hexadesimal

[Notes]

1. The interface for NAM=0/1 users.

[Examples]

1. Delete CUG Group:

Del Cug : IMSI=460001122334455, CugIC =12345678;

4.9.3 Modify CUG Preferential Index

[Command code] Mod CIIdx

[Command function] Modify CUG preferential index

[Input format]

Mod CIIdx : IMSI/MSISDN=,Bsg=, PrefIdx=[,ICA=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3	Bsg	Basic Service	NUMSTR	M	1	Select one of the following values: 0: Voice 1: Facsimile 2: Asynchronous Data (CDA) 3: Synchronous Data (CDS) 4: Asynchronous Data (PADA) 5: Synchronous Data (PDS)
4	PrefIdx	CUG Preferential Index	NUMSTR	M	1..5	See Notes
5	ICA	Inter CUG Accessibility	NUMSTR	O	1	0: calls confined within CUG group; 1: calls outside CUG are allowed; 2: incoming calls from outside CUG are allowed; 3: all calls are allowed.

[Notes]

1. The interface for NAM=0/1 users.
2. Value of PrefIdx parameter is taken from the CUG index which MS has subscribed, which can be obtained by querying MS CUG information. (See 4.16.1.8)

For instance,

First, subscribe a CUG group with ModCug command, with the subscribed basic service is voice, index is 1

Mod Cug : IMSI=460001122334455, CugIC=12345678, Index=1, BsList=1-0-0-0-0-0, ICR=1;

Secondly, subscribe CUG preferential index with Mod CIIdx command and the preferential index can be the subscribed index value in the previous step. The command is:

Mod CIdx : IMSI=460001122334455, Bsg=0, PrefIdx=1, ICA=3 ; (Preferential CUG index of voice service is 1);

[Examples]

1. Modify CUG Preferential Index:

Mod CIdx : IMSI=460001122334455, Bsg=0, PrefIdx=1, ICA=3;

4.9.4 Delete CUG Preferential Index

[Command code] Del CIdx

[Command function] Delete CUG Preferential Index

[Input format]

Del CIdx: IMSI/MSISDN=,Bsg=[,ICA=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number
3	Bsg	Basic Service	NUMSTR	M	1	Select one of the following values: 0: Voice 1: Facsimile 2: Asynchronous Data (CDA) 3: Synchronous Data (CDS) 4: Asynchronous Data (PADA) 5: Synchronous Data (PDS)
4	ICA	CUG inter-group call (Inter CUG Accessibility)	NUMSTR	O	1	0: calls confined within CUG group; 1: calls outside CUG are allowed; 2: incoming calls from outside CUG are allowed; 3: all calls are allowed.

[Notes]

1. The interface for NAM=0/1 users.
2. When the CUG preferential index does not exist, it will return success.

[Examples]

1. Delete CUG Preferential Index:

Del CIdx : IMSI=460001122334455, Bsg=0;

4.10 GPRS Service**4.10.1 Modify the Basic Information of the User's GPRS****[Command code]** Mod GBsc**[Command function]** Modify the Basic Information of the User's GPRS**[Input format]**

Mod GBsc : IMSI/MSISDN= [,SMOpt=][,Charge=]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number
3	SMOpt	Short message sending item when GMSC does not support GPRS	NUMSTR	O	1	0: sent by MSC 1: sent by SGSN
4	Charge	GPRS Charging Feature	NUMSTR	O	1..5	The same as the Charge parameter in paragraph 4.2.1

[Notes]

1. The interface for NAM=0/2 users.
2. When the subscriber's network access mode is access PS only, the parameter SMOpt can only be filled with 1.

[Examples]

1. Modify the GPRS information of the mobile subscriber:

Mod GBsc:IMSI=460001122334455,SMOpt=1,Charge=8;

4.10.2 Add PDP Context**[Command code]** Add PDP**[Command function]** Add PDP Context**[Input format]**

Add PDP : IMSI/MSISDN=, PDPType=[,QoS=][,APN=][,APNRANGE=] [,PDPAddr=]
 [,VPLMN=][,PDPCharge=][,QOSID=][,APNID=][,ExtPDPType=][,ExtPDPAddr=]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length -	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number
3.	QoS	PDP Service Quality	STRING	C	11..69	See the Notes
4.	APN	PDP Access Point Name	STRING	C	1..62	The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration".
5.	APNRANGE	APN range	NUMSTR	O	1...5	APN range, the value is from PSRoamSchID. 0 means available in all plmn.
6.	PDPType	PDP Address Type	NUMSTR	M	1	The value is below: 0: IP V4 1: IPV6 3: PPP
7.	PDPAddr	PDP Address	STRING	O	2..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format:xxxx:xxxx:xxxx:xxxx:xx xx:xxxx:xxxx:xxxx, xxxx is hexadecimal digits If the parameter PDPType is PPP , PDPAddr is not required to be filled in
8.	VPLMN	It is permitted to use the dynamic allocation address of VPLMN	NUMSTR	O	1	0:not permit 1:permit Default:0



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9.	PDPCharge	The Charging Feature of PDP Context	NUMSTR	O	1..5	The same as the Charge parameter in paragraph 4.2.1
10.	QOSID	Qos Profile ID	NUMSTR	C	1..3	1~255 Taken from OMC configuration data "Admin Domain Public Configuration->PS Service Configuration->Qos Profile Configuration". One of QOSID and QoS must be input. If all of them are input, QoS will be ignored.
11.	APNID	PDP access point ID	NUMSTR	C	1..3	The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration". One of APNID and APN must be provided and only one can be provided
12.	ExtPDPType	Extend PDP Address Type	NUMSTR	O	1	0:IPV4; 1:IPV6; 4:NONE Default:0 PDPType and ExtPDPType cannot be IPV4 or IPV6 in both. When ExtPDPType =0/1, ExtPDPAddr and PDPAddr must also be dynamic address or static address.
13.	ExtPDPAddr	Extend PDP Address	STRING	O	2..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx: xxxx:xxxx, xxxx is hexadecimal digits

[Notes]

1. The interface for NAM=0/2 users.

2. At most 50 groups of PDP context can be added. If a user has the same APN and PDP address type, PDP address cannot be static or dynamic at the same time.

3. The value range of each parameter of QoS is below:

Name	Value Range
Trusty (Trustiness Level)	1: Level 1 2: Level 2 3: Level 3
Delay (Delaying Level)	1: Level 1(Average Delay<0.5or2s) 2: level 2 (Average Delay<5s or 15s) 3: level 3 (Average Delay<50sor75s) 4: Level 4 (Best Effort)
Priority (Priority Level)	1: High Priority 2: Common Priority 3: Low Priority
Peak (Peak Throughput)	1: Up to 8 kbit/s 2: Up to 16 kbit/s 3: Up to 32 kbit/s 4: Up to 64 kbit/s 5: Up to 128 kbit/s 6: Up to 256 kbit/s 7: Up to 512 kbit/s 8: Up to 1024 kbit/s 9: Up to 2048 kbit/s
Mean (Mean Throughput)	1: 0.22 bit/s 2: 0.44 bit/s 3: 1.11 bit/s 4: 2.2 bit/s 5: 4.4 bit/s 6: 11.1 bit/s 7: 22 bit/s 8: 44 bit/s 9: 111 bit/s 10: 0.22 kbit/s

	11: 0.44 kbit/s 12: 1.11 kbit/s 13: 2.2 kbit/s 14: 4.4 kbit/s 15: 11.1 kbit/s 16: 22.2 kbit/s 17: 44 kbit/s 18: 111 kbit/s 31: Best Effort
PSPri (PS Assigned Priority)	1: Level 1 2: Level 2 3: Level 3
DeliveryErrSdu (Delivery of Error Data)	1: do not check error 2: permit sending 3: not permit sending
DeliveryOrder (Delivery of Sequence)	1: there is delivery order 2: there is no delivery order.
TrafficClass ((Extension QoS) Communication Type)	1: Conversational 2: Streaming 3: Interactive 4: Background
MaxSduSize ((Extension QoS) Maximum Service Data Unit length)	Value Range: 1~153. Set the value as i, When $1 \leq i \leq 150$, the maximum service data unit is $i*80$ (bits); When $i=151$, the maximum service data unit is 12016 (bits); When $i=152$, the maximum service data unit is 12080 (bits); When $i=153$, the maximum service data unit is 12160 (bits);
SduErrRatio ((Extension QoS) Service Data Unit Error Ratio)	1: $1*10^{-2}$ 2: $7*10^{-3}$ 3: $1*10^{-3}$ 4: $1*10^{-4}$ 5: $1*10^{-5}$ 6: $1*10^{-6}$ 7: $1*10^{-1}$
ResidualBitErr	1: $5*10^{-2}$

((Extension QoS) Residual Bit Error Ratio)	2: 1*10-2 3: 5*10-3 4: 4*10-3 5: 1*10-3 6: 1*10-4 7: 1*10-5 8: 1*10-6 9: 6*10-8
TrafficPriority ((Extension QoS)Traffic Control Priority)	0: reserved 1: Priority 1; 2: Priority 2; 3: Priority 3
TransferDelay ((Extension QoS)Transfer Delay)	Value Range:0~62 Set the value as i, When i=0, it is a reserved value in protocol; When 1≤i<16,the transfer delay is i*10(ms); When 16≤i<32,the transfer delay is 200+(i-16)*50(ms); When 32≤i≤62,the transfer delay is 1000+(i-32)*100 (ms);
MaxBitRateUplink ((ExtensionQoS) Max. Bit Rate of the Uplink)	Value Range: 1~255 Set the value as i, When 1≤i<64,the max bit rate of the uplink is i(kbps); When 64≤i<128,the max bit rate of the uplink is 64+(i-64)*8 (kbps) When 128≤i<255,the max bit rate of the uplink is 576+(i-128)*64 (kbps); When i=255,the max bit rate of the uplink is 0(kbps);
MaxBitRateDownlink ((Extension QoS) Max.Bit Rate of the Downlink)	Ditto
GuarBitRateUplink ((Extension QoS) Guaranteed Bit Rate of the Uplink)	Ditto, The following must be satisfied: GuarBitRateUplink ≤ MaxBitRateUplink (if traffic class = interactive or background, it does not need to check)
GuarBitRateDownlink ((Extension QoS)Guaranteed Bit Rate of the Downlink)	Ditto The following must be satisfied: GuarBitRateDownlink ≤ MaxBitRateDownlink (if traffic class = interactive or background, it does not need to check)
Source Statistic Descriptor	Value range:

((Extension QoS2) source statistics descriptor)	0 unknown 0 is the only value at present.
Signal Indication ((Extension QoS2) signal indicator)	Value range: 0 Not optimised for signalling traffic 1 Optimised for signalling traffic
MaxBitRateDownlinkEx ((Extension QoS2) Max bit rate of extended downlink)	Value range: 0 –250 Value 0 means using MaxBitRateDownlink. If value is i(kbps) Max bit rate of extended downlink is: $1 \leq i \leq 74$ Max bit rate of extended downlink is $8600 + i \cdot 100$ (kbps) $75 \leq i \leq 186$ Max bit rate of extended downlink is $16 + (i - 74) \cdot 1$ (Mbps) $187 \leq i \leq 250$ Max bit rate of extended downlink is $128 + (i - 186) \cdot 2$ (Mbps)
GuarBitRateDownlinkEx ((Extension QoS2) Downlink bit rate of extended guarantee)	Value range: 0 –250 Value 0 means using GuarBitRateDownlink If value is i (kbps) Max bit rate of extended guarantee downlink is: $1 \leq i \leq 74$ Max bit rate of extended guarantee downlink is $8600 + i \cdot 100$ (kbps) $75 \leq i \leq 186$ Max bit rate of extended guarantee downlink is $16 + (i - 74) \cdot 1$ (Mbps) $187 \leq i \leq 250$ Max bit rate of extended guarantee downlink is $128 + (i - 186) \cdot 2$ (Mbps) It must be guaranteed that $\text{GuarBitRateDownlinkEx} \leq \text{MaxBitRateDownlinkEx}$ (if traffic class = interactive or background, it does not need to check)
MaxBitRateUplinkEx ((Extension QoS3) Max bit rate of extended uplink)	Value range: 0 –250 Value 0 means to use MaxBitRateUplink If value is i (kbps) $1 \leq i \leq 74$ Max bit rate of extended uplink is $8600 + i \cdot 100$ (kbps) $75 \leq i \leq 186$ Max bit rate of extended uplink is $16 + (i - 74) \cdot 1$ (Mbps)

	$187 \leq i \leq 250$ Max bit rate of extended uplink is $128 + (i-186)*2$ (Mbps)
GuarBitRateUplinkEx ((Extension QoS3) Uplink bit rate of extended guarantee)	Value range: 0 –250 Value 0 means using GuarBitRateUplink If value is i (kbps), Max bit rate of extended guarantee uplink is: $1 \leq i \leq 74$ Max bit rate of extended guarantee uplink is $8600 + i*100$ (kbps) $75 \leq i \leq 186$ Max bit rate of extended guarantee uplink is $16 + (i-74)*1$ (Mbps) $187 \leq i \leq 250$ Max bit rate of extended guarantee uplink is $128 + (i-186)*2$ (Mbps) It must be guaranteed that $\text{GuarBitRateUplinkEx} \leq \text{MaxBitRateUplinkEx}$ (if traffic class = interactive or background, it does not need to check)

4. Input Format of Parameter QoS

Separate each parameter of QoS with "-". For example, in the form x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x-x.

The first x is the subscription flag bit of the extension QoS:

0, do not subscribe extension QoS;

1, subscribe extension QoS

2, subscribe extension QoS2

3, subscribe extension QoS3, and each of the latter x is the parameter of QoS, extension QoS, extension QoS2 and extension QoS3.

The parameter format which does not include the extension QoS is formed in a sequence shown in the following table.

N.O	Name
1	Subscription flag bit of extension QoS, value 0 stands for unsubscribed extension QoS.
2	Trusty (Trustiness Level)
3	Delay (Delaying Level)
4	Priority (Priority Level)
5	Peak (Peak Throughput)
6	Mean (Mean Throughput)

For example, 0-1-1-1-7-1, the first 0 stands for unsubscribed extension QoS and values after it are parameters of QoS(There are must be only 5 separators "-".)

The parameter format including the extension QoS is formed in a sequence shown in the following table.

N.O	Name
1	The subscription flag bit of the extension QoS, value 1 stands for the subscribed extension QoS.
2	Trusty (Trusty Level)
3	Delay (Delay Level)
4	Priority (Priority Level)
5	Peak (Peak Throughput)
6	Mean (Mean Throughput)
7	PSPri (PS Assigned Priority)
8	DeliveryErrSdu (Delivery of Error Data)
9	DeliveryOrder (Delivery of Sequence)
10	TrafficClass ((Extension QoS) Communication Type)
11	MaxSduSize ((Extension QoS) Maximum Service Data Unit Length)
12	SduErrRatio ((Extension QoS) Service Data Unit Error Ratio)
13	ResidualBitErr ((Extension QoS) Residual Bit Error Ratio)
14	TrafficPriority ((Extension QoS) Traffic Control Priority)
15	TransferDelay ((Extension QoS) Transfer Delay)
16	MaxBitRateUplink ((Extension QoS) Maximum Bit Rate of the Uplink.)
17	MaxBitRateDownlink ((Extension QoS) Maximum Bit Rate of the Downlink)
18	GuarBitRateUplink ((Extension QoS) Guaranteed Bit Rate of the Uplink)
19	GuarBitRateDownlink ((Extension QoS) Guaranteed Bit Rate of the Downlink)

For example, 1-1-1-1-7-1-2-1-2-1-151-1-1-1-1-64-104-64-104, the first "1" means to register extended QoS and values after it are parameters of QoS and extended QoS(There are must be only 18 separators "-")

The parameter format including the extension QoS2 is formed in a sequence shown in the following table.

N.O	Name
1	The subscription flag bit of the extension QoS, value 2 stands for the subscribed extension QoS2.
2	Trusty (Trusty Level)
3	Delay (Delay Level)
4	Priority (Priority Level)
5	Peak (Peak Throughput)
6	Mean (Mean Throughput)
7	PSPri (PS Assigned Priority)

8	DeliveryErrSdu (Delivery of Error Data)
9	DeliveryOrder (Delivery of Sequence)
10	TrafficClass ((Extension QoS) Communication Type)
11	MaxSduSize ((Extension QoS) Maximum Service Data Unit Length)
12	SduErrRatio ((Extension QoS) Service Data Unit Error Ratio)
13	ResidualBitErr ((Extension QoS) Residual Bit Error Ratio)
14	TrafficPriority ((Extension QoS) Traffic Control Priority)
15	TransferDelay ((Extension QoS) Transfer Delay)
16	MaxBitRateUplink ((Extension QoS) Maximum Bit Rate of the Uplink.)
17	MaxBitRateDownlink ((Extension QoS) Maximum Bit Rate of the Downlink)
18	GuarBitRateUplink ((Extension QoS) Guaranteed Bit Rate of the Uplink)
19	GuarBitRateDownlink ((Extension QoS) Guaranteed Bit Rate of the Downlink)
20	SourceStatDesc((Extension QoS2) source statistics descriptor)
21	SignalIndication((Extension QoS2) signal indicator)
22	MaxBitRateDownlinkEx((Extension QoS2) Max bit rate of extended downlink)
23	GuarBitRate4DownlinkEx((Extension QoS2) Downlink bit rate of extended guarantee)

For example, 2-1-1-1-7-1-2-1-2-1-151-1-1-1-64-104-64-104-0-1-74-74, the first "2" means register extended QoS2 and values after it are parameters of QoS, extended QoS and extended QoS2 parameter.(There are must be only 22 separators "-".)

The parameter format including the extension QoS3 is formed in a sequence shown in the following table.

N.O	Name
1	The subscription flag bit of the extension QoS, value 3 stands for the subscribed extension QoS3.
2	Trusty (Trusty Level)
3	Delay (Delay Level)
4	Priority (Priority Level)
5	Peak (Peak Throughput)
6	Mean (Mean Throughput)
7	PSPri (PS Assigned Priority)
8	DeliveryErrSdu (Delivery of Error Data)
9	DeliveryOrder (Delivery of Sequence)
10	TrafficClass ((Extension QoS) Communication Type)
11	MaxSduSize ((Extension QoS) Maximum Service Data Unit Length)
12	SduErrRatio ((Extension QoS) Service Data Unit Error Ratio)
13	ResidualBitErr ((Extension QoS) Residual Bit Error Ratio)
14	TrafficPriority ((Extension QoS) Traffic Control Priority)

15	TransferDelay ((Extension QoS) Transfer Delay)
16	MaxBitRateUplink ((Extension QoS)Maximum Bit Rate of the Uplink.)
17	MaxBitRateDownlink ((Extension QoS)Maximum Bit Rate of the Downlink)
18	GuarBitRateUplink ((Extension QoS)Guaranteed Bit Rate of the Uplink)
19	GuarBitRateDownlink ((Extension QoS) Guaranteed Bit Rate of the Downlink)
20	SourceStatDesc((Extension QoS2) source statistics descriptor)
21	SignalIndication((Extension QoS2) signal indicator)
22	MaxBitRateDownlinkEx((Extension QoS2) Max bit rate of extended downlink)
23	GuarBitRate4DownlinkEx((Extension QoS2) Downlink bit rate of extended guarantee)
24	MaxBitRateUplinkEx((Extension QoS3) Max bit rate of extended uplink)
25	GuarBitRateUplinkEx((Extension QoS3) Uplink bit rate of extended guarantee)

For example, 3-1-1-1-7-1-2-1-2-1-151-1-1-1-64-104-64-104-0-1-74-74-74-74, the first "3" means register extended QoS3 and values after it are parameters of QoS, extended QoS, extended QoS2 and extended QoS3 parameter.(There are must be only 24 separators "-".)

Interior restrictions of Qos:

- ①Quantity of '-' is 5, 18,22 or 24.
- ②The first character must be '0' or '1' or '2' or '3'.
- ③If TrafficClass is Conversational class, then value of SduErrRatio must be one of 1, 2, 3, 4 or 5.

If TrafficClass is Streaming class, then value of SduErrRatio must be one of 1, 2, 3, 4, 5 or 7.

If TrafficClass is Interactive class or Background class, then value of SduErrRatio must be one of 3, 4 or 6.

④If TrafficClass is Conversational class or Streaming class, then value of ResidualBitErr must be one of 1, 2, 3, 5, 6, 7 or 8.

If TrafficClass is Interactive class or Background class, then value of ResidualBitErr must be one of 4, 7 or 9.

⑤If TrafficClass is Conversational class, Streaming class or Background class, then ignore SignalIndication and set to default value 0.

If TrafficClass is Interactive class or Background class, then ignore SourceStatDesc and set to default value 0.

[Examples]

1. Set one piece of the PDP context information for the mobile subscriber, The address of PDP is dynamic IP V4 address, subscribed QoS:

Add

PDP:IMSI=460001122334455,QoS=0-1-1-1-7-1,APN=zte.com.cn,PDPType=0,VPL MN=1,PDPCharge=4;

2. Set one piece of the PDP context information for the mobile subscriber, The address of PDP is static IP V4 address, subscribed extended QoS:

Add

PDP:IMSI=460001122334455,QoS=1-1-1-7-1-2-1-2-1-151-1-1-1-64-104-64-104, APN=zte.com.cn, PDPType=0,PDPAddr=10.41.24.59;

3. Set one piece of the PDP context information for the mobile subscriber, The address of PDP is static IP V4 address, subscribed extended QoS2:

Add

PDP:IMSI=460001122334455,QoS=2-1-1-7-1-2-1-2-1-151-1-1-1-64-104-64-104-0-1-74-74,APN=zte.com.cn,PDPType=0,PDPAddr=10.41.24.59;

4. Set one piece of the PDP context information for the mobile subscriber, The address of PDP is static IP V4 address, subscribed extended QoS3:

Add

PDP:IMSI=460001122334455,QoS=3-1-1-1-7-1-2-1-2-1-151-1-1-1-64-104-64-104-0-1-74-74-74-74,APN=zte.com.cn,PDPType=0,PDPAddr=10.41.24.59;

4.10.3 Modify PDP Context

[Command code] MOD PDP

[Command function] Modify PDP Context

[Input format]

MOD PDP : IMSI/MSISDN=[,PDPID=][,OAPN=][,OPDPType=][,OAddrOption=][,QoS=]
[,APN=][,APNRANGE=][,VPLMN=][,PDPCharge=][,PDPAddr=][,QOSID=][,AP
NID=][,ExtPDPAddr=]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number
3	PDPIP	PDP Context Index (ContextID)	NUMSTR	C	1..2	Value:1~50
4	QoS	PDP Service Quality	STRING	O	11..69	Refer to Qos parameter in

						paragraph 4.10.2
5	APN	PDP Access Point Name	STRING	O	1..62	Refer to APN parameter in paragraph 4.10.2
6	APNRANGE	APN range	NUMSTR	O	1...5	APN range, the value is from SRoamSchID. 0 means available in all plmn.
7	VPLMN	MS is permitted to use the dynamically allocated address of VPLMN.	NUMSTR	O	1	0:not permit 1: permit
8	PDPCharge	Charge Feature of PDP Context	NUMSTR	O	1..5	The same as the Charge parameter in paragraph 4.2.1
9	PDPAddr	PDP Address	STRING	O	2..39	Invalid when PDPType=3 If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:x:xxxx, xxxx is hexadecimal digits
10	OAPN	Old PDP access point name	STRING	C	1..62	Refer to APN parameter in paragraph 4.10.2
11	OPDPType	Old PDP address type	NUMSTR	C	1	Values: 0: IP V4 1: IPV6 3: PPP
12	OAddrOptio n	Old address allocation option	NUMSTR	O	1	0: dynamic address 1: static address 0 by default
13	QOSID	QoS Profile ID	NUMSTR	O	1..3	1~255 Taken from OMC configuration data "Admin Domain Public Configuration->PS Service Configuration->Qos Profile Configuration". If QOSID and QoS are input, QoS will be ignored.
14	APNID	PDP access point ID	NUMSTR	O	1..3	The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN

						Configuration". If subscriber signed both APN and APNID, then return failed.
15	ExtPDPAddr	Extend PDP Address	STRING	O	2..39	If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxx x:xxxx, xxxx is hexadecimal digits When ExtPDPType =0/1, ExtPDPAddr and PDPAddr must also be dynamic address or static address.

[Notes]

1. The interface for NAM=0/2 users.
2. Only one set of PDP context information can be modified at a time. If a user has the same APN and PDP address type, PDP address cannot be static or dynamic at the same time.
3. PDP context can be modified by PDPIP or by locating PDP context information to be modified via OAPN, OPDPType and OAddrOption.
4. The PDPIP parameter is prior to OAPN, OPDPType and OAddrOption. If PDPIP and the other three parameters are all input, PDP context will be modified via PDPIP and the other three will be ignored.
5. If you want to modify PDP context through OAPN, OPDPType and OAddrOption, OAPN and OPDPType have to be input. If OAddrOption is not input, PDP context information of dynamic address corresponding to OAPN should be modified.

[Examples]

1. Modify PDP context by PDPIP:

```
MOD PDP:MSISDN=8613954678912,PDPIP=1,QoS=0-1-1-1-7-1,
APN=WNNET,VPLMN=1,PDPCharge=8,PDPAddr=101.101.111.1;
```

2. Modify PDP context by OAPN and OPDPTYPE, OaddrOption use the default values of dynamic address:

```
MOD PDP:MSISDN=8613954678912,OAPN=WNNET,OPDPTYPE=0,
QoS=0-1-1-1-7-1,APN=WNNET,PDPAddr=101.101.111.1;
```

3. Modify PDP context by OAPN, OPDPTYPE and OaddrOption:

```
MOD PDP:MSISDN=8613954678912,OAPN=WNNET,OPDPTYPE=0,
OAddrOption=1,QoS=0-1-1-1-7-1,VPLMN=1,PDPCharge=8;;
```

4.10.4 Delete PDP Context

[Command code] Del PDP

[Command function] Delete PDP Context

[Input format]

Del PDP : IMSI/MSISDN=[,PDPID=][,OAPN=][,OPDPType=][,OAddrOption=]
[,ALLDELFLAG =]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number
3.	PDPID	PDP Context Index (ContextID)	NUMSTR	C	1..2	Value:1~50
4.	OAPN	Old APN	STRING	C	1..62	Refer to APN parameter in paragraph 4.10.2
5.	OPDPType	Old PDP address type	NUMSTR	C	1	Values: 0:IP V4 1: IPV6 3:PPP
6.	OAddrOpti on	Old address allocation option	NUMSTR	O	1	0: dynamic address 1: static address 0 by default
7.	ALLDELFLAG	Un-subscribe GPRS Template, and delete all PDP contexts	NUMSTR	O	1	0:Delete one PDP context 1:Un-subscribe GPRS Template, and delete all PDP contexts 0 by default

[Notes]

1. The interface for NAM=0/2 users.
2. If PDP context does not exist, success will be returned.
3. PDP context can be deleted by PDPID or by locating PDP context information to be deleted via OAPN, OPDPType and OAddrOption.
4. The PDPID parameter is prior to OAPN, OPDPType and OAddrOption. If PDPID and the other three parameters are all input, PDP context will be deleted via PDPID and the other three will be ignored.

5. If you want to delete PDP context through OAPN, OPDPType and OAddrOption, OAPN and OPDPType have to be input. If OAddrOption is not input, PDP context information of dynamic address corresponding to OAPN should be deleted.

[Examples]

1. Delete the PDP context by PDPID:

Del PDP:MSISDN=8613954678912,PDPID=3;

2. Delete the PDP context by OAPN and OPDPTYPE; OaddrOption use the default values of dynamic address:

Del PDP:MSISDN=8613954678912,OAPN=WNNET,OPDPTYPE=0;

3. Un-subscribe GPRS Template and delete all PDP contexts by PDPID:

Del PDP:MSISDN=8613954678912,PDPID=3, ALLDELFLAG=1;

4.10.5 Modify GPRS template of subscriber

[Command code]Set TPLGPRS

[Command function]Modify GPRS template of subscriber

[Input format]

Set TPLGPRS : IMSI/MSISDN=,[GPRSTPL=] [,SMOpt=][,Charge=]
[,GPRSTPLADD=][,GPRSTPLDEL=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number

3	GPRSTPL	GPRS Template ID	STRING	C	1..249	Override in the original basis, GPRSTPL value like:X-X-X..,X is GPRS Template ID, Value range: 1~8192. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS Template Configuration". The maximum number of GPRS template ID is 50.If GPRSTPL is equal to 0, it means desubscribed
4	SMOpt	Short message sending item when GMSC does not support GPRS	NUMSTR	0	1	0:sent via MSC 1:sent via SGSN When the subscriber's network access mode is access PS only, the parameter SMOpt can only be filled with 1.
5	Charge	GPRS Charging Feature	NUMSTR	0	1..5	The same as the Charge parameter in paragraph 4.2.1

6	GPRSTPLADD	GPRS Template ID	STRING	C	1..249	If command include GPRSTPL, GRPSTPLADD ignore. Add in the original basis, GPRSTPLADD value like: X-X-X.., X is GPRS Template ID, Value range: 1~8192. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS Template Configuration". The maximum number of GPRS template ID is 50.
7	GRPSTPLDEL	GPRS Template ID	STRING	C	1..249	If command includes GPRSTPL, GRPSTPLDEL is invalid. Delete in the original basis, GPRSTPLDEL value like: X-X-X.., X is GPRS Template ID, Value range: 1~8192. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS Template Configuration". The maximum number of GPRS template ID is 50.

[Notes]

1. The interface for NAM=0/2 users.
2. One of GPRSTPL, GPRSTPLADD and GPRSTPLDEL must be input. And there shall not be duplicated template ID in GPRSTPLADD and GPRSTPLDEL parameters.

[Examples]

1. Modify GPRS Template of subscriber to 3:

Set TPLGPRS:MSISDN=8613954678912,GPRSTPL=3;

2. Add New GPRS Template 4. And modify the GPRS Charge to Normal Billing:

Set TPLGPRS:MSISDN=8613954678912, GPRSTPLADD=4,Charge=8;

4.11 Modify Location Information**[Command code]**Mod Loc**[Command function]**Modify Location Information**[Input format]**

Mod Loc:IMSI/MSISDN= [,MSCNumber=][,VLRNumber=][,SGSNNumber=][,SGSNAddr =]
[, EPCSGSNHost =][, EPCSGSNRealm =][, EPCMMEHost =]
[, EPCMMERealm =][, EPCNO3GHOST =][, EPCN3GREALM =]

[Parameter Description]

S/ N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description	
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EP S
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN number	CS PS-GPRS PS-EP S
3.	MSCNumber	MSC number	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates delete MSC number	CS
4.	VLRNumber	VLR number	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates delete VLR number	CS
5.	SGSNNumber	SGSN number	STRING	O	1..16	Character string of 1 to 16 digits “*” indicates delete SGSN number	PS-GPRS
6.	SGSNAddr	SGSN address	STRING	O	1..15	Format: xxx.xxx.xxx.xxx, xxx is decimal digit “*” indicates delete SGSN address	PS-GPRS
It supports the following parameters only when the SubType is EPC							
7.	EPCSGSNH	S4-SGSN Host	STRING	O	1..128	“*” indicates delete	PS-EPS

	ost	name				EPCSGSNHost	
8.	EPCSGSNR ealm	S4-SGSN Domain Name	STRING	O	1..128	"*" indicates delete EPCSGSNRealm The EPCSGSNHost and EPCSGSNRealm parameters must be input at the same time, if any one is "*", the other need to be "*".	PS-EPS
9.	EPCMMEHo st	MME Host name	STRING	O	1..128	"*" indicates delete EPCMMEHost	PS-EPS
10.	EPCMMERe alm	MME Domain Name	STRING	O	1..128	"*" indicates delete EPCMMERealm The EPCMMEHost and EPCMMERealm parameters must be input at the same time, if any one is "*", the other need to be "*".	PS-EPS
11.	EPCNO3GH OST	AAA Server Host	STRING	O	1..128	"*" indicates delete EPCNO3GHOST	PS-EPS
12.	EPCN3GRE ALM	AAA Server Ealm	STRING	O	1..128	"*" indicates delete EPCN3GREALM The EPCNO3GHOST and EPCN3GREALM parameters must be input at the same time, if any one is "*", the other need to be "*".	PS-EPS

[Examples]

1. Delete the user location information:

```
Mod          Loc:MSISDN=8613954678912,MSCNumber=*,VLRNumber=*,  
SGSNNumber=*,SGSNAddr=*,
```

4.12 Multiple Number

4.12.1 Add Multiple Number

[Command code] Add ISDN

[Command function] Add Multiple Number

[Input format]

Add ISDN : IMSI/MSISDN=,ISDN=,BS=[,BCID=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic Telephone Number
3	ISDN	Non Basic Number	NUMSTR	M	6..15	Non basic number to be added
4	BS	Basic Service Name in Accordance With the Newly Added Non Basic Number	NUMSTR	M	1..2	select one of the following values: 2: telephone 5: point to point short message call terminating 8: facsimile group and alternative voice 9: automatic facsimile category 3 10: facsimile category 4 16: dataCDA-300 17: dataCDA-1200 19: dataCDA-2400 20: dataCDA-4800 21: dataCDA-9600 22: General-dataCDA 24: dataCDS-1200 25: dataCDS-2400 26: dataCDS-4800 27: dataCDS-9600 28: General-dataCDS 42: AllASpeechDataCDABS 43:AllASpeechDataCDSBS 44:AllSpeechFwByDataCDABS 45:AllSpeechFwByDataCDSBS

5	BCID	Bearer capability index	NUMSTR	0	1..5	Value range: 0~65535 Take from OMC configuration data "Public Service Configuration->WCDMA Global Service Configuration->Bearer Capability Configuration" Default value:0 Fill in 0 in case of BS =2
---	------	-------------------------	--------	---	------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

[Notes]

1. The interface for NAM=0/1 users.
2. Basic Service and its corresponding Bearer capability can't be repeated.
3. If the ISDN already exists, it will be a modified operation.

[Examples]

1. Add Multiple Number:

Add ISDN:MSISDN=862512345678,ISDN=8677778888,BS=28,BCID=0;

4.12.2 Delete Multiple Number

[Command code] Del ISDN

[Command function] Delete Multiple Number

[Input format]

Del ISDN : ISDN=

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	ISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Multi Number

[Examples]

1. Delete Multiple Number:

Del ISDN : ISDN=862512345678;

4.13 CAMEL Service**4.13.1 Subscribing CAMEL Service Basic Information**

[Command code] Mod CBsc

[Command function] add or modify CAMEL service basic information.

[Input format]

Mod CBsc : IMSI/MSISDN=[,TIFFlag=][,State=][,LocInfo=][,TrigTCSI=]

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att r.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS
3	TIFFlag	Transfer Information Flag	NUMSTR	O	1	0: delete subscription 1: subscribe	CS
4	State	Whether to send the user state to GMSC as a part of call terminating processing	NUMSTR	O	1	0: delete subscription 1: subscribe	CS PS-GPRS
5	LocInfo	Whether to send location information to GMSC as a part of call terminating processing	NUMSTR	O	1	0: delete subscription 1: subscribe	CS PS-GPRS
6	TrigTCSI	Whether to trigger T-CSI	NUMSTR	O	1	0: delete trigger 1: trigger	CS

[Examples]

1. Subscribing CAMEL Service Basic:

Mod CBsc : IMSI=460001122334455, TIFFlag =1, State=1, LocInfo=1;

4.13.2 Subscribing CAMEL Service O_CSI

[Command code] Set OCSI

[Command function] Add or modify O_CSI

[Input format]

Set OCSI : IMSI/MSISDN=,Phase =,NotiCSE=,Active =,TDP=,SrvKey/SrvKeyID =,SCFAddr/SCFAddrID=[,DftCall=][,CTFg=][,CallType=][,BscSrvFg=][,BscSrv=][,DestNumFg=][,MType=][,DestNum=][,DestLen=][,CauseValFg=][,CauseVal=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	Phase	Camel version No.	NUMSTR	M	1	Select one of the following values: 1: Phase 1; 2: Phase 2; 3: Phase 3; 4: Phase 4;
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify Valid when the parameter Phase's value is larger than 2
5	Active	Activate or not	NUMSTR	O	1	0: not activate 1: activate Valid when the parameter Phase's value is larger than 2
6	TDP	Detection Point	NUMSTR	M	1	2: Collected information 4: Route select failure

							When Phase's value is 1 or 2, TDP can only be filled with 2 When Phase's value is 3 or 4, TDP can be filled with 2 or 4
7	SrvKey	Service Key Description	STRING	C	1..50		It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration". Either of SrvKey and SrvKeyID must be signed.
8	SrvKeyID	Service Key ID	NUMSTR	C	1..5		1~65535, It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
9	SCFAddr	gsmSCF address	NUMSTR	C	1..15		It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
10	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5		1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
11	DftCall	Default Call Handling	NUMSTR	O	1		0: continue Call 1: release Call
12	CTFg	Call Type subscription Flag (trigger standard of Detection Point)	NUMSTR	O	1		Valid when Phase's value is larger than 1 and TDP's value is 2. Only when CTFg's value is 1, the parameter CallType should exist. 0: not subscribe detecting point standard of call type 1: subscribe detecting point standard of call type
13	CallType	Call Type (Trigger)	NUMSTR	O	1		0: Forwarded

		Standard of Detection Point)				1: not Forwarded
14	BscSrvFg	Basic service subscription flag (Trigger Standard of Detection Point)	NUMSTR	O	1	<p>Valid when Phase's value is larger than 1 and TDP's value is 2. Only when BscSrvFg's value is 1, the parameter BscSrv should exist.</p> <p>0: not subscribe detection point standard of basic service subscribed</p> <p>1: subscribe detection point standard of basic service.</p> <p>When BscSrvFg is 0, the basic service trigger standard of the subscriber will be cancelled. At the same time, the parameter BscSrv needn't to be filled.</p>
15	BscSrv	Basic Service trigger (Trigger Standard of Detection Point)	STRING	O	1..14	<p>5 basic services can be subscribed at most, and every two items are separated by "-". See appendix 2.</p> <p>For example, if 3 items are subscribed, the filling format is 4-11-46.</p> <p>If the subscriber has basic service trigger standard, the new value will override the current basic service trigger standard.</p>
16	DestNumFg	(Trigger Standard of Detection Point) destination number subscription flag	NUMSTR	O	1	<p>Valid when Phase's value is larger than 2 and TDP's value is 2. Only when DestNumFg's value is 1, the parameters DestNum, Mtype, DestLen are available, and either of DestNum and DestLen should exist.</p> <p>0: not subscribe the detection point standard of the destination number</p> <p>1: subscribe the detection point standard of the destination number</p> <p>When DestNumFg is 0, it means the destination number detection point standard of this subscriber should be deleted. At the same time, the parameters</p>

						Mtype, DestNum and DestLen could not exist.
17	Mtype	(Trigger Criteria of Detection Point --destination number) Match Type	NUMSTR	O	1	0: prohibited; 1: authorized
18	DestNum	(Trigger Standard of Detection Point --destination number) destination number list	STRING	O	1..169	<p>At most 10 destination numbers can be subscribed. The number is of 16 digits at most, and “-” (hyphen) is used to separate adjacent two numbers.</p> <p>If subscriber has already destination number trigger standard, the new value will override the current destination number trigger standard.</p> <p>e.g. 8613943658721- 8613937288934 means two destination numbers are subscribed: 8613943658721 and 8613937288934.</p>
19	DestLen	(Trigger Criteria of Detection Point --destination number) Destination Number Length List	STRING	O	1..8	<p>At most 3 destination number lengths can be subscribed. The number length is of 2 digits for each destination number length, and “-” (hyphen) is used to separate adjacent two destination number lengths. The value of each destination number length is 1~15. “*” means to delete the DestLen.</p> <p>e.g. 8-2-4 means three groups of destination number length are subscribed, length of each is 8, 2, and 4.</p> <p>If the subscriber already has destination number length, new values will overrid the current destination number length.</p>
20	CauseValF	(Trigger Standard of	NUMSTR	O	1	Valid when TDP's value is 4. Only when

	g	Detection Point) Failure code flag				CauseValFg's value is 1, the parameter CauseVal should exist.0: not subscribe the detection point standard of failure code. 1: subscribe the detection point standard of failure code When CauseValFg is 0, it means the failure code detection point standard of the subscriber should be cancelled and the parameter CauseVal needn't to be input.
21	CauseVal	(Trigger Standard of Detection Point) Failure code	STRING	0	1..19	5 failure codes can be subscribed at most. See appendix 3. If the subscriber already has failure code, the new value will override the current failure code.

[Notes]

1. The interface for NAM=0/1 users.
2. When Phase's value is 1 or 2, at most one O_CSI can be subscribed; when Phase's value is 3 or 4, at most two O_CSIs can be subscribed, but their TDPs should be different.
3. Trigger standard of detection point can be classified into three categories:
 - Basic service trigger
 - Destination number trigger
 - Failure code trigger

[Examples]

1. Subscribing CAMEL Service O_CSI:

Set OCSI : IMSI=460001122334455, Phase=3, NotiCSE=1, Active=1 , TDP=2, SrvKey=123, SCFAddr=862511223344, DftCall=1;

4.13.3 Subscribing CAMEL Service T_CSI

[Command code] Set TCSI

[Command function] Add or modify CAMEL service T_CSI.

[Input format]

Set TCSI : IMSI/MSISDN=,Phase =,NotiCSE=,Active =,TDP=,SrvKey/ SrvKeyID =, SCFAddr/ SCFAddrID = [,DftCall=][,BscSrvFg=][,BscSrv=][,CauseValFg=][,CauseVal=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	Phase	Camel version No.	NUMSTR	M	1	The value is one of the following: 1: Phase 1 2: Phase 2 3: Phase 3 4: Phase 4
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify Valid when the parameter Phase's value is larger than 2.
5	Active	Activate or not	NUMSTR	O	1	0: not activate 1: activate Valid when the parameter Phase's value is larger than 2.
6	TDP	Detection Point	NUMSTR	M	1	TDP value meaning: 12: Terminating attempt authorized 13: T busy 14: T no answer When Phase is 1 or 2, TDP can only be filled with 12; When Phase is 3 or 4, TDP can be filled with 12, 13 or 14.
7	SrvKey	Service Key description	STRING	C	1..50	It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration". Either of SrvKey and

						SrvKeyID must be signed.
8	SrvKeyID	Service Key ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
9	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
10	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
11	DftCall	Default Call handling	NUMSTR	O	1	0: continue Call 1: release Call
12	BscSrvFg	(Trigger Standard of Detecting Point) basic service subscription flag	NUMSTR	O	1	Valid when Phase's value is larger than 1 and TDP's value is 12. Only when BscSrvFg's value is 1, the parameter BscSrv should exist. 0: not subscribe detection point standard of basic service 1: subscribe detection point standard of basic service. When BscSrvFg is 0, it means the basic service trigger standard of the subscriber will be cancelled and the parameter BscSrv needn't to be input.
13	BscSrv	(Trigger Standard of Detecting Point) basic service	STRING	O	1..14	5 basic services can be subscribed at most. Every adjact two items are separated by "-". See appendix 2. If the subscriber already has basic service trigger standard, the new value will override the current basic service trigger

						standard.
14	CauseValFg	(Trigger Standard of Detecting Point)Failure code flag	NUMSTR	0	1	Valid when Phase's value is 3 or 4 and TDP's value is 13 or 14. Only when CauseValFg's value is 1, the parameter CauseVal should exist. 0: not subscribe detection point standard of failure code 1: subscribe detection point standard of failure code When CauseValFg is 0, it means the failure code detecting point standard of the subscriber will be cancelled and the parameter CauseVal needn't to be input.
15	CauseVal	(Trigger Standard of Detecting Point) Failure code	STRING	0	1..19	5 failure codes can be subscribed at most. See appendix 3. If the subscriber already has failure code, the new value will override the current failure code.

[Notes]

1. The interface for NAM=0/1 users.
2. When Phase is 1 or 2, at most 1 T_CSI can be subscribed; When Phase=3 or 4, at most 3 T_CSIs can be subscribed (For one subscriber, TDPs of multiple T_CSIs should not be the same);
3. Detection point standards can be classified into two categories:
 - Basic Service Trigger
 - Failure Code Trigger

[Examples]

1. Subscribing CAMEL Service T_CSI:

Set TCSI : IMSI=460001122334455, Phase=3, NotiCSE=1, Active=1 , TDP=12, SrvKey=443, SCFAddr=862511223344, DftCall=1;

4.13.4 Subscribing CAMEL Service SS_CSI

[Command code] Set SSCSI

[Command function] Add or modify SS_CSI

[Input format]

Set SSCSI : IMSI/MSISDN= [, NotiCSE=][, Active =],SCFAddr/SCFAddrID= [,NC=]

[, NC_CCBS=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	ISDN Number
3	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify
4	Active	Activate or not	NUMSTR	O	1	0: not activate 1: activate
5	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
6	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
7	NC	Notification standard	STRING	M	5	See [Notes]
8	NC_CCBS	CCBS Notification standard	NUMSTR	O	1	0: De-subscribed 1: subscribed

[Notes]

1. The interface for NAM=0/1 users.
2. Parameter NC is composed of "x-x-x" character string. "x" stands for "0" or "1". "0" means "unsubscribed", "1" means "subscribed". The first "x" stands for subscribing or unsubscribing of ECT; the second "x" stands for subscribing or unsubscribing of CD; the third "x" stands for subscribing or unsubscribing of MPTY. For example, 1-1-0 means having subscribed notification standard ECT and CD, but having not subscribed notification standard MPTY.
3. When SSCSI is added, the user should subscribe one notification criteria (NC) at

4. Only one SS_CSI at most can be subscribed.

[Examples]

1. Subscribing CAMEL Service SS_CSI:

```
Set SSSCI : IMSI=460001122334455, NotiCSE=1, Active=1 , SCFAddr
=8613905120001, NC=1-0-1 ;
```

4.13.5 Subscribing CAMEL Service U_CSI

[Command code] Set UCSI

[Command function] Add or modify U_CSI

[Input format]

Set UCSI : IMSI/MSISDN=,SrvCode=,SCFAddr/SCFAddrID=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	SrvCode	Service Code	NUMSTR	M	1..16	Value range: 0~9999999999999999
4	SCFAddr	GsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
5	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".

[Notes]

1. The interface for NAM=0/1 users.

2. Ten U_CSIs at most can be subscribed.

[Examples]

1. Subscribing CAMEL Service U_CSI:

Set UCSI: IMSI=460001122334455,SrvCode=254 , SCFAddr=8613905120001 ;

4.13.6 Subscribing CAMEL Service GPRS_CSI

[Command code] Set GPRSCSI

[Command function] Add or modify GPRS_CSI

[Input format]

Set GPRSCSI : IMSI/MSISDN=,Phase =[,NotiCSE=][,Active=],TDP=,SrvKey/SrvKeyID=,SCFAddr/SCFAddrID=[,DftCall=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	Phase	Camel Version No.	NUMSTR	M	1	3: Phase 3
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify
5	Active	Whether activate or not	NUMSTR	O	1	0: not activated 1: activated
6	TDP	Detection Point	NUMSTR	M	1..2	Select one of the following: 1: attached 2: location attachment change 11: PDP context establishment 12: PDP context establishing response 14: location PDP context change
7	SrvKey	Service Key Description	STRING	C	1..50	It could be obtained from the OMC

						configuration"WCN Domain Service Configuration->WCN Service Key Configuration". Eitherof SrvKey and SrvKeyID must be signed.
8	SrvKeyID	Service Key ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration"WCN Domain Service Configuration->WCN Service Key Configuration".
9	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
10	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
11	DftCall	Default Call Handle	NUMSTR	O	1	0: continue Call 1: release Call

[Notes]

1. The interface for NAM=0/2 users.
2. At most 5 GPRS_CSIs can be subscribed.

[Examples]

1. Subscribing CAMEL Service GPRS_CSI:

Set GPRSCSI : IMSI=460001122334455, Phase =3, NotiCSE=1, Active =1,TDP=1,
SrvKey=234, SCFAddr=8613905120001 ;

4.13.7 Subscribing CAMEL Service SMS_CSI

[Command code] Set SMSCSI

[Command function] Add or modify SMS_CSI

[Input format]

Set SMSCSI : IMSI/MSISDN=,Phase=[,NotiCSE=][,Active=],SrvKey/SrvKeyID=,
 SCFAddr/SCFAddrID=[,DftCall=]

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att.r.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS
3	Phase	Camel phase	NUMSTR	M	1	3: Phase 3	CS PS-GPRS
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify	CS PS-GPRS
5	Active	Whether activate or not	NUMSTR	O	1	0: not activate 1: activate	CS PS-GPRS
6	SrvKey	Service Key Description	STRING	C	1..50	It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration". Either of SrvKey and SrvKeyID must be signed.	CS PS-GPRS
7	SrvKeyID	Service Key ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".	CS PS-GPRS
8	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDoma	CS PS-GPRS

							in Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.	
9	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5		1~65535, It could be obtained from the OMC configuration "AdminDoma in Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS PS-GPRS
10	DftCall	Default Call Handle	NUMSTR	O	1		0: continue Call 1: release Call	CS PS-GPRS

[Notes]

- At most one SMS_CSI can be subscribed, HLR fixed TDP=1.

[Examples]

1. Subscribing CAMEL Service SMS_CSI:

```
Set SMSCSI : IMSI=460001122334455, Phase =3, NotiCSE=1, Active =1,
SrvKey=234, SCFAddr=8613905120002, DftCall=1 ;
```

4.13.8 Subscribing CAMEL Service VT_CSI

[Command code] Set VTCSI

[Command function] Add or modify VT_CSI.

[Input format]

```
Set VTCSI : IMSI/MSISDN=,Phase=[,NotiCSE=][,Active=],TDP=,SrvKey/SrvKeyID=,
SCFAddr/SCFAddrID=[,DftCall=][,BscSrvFg=][,BscSrv=][,CauseValFg=][,CauseVal=]
```

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code	Para_value Description

					Length	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	Phase	Camel phase	NUMSTR	M	1	Value is one of the following: 3: Phase 3; 4: Phase 4;
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify
5	Active	Whether activate or not	NUMSTR	O	1	0: not activate 1: activate
6	TDP	Trigger and Detect Point	NUMSTR	M	1	TDP significances: 12: Terminating attempt authorized 13: T busy 14: T no answer
7	SrvKey	Service Key Description	STRING	C	1..50	It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration". Either of SrvKey and SrvKeyID must be signed.
8	SrvKeyID	Service Key ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
9	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
10	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain

						Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration”.
11	DftCall	(trigger standard of Detecting Point) Default Call Handle	NUMSTR	O	1	0: continue Call 1: release Call
12	BscSrvFg	Basic service subscription flag (Trigger Standard of Detecting Point)	NUMSTR	O	1	Valid when TDP's value is 12. Only when BscSrvFg's value is 1, the parameter BscSrv should exist. 0: detecting point standard without basic service subscribed 1: detecting point standard with basic service subscribed When BscSrvFg is 0, the basic service trigger standard of subscriber will be cancelled, and the parameter BscSrv needn't to be input.
13	BscSrv	(Trigger Standard of Detecting Point) Basic service	STRING	O	1..14	5 services can be subscribed at most. See appendix 2.
14	CauseValFg	(Trigger Standard of Detecting Point) Failure code flag	NUMSTR	O	1	Valid when TDP's value is 13 or 14. Only when CauseValFg's value is 1, the parameter CauseVal should exist. 0: detecting point standard without failure code subscribed 1: detecting point standard with failure code subscribed When CauseValFg is 0, it means the failure code detecting point standard of subscriber should be cancelled and the parameter CauseVal needn't to be input.
15	CauseVal	(Trigger Standard of Detecting Point) Failure code	STRING	O	1..15	5 failure codes can be subscribed at most. See appendix 3.

[Notes]

1. The interface for NAM=0/1 users.
2. VT_CSI is provided when Phase=3 or Phase=4, and at most three VT_CSIs can be subscribed (when multiple VT_CSEs are subscribed, their TDPs should be different).
3. Trigger criteria of detecting point can be organized into two categories:
 - Basic service trigger
 - Failure code trigger

[Examples]

1. Subscribing CAMEL Service VT_CSI:

Set VTCSI : IMSI=460001122334455, Phase=3, NotiCSE=1, Active=1 , TDP=12, SrvKey=112, SCFAddr=862511223344, DftCall=1 ;

4.13.9 Subscribing CAMEL Service M_CSI

[Command code] Set MCSI

[Command function] Add or modify M_CSI

[Input format]

Set MCSI : IMSI/MSISDN=[,NotiCSE=][,Active=],SrvKey/SrvKeyID=, SCFAddr/SCFAddrID=[,Trigger=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify Default: 0.
4	Active	Whether activate or not	NUMSTR	O	1	0: not activate 1: activate Default: 1.
5	SrvKey	Service Key Description	STRING	C	1..50	It could be obtained from the OMC configuration "WCN Domain

						Service Configuration->WCN Service Key Configuration". Eitherof SrvKey and SrvKeyID must be signed.
6	SrvKeyID	Service Key ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration"WCN Domain Service Configuration->WCN Service Key Configuration".
7	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
8	SCFAddrID	gsmSCF address ID	NUMSTR	C	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
9	Trigger	Trigger list	STRING	O	9	See the following description.

[Notes]

1. The interface for NAM=0/1 users.
2. At most one MCSI can be subscribed.
3. Composition of Trigger: x-x-x-x-x. The value of "x" is 1or 0: 1 stands for "subscribed", while 0 stands for "not subscribed". At least one trigger should be subscribed.The first "x" stands for the subscribing or withdrawing of trigger InSameVlr; the second "x" stands for the subscribing or withdrawing of trigger ToOtherVlr; the third "x" stands for that of trigger ImsiAttach; the fourth "x" stands for that of trigger MsInitImsiDetach; the fifth "x" stands for that of trigger NetworkInitImsiDetach.For example, 1-1-1-1-1 means that all the five triggers have been subscribed.
4. Trigger meanings:

InSameVlr: Same VLR location update

ToOtherVlr: Crossing VLR location update

- ImsiAttach: IMSI attachment
 MsInitImsiDetach: IMSI detachment initiated by MS
 NetworkInitImsiDetach: IMSI detachment initiated by network

[Examples]

1. Subscribing CAMEL Service M_CSI:

Set MCSI : IMSI=460001122334455, NotiCSE=1, Active=1, SrvKey=6677,
 SCFAddr=862511223344, Trigger=1-1-1-1-1 ;

4.13.10 Subscribing CAMEL Service D_CSI

[Command code] Set DCSI

[Command function] Add or modify D_CSI

[Input format]

Set DCSI : IMSI/MSISDN=[,Phase=[,NotiCSE=] [,Active=],DialNum=,SrvKey/SrvKeyID=,
 SCFAddr/SCFAddrID=[,DftCall=]

[Parameter Description]

S/ N	Para_Name		Para_Value				
	Name	Meaning	Type	Attr.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	
3	Phase	Camel phase	NUMSTR	M	1	Value is one of the following: 3: Phase 3 4: Phase 4;	
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify	
5	Active	Whether activate or not	NUMSTR	O	1	0: not activate 1: activate	
6	DialNum	Called number	NUMSTR	M	1..16	Called number	
7	SrvKey	Service Key Description	STRING	C	1..50	It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key"	

						Configuration". Either of SrvKey and SrvKeyID must be signed.
8	SrvKeyID	Service Key ID	NUMSTR	O	1..5	1~65535, It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
9	SCFAddr	gsmSCF address	NUMSTR	C	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration". Either of SCFAddr and SCFAddrID must be signed.
10	SCFAddrID	gsmSCF address ID	NUMSTR	O	1..5	1~65535, It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
11	DftCall	Default Call Handle	NUMSTR	O	1	0: continue Call 1: release Call

[Notes]

1. The interface for NAM=0/1 users.
2. At most ten D_CSI can be subscribed.

[Examples]

1. Subscribing CAMEL Service D_CSI:

Set DCSI : IMSI=460001122334455, Phase=3, NotiCSE=1, Active=1,
 DialNum=86139123456, SrvKey=3233, SCFAddr=862511223344;

4.13.11 Subscribing CAMEL Service TIF_CSI

[Command code] Set TIFCSI

[Command function] Add or modify TIF_CSI

[Input format]

Set TIFCSI : IMSI/MSISDN= [, NotiCSE=][,TIFFlag=]

[Parameter Description]

S/N	Para_Name	Para_Value
-----	-----------	------------

	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify
4	TIFFlag	Information transform flag	NUMSTR	O	1	Its value is fixed to 1.1: subscribe

[Notes]

1. The interface for NAM=0/1 users.
2. The Phase's value in TIF_CSI is fixed to be 3.

[Examples]

1. Subscribing CAMEL Service TIF_CSI:

Set TIFCSI: IMSI=460001122334455, NotiCSE=1, TIFFlag=1;

4.13.12 Subscribing CAMEL Service MT_SMS_CSI

[Command code] Set MTSCSI

[Command function] Add or modify MT_SMS_CSI

[Input format]

Set MTSCSI : IMSI/MSISDN=,Phase =[, NotiCSE=][, Active =],SrvKey=,SCFAddr=[,DftCall=][,CRT=]

[Parameter Description]

S/N	Para_Name		Para_Value					Network Access Mode
	Name	Meaning	Type	Att.r.	Code Length	Para_value Description		
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS	
2	MSISDN	Mobile Station International	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS	

		ISDN Number					
3	Phase	Camel phase	NUMSTR	M	1	4: Phase 4	CS PS-GPRS
4	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify	CS PS-GPRS
5	Active	Whether activate or not	NUMSTR	O	1	0: not activate 1: activate	CS PS-GPRS
6	SrvKey	Service Key Description	STRING	M	1..50	It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".	CS PS-GPRS
7	SCFAddr	gsmSCF address	NUMSTR	M	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS PS-GPRS
8	DftCall	Default Call Handling	NUMSTR	O	1	0: continue Call 1: release Call	CS PS-GPRS
9	CRT	Trigger Standard of Detecting Point	STRING	O	3	Refer to the description 3 below	CS PS-GPRS

[Notes]

1. At most one MT_SMS_CSI can be subscribed, HLR fixes the TDP's value to be 2

2. Composition of CRT: x-x.

The value of "x" is 1or 0; 1 stands for "subscribed", while 0 stands for "not subscribed".

The first "x" stands for the subscribing or withdrawing of trigger sms-DELIVER;

The second "x" stands for the subscribing or withdrawing of trigger sms-STATUS-REPORT;

For example, 1-0 means to subscribe the sms-DELIVER and desubscribe the sms-STATUS-REPORT.

[Examples]

1. Subscribing CAMEL Service MT_SMS_CSI:

Set MTSCSI : IMSI=460001122334455, Phase =4, NotiCSE=1, Active =1,
 SrvKey=234, SCFAddr=8613905120002, DftCall=1 ,CRT=1-0;

4.13.13 Subscribing CAMEL Service MG_CSI

[Command code] Set MGCSI

[Command function] Add or modify MG_CSI

[Input format]

Set MGCSI : IMSI/MSISDN=[, NotiCSE=][, Active =],SrvKey=,SCFAddr= [,Trigger=]

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	NotiCSE	Notify CSE	NUMSTR	O	1	0: not notify 1: notify
4	Active	Whether activate or not	NUMSTR	O	1	0: not activate 1: activate
5	SrvKey	Service Key Description	STRING	M	1..50	It could be obtained from the OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
6	SCFAddr	gsmSCF address	NUMSTR	M	1..15	It could be obtained from the OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
7	Trigger	Trigger list	STRING	O	13	See the following description.

[Notes]

1. The interface for NAM=0/2 users.
2. At most one MG_CSI can be subscribed.

3. Trigger parameter structure: x-x-x-x-x-x: x being 1 or 0, 1 stands for "subscribed", while 0 stands for "not subscribed". At least one trigger should be subscribed. The meaning of x in proper order is
- Same SGSN service area routing area update
 - Different SGSN service area routing area—from new SGSN
 - Different SGSN service area routing area update—disconnection due to GPRS detachment
 - GPRS attachment
 - MS-originated GPRS detachment
 - Network-originated GPRS detachment
 - Network-originated MS Paging unreachable status conversion

[Examples]

1. Subscribing CAMEL Service MG_CSI:

```
Set MGCSI : IMSI=460001122334455, NotiCSE=1, Active =1,SrvKey=234,
SCFAddr=8613905120001, Trigger=1-1-1-1-1-1;
```

4.13.14 Deleting CAMEL Service

[Command code] Del CSI

[Command function] Delete CAMEL service. Delete either one CSI or all CSIs.

[Input format]

1. Delete O_CSI, T_CSI, VT_CSI and GPRS_CSI

Del CSI : IMSI/MSISDN=,CSI =,TDP=

2. Delete U_CSI, SS_CSI, M_CSI, SMS_CSI, MT_SMS_CSI and MG_CSI or all CSIs subscribed.

Del CSI : IMSI/MSISDN=,CSI =

3. Delete D_CSI

Del CSI : IMSI/MSISDN=,CSI =,DialNum=

4. Delete U_CSI

Del CSI:IMSI/MSISDN=,CSI =U_CSI [,SrvCode =]

If SrvCode is not input, delete all UCSI.

[Parameter Description]

S/ N	Para_Name		Para_Value				
	Name	Meaning	Type	Attr.	Code Length	Para_value Description	
1.	IMSI	International Mobile	NUMSTR	M	6..15	IMSI number	

		Subscriber Identity					
2.	MSISDN	Mobile Station International ISDN Number		NUMSTR	M	6..15	Basic phone number
3.	CSI	CAMEL Service Identity		STRING	M	3..10	One of the following character string: ALL O_CSI T_CSI U_CSI SS_CSI GPRS_CSI SMS_CSI VT_CSI D_CSI M_CSI MT_SMS_CSI MG_CSI TIF_CSI
4.	TDP	Test and Detect Point		NUMSTR	O	1	For O_CSI, fill TDP to be 2 or 4. For T_CSI and VT_CSI, fill TDP to be 12, 13 or 14. For GPRS_CSI, fill TDP to be 1, 2, 11 or 14.
5.	DialNum	Called number		NUMSTR	O	1..16	This parameter is only used to delete D_CSI.
6.	SrvCode	UCSI service code		NUMSTR	O	1..16	This parameter is only used to delete the U_CSI corresponding to the service code.

[Notes]

1. When "ALL" is input for parameter CSI, it stands for deleting all the subscribed CSIs (O_CSI, T_CSI, U_CSI, SS_CSI, GPRS_CSI, SMS_CSI, MT_SMS_CSI, MG_CSI, VT_CSI, M_CSI, D_CSI and TIF_CSI).

2. It will return success when the record does not exist.

[Examples]

1. Deleting O_CSI CAMEL Service:

Del CSI : IMSI=460001122334455, CSI=O_CSI, TDP=2 ;

2. Deleting T_CSI CAMEL Service:

Del CSI : IMSI=460001122334455, CSI=T_CSI, TDP=12 ;

3. Deleting SS_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=SS_CSI ;

4. Deleting U_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=U_CSI, SrvCode=123;

5. Deleting SMS_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=SMS_CSI ;

6. Deleting M_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=M_CSI ;

7. Deleting GPRS_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=GPRS_CSI, TDP=11 ;

8. Deleting D_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=D_CSI,DialNum=86251234567 ;

9. Deleting VT_CSI CAMEL Service:

Del CSI : IMSI=460001122334455, CSI=VT_CSI, TDP=12 ;

10. Deleting MT_SMS_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=MT_SMS_CSI ;

11. Deleting MG_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=MG_CSI ;

13. Deleting TIF_CSI CAMEL Service:

Del CSI : IMSI=460001122334455 , CSI=TIF_CSI ;

14. Deleting All CAMEL Service:

Del CSI : IMSI=460001122334455, CSI=ALL;

4.13.15 Modify Camel Template of subscriber

[Command code]Set TPLCAMEL

[Command function]Modify CAMEL Template of subscriber, including OCSI, TCSI, UCSI, SMSCSI and GPRSCSI.

[Input format]

Set TPLCAMEL :
 IMSI/MSISDN=[,OCSITPL=][,ONotiCSE=][,OAct=][,TCSITPL=][,TNotiCSE=][,TAct=][,UC
 SITPL=][,SMSCSITPL=][,SMSNC=][,SMSAct=][,GPRSCSITPL=][,GPRSNC=][,GPRSAct=][
 ,UCSITPLADD=][, UCSITPLDEL =]

[Parameter Description]

S/ N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EP S
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EP S
3	OCSITPL	OCSI Template ID	NUMSTR	O	1...3	0~255, 1~255 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->OCSI Template Configuration". All the OCSI information will be deleted when OCSITPL=0.	CS
4	ONotiCSE	OCSI notices CSE or not	NUMSTR	O	1	Valid in case that OCSI Camel Phase is equal to or larger than 3: 0: not notice CSE; 1: notice CSE;	CS



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5	OAct	Whether to activate OCSI	NUMSTR	O	1	Valid in case of OCSI Camel Phase being equal to or over 3: 0: not activate; 1: activate;	CS
6	TCSITPL	TCSI Template ID	NUMSTR	O	1..3	0~255, 1~255 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->TCSI Template Configuration". All the TCSI information will be deleted when TCSITPL=0.	CS
7	TNotiCSE	Whether to notice CSE by TCSI	NUMSTR	O	1	Valid in case of TCSI Camel Phase being equal to or over 3: 0: not notice CSE; 1: notice CSE;	CS
8	TAct	Whether to activate TCSI	NUMSTR	O	1	Valid in case of TCSI Camel Phase being equal to or over 3: 0: not activate; 1: activate;	CS
9	UCSITPL	UCSI Template ID	STRING	O	1~359	0~65535, 1~65535 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->UCSI Template Configuration". All the UCSI information will be deleted when UCSITPL=0. Supporting subscribe one or multiple UCSI template as format: 1-2-3. The maximum count of UCSI template ID is 60.	CS

10	SMSCSITPL	SMSCSI Template ID	NUMSTR	O	1...3	0~255, 1~255 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->TCSI Template Configuration". All the SMS_CSI information will be deleted when SMSCSITPL=0.	CS PS-GPRS
11	SMSNC	Whether to notice CSE by SMSCSI	NUMSTR	O	1	0: not notice CSE; 1: notice CSE	CS PS-GPRS
12	SMSAct	Whether to activate SMSCSI	NUMSTR	O	1	0: not activate; 1: activate	CS PS-GPRS
13	GPRSCSITPL	GPRSCSI Template ID	NUMSTR	O	1...3	0~255, 1~255 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS-CSI Template Configuration". All the GPRS_CSI information will be deleted when GPRSCSITPL=0 .	PS-GPRS
14	GPRSNC	Whether to notice CSE by GPRSCSI	NUMSTR	O	1	0: not notice CSE; 1: notice CSE;	PS-GPRS
15	GPRSAct	Whether to activate GPRSCSI	NUMSTR	O	1	0: not activate; 1: activate	PS-GPRS

16	UCSITPLAD	UCSI Template	STRING	O	1~359	1~65535 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->UCSI Template Configuration". Subscribe one or multiple UCSI template as format: 1-2-3. UCSITPLADD is combined with subscribed UCSI template.The maximum count of UCSI template ID is 60. UCSITPLADD will be ignored if UCSITPL exists. The UCSI template ID in UCSITPLADD should not repeated with which in UCSITPLDEL.	CS
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17	UCSITPLDE L	UCSI Template ID	STRING	O	1~359	1~65535 could be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->UCSI Template Configuration". Unsubscribe one or multiple UCSI template as format:1-3-4. If the UCSI template ID in UCSITPLDEL is subscribed, it will be unsubscribed. If not, it will be ignored. UCSITPLDEL will be ignored if UCSITPL exists. The UCSI template ID in UCSITPLDEL should not repeated with which in UCSITPLADD.	CS
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[Examples]

1. Modify OCST Template of subscriber to be 3:

Set TPLCAMEL : MSISDN=8613954678912, OCSITPL =3;

2. Modify TCST Template of subscriber to be 3:

Set TPLCAMEL : MSISDN=8613954678912, TCSITPL =3;

3. Modify UCST Template of subscriber to be 3:

Set TPLCAMEL : MSISDN=8613954678912, UCSITPL =3;

4.14 Location Service

4.14.1 Subscribing GMLC

[Command code] Set GMLC

[Command function] Add or modify GMLC.

[Input format]

Set GMLC : IMSI/MSISDN=,GMLCList=

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att r.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS
3	GMLCList	Subscribed GMLC list	STRING	M	1..79	Five GMLCs are allowed to be subscribed at most; each two adjacent GMLCs are separated by "-" (hyphen) GMLC should be obtained from OMC configuration data "WCN Domain Service Configuration->LCS Service Configuration->GMLC Address Configuration"	CS PS-GPRS

[Notes]

- When modifying GMLC subscription information, the input value of parameter GMLCList will overwrite the subscribed GMLC.

[Examples]

- Subscribe GMLC service:

Set GMLC : IMSI=460001122334455, GMLCList =861390512-861390513-861390514;

4.14.2 Deleting GMLC

[Command code] Del GMLC

[Command function] Delete GMLC

[Input format]

Del GMLC : IMSI/MSISDN=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number

[Examples]

1.Delete GMLC service:

Del GMLC : IMSI=460001122334455;

4.14.3 Subscribing Mobile Station Location Type

[Command code] Set LCS

[Command function] Subscribe MS location type.

[Input format]

 Set LCS : IMSI/MSISDN=,Type=,Prov=[,NotiFg=][,Noti=][,PLMNcli=]
 [,ExAddr=][,GRestFg=][,GRest=][,ExNotiFg=][,ExNoti=] [, serviceTypeId=]

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att. r.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS
3	Type	Location type	NUMSTR	M	1	Take one of the following values: 0: general type 1: call related type	CS PS-GPRS

						2: call unrelated type 3: PLMN operation and management type 4: UE requesting its own location 5: UE requesting location auxiliary data 6: UE requesting to transmit its location to another LCS client side 7: Service type	
4	Prov	Subscription or canceling subscription of location type	NUMSTR	M	1	0: cancel subscription 1: subscribed	CS PS-GPRS
5	Notifg	Flag of call/conversation related type and call/conversation unrelated type being notified to UE	NUMSTR	O	1	Available only if the location type is call/conversation related type and call/conversation unrelated type. Take one of the following values: 0: not notify 1: notify	CS PS-GPRS
6	Noti	Type of call/conversation related type and call/conversation unrelated type being notified to UE	NUMSTR	O	1	Available only if the location type is call/conversation related type and call/conversation unrelated type. For values, see description below	CS PS-GPRS
7	PLMNcli	LCS client of PLMN O&M type	STRING	O	1..9	Available only if the location type is PLMN O&M type. For values, see description below.If Prov is	CS PS-GPRS

						0, this parameter will be ignored.	
8	ExAddr	External LCS client address	NUMSTR	O	1..38	Available only if the location type is call/conversation related type and call/conversation unrelated type	CS PS-GPRS
9	GRestFg	GMLC Restriction flag	NUMSTR	O	1	Available only if the location type is call/conversation related type and call/conversation unrelated type/ServiceType. Take one of the following values: 0: no GMLC Restriction 1: GMLC Restriction exists	CS PS-GPRS
10	GRest	GMLC Restriction	NUMSTR	O	1	Available only if the location type is call/conversation related type and call/conversation unrelated type/ServiceType. Take one of the following values: 0: GMLC Restriction 1: any GMLC of home country This paremeter is valid only when GRestFg is 1.	CS PS-GPRS
11	ExNotiFg	Whether external LCS client is notified to UE	NUMSTR	O	1	Available only if the location type is call/conversation related type and call/conversation unrelated type/ServiceType. Take one of the following values:	CS PS-GPRS

						0: not notify 1: notify	
12	ExNoti	Type of external LCS client being notified to UE	NUMSTR	0	1	Available only if the location type is call/conversation related type and call/conversation unrelated type/ServiceType. For values, see description below This parameter is valid only when ExNotiFg is 1.	CS PS-GPRS
13	serviceTypeI d	Service Type Identifier	NUMSTR	0	1...3	This para is Valid when type is :Servicetype,value is 0~127	CS PS-GPRS

[Notes]
1. Value of Parameter PLMNcli :

- 0: LCS client broadcasting location-related information;
- 1: O&M LCS client in HPLMN;
- 2: O&M LCS client in VPLMN;
- 3: LCS client for recording anonymous location information;
- 4: LCS client for supporting telecom service, bearer service or supplementary service subscribed by target UE subscriber.

One or multiple PLMN O&M LCS clients can be subscribed for each time. The two adjacent LCS clients are separated by "-". For example, 2-3 stands for having subscribed "O&M LCS client in VPLMN" and "LCS client recording anonymous location information"; 0-1-3-4 stands for having subscribed "LCS client broadcasting location-related information", "O&M LCS client in HPLMN", "LCS client recording anonymous location information" and "LCS client supporting telecom service, bearer service or supplementary service subscribed by target UE subscriber".

2. Value of Parameter Noti and parameter ExNoti

- 0: notify UE subscriber and the location is permitted;
- 1: notify UE subscriber for verification. The location is allowed only if allowed by UE or no verification after notification;

2: notify UE subscriber for verification. The location is allowed only if verified by UE;

3: the location is forbidden.

3. When the value of parameter Type is 0(general type), 4(UE requiring its own location), 5(UE requiring location auxiliary data) or 6(UE requiring to transmit its location to another LCS client side), only the parameter Prov can be input. Other parameters will be omitted.

4. When the value of parameter Prov is 0, if exaddr carried,it means to delete external LCS client address,if exaddr not carried,it means to cancel the subscribed LCS service. Once the cancellation is done, the subscription information of its relevant external LCS client (only in case of call related type and call unrelated type, the external LCS client is subscribed) is also cancelled.

5. When the value of parameter Type is 7(Servicetype), the following parameters can be input:Prov、serviceTypeID、GRestFg、GRest、ExNotiFg and ExNoti,other input parameters will be ignore.

6. When the value of parameter Type is 7(Servicetype) and Pro is 1,only the parameter serviceTypeID is exist,the other parameters can be input.

7. When the value of parameter Type is 7(Servicetype) and Pro is 1,if GRestFg valid,GRest must be carried;if ExNotiFg valid, ExNoti must be carried.

8. When the value of parameter Type is 7(Servicetype) and Pro is 0,if serviceTypeID carried,it means to delete ServiceType information of serviceTypeID,if serviceTypeID not carried, it means to de-subscribe all ServiceType information.

[Examples]

1. Subscribe the location type as call/conversation related type:

Set LCS : IMSI=460001122334455 , Type=1 , Prov=1, NotiFg=1, Noti=2,

ExAddr=861390512001, GRestFg=1, GRest=1, ExNotiFg=1, ExNoti=1;

2. Subscribe the location type as call/conversation unrelated type:

Set LCS : IMSI=460001122334455 , Type=2 , Prov=1, NotiFg=1, Noti=2 ;

3. Subscribe the location type as PLMN O&M type:

Set LCS : IMSI=460001122334455 , Type=3 , Prov=1, PLMNcli=0-1-2-3-4;

4. Subscribe the location type as Service type:

Set LCS : IMSI=460001122334455 , Type=7, Prov=1;

5. Cancel the call related type location service of subscriber:

Set LCS : IMSI=460001122334455 , Type=1, Prov=0;

4.14.4 Subscribing GMLC Basic Information

[Command code] Set GMLCBSC

[Command function] Subscribe GMLC Basic Information.

[Input format]

Set GMLCBSC : IMSI/MSISDN= [,HGMLCTYPE=][,HGMLCADDRESS=]
[,PPRTYPE=][,PPRADDRESS=]

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att.r.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS
3	HGMLCTYPE	The type of H-GMLC Address	NUMSTR	O	1	0: IP V4 1: IP V6	CS PS-GPRS PS-EPS
4	HGMLCADD RESS	H-GMLC Address	STRING	O	1..39	If HGMLCTYPE is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If HGMLCTYPE is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx, xxxx is	CS PS-GPRS PS-EPS

						hexadecimal digit. “*” indicates De-subscribe	
5	PPRTYPE	The type of PPR Address	NUMSTR	O	1	0: IP V4 1: IP V6	CS PS-GPRS PS-EPS
6	PPRADDRES S	PPR Address	STRING	O	1..39	If PPRTYPE is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If PPRTYPE is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx, xxxx is hexadecimal digit. “*” indicates De-subscribe	CS PS-GPRS PS-EPS

[Examples]

1. Subscribe GMLC Basic Information:

```
Set GMLCBSC : IMSI=460001122334455, HGMLCTYPE=0, HGMLCADDRESS
=10.44.107.179, PPRTYPE=1, PPRADDRESS =a123:0:123b:0:12c3:0:1d23:fe23;
```

4.15 SCF Address**4.15.1 Subscribe SCF Address****[Command code]** SET SCF

[Command function] Add or modify SCF addresses of ODB, CF, CB and Camel.

[Command Input Format]

```
SET SCF : IMSI/MSISDN=,Type=[,NotiCSE=][,SCFLIST=][,SCFIDLIST=]
```

[Parameter Description]

S/N	Para_Name		Para_Value				Network Access Mode
	Name	Meaning	Type	Att.r.	Code Length	Para_value Description	
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number	CS PS-GPRS PS-EPS
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number	CS PS-GPRS PS-EPS

3	Type	Type (SCF addresses of CF, CB, Camel and ODB)	NUMSTR	M	1	1: SCF address of Camel 2: SCF address of CB 3: SCF address of CF 4: SCF address of ODB	CS PS-GPRS
4	NotiCSE	Whether notify CSE	NUMSTR	O	1	1: notify 0: do not notify	CS PS-GPRS
5	SCFLIST	Subscribed SCF List	STRING	O	1..79	See following notes	CS PS-GPRS
6	SCFIDLIST	Subscribed SCFID List	STRING	O	1..29	See following notes	CS PS-GPRS

[Notes]

1. SCF Address should be obtained from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
2. If SCF address information has been subscribed, the input parameter SCFLIST will overwrite the existed SCF address.
3. Five SCF addresses are allowed to be subscribed at most and each two adjacent addresses are separated by "-".

For example: SCFLIST=861390512-861390513 is comprised of two SCF addresses.

4. Five SCFID are allowed to be subscribed at most and each two adjacent addresses are separated by "-".

For example: SCFIDLIST=1-2 is comprised of two SCFID.

5. SCFLIST and SCFIDLIST can not be provided simultaneously,Otherwise return failed.

[Examples]

1. Subscribe SCF addresses of Camel:

```
SET      SCF:      IMSI=460001122334455,      Type=1,      NotiCSE=1,      SCFLIST
=861390512-861390513-861390514;
```

4.15.2 Deleting SCF Address**[Command code]** Del SCF

[Command function] Delete SCF addresses of category ODB, CF, CB and Camel.

[Input format]

Del SCF : IMSI/MSISDN=,Type=[,NotiCSE=]

[Parameter Description]

S/	Para_Name	Para_Value
----	-----------	------------

N	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
3	Type	Type	NUMSTR	M	1	0: SCF address of all (Camel, CB , CF and ODB) 1: SCF address of Camel 2: SCF address of CB 3: SCF address of CF 4: SCF address of ODB
4	NotiCSE	Whether notify CSE	NUMSTR	O	1	1: notify 0: not notify

[Examples]

1. Delete SCF address (Camel) of subscriber:

Del SCF : IMSI=460001122334455, Type=1,NotiCSE=0;

2. Delete SCF address (CF) of subscriber:

Del SCF : IMSI=460001122334455, Type=3 ;

3. Delete all SCF addresses of subscriber:

Del SCF : IMSI=460001122334455, Type=0 ;

4.16 Query

4.16.1 Querying User Subscription Information

[Command code] Qry User

[Command function] Query basic service, region restriction, supplementary service, PDP context, CAMEL service, LCS service, CUG service, multi-number, SCF address subscription information, location information, EPC basic service, CSG information, APN subscription information, dynamic information of short message center address, CommonISDN list and Specific APN Information.

[Input format]

Qry User : IMSI/MSISDN=, Item=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_Value Description
1	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
2	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic ISDN number
3	Item	The type of user's subscription	STRING	M	2..8	The value is one of the following: BASIC (basic service) CAMEL (CAMEL service) CUG (CUG service) LCS (LCS service) MULTI (multi-number) GPRS (GPRS service) RSZI (region restriction) SCF (SCF address) SS (supplementary service) DYSMS(dynamic information of short message center address) LOC (location information) EPCBASIC (EPC basic service) CSG (CSG information) APNCP (APN subscription information) MultiSIM (CommonISDN list) SPEAPN(Specific Information) APN

[Notes]

1. Only when query succeeds (RETN=000000), subscription information is returned. If query fails (RETN>0), only the operation result is returned, format:ACK: Qry User:RETN=,DESC=.

4.16.1.1 Querying Authentication Information

[Command code]Qry Auth

[Command function]Query authentication information.

[Input format]

Qry Auth : IMSI/MSISDN=

[Output Format]

ACK:Qry Auth:RETN=,DESC=,IMSI=,Ki=,SecVer=[,AMF=][, AKFg =][, reSynFg =][, KeyID =][,OPC =][,OPcKeyID =][,OVID =][,IMSI2=][,VALIDTIME=][, HSMKeyNo=][, SRESDER=][, TriDESKeyID =][,OPCTRIDESKEYID=][,AESKEYID=][,OPCAESKEYID=]

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	See appendix 1
2.	DESC	Result description	STRING	M	1..256	See appendix 1
3.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
4.	Ki	Authentication key	HEXSTR	M	32, 1..16	When the parameter SecVer's value is not 255, Ki must be a 32-digit hexadecimal number; When the parameter SecVer's value is 255, Ki should be a 1..16 digit decimal number.
5.	SecVer	Authentication algorithm	NUMSTR	M	1..3	0: COMP128-1 algorithm 1: COMP128-2 algorithm 2: COMP128-3 algorithm 3:COMP128-4 Algorithm 4:Specific A3/A8 algorithm 5:Specific A3/A8-1 algorithm 20: Milenage algorithm 21: XOR algorithm 22:Default AKA Algorithm 23:Specific AKA-1 24:Specific AKA-2 255:Fake Ki
6.	AMF	Authentication management field	HEXSTR	O	4	4-digit hexadecimal number. Output this parameter when the

						parameter SecVer is 20 or 22,23,24.
7.	AKFg	Anonymous key flag	NUMSTR	O	1	0: no anonymous key flag 1: there is an anonymous key flag Output this parameter when the parameter SecVer is 20 or 22,23,24.
8.	reSynFg	Re-synchronization anonymous key flag	NUMSTR	O	1	0: no re-synchronization anonymous key flag 1: there is a re-synchronization anonymous key flag Output this parameter when the parameter SecVer is 20 or 22,23,24.
9.	KeyID	Decryption key index	NUMSTR	O	1..3	Value range: 0~255. 0: the parameter Ki is not encrypted by KeyID. 1~255: see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration".
10.	OPc	OPc	HEXSTR	O	32	32-bit Hex figure Valid when the parameter SecVer is 3 or 20,22,23,24.
11.	OPcKeyID	OPc decryption key index	NUMSTR	O	1..3	Value range:0~255. 0: the parameter OPc is not encrypted. 1~255: see the OMC configuration"AdminDomain Public Configuration->Deciphering Key Configuration->SIM Card Deciphering Key Configuration". Valid when the parameter SecVer is 3 or 20,22,23,24.
12.	OVID	Milenage variable index	NUMSTR	O	1..4	Value range: 0~5000. 0: not subscribe. Others: see the OMC configuration "Global Service Configuration->WCDMA Global Service Configuration->Milenage Parameter Configuration".



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						Output this parameter when the parameter SecVer is 3 or 20,22,23,24.
13.	IMSI2	Related SIM Card	NUMSTR	O	15	IMSI Number
14.	VALIDTIME	SIM Validtime	STRING	O	19	Time Format yyyy-mm-dd HH-MM-SS, expressed as year - month - day hours - minutes - seconds, such as 2007-08-12 09-09-56
15.	HSMKeyNo	HSM decryption key NO.	NUMSTR	O	1..3	Value range: 0~255. 0: Ki is not encrypted by HSM. 1~255: see the OMC configuration "AdminDomain Public Configuration->HSM Configuration->HSM Encryption of AKey Configuration".
16.	SRESDER	SRES Derivation Function	NUMSTR	M	1	0: Function #1 1: Function #2 Output this parameter when the parameter SecVer's value is 3.
17.	TriDESKeyID	3DES Key ID	NUMSTR	O	1..5	Value range: 1~65535,see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". TriDESKeyID conflicts with KeyID.
18.	OPCTRIDESKEYID	OPC 3DES Key ID	NUMSTR	O	1..5	Value range: 1~65535,see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->3DES Deciphering Key Configuration". Effective only when the parameter SecVer is 3 or 20,22,23,24.
19.	AESKEYID	AES Key ID	NUMSTR	O	1..5	Value range: 1~65535,see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->AES Deciphering Key Configuration".
20.	OPCAESKEYID	OPC AES Key ID	NUMSTR	O	1..5	Value range: 1~65535,see the OMC configuration "AdminDomain Public Configuration->Deciphering Key Configuration->AES Deciphering Key Configuration".

					Configuration". Default value:0. Effective only when the parameter SecVer is 3 or 20,22,23,24.
--	--	--	--	--	------------------------------------------------------------------------------------------------------

[Examples]

1. Qry Auth : IMSI=460001122334455

ACK:Qry Auth:RETN=000000, DESC=success,IMSI=460001122334455, KeyID=1,Ki
 =12345678901234567890123456789012, SecVer=20, AMF=1234, AKFg=1,
 reSynFg=1;

4.16.1.2 Querying Subscription Information of Basic Service**[Command function]**Query basic service information of the user.**[Input format]**

Qry User : IMSI/MSISDN=,Item= BASIC

[Output Format]

```
ACK:Qry USER:RETN=000000,DESC=,ITEM=,IMSI=, MSISDN=,
SubType=, NAM=, MSFg= ,
MSType=,SubRest=,CSPri=[,ARD=],NAEA=,Tele=, EmegCall=,
SMMO=SMMT=,Fac3=,AutoFac3=Fac4=,BOC=,BIC=,RoamSch=,B
SS=,BR=,BPR=,BFN=,BCT=,BICT=BFICT=,BT=,BIP=ODBPL_3=,
ODBPL_4=,PsRoamSch= ,RCType=,AddRCType=,BPOS=][,AII CDA
=][,AII CDS=][,CDA300=][,CDA1200=][,CDA75=][,CDA2400=][,CD
A4800=][,CDA9600=][,GenCDA=][,CDS1200=][,CDS2400=][,CDS
4800=][,CDS9600=][,GenCDS=][,PA300=][,PA1200=][,PA75=][,P
A2400=][,PA4800=][,PA9600=][,GenPACA=][,PDS2400=][,PDS48
00=][,PDS9600=][,GenPDS=][,ASCDa=][,ASCDs=][,SFCDA=][,SF
CDS=][,PLMNTS_1=][,PLMNTS_2=][,PLMNTS_3=][,PLMNTS_4=][
,PLMNTS_5=][,PLMNTS_6=][,PLMNTS_7=][,PLMNTS_8=][,PLMNT
S_9=][,PLMNTS_A=][,PLMNTS_B=][,PLMNTS_C=][,PLMNTS_D=][
,PLMNTS_E=][,PLMNTS_F=][,PLMNBS_1=][,PLMNBS_2=][,PLMN
S_3=][,PLMNBS_4=][,PLMNBS_5=][,PLMNBS_6=][,PLMNBS_7=][
,PLMNBS_8=][,PLMNBS_9=][,PLMNBS_A=][,PLMNBS_B=][,PLMN
S_C=][,PLMNBS_D=][,PLMNBS_E=][,PLMNBS_F=],ODBNC=[,ODB
SCF=][,VGCS=][,VGCSRoa=][,VGCSLst=][,VBS=][,VBSRoam=][
,VBSLst=],ZCSet=,Stype=,OFAID=[,CtrlSche=][,DualNet=][,CMSIS
DN=][,EXTType=][,SMSRouterID=][,DualIMSI=][,SIPID=][
,LINE2NUM=][,DEFCALL=],BsgCount=[, Bsg1=]...[,Bsg7=]
[,OriginFAID=][,FRAUDID=][, OINI=][, TINI=][, OINR=][, TINR=]
[, ISTAlertTimer=][,ISTAlertOpt=][,ISTVLROPT=]
[,ISTGMSCOPT=][,RestrictCF=][,CamelCtlName=][,SDSCtlName=]
[,PREIPSMGW=][,SCADDRESS=][,NOTIFYIMSAS=][,BCID=][,MDT
```

USERCONSENT=][,AREASRVID=][,LMU=][,EOINR=][,ETINR=][,S
 UPLAUTIMER=][,LAUTIMER=][,SUPRAUTAUTIMER=][,RAUTAUTIM
 ER=]

[Parameter Descript]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	See appendix 1
2.	DESC	Result description	STRING	M	1..256	See appendix 1
3.	ITEM	Query option	STRING	M	5	Return BASIC
4.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
6.	SubType	Subscriber type	NUMSTR	M	1	0: GSM subscriber 1: WCDMA subscriber 2: LTE subscriber
7.	NAM	Network Access Mode	NUMSTR	M	1	One of: 0: access CS and PS 1: only access CS 2: only access PS
8.	MSFg	MS State	NUMSTR	M	1	The value is one of the following: 0: Available 1: Paused 2: Lost 3: Unpaid 4: Reproductive 6: Unpaid (Barring of Outgoing Calls) 7: Unpaid (Barring of Incoming Calls)
9.	MSType	Mobile Station Category	NUMSTR	M	1..3	See MSType parameter in Section 4.2.1
10.	SubRest	Subscription Restriction	NUMSTR	M	1	See the description below: 0: all GSM PLMN

						1:one national and all foreign GSM PLMNs 2: regionally restricted (part of a GSM PLMN in one country) 3:regionally restricted plus all other GSM PLMNs
11.	CSPri	CS assigned priority	NUMSTR	M	1..2	One of the following values: 1: class 1 2: class 2 3: class 3
12.	NAEA	Equal Access	NUMSTR	M	6	000000 stands for NAEA not subscribed, Other values refer to OMC configuration "WCN Domain Service Configuration->Custom Service Configuration->NAEA Configuration".
13.	ARD	Access restriction parameter	NUMSTR	O	1..2	0~63: 0-Allow to access GERAN、UTRAN、GAN、I-HSPA-Evolution、E-UTRAN、HO-To-Non-3GPP-Access; 1-Not allow to access UTRAN; 2-Not allow to access GERAN; 4-Not allow to access GAN; 8-Not allow to access I-HSPA-Evolution; 16-Not allow to access E-UTRAN; 32- Not allow to access HO-To-Non-3GPP-Access. Other value is combined with above values.
14.	Tele	Telephone	NUMSTR	M	1	0: Not Subscribed 1: Subscribed
15.	EmegCall	Emergency Call	NUMSTR	M	1	0: Not Subscribed 1: Subscribed
16.	SMMO	Point-to-point Short Message MS Originating	NUMSTR	M	1	0: Not Subscribed 1: Subscribed

17.	SMMT	Point-to-point Short Message MS terminating	NUMSTR	M	1	0: Not Subscribed 1: Subscribed
18.	Fac3	Fax group or alternative voice	NUMSTR	M	1	0: Not Subscribed 1: Subscribed
19.	AutoFac3	Automatic fax. Type 3	NUMSTR	M	1	0: Not Subscribed 1: Subscribed
20.	Fac4	Fax. Type 4	NUMSTR	M	1	0: Not Subscribed 1: Subscribed
21.	BOC	(ODB)Barring of Outgoing Calls	NUMSTR	M	1	The value is one of the following: 0: no call barring 1: All outgoing calls barred 2: International outgoing calls barred 3: International outgoing calls barred except in the home PLMN 4: Barring of all outgoing calls roaming outside the home PLMN country 5: International region outgoing calls barred 6: International region outgoing calls barred except in the home PLMN. 7: International outgoing calls barred except in the home PLMN country and international region outgoing calls barred
22.	BIC	(ODB)Barring of incoming Calls	NUMSTR	M	1	The value is one of the following: 0: no incoming call barring 1: barring of all incoming calls 2: barring of all incoming calls when roaming outside home PLMN Country. 3: barring of all incoming calls when roaming outside home PLMN Country zone
23.	BSS	(ODB)Barring of	NUMSTR	M	1	0: not barring

		Supplementary Service				1: barring
24.	BR	(ODB)Barring of Roaming	NUMSTR	M	1	The value is one of the following: 0: no roaming restriction 1: barring of roaming outside home PLMN 2: barring of roaming outside home PLMN country
25.	BPR	(ODB)Barring of High Rate Calling	NUMSTR	M	1	The value is one of the following: 0: no barring of PRC calling 1: barring of PRC message calling 2: barring of PRC entertainment calling 3: Barring of PRC message calling and entertainment calling
26.	BFN	(ODB)Barring of Forwarding Number Registration	NUMSTR	M	1	The value is one of the following: 0: No barring 1: Barring of registration of any call forwarded-to number 2: Barring of registration of any international call forwarded-to number; 3: Barring of registration of any international call forwarded-to number except in the HPLMN country 4: Barring of registration of any International region call forwarded-to number. 5: Barring of registration of any International region forwarded-to number except in the HPLMN country
27.	BCT	(ODB)Barring of Call Transferring	NUMSTR	M	1	The value is one of the following: 0: no barring of call transferring 1: barring of call transferring 2: barring of call transferring when at least one of two calls need to pay

						charge 3: barring of call transferring when at least one of two calls need to pay international charge 4: barring of call transferring when at least one of two calls need to pay international zone charge
28.	BICT	(ODB)Barring of call transferring when two calls need to pay	NUMSTR	M	1	0: not barring 1: barring
29.	BFICT	(ODB)Barring of call transferring when the subscriber already has call transferring in the same MSC/VLR.	NUMSTR	M	1	0: not barring 1: barring
30.	BT	Self-define the first ODB service(ODB of long-distance calls unauthorized)	NUMSTR	M	1	0: have toll call access right 1: barring of toll call
31.	BIP	Self-define the second ODB service(ODB of IP calls authorized)	NUMSTR	M	1	0: barring of IP call 1: have IP call access
32.	BPOS	Packet domain ODB incoming and outgoing call restriction	NUMSTR	M	1	Select one of the following values: 0: No restriction 1: Bar all packet domain incoming and outgoing calls 2: The subscriber is not allowed to originate service request from access point in the home network while roaming outside home network. 3: The subscriber is not allowed to originate service request from access point in the visiting network while roaming outside home network.
33.	ODBPL_3	Self-define the third ODB service	NUMSTR	M	1	The parameter is configured in configuration system and shall be activated before taking effect. 0: not subscribed



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						1: subscribed
34.	ODBPL_4	Self-define the forth ODB service	NUMSTR	M	1	The parameter is configured in configuration system and shall be activated before taking effect. 0: not subscribed 1: subscribed
35.	AllCDA	All CDA services	NUMSTR	O	1	0: Not Subscribed 1: subscribed
36.	AllCDS	All CDS services	NUMSTR	O	1	0: Not Subscribed 1: subscribed
37.	CDA300	CDA data service (300)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
38.	CDA1200	CDA data service (1200)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
39.	CDA75	CDA data service (1200_75)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
40.	CDA2400	CDA data service (2400)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
41.	CDA4800	CDA data service (4800)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
42.	CDA9600	CDA data service (9600)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
43.	GenCDA	General DataCDA	NUMSTR	O	1	0: Not Subscribed 1: subscribed
44.	CDS1200	CDS data service (1200)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
45.	CDS2400	CDS data service (2400)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
46.	CDS4800	CDS data service (4800)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
47.	CDS9600	CDS data service (9600)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
48.	GenCDS	General DataCDS	NUMSTR	O	1	0: Not Subscribed 1: subscribed



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49.	PA300	PadAccessCA service (300)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
50.	PA1200	PadAccessCA service (1200)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
51.	PA75	PadAccessCA service (1200_75)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
52.	PA2400	PadAccessCA service (2400)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
53.	PA4800	PadAccessCA service (4800)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
54.	PA9600	PadAccessCA service (9600)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
55.	GenPACA	General PadAccessCA	NUMSTR	O	1	0: Not Subscribed 1: subscribed
56.	PDS2400	PDS data service (2400)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
57.	PDS4800	PDS data service (4800)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
58.	PDS9600	PDS data service (9600)	NUMSTR	O	1	0: Not Subscribed 1: subscribed
59.	GenPDS	General DataPDS	NUMSTR	O	1	0: Not Subscribed 1: subscribed
60.	ASCDCA	AllAlternateSpeech_DataCDA	NUMSTR	O	1	0: Not Subscribed 1: subscribed
61.	ASCDS	AllAlternateSpeech_DataCDS	NUMSTR	O	1	0: Not Subscribed 1: subscribed
62.	SFCDA	AllSpeechFollowedByDataCD A	NUMSTR	O	1	0: Not Subscribed 1: subscribed
63.	SFCDS	AllSpeechFollowedByDataCD S	NUMSTR	O	1	0: Not Subscribed 1: subscribed
64.	RoamSch	Roaming solution subscription information	STRING	M	1..30	"*" indicates no subscription of roaming scheme;Refer to OMC configuration data "WCN Domain Service Configuration->Roaming

						Data Configuration->Circuit-Switching Domain Roaming Scheme Configuration".
65.	PLMNTS_1	Specific telecom service 1	NUMSTR	O	1	0: Not Subscribed 1: subscribed
66.	PLMNTS_2	Specific telecom service 2	NUMSTR	O	1	0: Not Subscribed 1: subscribed
67.	PLMNTS_3	Specific telecom service 3	NUMSTR	O	1	0: Not Subscribed 1: subscribed
68.	PLMNTS_4	Specific telecom service 4	NUMSTR	O	1	0: Not Subscribed 1: subscribed
69.	PLMNTS_5	Specific telecom service 5	NUMSTR	O	1	0: Not Subscribed 1: subscribed
70.	PLMNTS_6	Specific telecom service 6	NUMSTR	O	1	0: Not Subscribed 1: subscribed
71.	PLMNTS_7	Specific telecom service 7	NUMSTR	O	1	0: Not Subscribed 1: subscribed
72.	PLMNTS_8	Specific telecom service 8	NUMSTR	O	1	0: Not Subscribed 1: subscribed
73.	PLMNTS_9	Specific telecom service 9	NUMSTR	O	1	0: Not Subscribed 1: subscribed
74.	PLMNTS_A	Specific telecom service 10	NUMSTR	O	1	0: Not Subscribed 1: subscribed
75.	PLMNTS_B	Specific telecom service 11	NUMSTR	O	1	0: Not Subscribed 1: subscribed
76.	PLMNTS_C	Specific telecom service 12	NUMSTR	O	1	0: Not Subscribed 1: subscribed
77.	PLMNTS_D	Specific telecom service 13	NUMSTR	O	1	0: Not Subscribed 1: subscribed
78.	PLMNTS_E	Specific telecom service 14	NUMSTR	O	1	0: Not Subscribed 1: subscribed
79.	PLMNTS_F	Specific telecom service 15	NUMSTR	O	1	0: Not Subscribed 1: subscribed

80.	PLMNBS_1	Specific bear service 1	NUMSTR	O	1	0: Not Subscribed 1: subscribed
81.	PLMNBS_2	Specific bear service 2	NUMSTR	O	1	0: Not Subscribed 1: subscribed
82.	PLMNBS_3	Specific bear service 3	NUMSTR	O	1	0: Not Subscribed 1: subscribed
83.	PLMNBS_4	Specific bear service 4	NUMSTR	O	1	0: Not Subscribed 1: subscribed
84.	PLMNBS_5	Specific bear service 5	NUMSTR	O	1	0: Not Subscribed 1: subscribed
85.	PLMNBS_6	Specific bear service 6	NUMSTR	O	1	0: Not Subscribed 1: subscribed
86.	PLMNBS_7	Specific bear service 7	NUMSTR	O	1	0: Not Subscribed 1: subscribed
87.	PLMNBS_8	Specific bear service 8	NUMSTR	O	1	0: Not Subscribed 1: subscribed
88.	PLMNBS_9	Specific bear service 9	NUMSTR	O	1	0: Not Subscribed 1: subscribed
89.	PLMNBS_A	Specific bear service 10	NUMSTR	O	1	0: Not Subscribed 1: subscribed
90.	PLMNBS_B	Specific bear service 11	NUMSTR	O	1	0: Not Subscribed 1: subscribed
91.	PLMNBS_C	Specific bear service 12	NUMSTR	O	1	0: Not Subscribed 1: subscribed
92.	PLMNBS_D	Specific bear service 13	NUMSTR	O	1	0: Not Subscribed 1: subscribed
93.	PLMNBS_E	Specific bear service 14	NUMSTR	O	1	0: Not Subscribed 1: subscribed
94.	PLMNBS_F	Specific bear service 15	NUMSTR	O	1	0: Not Subscribed 1: subscribed
95.	RCType	Routing type	NUMSTR	M	1..3	0..254 0 indicating no subscription of routing type
96.	AddRCTy	Additional routing type	NUMSTR	M	1..5	0, 255..65789

	pe					0 indicates no description of additional routing type
97.	PsRoamS ch	PS roaming scheme name	STRING	M	1..30	"*" indicates no subscription of roaming scheme; Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->Roaming Data Configuration->Packet-Switching Domain Roaming Scheme Configuration".
98.	ODBNC	ODB notice CSE identifier	NUMSTR	M	1	0: do not notify CSE 1: notify CSE
99.	ODBSCF	SCF address of ODB type	STRING	O	1..79	No value means no subscription. Refer to description in section 4.15.1
100.	VGCS	VGCS subscription indication	NUMSTR	O	1	Return when network access mode is CS or CS/PS 0: not subscribed 1: subscribed
101.	VGCSRoa m	VGCS being allowed for use in VPLMN	NUMSTR	O	1	Effective only in case of VGCS=1, 1: allowed
102.	VGCSLst	VGCS group identifier list	STRING	O	1..349	Effective only in case of VGCS=1 VGCS Group Id list,each GROUP ID is made up of 1-6 bit decimal numbers, and the maximal number is 50, separated with "-" For example: 231-143-67987
103.	VBS	VBS subscription indication	NUMSTR	O	1	Return when network access mode is CS or CS/PS 0: not subscribed 1: subscribed
104.	VBSRoa m	VBS allowed in VPLMN	NUMSTR	O	1	Effective only in case of VBS=1, 1: allowed
105.	VBSLst	VBS group identifier list	STRING	O	1..449	Valid when VBS=1 VBS Group Id list and whether the subscriber can originate group call; each GROUP ID is made up of 1-6

						bit decimal number; the value is 0 or 1 for whether group call can be originated; these two come in pair, separated by "&"; there are up to 50 pairs of GroupID and whether group call can be originated. The GROUP ID can't be repeated; each of them are separated by "-". For example: 231&1-143&0-67987&1, it indicates that: the subscriber can originate group call with GROUP ID 231; the subscriber can't originate group call with GROUP ID 143; the subscriber can originate group call with GROUP ID 67987
106.	ZCSet	Zone Code Set	NUMSTR	M	1..5	The value is one of the followings: 1~65535. Take from HLR Configuration data configuration data "WCN Domain Service Configuration->Custom Service Configuration->Zone Charge Configuration". If the value of ZCSet is 65535, it means ZCSet not subscribed.
107.	Stype	Specifical Subscriber Type	NUMSTR	M	1..3	The value is one of the followings: 0~255. 0-postpaid subscriber; 1-prepaid subscriber; 2-lost report subscriber 4-prepaid subscriber with outgoing call being restricted or incoming call being restricted. 5-Shenzhouxing subscriber initialization 6-Shenzhouxing subscriber

						reservation. 7- Shenzhouxing subscriber block.
108.	OFAID	ID of control table of black and white CF lists	NUMSTR	M	1..3	0~255; 0~254 are valid OFA ID , please refer to OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->Forwarding White-Black List Configuration". 255 means not registered.
109.	CtrlSche	Name of service control scheme	STRING	O	1..30	Refer to OMC configuration data "WCN Domain Service Configuration->VPLMN Service Configuration->Control Scheme Configuration".
110.	DualNet	Dual-Ner-One-Online subscriber	NUMSTR	O	1	0: not Dual-Net-One-Online subscriber 1: Dual-Net-One-Online subscriber
111.	CMSISDN	Common MSISDN Number	STRING	O	6..15	Common MSISDN Number. If CMSISDN and MSISDN are the same, then Multi-SIM principal card user is subscribed. If CMSISDN and MSISDN are different, then Multi-SIM supplementary card user is subscribed. For non-Multi-SIM users, this parameter is not returned.
112.	EXTType	Extension subscriber type	STRING	O	1..30	Get from OMC configuration "WCN Domain Service Configuration->Custom service Configuration->Extended Subscriber Type Configuration".
113.	SMSRouterID	SMS ROUTER ID	NUMSTR	O	1..3	Value range: 1~255, means SMS ROUTER subscribed; Please refer to OMC configuration "WCN Domain Service Configuration->SMS Router Configuration->SMS Router"

						Configuration".
114.	DualIMSI	Dual IMSI Number	NUMSTR	O	6..15	When not subscribed Dual IMSI number The parameter DualIMSI will not returned.
115.	SIPID	SIP IN service	NUMSTR	M	0..65535	SIP CAMEL service code ID, refer to OMC configuration "Admin Domain Public Configuration->SIP IN Service Configuration->SIP IN Configuration". parameter of SIPID is conflict with CS CAMEL Service.
116.	LINE2NU M	Line2 MSISDN	NUMSTR	O	6..15	Line 2 MSISDN number When ALS service is subscribed, this parameter is returned.
117.	DEFCALL	Default call service code	STRING	O	1..16	The default call service code used when BC is not applied in SendRoutingInfo request received by HLR. The values and descriptions are shown in chapter 4.2.1.
118.	BsgCount	Number of subscribed BSG	NUMSTR	M	1	Number of subscribed BSG(Including subscribed BSG of multinumber), Value:0~7
119.	Bsg1	The first subscribed BSG	NUMSTR	O	1	Available when BsgCount≥1, Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS)
120.	Bsg2	The second subscribed BSG	NUMSTR	O	1	Available when BsgCount≥2, Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA)

						7: Synchronous data (PDS)
121.	Bsg3	The third subscribed BSG	NUMSTR	0	1	Available when BsgCount≥3, Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS)
122.	Bsg4	The fourth subscribed BSG	NUMSTR	0	1	Available when BsgCount≥4, Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS)
123.	Bsg5	The fifth subscribed BSG	NUMSTR	0	1	Available when BsgCount≥5, Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS)
124.	Bsg6	The sixth subscribed BSG	NUMSTR	0	1	Available when BsgCount≥6, Values: 0: Speech 1: SMS 2: FAX 3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS)
125.	Bsg7	The seventh subscribed BSG	NUMSTR	0	1	Available when BsgCount≥7, Values: 0: Speech 1: SMS 2: FAX

						3: Asynchronous data (CDA) 4: Synchronous data (CDS) 6: Asynchronous data (PADA) 7: Synchronous data (PDS)
126.	OriginFAID	Origin for Forwarded-to Number Analysis	STRING	O	1..3	Value range:0~511, refer to OMC configuration "WCN Domain Service Configuration->Custom Service Configuration->Origin for Forward-to Number Analysis".
127.	FRAUDID	The Fraud Profile ID for Subscriber	NUMSTR	O	1..3	0~250, refer to OMC configuration "WCN Domain Service Configuration->Fraud Profile Configuration".
128.	OINI	Originating Intelligent Network Indication	NUMSTR	O	1	0:Not Subscribed 1:Subscribed
129.	TINI	Terminating Intelligent Network Indication	NUMSTR	O	1	0:Not Subscribed 1: Subscribed
130.	OINR	Originating Intelligent Network Reference	NUMSTR	O	1..3	1~999:Subscribe
131.	TINR	Terminating Intelligent Network Reference	NUMSTR	O	1..3	1~999:Subscribe
132.	ISTAlertTimer	IST Alert Timer	NUMSTR	O	1..3	0, 15~255
133.	ISTAlertOpt	IST Alert Option	NUMSTR	O	1	0~3 0: Call allowed 1: Terminate call Activity referred 2: Continue monitor call activity 3: terminate all call activities
134.	ISTVLROPT	VLR Not Support IST Option	NUMSTR	O	1	0~3 0: Ignore 1: Supplementary service Barring of Outgoing Call 2: Supplementary service Barring of Incoming Call

						3: Supplementary service Barring of Outgoing call and Incoming Call
135.	ISTGMSC OPT	GMSC Not Support IST Option	NUMSTR	O	1	0~2 0: Ignore 1: Operator Determined Barring of all incoming calls 2: Supplementary service Barring of All Outgoing Calls
136.	RestrictCF	Restrict User register or unregister forward-number	NUMSTR	O	1	Return when network access mode is CS or CS/PS. Value: 0: Unrestrict 1: Restrict
137.	CamelCtlName	Camel Control Strategy Name	STRING	O	1..30	Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->Camel Control Strategy Configuration".
138.	SDSCtlName	SDS Control Strategy Name	STRING	O	1..30	Refer to OMC configuration "WCDMA Global Service Configuration->SDS Control Strategy Configuration". The absence of this parameter indicates no SDS Control Strategy subscription.
139.	PREIPSMGW	Preconfigured IP-SM-GW	STRING	O	1..16	Character string of 1 to 16 digits. The absence of this parameter indicates no subscription
140.	SCADDR ESS	Service Centre Address	STRING	O	1..38	Character string of 1 to 38 digits. The absence of this parameter indicates no subscription
141.	NOTIFYIMSAS	Notify IMS AS	STRING	O	1..16	Character string of 1 to 16 digits. The absence of this parameter indicates no subscription
142.	BCID	Bearer capability index	NUMSTR	M	1..5	Value range: 0~65535, refer to OMC configuration "Public Service Configuration->WCDMA Global Service Configuration->Bearer Capability Configuration".

143.	MDTUSE RCONSEN T	MDT User Consent	NUMSTR	O	1	0: CONSENT_NOT_GIVEN 1: CONSENT_GIVEN 255: NONE MDTUSERCONSENT will not return when the value is 255
144.	AREASRV ID	Service Area ID	NUMSTR	O	1..5	Value range: 0~65535 0: not Subscribed Other data can be Obtained from OMC configuration data "WCN Domain Service Configuration->Area Service Configuration->Roaming Service Configuration". AREASRVID will not return when the value is 0
145.	LMU	LMU Identifier	NUMSTR	O	1	1 : Subscribed
146.	EOINR	Extended OCSI Reference	NUMSTR	O	1..3	1~999. The absence of this parameter indicates no subscription.
147.	ETINR	Extended TCSI Reference	NUMSTR	O	1..3	1~999. The absence of this parameter indicates no subscription.
148.	SUPLAUT IMER	Support LAU Timer	NUMSTR	O	1	1: Support
149.	LAUTIME R	LAU Timer	NUMSTR	O	1..10	0~4294967295
150.	SUPRAUT AUTIMER	Support RAU/TAU Timer	NUMSTR	O	1	1: Support
151.	RAUTAU TIMER	RAU/TAU Timer	NUMSTR	O	1..10	0~4294967295

[Notes]

1. ISTAlertOpt, ISTVLROPT, ISTGMSCOPT are effective when the IST Alert timer value is in a range from 15 to 255.
2. It will not be returned if the optional parameter is not subscribed.

[Examples]

1. Query basic service information of the user:

```
qry user:imsi=4600000000000000,item=basic;
ACK:Qry      User:ITEM=BASIC,      RETN=000000,      DESC=success,
IMSI=4600000000000000,    MSISDN=8613900000000,   SubType=2,   NAM=1,
MSFg=0, MSType=0, SubRest=0, CSPri=0, NAEA=000000, Tele=0, EmegCall=0,
```

SMMO=0, SMMT=0, Fac3=0, AutoFac3=0, Fac4=0, BOC=0, BIC=0, BSS=0, BR=0, BPR=0, BFN=0, BCT=0, BICT=0, BFICT=0, BT=0, BIP=0, BPOS=0, ODBPL_3=0, ODBPL_4=0, RoamSch=*, PsRoamSch=*, RCType=0, AddRCType=0, ODBNC=0, VGCS=0, VBS=0, ZCSet=65535, STYPE=0, OFAID=255, SIPID = 0, BsgCount=0, RestrictCF=0, BCID=0, MDTUSERCONSENT=0;

2. Query basic service information of the user:

```
qry user:imsi=4600000000000000,item=basic;
```

ACK:Qry User:ITEM=BASIC, RETN=000000, DESC=success, IMSI=4600000000000000, MSISDN=8613900000000, SubType=2, NAM=1, MSFg=0, MSType=0, SubRest=0, CSPri=22, NAEA=220002, Tele=1, EmegCall=1, SMMO=1, SMMT=1, Fac3=1, AutoFac3=1, Fac4=1, BOC=2, BIC=2, BSS=1, BR=1, BPR=2, BFN=2, BCT=2, BICT=1, BFICT=1, BT=1, BIP=1, BPOS=0, ODBPL_3=0, ODBPL_4=0, ALLCDA=1, ALLCDS=1, CDA300=1, CDA1200=1, CDA75=1, CDA2400=1, CDA4800=1, CDA9600=1, GenCDA=1, CDS1200=1, CDS2400=1, CDS4800=1, CDS9600=1, GenCDS=1, PA300=1, PA1200=1, PA75=1, PA2400=1, PA4800=1, PA9600=1, GenPACA=1, PDS2400=1, PDS4800=1, PDS9600=1, GenPDS=1, ASCDA=1, ASCDS=1, SFCDA=1, SFCDS=1, RoamSch=1000, PsRoamSch=*, RCType=23, AddRCType=257, PLMNTS_2=1, PLMNTS_6=1, PLMNTS_7=1, PLMNTS_E=1, PLMNBS_1=1, PLMNBS_2=1, PLMNBS_3=1, PLMNBS_4=1, PLMNBS_5=1, PLMNBS_6=1, PLMNBS_7=1, PLMNBS_8=1, PLMNBS_9=1, PLMNBS_A=1, PLMNBS_B=1, PLMNBS_C=1, PLMNBS_D=1, PLMNBS_E=1, PLMNBS_F=1, ARD=1, ODBNC=1, ODBSCF=1-3, VGCS=1, VGCSRoam=1, VGCSLst=1, VBS=1, VBSRoam=1, VBSLst=23&1, ZCSet=2, STYPE=2, OFAID=2, CTRLSCHE=aaa, SIPID = 0, EXTTYPE = a4, BsgCount=7, Bsg1=0, Bsg2=1, Bsg3=2, Bsg4=3, Bsg5=6, Bsg6=4, Bsg7=7, CMSISDN = 8613900000000, SMSRouterID = 1, DEFCALL=fac3, OriginFAID=213, RestrictCF=1, CamelCtlName=25, BCID=0, MDTUSERCONSENT=0;

4.16.1.3 Querying Regional Restriction Subscription Information

[Command function]Query regional restriction information of subscriber.

[Input format]

Qry User : IMSI/MSISDN=, Item= RSZI

[Output Format]

ACK:Qry

User:RETN=,DESC=,ITEM=,IMSI=,MSISDN=,ZCCount=[,CCNDC1=][,ZCList1=][,CCNDC2=][,ZCList2=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation return code	NUMSTR	M	6	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3	ITEM	Query option	STRING	M	4	Return RSZI
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic ISDN number
6	ZCCount	Subscribed CCNDC number	NUMSTR	M	1..2	0~10
7	CCNDC1	The first subscribed CCNDC	NUMSTR	O	2..12	When ZCCount≥1, this parameter is available; Country Code and Network Access Code
8	ZCList1	Zone Code List	STRING	O	4..49	When ZCCount≥1, this parameter is available. “-” (hyphen) is used to separate two adjacent zones in zone code list, e.g. zone code list composed of 1111 and 2222 is 1111-2222.
...

[Notes]

- For CCNDC, there might be several records. Each record has its own subscription information. For example, two CCNDC records, and the output parameters can be CCNDC1, ZCList1, CCNDC1, ZCList1.

[Examples]

Qry User : IMSI=460001122334455, Item= RSZI;
 ACK:Qry User:RETN=000000,DESC=
 success,ITEM=RSZI,IMSI=460001122334455,MSISDN=8613905120001, ZCCount=2,
 CCNDC1=86139, ZCList1=1111-2222-3333-4444, CCNDC2=86138,
 ZCList2=4214-3145-5432-9812-8723;

4.16.1.4 Querying Subscription Information of Supplementary Service

[Command function]Query subscription information of supplementary service

[Input format]

Qry User : IMSI/MSISDN=,Item= SS

[Output Format]

ACK:Qry User:RETN=,DESC=,ITEM=,IMSI=,MSISDN=,CLIP_P=[,CLIPOpt=]
,CLIR_P=[,CLIROpt=],COLP_P=[,COLPOpt=],COLR_P=
,CH_P=[,CW_A=][,FAC_CW_A=][,CDA_CW_A=]
,CDS_CW_A=][,PDS_CW_A=][,PADA_CW_A=],CFU_P=
,CFUNTC=][,CFURDP=][,CFU_R=][,CFU_A=][,CFUNum=]
,[FAC_CFU_R=][,FAC_CFU_A=][,FAC_CFUNum=][,CDA_CFU_R=]
,[CDA_CFU_A=][,CDA_CFUNum=][,CDS_CFU_R=][,CDS_CFU_A=]
,[CDS_CFUNum=][,PDS_CFU_R=][,PDS_CFU_A=]
,[PDS_CFUNum=][,PADA_CFU_R=][,PADA_CFU_A=]
,[PADA_CFUNum=],CFB_P=[,CFBNTC=][,CFBNTF=]
,[CFBRDP=][,CFB_R=][,CFB_A=][,CFBNum=][,FAC_CFB_R=]
,[FAC_CFB_A=][,FAC_CFBNum=][,CDA_CFB_R=]
,[CDA_CFB_A=][,CDA_CFBNum=][,CDS_CFB_R=]
,[CDS_CFB_A=][,CDS_CFBNum=][,PDS_CFB_R=][,PDS_CFB_A=]
,[PDS_CFBNum=][,PADA_CFB_R=][,PADA_CFB_A=]
,[PADA_CFBNum=],CFNRY_P=[,CFNRYNTC=][,CFNRYNTF=]
,[CFNRYRDP=][,CFNRY_R=][,CFNRY_A=][,CFNRYTime=]
,[CFNRYNum=][,FAC_CFNRY_R=][,FAC_CFNRY_A=]
,[FAC_CFNRYNum=][,FAC_CFNRYTime=][,CDA_CFNRY_R=]
,[CDA_CFNRY_A=][,CDA_CFNRYNum=][,CDA_CFNRYTime=]
,[CDS_CFNRY_R=][,CDS_CFNRY_A=][,CDS_CFNRYNum=]
,[CDS_CFNRYTime=][,PDS_CFNRY_R=][,PDS_CFNRY_A=]
,[PDS_CFNRYNum=][,PDS_CFNRYTime=][,PADA_CFNRY_R=]
,[PADA_CFNRY_A=][,PADA_CFNRYNum=][,PADA_CFNRYTime=]
,CFNRC_P=[,CFNRCNTC=][,CFNRCRDP=][,CFNRC_R=]
,[CFNRC_A=][,CFNRCNum=][,FAC_CFNRC_R=][,FAC_CFNRC_A=]
,[FAC_CFNRCNum=][,CDA_CFNRC_R=][,CDA_CFNRC_A=]
,[CDA_CFNRCNum=][,CDS_CFNRC_R=][,CDS_CFNRC_A=]
,[CDS_CFNRCNum=][,PDS_CFNRC_R=][,PDS_CFNRC_A=]
,[PDS_CFNRCNum=][,PADA_CFNRC_R=][,PADA_CFNRC_A=]
,[PADA_CFNRCNum=],CBCtrl=,CB_PWD=,PWA=,BAOC_P=,
,[BAOC_A=][,FAC_BAOC_A=][,SM_BAOC_A=][,CDA_BAOC_A=]
,[CDS_BAOC_A=][,PDS_BAOC_A=][,PADA_BAOC_A=],BOIC_P=,
,[BOIC_A=][,SM_BOIC_A=][,FAC_BOIC_A=][,CDA_BOIC_A=]
,[CDS_BOIC_A=][,PDS_BOIC_A=][,PADA_BOIC_A=],BOICE_P=,
,[BOICE_A=][,FAC_BOICE_A=][,SM_BOICE_A=]
,[CDA_BOICE_A=][,CDS_BOICE_A=][,PDS_BOICE_A=]
,[PADA_BOICE_A=],BAIC_P=[,BAIC_A=][,FAC_BAIC_A=]
,[SM_BAIC_A=][,CDA_BAIC_A=][,CDS_BAIC_A=]
,[PDS_BAIC_A=][,PADA_BAIC_A=],BICR_P=[,BICR_A=]

[,FAC_BICR_A=][,SM_BICR_A=][,CDA_BICR_A=][,CDS_BICR_A=]
 [,PDS_BICR_A=][PADA_BICR_A=],MPTY_P=,ECT_P=
 ,AOCC_P=,AOCI_P=,CUG_P=,eMLPP_P=[,MaxPri=]
 [,DefPri=],CD_P=[,CDNTC=][,CDRDP=],CFD_P=[,CFDNTC=]
 [,CFDNTF=][,OVRCFB=][,OVRCFNRY=][,OVRCFNRC=][,CFD_R=]
 [,CFDBAddr=][,CFDNRyAddr=][,CFDNRcAddr=],PLSS_1=
 ,PLSS_2=,PLSS_3=,PLSS_4=,PLSS_5=,PLSS_6=
 ,PLSS_7=,PLSS_8=,PLSS_9=,PLSS_A=,PLSS_B=
 ,PLSS_C=,PLSS_D=,PLSS_E=,PLSS_F=[,CFSCF=],CFNC=
 [,CBSCF=],CBNC=,UUS1=,UUS2=,UUS3=,CFBN_P=
 [,CFBN_R=][,CFBNAddr=],MC=[,Nbr_SB=][,Nbr_User=]
 ,CNAP=[,CNAPOpt=],BORO_P=[,BORO_A=][,FAC_BORO_A=]
 [,SM_BORO_A=][,CDA_BORO_A=]
 [,CDS_BORO_A=][,PDS_BORO_A=][,PADA_BORO_A=]
 [,TriMPTY_P=][,SM_CFU_R=][,SM_CFU_A=][,SM_CFUNum=]
 [,FAC_CFD_R=][,FAC_CFDBAddr=][,FAC_CFDNRyAddr=]
 [,FAC_CFDNRcAddr=][,CDA_CFD_R=][,CDA_CFDBAddr=]
 [,CDA_CFDNRyAddr=][,CDA_CFDNRcAddr=][,CDS_CFD_R=]
 [,CDS_CFDBAddr=][,CDS_CFDNRyAddr=][,CDS_CFDNRcAddr=]
 [,PADA_CFD_R=][,PADA_CFDBAddr=][,PADA_CFDNRyAddr=]
 [,PADA_CFDNRcAddr=][,PDS_CFD_R=][,PDS_CFDBAddr=]
 [,PDS_CFDNRyAddr=][,PDS_CFDNRcAddr=][,SM_CFNRC_R=]
 [,SM_CFNRC_A=][,SM_CFNRCNum=],SSET=[,RDI=][,FM_P=]
 [,FMGRP=][,FMSUPER=][,OCCBS=][,TCCBS=],CBNotChkPwd=
 [,CFF=][,CFF_A=][,CFDBAVI=][,CFDNRyAVI=][,CFDNRcAVI=][,FA
 C_CFDRAVI=][,FAC_CFDNRyAVI=][,FAC_CFDNRcAVI=]
 [,CDA_CFDRAVI=][,CDA_CFDNRyAVI=][,CDA_CFDNRcAVI=][,CDS_CF
 DBAVI=][,CDS_CFDNRyAVI=][,CDS_CFDNRcAVI=][,PADA_CFDRAVI=][
 ,PADA_CFDNRyAVI=][,PADA_CFDNRcAVI=][,PDS_CFDRAVI=][,PDS_CF
 DNRyAVI=][,PDS_CFDNRcAVI=][,CFDNRYTIME=][,FAC_CFDNRyTIME
 =][,CDA_CFDNRyTIME=][,CDS_CFDNRyTIME=][,PADA_CFDNRyTIME
 =][,PDS_CFDNRyTIME=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation return code	NUMSTR	M	6	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3	ITEM	Query option	STRING	M	2	Return SS
4	IMSI	International Mobile	NUMSTR	M	6..15	IMSI number

		Subscriber Identity				
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
6	CLIP_P	Calling Line Identification Presentation_Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
7	CLIOpt	Calling Line Identification Presentation Extension_Subscribed	NUMSTR	O	1	Only when CLIP_P=1, this parameter is available. 0: Override Enabled 1: Override Disabled
8	CLIR_P	Calling Line Identification Restriction_Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
9	CLIROpt	Calling Line Identification Restriction Extension_Subscribed	NUMSTR	O	1..2	When CLIR_P=1, this parameter is available 0: Permanent 1:temporary mode with presentation restricted 2:temporary mode with presentation allowed
10	COLP_P	Called Line Identification Presentation_Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
11	COLPOpt	Called Line Identification Presentation Extension_Subscribed	NUMSTR	O	1	When COLP_P=1, this parameter is available 0: Override enabled 1: Override disabled
12	COLR_P	Called Line Presentation Identification Restriction_Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
13	CW_P	Call Waiting_Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
14	CW_A	Call Waiting_Activated	NUMSTR	O	1	When CW_P=1, this parameter is available 0: not activated 1: activated
15	FAC_CW_A	FAX Waiting_Activated	NUMSTR	O	1	0: not activated 1: activated

						Default value: 0
16	CDA_CW_A	CDA Waiting_Activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
17	CDS_CW_A	CDS Waiting_Activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
18	PADA_CW_A	PADA Waiting_Activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
19	PDS_CW_A	PDA Waiting_Activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
20	CH_P	Call Hold Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
21	CFU_P	CFU subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
22	CFU_R	CFR registered	NUMSTR	O	1	When CFU_P=1, this parameter is available 0: not subscribed 1: subscribed
23	CFU_A	CFU Activated	NUMSTR	O	1	When CFU_P=1, this parameter is available 0: not activated 1: activated
24	CFUNTC	Unconditional call forwarding notifying calling subscriber	NUMSTR	O	1	When CFU_P=1, this parameter is available 0: not notify 1: notify
25	CFURDP	Unconditional call forwarding displaying called number	NUMSTR	O	1	When CFU_P=1, this parameter is available 0: not display 1: display
26	CFUNum	CFU forwarded-to Number	NUMSTR	O	2..28	When CFU_R=1, this parameter is available

27	FAC_CFU_R	FAC CFU register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
28	FAC_CFU_A	FAC CFU activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
29	FAC_CFUN_um	FAC CFU number	NUMSTR	O	2..28	When FAC_CFU_R=1, this parameter is available
30	CDA_CFU_R	CDA CFU register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
31	CDA_CFU_A	CDA CFU activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
32	CDA_CFUN_um	CDA CFU number	NUMSTR	O	2..28	When CDA_CFU_R=1, this parameter is available
33	CDS_CFU_R	CDS CFU register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
34	CDS_CFU_A	CDS CFU activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
35	CDS_CFUN_um	CDS CFU number	NUMSTR	O	2..28	When CDS_CFU_R=1, this parameter is available
36	PADA_CFU_R	PADA CFU register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
37	PADA_CFU_A	PADA CFU activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
38	PADA_CFU_Num	PADA CFU number	NUMSTR	O	2..28	When PADA_CFU_R=1, this parameter is available
39	PDS_CFU_R	PDS CFU register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0

40	PDS_CFU_A	PDS CFU activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
41	PDS_CFUN um	PDS CFU number	NUMSTR	O	2..28	When PDS_CFU_R=1, this parameter is available
42	CFB_P	CFB subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
43	CFB_R	CFB registered	NUMSTR	O	1	When CFB_P=1, this parameter is available 0: not subscribed 1: subscribed
44	CFB_A	CFB Activated	NUMSTR	O	1	When CFB_P=1, this parameter is available 0: not activated 1: activate
45	CFBNTC	Call forwarding on subscriber busy notifying calling party	NUMSTR	O	1	When CFB_P=1, this parameter is available 0: not notify 1: notify
46	CFBNTF	Call forwarding on subscriber busy notifying forwarding party	NUMSTR	O	1	When CFB_P=1, this parameter is available 0: not notify 1: notify
47	CFBRDP	Call forwarding on subscriber busy displaying called number	NUMSTR	O	1	When CFB_P=1, this parameter is available 0: not display 1: display
48	CFBNum	CFB forwarded-to number	NUMSTR	O	2..28	When CFB_R=1, this parameter is available
49	FAC_CFB_R	FAC CFB register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
50	FAC_CFB_A	FAC CFB activated	NUMSTR	O	1	0: not activated 1: activate Default value: 0
51	FAC_CFBN	FAC CFB number	NUMSTR	O	2..28	When FAC_CFB_R=1, this

	um					parameter is available
52	CDA_CFB_R	CDA CFB register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
53	CDA_CFB_A	CDA CFB activated	NUMSTR	O	1	0: not activated 1: activate Default value: 0
54	CDA_CFBN_um	CDA CFB number	NUMSTR	O	2..28	When CDA_CFB_R=1, this parameter is available
55	CDS_CFB_R	CDS CFB register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
56	CDS_CFB_A	CDS CFB activated	NUMSTR	O	1	0: not activated 1: activate Default value: 0
57	CDS_CFBN_um	CDS CFB number	NUMSTR	O	2..28	When CDS_CFB_R=1, this parameter is available
58	PADA_CFB_R	PADA CFB register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
59	PADA_CFB_A	PADA CFB activated	NUMSTR	O	1	0: not activated 1: activate Default value: 0
60	PADA_CFB_Num	PADA CFB number	NUMSTR	O	2..28	When PADA_CFB_R=1, this parameter is available
61	PDS_CFB_R	PDS CFB register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
62	PDS_CFB_A	PDS CFB activated	NUMSTR	O	1	0: not activated 1: activate Default value: 0
63	PDS_CFBN_um	PDS CFB number	NUMSTR	O	2..28	When PDS_CFB_R=1, this parameter is available
64	CFNRY_P	CFNRY Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed



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65	CFNRY_R	CFNRY registered	NUMSTR	O	1	When CFNRY_P=1, this parameter is available 0: not subscribed 1: subscribed
66	CFNRY_A	CFNRY Activated	NUMSTR	O	1	When CFNRY_P=1, this parameter is available 0: not activated 1: activated
67	CFNRYNTC	Calling subscriber receives notification that the call has been forwarded on no reply	NUMSTR	O	1	When CFNRY_P=1, this parameter is available 0: not notify 1: notify
68	CFNRYNTF	Forwarding subscriber receives notification that the call has been forwarded on no reply	NUMSTR	O	1	When CFNRY_P=1, this parameter is available 0: not notify 1: notify
69	CFNRYRDP	Called number is displayed on call forwarding (no answer)	NUMSTR	O	1	When CFNRY_P=1, this parameter is available 0: not display 1: display
70	CFNRYTim e	Time of CFNRY	NUMSTR	O	1..2	When CFNRY_P=1, this parameter is available, the value can be one of 5.10.15.20.25.30 secinds.
71	CFNRYNu m	CFNRY Forwarded-to Number	NUMSTR	O	2..28	When CFNRY_R=1, this parameter is available
72	FAC_CFNR Y_R	FAC CFNRY register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
73	FAC_CFNR Y_A	FAC CFNRY activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
74	FAC_CFNR YTime	FAC CFNRY time	NUMSTR	O	1..2	the value can be one of 5.10.15.20.25.30 secinds. Default value is not subscribed
75	FAC_CFNR	FAC CFNRY number	NUMSTR	O	2..28	When FAC_CFNRY_R=1, this

	YNum					parameter is available
76	CDA_CFNRY Y_R	CDA CFNRY register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
77	CDA_CFNRY Y_A	CDA CFNRY activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
78	CDA_CFNRY YTime	CDA CFNRY time	NUMSTR	O	1..2	the value can be one of 5.10.15.20.25.30 secinds. Default value is not subscribed
79	CDA_CFNRY YNum	CDA CFNRY number	NUMSTR	O	2..28	When CDA_CFNRY_R=1, this parameter is available
80	CDS_CFNRY Y_R	CDS CFNRY register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
81	CDS_CFNRY Y_A	CDS CFNRY activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
82	CDS_CFNRY YTime	CDS CFNRY time	NUMSTR	O	1..2	the value can be one of 5.10.15.20.25.30 secinds. Default value is not subscribed
83	CDS_CFNRY YNum	CDS CFNRY number	NUMSTR	O	2..28	When CDS_CFNRY_R=1, this parameter is available
84	PADA_CFN RY_R	PADA CFNRY register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
85	PADA_CFN RY_A	PADA CFNRY activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
86	PADA_CFN RYTime	PADA CFNRY time	NUMSTR	O	1..2	the value can be one of 5.10.15.20.25.30 secinds. Default value is not subscribed
87	PADA_CFN RYNum	PADA CFNRY number	NUMSTR	O	2..28	When PADA_CFNRY_R=1, this parameter is available
88	PDS_CFNRY	PDS CFNRY register	NUMSTR	O	1	0: not subscribed



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	Y_R					1: subscribed Default value: 0
89	PDS_CFNRY Y_A	PDS CFNRY activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
90	PDS_CFNRY YTime	PDS CFNRY time	NUMSTR	O	1..2	the value can be one of 5.10.15.20.25.30 secinds. Default value is not subscribed
91	PDS_CFNRY YNum	PDS CFNRY number	NUMSTR	O	2..28	When PDS_CFNRY_R =1, this parameter is available
92	CFNRC_P	CFNRC Subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
93	CFNRC_R	CFNRC registered	NUMSTR	O	1	When CFNRC_P=1, this parameter is available 0: not subscribed 1: subscribed
94	CFNRC_A	CFNRC Activated	NUMSTR	O	1	When CFNRC_P=1, this parameter is available 0: not activated 1: activated
95	CFNRCNTC	Calling subscriber receives notification that the call has been forwarded on not reachable	NUMSTR	O	1	When CFNRC_P=1, this parameter is available 0: not notify 1: notify
96	CFNRCRDP	Called number is displayed in case of call forwarding on unreachable condition	NUMSTR	O	1	When CFNRC_P=1, this parameter is available 0: not display 1: display
97	CFNRCNu m	CFNRC forwarded-to number	NUMSTR	O	2..28	When CFNRC_R=1, there is this parameter
98	FAC_CFNRY C_R	FAC CFNRC register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
99	FAC_CFNRY C_A	FAC CFNRC activated	NUMSTR	O	1	0: not activated 1: activated

						Default value: 0
100	FAC_CFNRC CNum	FAC CFNRC number	NUMSTR	O	2..28	When FAC_CFNRC_R=1, there is this parameter
101	CDA_CFNRC C_R	CDA CFNRC register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
102	CDA_CFNRC C_A	CDA CFNRC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
103	CDA_CFNRC CNum	CDA CFNRC number	NUMSTR	O	2..28	When CDA_CFNRC_R=1, there is this parameter
104	CDS_CFNRC C_R	CDS CFNRC register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
105	CDS_CFNRC C_A	CDS CFNRC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
106	CDS_CFNRC CNum	CDS CFNRC number	NUMSTR	O	2..28	When CDS_CFNRC_R=1, there is this parameter
107	PADA_CFN RC_R	PADA CFNRC register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
108	PADA_CFN RC_A	PADA CFNRC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
109	PADA_CFN RCNum	PADA CFNRC number	NUMSTR	O	2..28	When PADA_CFNRC_R=1, there is this parameter
110	PDS_CFNRC C_R	PDS CFNRC register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
111	PDS_CFNRC C_A	PDS CFNRC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
112	PDS_CFNRC CNum	PDS CFNRC number	NUMSTR	O	2..28	When PDS_CFNRC_R=1, there is this parameter

113	CBCtrl	Call Barring Password Control	NUMSTR	M	1	0: controlled by operator 1: controlled by subscriber
114	CB_PWD	Call Barring_Password	NUMSTR	M	4	4-digit numbers
115	PWA	Times of attempt to modifying password	NUMSTR	M	1	0~3
116	BAOC_P	Barring of All Outgoing Calls subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
117	BAOC_A	Barring of All Outgoing Calls Activated	NUMSTR	O	1	When BAOC_P=1, this parameter is available 0: not activated 1: activated
118	SM_BAOC_A	SM BAOC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
119	FAC_BAOC_A	FAC BAOC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
120	CDA_BAOC_A	CDA BAOC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
121	CDS_BAOC_A	CDS BAOC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
122	PADA_BAO_C_A	PADA BAOC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
123	PDS_BAOC_A	PDS BAOC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
124	BOIC_P	Barring of Outgoing International Calls subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
125	BOIC_A	Barring of Outgoing International Calls Activated	NUMSTR	O	1	When BAOC_P=1, this parameter is available 0: not activated

						1: activated
126	SM_BOIC_A	SM BOIC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
127	FAC_BOIC_A	FAC BOIC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
128	CDA_BOIC_A	CDA BOIC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
129	CDS_BOIC_A	CDS BOIC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
130	PADA_BOI_C_A	PADA BOIC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
131	PDS_BOIC_A	PDS BOIC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
132	BOICE_P	Barring of Outgoing International Calls except to home PLMN subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
133	BOICE_A	Barring of Outgoing International Calls except to home PLMN Activated	NUMSTR	O	1	When BOICE_P=1 this parameter is available 0: not activated 1: activated
134	SM_BOICE_A	SM BOICE activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
135	FAC_BOIC_E_A	FAC BOICE activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
136	CDA_BOIC_E_A	CDA BOICE activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0



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137	CDS_BOIC_E_A	CDS BOICE activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
138	PADA_BOI_CE_A	PADA BOICE activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
139	PDS_BOIC_E_A	PDS BOICE activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
140	BAIC_P	Barring of All Incoming Calls subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
141	BAIC_A	Barring of All Incoming Calls Activated	NUMSTR	0	1	When BAIC_P=1, this parameter is available 0: not activated 1: activated
142	SM_BAIC_A	SM BAIC activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
143	FAC_BAIC_A	FAC BAIC activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
144	CDA_BAIC_A	CDA BAIC activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
145	CDS_BAIC_A	CDS BAIC activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
146	PADA_BAI_C_A	PADA BAIC activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
147	PDS_BAIC_A	PDS BAIC activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
148	BICR_P	Barring of incoming calls when roaming outside	NUMSTR	M	1	0: not subscribed 1: subscribed

		HPLMN country subscribed				
149	BICR_A	BICR Activated	NUMSTR	O	1	When BICR_P=1, this parameter is available 0: not activated 1: activated
150	SM_BICR_A	SM BICR activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
151	FAC_BICR_A	FAC BICR activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
152	CDA_BICR_A	CDA BICR activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
153	CDS_BICR_A	CDS BICR activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
154	PADA_BICR_A	PADA BICR activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
155	PDS_BICR_A	PDS BICR activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
156	MPTY_P	Multiparty subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
157	ECT_P	Explicit Call Transfer subscribed	NUMSTR	M	1	0: not pre-subscribed 1: pre-subscribed
158	AOCC_P	AOCC subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
159	AOCI_P	AOCI subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
160	CUG_P	CUG subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
161	eMLPP_P	eMLPP subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed



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162	MaxPri	eMLPP largest priority	NUMSTR	O	1	When eMLPP_P=1, this parameter is available 0~6
163	DefPri	eMLPP default priority	NUMSTR	O	1	When eMLPP_P=1, this parameter is available 0~6
164	CD_P	CD subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
165	CDNTC	CD notified to calling party	NUMSTR	O	1	When CD_P=1, this parameter is available 0: not notify 1: notify
166	CDRDP	CD displaying called number	NUMSTR	O	1	When CD_P=1, this parameter is available 0: not display 1: display
167	CFD_P	CFD subscribed	NUMSTR	M	1	0: not subscribed 1: subscribed
168	CFDNTC	CFD notice the calling party	NUMSTR	O	1	When CFD_P=1, this parameter is available 0: not notify 1: notify
169	CFDNTF	CFD notice the forwarding party	NUMSTR	O	1	When CFD_P=1, this parameter is available 0: not notify 1: notify
170	OVRCFB	Whether defaulted forwarding overwrites CFB	NUMSTR	O	1	When CFD_P=1, this parameter is available 0: not overwritten 1: overwritten
171	OVRCFNRY	Whether defaulted forwarding overwrites CFNRY	NUMSTR	O	1	When CFD_P=1, this parameter is available 0: not overwritten 1: overwritten
172	OVRCFNRC	Whether defaulted	NUMSTR	O	1	When CFD_P=1, this parameter is

		forwarding overwrites CFNRC				available 0: not overwritten 1: overwritten
173	CFD_R	Voice CFD registered	NUMSTR	O	1	When CFD_P=1, this parameter is available 0: not registered 1: registered
174	CFDBAddr	Voice CFDB address	NUMSTR	O	2..28	If the Voice CFDB address is registered, this parameter will be returned.
175	CFDNRyAd dr	Voice CFDNRy address	NUMSTR	O	2..28	If the Voice CFDNRy address is registered, this parameter will be returned.
176	CFDNRcAd dr	Voice CFDNRc address	NUMSTR	O	2..28	If the Voice CFDNRc address is registered, this parameter will be returned.
177	PLSS_1	Self-defined supplementary service 1	NUMSTR	M	1	0: not subscribed 1: subscribed
178	PLSS_2	Self-defined supplementary service 2	NUMSTR	M	1	0: not subscribed 1: subscribed
179	PLSS_3	Self-defined supplementary service 3	NUMSTR	M	1	0: not subscribed 1: subscribed
180	PLSS_4	Self-defined supplementary service 4	NUMSTR	M	1	0: not subscribed 1: subscribed
181	PLSS_5	Self-defined supplementary service 5	NUMSTR	M	1	0: not subscribed 1: subscribed
182	PLSS_6	Self-defined supplementary service 6	NUMSTR	M	1	0: not subscribed 1: subscribed
183	PLSS_7	Self-defined supplementary service 7	NUMSTR	M	1	0: not subscribed 1: subscribed
184	PLSS_8	Self-defined supplementary service 8	NUMSTR	M	1	0: not subscribed 1: subscribed
185	PLSS_9	Self-defined supplementary service 9	NUMSTR	M	1	0: not subscribed 1: subscribed

186	PLSS_A	Self-defined supplementary service A	NUMSTR	M	1	0: not subscribed 1: subscribed
187	PLSS_B	Self-defined supplementary service B	NUMSTR	M	1	0: not subscribed 1: subscribed
188	PLSS_C	Self-defined supplementary service C	NUMSTR	M	1	0: not subscribed 1: subscribed
189	PLSS_D	Self-defined supplementary service D	NUMSTR	M	1	0: not subscribed 1: subscribed
190	PLSS_E	Self-defined supplementary service E	NUMSTR	M	1	0: not subscribed 1: subscribed
191	PLSS_F	Self-defined supplementary service F	NUMSTR	M	1	0: not subscribed 1: subscribed
192	CFSCF	SCF address of CF type	STRING	O	1..79	No value means no subscription. Refer to description of section 4.15.1
193	CFNC	Identifier of supplementary service of CF type noticing CSE	NUMBER	M	1	0: do not notice CSE 1: notice CSE
194	CBSCF	SCF address of CB type	STRING	O	1..79	No value means no subscription. Refer to description of section 4.15.1
195	CBNC	Identifier of supplementary service of CB type noticing CSE	NUMBER	M	1	0: do not notice CSE 1: notice CSE
196	UUS1	User-to-User Signaling 1	NUMSTR	M	1	0: de-reserve 1: reserve
197	UUS2	User-to-User Signaling 2	NUMSTR	M	1	0: de-reserve 1: reserve
198	UUS3	User-to-User Signaling 3	NUMSTR	M	1	0: de-reserve 1: reserve
199	CFBN_P	Network switch reserve	NUMSTR	M	1	0: not reserved 1: reserve
200	CFBN_R	Network switch register	NUMSTR	O	1	When CFBN_P=1, this parameter is available 0: not registered 1: registered

201	CFBNAddr	Network switch number	NUMSTR	O	2..16	When CFBN_P=1, this parameter is available
202	MC	MultiCall	NUMSTR	M	1	0: not subscribed 1: subscribed
203	Nbr_SB	MAX number of coexisting bearers set by operator	NUMSTR	O	1	When MC=1, this parameter is available Value range: 2~7
204	Nbr_User	MAX number of coexisting bearers set by user	NUMSTR	O	1	When MC=1, this parameter is available Value range: 1~7
205	CNAP	Calling name presentation	NUMSTR	M	1	0: not subscribed 1: subscribed
206	CNAPOpt	CNAP override option	NUMSTR	O	1	When CNAP=1, this parameter is available 0:OverrideEnabled 1:OverrideDisabled
207	BORO_P	Baring of all outgoing calls when roaming out of home PLMN_subscription	NUMSTR	M	1	0: not subscribed 1: subscribed
208	BORO_A	Voice BORO (Baring of all outgoing calls when roaming out of home PLMN) activation	NUMSTR	O	1	When BORO_P=1, this parameter is available 0: not activated 1: activated
209	SM_BORO_A	Short message BORO (Baring of all outgoing calls when roaming out of home PLMN) activation	NUMSTR	O	1	0: not activated 1: activated Default value: 0
210	FAC_BORO_A	Facsimile BORO (Baring of all outgoing calls when roaming out of home PLMN) activation	NUMSTR	O	1	0: not activated 1: activated Default value: 0
211	CDA_BOR_O_A	CDA BORO (Baring of all outgoing calls when roaming out of home PLMN) activation	NUMSTR	O	1	0: not activated 1: activated Default value: 0
212	CDS_BOR_O_A	CDS BORO (Baring of all outgoing calls when	NUMSTR	O	1	0: not activated 1: activated

		roaming out of home PLMN) activation				Default value: 0
213	PADA_BOR_O_A	PADA BORO (Baring of all outgoing calls when roaming out of home PLMN) activation	NUMSTR	0	1	0: not activated 1: activated Default value: 0
214	PDS_BORO_A	PDS BORO (Baring of all outgoing calls when roaming out of home PLMN) activation	NUMSTR	0	1	0: not activated 1: activated Default value: 0
215	TriMPTY_P	Triple MPTY	NUMSTR	0	1	When MPTY=1, this parameter is available 0: No Triple MPTY 1: Triple MPTY
216	SM_CFU_R	SM CFU register	NUMSTR	0	1	0: not subscribed 1: subscribed Default value: 0
217	SM_CFU_A	SM CFU activated	NUMSTR	0	1	0: not activated 1: activated Default value: 0
218	SM_CFUNum	SM CFU number	NUMSTR	0	2..28	When SM_CFU_R=1, this parameter is available
219	FAC_CFD_R	Facsimile defaulted Call Forwarding Unconditional) registration	NUMSTR	0	1	0: not registered 1: registered Default value: 0
220	FAC_CFDB Addr	Facsimile defaulted Call Forwarding on Busy	NUMSTR	0	2..28	If the Facsimile defaulted Call Forwarding on Busy is registered, this parameter will be returned.
221	FAC_CFDN RyAddr	Facsimile defaulted Call Forwarding on No Reply	NUMSTR	0	2..28	If the Facsimile defaulted Call Forwarding on No Reply is registered, this parameter will be returned.
222	FAC_CFDN RcAddr	Facsimile defaulted Call Forwarding on Unreachable	NUMSTR	0	2..28	If the Facsimile defaulted Call Forwarding on Unreachable is registered, this parameter will be

						returned.
223	CDA_CFD_R	CDA defaulted Call Forwarding Unconditional registration	NUMSTR	O	1	0: not registered 1: registered Default value: 0
224	CDA_CFDB Addr	CDA defaulted Call Forwarding on Busy	NUMSTR	O	2..28	If the CDA defaulted Call Forwarding on Busy is registered, this parameter will be returned.
225	CDA_CFDN RyAddr	CDA defaulted Call Forwarding on No Reply	NUMSTR	O	2..28	If the CDA defaulted Call Forwarding on No Reply is registered, this parameter will be returned.
226	CDA_CFDN RcAddr	CDA defaulted Call Forwarding on Unreachable	NUMSTR	O	2..28	If the CDA defaulted Call Forwarding on Unreachable is registered, this parameter will be returned.
227	CDS_CFD_R	CDS defaulted Call Forwarding Unconditional registration	NUMSTR	O	1	0: not registered 1: registered Default value: 0
228	CDS_CFDB Addr	CDS defaulted Call Forwarding on Busy	NUMSTR	O	2..28	If the CDS defaulted Call Forwarding on Busy is registered, this parameter will be returned.
229	CDS_CFDN RyAddr	CDS defaulted Call Forwarding on No Reply	NUMSTR	O	2..28	If the CDS defaulted Call Forwarding on No Reply is registered, this parameter will be returned.
230	CDS_CFDN RcAddr	CDS defaulted Call Forwarding on Unreachable	NUMSTR	O	2..28	If the CDS defaulted Call Forwarding on Unreachable is registered, this parameter will be returned.
231	PADA_CFD _R	PADA defaulted Call Forwarding Unconditional registration	NUMSTR	O	1	0: not registered 1: registered Default value: 0
232	PADA_CFD BAddr	PADA defaulted Call Forwarding on Busy	NUMSTR	O	2..28	If the PADA defaulted Call Forwarding on Busy is registered,

						this parameter will be returned.
233	PADA_CFD_NRyAddr	PADA defaulted Call Forwarding on No Reply	NUMSTR	O	2..28	If the PADA defaulted Call Forwarding on No Reply is registered, this parameter will be returned.
234	PADA_CFD_NRcAddr	PADA defaulted Call Forwarding on Unreachable	NUMSTR	O	2..28	If the PADA defaulted Call Forwarding on Unreachable is registered, this parameter will be returned.
235	PDS_CFD_R	PDS defaulted Call Forwarding Unconditional registration	NUMSTR	O	1	0: not registered 1: registered Default value: 0
236	PDS_CFDB_Addr	PDS defaulted Call Forwarding on Busy	NUMSTR	O	2..28	If the PDS defaulted Call Forwarding on Busy is registered, this parameter will be returned.
237	PDS_CFDN_RyAddr	PDS defaulted Call Forwarding on No Reply	NUMSTR	O	2..28	If the PDS defaulted Call Forwarding on No Reply is registered, this parameter will be returned.
238	PDS_CFDN_RcAddr	PDS defaulted Call Forwarding on Unreachable	NUMSTR	O	2..28	If the PDS defaulted Call Forwarding on Unreachable is registered, this parameter will be returned.
239	SM_CFNRC_R	SM CFNRC register	NUMSTR	O	1	0: not subscribed 1: subscribed Default value: 0
240	SM_CFNRC_A	SM CFNRC activated	NUMSTR	O	1	0: not activated 1: activated Default value: 0
241	SM_CFNRC_Num	SM CFNRC number	NUMSTR	O	2..28	When SM_CFNRC_R=1, this parameter is available
242	SSET	Service Set	NUMSTR	M	1..4	1~1999: subscribed. 0: not subscribed
243	RDI	redirection destination	NUMSTR	O	1..2	0~32: subscribe.

		index				No value returns when the service is not subscribed
244	FM_P	Follow Me	NUMSTR	O	1	When FM_P is subscribed, this parameter is available 1: Subscribe
245	FMGRP	FM Group Name	STRING	O	1..30	When FM_P=1 and is subscribed, this parameter is available The value comes from OMC configuration data "WCN Domain Service Configuration->Follow Me Service Configuration->Follow Me Group Configuration".
246	FMSUPER	Follow Me supervisor	NUMSTR	O	1	When FM_P=1, this parameter is available 0: NO 1: YES
247	OCCBS	Originating Call Completion to Busy subscriber	NUMSTR	O	1	When support CCBS, this parameter is available 0: De-subscribe 1: Subscribe
248	TCCBS	Terminating Call Completion to Busy subscriber	NUMSTR	O	1	When support CCBS, this parameter is available 0: De-subscribe 1: Subscribe
249	CBNotChkP wd	Call barring not check password	NUMSTR	M	1	0:check 1:not check
250	CFF	Disable call forward _Subscribed	NUMSTR	O	1	When support Disable Call Forward, this parameter is available 1: Subscribed
251	CFF_A	Disable call forward _activated	NUMSTR	O	1	When support Disable Call Forward and CFF=1, this parameter is available 1: activated
252	CFDBAVI	Speech CFDB available area	NUMSTR	O	1	When CFDBAVI is registered, the parameter is available. 1: HPLMN



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						2: ALLPLMN
253	CFDNRyAVI	Speech CFDNRy available area	NUMSTR	O	1	When CFDNRyAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
254	CFDNRcAVI	Speech CFDNRc available area	NUMSTR	O	1	When CFDNRcAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
255	FAC_CFDBAVI	Facsimile CFDB available area	NUMSTR	O	1	When CFDBAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
256	FAC_CFDNRyAVI	Facsimile CFDNRy available area	NUMSTR	O	1	When CFDNRyAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
257	FAC_CFDNRcAVI	Facsimile CFDNRc available area	NUMSTR	O	1	When CFDNRcAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
258	CDA_CFDBAVI	CDA CFDB available area	NUMSTR	O	1	When CFDBAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
259	CDA_CFDNRyAVI	CDA CFDNRy available area	NUMSTR	O	1	When CFDNRyAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
260	CDA_CFDNRcAVI	CDA CFDNRc available area	NUMSTR	O	1	When CFDNRcAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
261	CDS_CFDBAVI	CDS CFDB available area	NUMSTR	O	1	When CFDBAVI is registered, the parameter is available.

						1: HPLMN 2: ALLPLMN
262	CDS_CFDN RyAVI	CDS CFDNRy available area	NUMSTR	O	1	When CFDNRyAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
263	CDS_CFDN RcAVI	CDS CFDNRc available area	NUMSTR	O	1	When CFDNRcAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
264	PADA_CFD BAVI	PADA CFDB available area	NUMSTR	O	1	When CFDBAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
265	PADA_CFD NRyAVI	PADA CFDNRy available area	NUMSTR	O	1	When CFDNRyAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
266	PADA_CFD NrAVI	PADA CFDNRc available area	NUMSTR	O	1	When CFDNRcAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
267	PDS_CFDB AVI	PDS CFDB available area	NUMSTR	O	1	When CFDBAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
268	PDS_CFDN RyAVI	PDS CFDNRy available area	NUMSTR	O	1	When CFDNRyAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
269	PDS_CFDN RcAVI	PDS CFDNRc available area	NUMSTR	O	1	When CFDNRcAVI is registered, the parameter is available. 1: HPLMN 2: ALLPLMN
270	CFDNRYTI	Voice CFDNRy time with no	NUMSTR	O	1..2	The parameter will be returned

	ME	reply				when value is not zero. The values can be one of 5, 10, 15, 20, 25, 30 seconds.
271	FAC_CFDN RYTIME	Fax CFDNRy time with no reply	NUMSTR	O	1..2	The parameter will be returned when value is not zero. The values can be one of 5, 10, 15, 20, 25, 30 seconds.
272	CDA_CFDN RYTIME	CDA CFDNRy time with no reply	NUMSTR	O	1..2	The parameter will be returned when value is not zero. The values can be one of 5, 10, 15, 20, 25, 30 seconds.
273	CDS_CFDN RYTIME	CDS CFDNRy time with no reply	NUMSTR	O	1..2	The parameter will be returned when value is not zero. The values can be one of 5, 10, 15, 20, 25, 30 seconds.
274	PADA_CFD NRYTIME	PADA CFDNRy time with no reply	NUMSTR	O	1..2	The parameter will be returned when value is not zero. The values can be one of 5, 10, 15, 20, 25, 30 seconds.
275	PDS_CFDN RYTIME	PDS CFDNRy time with no reply	NUMSTR	O	1..2	The parameter will be returned when value is not zero. The values can be one of 5, 10, 15, 20, 25, 30 seconds.

[Notes]

1. Non-voice registration and activation parameters using the default value when not returned.

[Examples]

1. Query supplementary service information of mobile subscriber:

Qry User : IMSI=4600000000000006,Item=SS;

ACK:Qry User:ITEM=SS, RETN=000000, DESC=success, IMSI=4600000000000006, MSISDN=8613900000006, CLIP_P=1, CLIPOpt=1, CLIR_P=0, COLP_P=0, COLR_P=0, CH_P=0, CW_P=0, CFU_P=1, CFU_R=0, CFU_A=0, CFUNC=0, CFURDP=0, CFB_P=1, CFB_R=0, CFB_A=0, CFBNTC=0, CFBNTF=0, CFBRDP=0, CFNRY_P=1, CFNRY_R=0, CFNRY_A=0, CFNRYNTC=0, CFNRYNTF=0, CFNRYRDP=0, CFNRYTime=20, CFNRC_P=1, CFNRC_R=0, CFNRC_A=0, CFNRCNTC=0, CFNRCRDP=0, CBCtrl=0, CB_PWD=0000,

CBNotChkPwd=0, PWA=0, BAOC_P=0, BOIC_P=0, BOICE_P=0, BAIC_P=0, BICR_P=0,
 BORO_P=0, MPTY_P=0, ECT_P=0, AOCC_P=0, AOCL_P=0, CUG_P=0, eMLPP_P=0,
 CD_P=0, CFBN_P=0, CFD_P=1, CFD_R=0, CFDNTC=0, CFDNTF=0, OVRCFB=0,
 OVRCFNRY=0, OVRCFNRC=0, PLSS_1=0, PLSS_2=0, PLSS_3=0, PLSS_4=0, PLSS_5=0,
 PLSS_6=0, PLSS_7=0, PLSS_8=0, PLSS_9=0, PLSS_A=0, PLSS_B=0, PLSS_C=0,
 PLSS_D=0, PLSS_E=0, PLSS_F=0, UUS1=0, UUS2=0, UUS3=0, CFNC=0, CBNC=0, MC=0,
 CNAP=0, SSET=0, OCCBS=0, TCCBS=0

4.16.1.5 Querying GPRS Subscription Information

[Command function]Query MS GPRS information.

[Input format]

Qry User : IMSI/MSISDN=, Item=GPRS

[Output Format]

```

ACK:Qry User:RETN=,DESC=,ITEM=,IMSI=,MSISDN=,SMOpt=,Charge=[,GRPSTPL=]
      [,PDPCount=][,PDPID1=][,PDPType1=][,ExtPDPType1=]
      [,QoS1=][,QoS1=][,VPLMN1=][,APN1=][,APNRANGE1=]
      [,PDPAddr1=][,ExtPDPAddr1=][,PDPCharge1=].....[,PDPID50=][,PDPT
      ype50=][,ExtPDPType50=][,QoS50=][,QoS50=][,VPLMN50=][,APN5
      0=][,APNRANGE50=][,PDPAddr50=][,ExtPDPAddr50=][,PDPCharge50
      =]
  
```

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	5	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3.	ITEM	Query option	STRING	M	4	Return GPRS
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
6	GPRSTPL	GPRS Template ID	STRING	O	1..249	The format of value is: X-X-X. GPRS Template ID and PDP information will not be carried at the same time. If the subscriber subscribes GPRS Template, the response will only

						return GPRS Template. If the subscriber subscribes PDP information, the response will only return PDP information. The format of GPRSTPL value is: X-X-X-X., X is GPRS Template ID, Value range: 1~8192. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->GPRS Template Configuration". The maximum number of GPRS template ID is 50.
7	PDPCount	Number of PDP context	NUMSTR	O	1..2	0~50
8	PDPID1	Index of PDP context	NUMSTR	O	1..2	Available when PDPCOUNT≥1. Range: 1~50
9	PDPTYPE1	Type of PDP address	NUMSTR	O	1	Available when PDPCOUNT≥1. 0: IP V4 1: IPV6 3: PPP
10	ExtPDPTYPE1	Extend PDP Address Type	NUMSTR	O	1	Available when PDPCOUNT≥1. 0:IPV4; 1:IPV6; 4:NONE
11	QoS1	Quality of service	STRING	O	11..69	Available when PDPCOUNT≥1. See description in 4.10.2 This parameter will not be output when QOSID1 exists
12	VPLMN1	Allow MS to use VPLMN dynamically assigned address	NUMSTR	O	1	Available when PDPCOUNT≥1. 0: not allow 1: allow
13	APN1	Name of PDP access point	STRING	O	1..62	Available when PDPCOUNT≥1 The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration".
13	APNRANGE1	APN range	NUMSTR	O	1..5	Available when PDPCOUNT≥1 The value comes from

						PSRoamSchID, the default value is 0;
14	PDPAddr1	PDP address	STRING	O	15..39	Available when PDPCount≥1 and not all 0. If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xx xx:xxxx, xxxx is hexadecimal digits
15	ExtPDPAddr1	Extend PDP Address	STRING	O	15..39	Refer:PDPAddr parameter
16	Charge	GPRS billing features	NUMSTR	M	1..5	The same as the Charge parameter in paragraph 4.2.1
17	SMOpt	Short message sending item when GMSC does not support GPRS	NUMSTR	M	1	0: sent via MSC 1: sent via SGSN
18	PdpCharge1	PDP context charging features	NUMSTR	O	1..5	Available when PDPCount≥1. The same as the Charge parameter in paragraph 4.2.1
19	QOSID1	QoS Profile ID	NUMSTR	O	1..3	1~255 Available when PDPCount≥1. Take from OMC configuration data "Admin Domain Public Configuration->PS Service Configuration->Qos Profile Configuration".
...

[Notes]

- For PDP context, there might be several records. Each record has its own subscription information. For example, two PDP context records, and the output parameters can be PDPID1、PDPType1、ExtPDPType1、QoSID1、QoS1、VPLMN1、APN1、PDPAddr1、ExtPDPAddr1、PDPCharge1、PDPID2 ...

[Examples]

- The user is subscribed with GPRS template; query the MS GPRS information:
 Qry User:IMSI=4600000000000000,Item=GPRS;
 ACK:Qry User:ITEM=GPRS, RETN=000000, DESC=success, IMSI=4600000000000000,
 MSISDN=8613900000000, SMOpt=0, Charge=2, GPRSTPL=1

2. The user is subscribed with PDP context information; query the MS GPRS information:

Qry User:IMSI=4600000000000000,Item=GPRS;

ACK:Qry User:ITEM=GPRS, RETN=000000, DESC=success, IMSI=4600000000000000,
MSISDN=8613900000000, SMOpt=0, Charge=2, PDPCount=1, PDPIP1=1, PDPType1=0,
QOSID1=1, VPLMN1=0, APN1=1, PDPCharge1=0, ExtPDPType1=4

4.16.1.6 Querying CAMEL Service Subscription Information

[Command code]Query CAMEL service subscription information of mobile subscriber.

[Input format]

Qry User : IMSI/MSISDN=,Item= CAMEL

[Output Format]

ACK:Qry

User:RETN=,DESC=,ITEM=,IMSI=,MSISDN=,[,State=][,LocInfo=][,Tifflag=][,TIFNC=],[,TrigTCSI=][,OCount=][,OPhase=][,ONC=][,OAct=][,OTDP1=][,OSK1=][,OSCF1=][,ODC1=][,OCTFg1=][,OCT1=][,OMType1=][,ODest1=][,ODL1=][,OBS1=][,OCV1=][,TCount=][,TPhase=][,TNC=][,TAct=][,TTDP1=][,TSK1=][,TSCF1=][,TDC1=][,TCTFg1=][,TBS1=][,TCV1=][,SSCount=][,SSNC=][,SSAct=][,SSSCF1=][,SSNoti=][,SSNoti_CCBS=][,UCount=][,SrvCode1=][,USCF1=][,GPRSCount=][,GPRSPhase=][,GPRSNC=][,GPRSAct=][,GP_RSTDP1=][,GPRSSK1=][,GPRSSCF1=][,GPRSDC1=][,SMSCount=][,SMSPhase=][,SMSNC=][,SMSAct=][,SMSK1=][,SMSSCF1=][,SMSDC1=][,VTCount=][,VTPhase=][,VTNC=][,VTAct=][,VTTDP1=][,VTSK1=][,VTSCF1=][,VTDC1=][,VTBS1=][,VTCV1=][,MCount=][,MNC=][,MAct=][,MSK1=][,MSCF1=][,MTrig1=][,DCount=][,DPhase=][,DNC=][,DAct=][,Di alNum1=][,DSK1=][,DSCF1=][,DDC1=][,MTSCount=][,MTSPhase=][,MTSNC=][,MTSAct=][,MTSSK1=][,MTSSCF1=][,MTSDC1=][,MTSCRT1=][,MGCount=][,MGNC=][,MGAct=][,MGSK1=][,MGSCF1=][,MGTrig1=][,CAMELSCF=][,OCSITPL=][,TCSITPL=][,UCSITPL=][,SMSCSITPL=][,GRPSCSITPL=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation returned code	NUMSTR	M	6	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3	ITEM	Query option	STRING	M	5	Return CAMEL
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number

5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic ISDN number
6	State	Whether send user state to GMSC as a part of MT processing	NUMSTR	O	1	0: not subscribe 1: subscribe
7	LocInfo	Whether send location information to GMSC as a part of MT processing	NUMSTR	O	1	0: not subscribe 1: subscribe
8	TIFFlag	Translation Information Flag	NUMSTR	O	1	0: not subscribe 1: subscribe
9	TIFNC	Whether TIFCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify
10	TrigTCSI	Whether to trigger T-CSI	NUMSTR	O	1	0: not triggere 1: triggere
11	OCount	Number of OCSI	NUMSTR	O	1	range: 1~2
12	OPhase	OCSI version No.	NUMSTR	O	1	When OCount \geq 1, this parameter is available 1: Phase 1 2: Phase 2 3: Phase 3 4: Phase 4
13	ONC	Whether OCSI is notified to CSE	NUMSTR	O	1	When OCount's value is larger than 0 and Camelphase's value is larger than 2, or OCSITPL's value is not 0, this parameter is available 0: not notify 1: notify
14	OAct	Whether OCSI is activated	NUMSTR	O	1	When OCount's value is larger than 0 and Camelphase's value is larger than 2, or OCSITPL's value is not 0, this parameter is available 0: not activated 1: activated



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15	OTDP1	OCSI TDP	NUMSTR	O	1	When OCount≥1, this parameter is available OTDP1=2 or 4, see chapter 4.13.3
16	OSK1	OCSI service key Name	STRING	O	1..50	When OCount≥1, this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
17	OSCF1	OCSI gsmSCF address	NUMSTR	O	1..15	When OCount≥1, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
18	ODC1	OCSI Default Call	NUMSTR	O	1	When OCount≥1, this parameter is available. 0: continue Call 1: release Call
19	OCTFg1	(OCSI TDP Criteria) Call Type Subscription Flag	NUMSTR	O	1	When OCount≥1, this parameter is available. 0: not subscribed 1: subscribed
20	OCT1	(OCSI TDP Criteria) Call Type	NUMSTR	O	1	When OCount≥1 and OCTFg1=1, this parameter is available. 0: Forwarded 1: not Forwarded
21	OMType1	(OCSI TDP Criteria) Match Type	NUMSTR	O	1	When OCount≥1 and destination number flag is 1, this parameter is available. 0: prohibit 1: authorize
22	ODest1	(OCSI TDP Criteria)	STRING	O	1..169	When OCount≥1, destination

		Destination Number				number flag is 1 and destination number list flag is 1, this parameter is available. Use “-”(hyphen) to separate destination numbers returned as reverse BCD format, e.g. the Destination Number signed is 112233445-123456789, it will return as 11223344F5-21436587F9.
23	ODL1	(OCSI TDP Criteria) Destination Number Length	STRING	O	1..8	When OCount \geq 1, destination number flag is 1 and destination number length list flag is 1, this parameter is available. Use “-”(hyphen) to separate destination number length, e.g. 8-9-7
24	OBS1	(OCSI TDP Criteria) Basic Service	STRING	O	1..14	When OCount \geq 1 and basic service flag is 1, this parameter is available. See appendix 2
25	OCV1	(OCSI TDP Criteria) failure code	STRING	O	1..19	When OCount \geq 1 and failure code flag is 1, this parameter is available. See appendix 3
26	TCount	TCSI Count	NUMSTR	O	1	Scope: 1~3
27	TPhase	TCSI Phase	NUMSTR	O	1	When TCount \geq 1, this parameter is available. 1: Phase 1 2: Phase 2 3: Phase 3 4: Phase 4
28	TNC	Whether TCSI is notified to CSE	NUMSTR	O	1	When TCount's value is larger than 0 and Camelphase's value is larger than 2, or TCSITPL's value

						is not 0, this parameter is available. 0: not notify 1: notify
29	TAct	Whether TCSI is activated	NUMSTR	O	1	When TCount's value is larger than 0 and Camelphase's value is larger than 2, or TCSITPL's value is not 0, this parameter is available. 0: not activated 1: activated
30	TTDP1	TCSI TDP	NUMSTR	O	2	When TCount≥1, this parameter is available. TTDP1=12, 13 or 14, see chapter 4.13.3
31	TSK1	TCSI Service Key Name	STRING	O	1..50	When TCount≥1 this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
32	TSCF1	TCSI gsmSCF Address	NUMSTR	O	1..15	When TCount≥1, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
33	TDC1	TCSI Default Call Handle	NUMSTR	O	1	When TCount≥1 this parameter is available. 0: continue Call 1: release Call
34	TCTFg1	(TCSI TDP Criteria) Call Type Subscription Flag	NUMSTR	O	1	When TCount≥1 this parameter is available. 0: not subscribed

						1: subscribed
35	TBS1	(TCSI TDP Criteria) Basic Service	STRING	O	1..14	When TCount \geq 1 and the TDP criteria is 1, this parameter is available. See appendix 2
36	TCV1	(TCSI TDP Criteria) Failure code	STRING	O	1..19	When TCount \geq 1 and the failure code flag is 1, this parameter is available. See appendix 3
37	SSCount	SSCSI Count	NUMSTR	O	1	Scope: 1
38	SSNC	Whether SSCSI is notified to CSE	NUMSTR	O	1	When SSCount=1 and camel version No. is 3, this parameter is available. 0: not notify 1: notify
39	SSAct	Whether SSCSI is activated	NUMSTR	O	1	When SSCount=1 and camel version No. is 3, this parameter is available. 0: not activate 1: activate
40	SSSCF1	SSCSI gsmSCF Address	NUMSTR	O	1..15	When SSCount=1, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
41	SSNoti	SSCSI Notification Criteria	STRING	O	5	When SSCount=1, this parameter is available. Use "-"(hyphen) to separate the items, see chapter 4.13.4.
42	SSNoti_CCB S	SSCSI CCBS Notification Criteria	NUMSTR	O	1	When SSCount=1, this parameter is available. 0: not subscribe 1: subscribe



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43	UCount	UCSI Count	NUMSTR	O	1..2	Scope:1~10
44	SrvCode1	UCSI Service Code	NUMSTR	O	1..16	When UCount>0, this parameter is available.
45	USCF1	UCSI gsmSCF address	NUMSTR	O	1..15	When UCount>0, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
46	GPRSCount	GPRSCSI Count	NUMSTR	O	1	Scope:1~5
47	GPRSPhase	GPRSCSI Phase	NUMSTR	O	1	When GPRSCount≥1, this parameter is available. 3: Phase 3
48	GPRSCNC	Whether GPRSCSI is notified to CSE	NUMSTR	O	1	When GPRSCount's value is larger than 0, or GPRSCSITPL's value is larger than 0, this parameter is available. 0: not notify 1: notify
49	GPRSAct	Whether GPRSCSI is activated	NUMSTR	O	1	When GPRSCount's value is larger than 0, or GPRSCSITPL's value is larger than 0, this parameter is available. 0: not activate 1: activate
50	GPRSTDPI	GPRSCSI TDP	NUMSTR	O	1..2	When GPRSCount≥1, this parameter is available. 1, 2, 11, 12 and 14. See chapter 4.13.6
51	GPRSSK1	Name of GPRSCSI service key	STRING	O	1..50	When GPRSCount≥1, this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key"

						Configuration".
52	GPRSSCF1	GPRSCSI gsmSCF address	NUMSTR	O	1..15	When GPRSCount \geq 1, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
53	GPRSDC1	GPRSCSI default call	NUMSTR	O	1	When GPRSCount \geq 1, this parameter is available. 0: continuous call 1: release call
54	SMSCount	SMSCSI Count	NUMSTR	O	1	Scope: 1
55	SMSPhase	SMSCSI Phase	NUMSTR	O	1	When SMSCount \geq 1, this parameter is available. 3: Phase 3
56	SMSNC	Whether SMSCSI is notified to CSE	NUMSTR	O	1	When SMSCount's value is larger than 1, or SMSCSITPL's value is larger than 0, this parameter is available. 0: not notify 1: notify
57	SMSAct	Whether SMSCSI is activated	NUMSTR	O	1	When SMSCount \geq 1, this parameter is available. 0: not activate 1: activate
58	SMSSK1	Name of SMSCSI service key	STRING	O	1..50	When SMSCount \geq 1, this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
59	SMSSCF1	SMSCSI gsmSCF address	NUMSTR	O	1..15	When SMSCount \geq 1, this parameter is available. Refer to OMC

						configuration"AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
60	SMSDC1	SMSCSI default call	NUMSTR	O	1	When SMSCount \geq 1, this parameter is available. 0: continue call 1: release call
61	VTCount	VTCSI Count	NUMSTR	O	1	Scope:1~3
62	VTPhase	VTCSI Phase	NUMSTR	O	1	When VTCount \geq 1, this parameter is available. 3: Phase 3
63	VTNC	Whether VTCSI is notified to CSE	NUMSTR	O	1	When VTCCCount \geq 1, this parameter is available. 0: not notify 1: notify
64	VTAct	Whether VTCSI is activated	NUMSTR	O	1	When VTCCCount \geq 1, this parameter is available. 0: not activate 1: activate
65	VTTDP1	VTCSI TDP	NUMSTR	O	2	When VTCCCount \geq 1, this parameter is available. 12, 13 and 14, see chapter 4.13.8
66	VTSK1	Name of VTCSI service key	STRING	O	1..50	When VTCCCount \geq 1, this parameter is available. Refer to OMC configuration"WCN Domain Service Configuration->WCN Service Key Configuration".
67	VTSCF1	VTCSI gsmSCF address	NUMSTR	O	1..15	When VTCCCount \geq 1, this parameter is available. Refer to OMC configuration"AdminDomain Public Configuration->ITU IN

						Service Configuration->GSMSCF Address Configuration".
68	VTDC1	VTCSI default call	NUMSTR	O	1	When VTCCOUNT≥1, this parameter is available. 0: continue call 1: release call
69	VTBS1	(VTCSI TDP Criteria)Basic service	STRING	O	1..14	When VTCCOUNT≥1, this parameter is available. See appendix 2
70	VTCV1	(VTCSI TDP Criteria) Failure Code	STRING	O	1..19	When VTCCOUNT≥1, this parameter is available. See appendix 3
71	MCount	MCSI Count	NUMSTR	O	1	Scope: 1
72	MNC	Whether MCSI is notified to CSE	NUMSTR	O	1	When MCount≥1, this parameter is available. 0: not notify 1: notify
73	MAct	Whether MCSI is activated	NUMSTR	O	1	When MCount≥1, this parameter is available. 0: not activate 1: activate
74	MSK1	Name of MCSI service key	STRING	O	1..50	When MCount≥1, this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
75	MSCF1	MCSI gsmSCF address	NUMSTR	O	1..15	When MCount≥1, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF"

						Address Configuration".
76	MTrig1	MCSI trigger	STRING	O	9	When MCount \geq 1, this parameter is available. Separate the following items in order with "-": InSameVlr-ToOtherVlr-ImsiAttach Detach-MsInitImsi-NetworkInit ImsiDetach
77	DCount	DCSI Count	NUMSTR	O	1..2	Scope:1~10
78	DPhase	DCSI Phase	NUMSTR	O	1	When DCount \geq 1, this parameter is available. 3: Phase 3 4: Phase 4
79	DNC	Whether DCSI is notified to CSE	NUMSTR	O	1	When DCount \geq 1, this parameter is available. 0: not notify 1: notify
80	DAct	Whether DCSI is activated	NUMSTR	O	1	When DCount \geq 1, this parameter is available. 0: not activate 1: activate
81	DialNum1	DCSI called number	NUMSTR	O	1..16	When DCount \geq 1, this parameter is available.
82	DSK1	Description of DCSI service key	STRING	O	1..50	When DCount \geq 1, this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
83	DSCF1	DCSI gsmSCF address	NUMSTR	O	1..15	When DCount \geq 1, this parameter is available. Refer to OMC configuration "AdminDomain

						Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
84	DDC1	DCSI default call	NUMSTR	O	1	When DCount \geq 1, this parameter is available. 0: continue call 1: release call
85	MTSCount	MTSMSCSI Count	NUMSTR	O	1	Value scope: 1
86	MTSPhase	MTSMSCSI phase	NUMSTR	O	1	When MTSCount \geq 1, this parameter is available. 4: Phase 4.
87	MTSNC	Whether MTSMSCSI is notified to CSE	NUMSTR	O	1	When MTSCount \geq 1, this parameter is available. 0: not notify 1: notify
88	MTSAct	Whether is activated	NUMSTR	O	1	When MTSCount \geq 1, this parameter is available. 0: not activate 1: activate
89	MTSSK1	Description of MTSMSCSI service key	NUMSTR	O	1..8	When MTSCount \geq 1, this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
90	MTSSCF1	MTSMSCSI gsmSCF address	NUMSTR	O	1..15	When MTSCount \geq 1, this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
91	MTSDC1	MTSMSCSI Default Call Handling	NUMSTR	O	1	When MTSCount \geq 1, this parameter is available.

						0: continue call 1: release call
92	MTSCRT1	MTSMSCSI trigger Standard of Detecting Point	STRING	O	3	When MTSCount ≥ 1 , this parameter is available. See the description in section 4.13.12
93	MGCount	MGCSI count	NUMSTR	O	1	Value scope: 1
94	MGNC	Whether MG_CSI is notified to CSE	NUMSTR	O	1	When MGCount ≥ 1 , this parameter is available. 0: not notify 1: notify
95	MGAct	Whether is activated	NUMSTR	O	1	When MGCount ≥ 1 , this parameter is available. 0: not activate 1: activate
96	MGSK1	Description of MG_CSI service key	NUMSTR	O	1..8	When MGCount ≥ 1 , this parameter is available. Refer to OMC configuration "WCN Domain Service Configuration->WCN Service Key Configuration".
97	MGSCF1	MG_CSI gsmSCF address	NUMSTR	O	1..15	When MGCount ≥ 1 , this parameter is available. Refer to OMC configuration "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".
98	MGTrig1	MGCSI trigger list	STRING	O	13	When MGCount ≥ 1 , this parameter is available. See the description in section 4.13.13
99	CAMELSCF	SCF address of CAMEL type	STRING	O	1..79	No value means no subscription. Refer to description in section 4.15.1



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100	OCSITPL	OCSI Template ID	NUMSTR	O	1...3	OCSI Template ID and OCSI information will not appear at the same time. If the subscriber subscribes OCSI Template, the response will only return OCSI Template. If the subscriber subscribes OCSI information, the response will only return OCSI information. Obtained from HLR configuration data, see chapter 4.13.15.
101	TCSITPL	TCSI Template ID	NUMSTR	O	1...3	TCSI Template ID and TCSI information will not appear at the same time. If the subscriber subscribes TCSI Template, the response will only return TCSI Template. If the subscriber subscribes TCSI information, the response will only return TCSI information. Obtained from HLR configuration data see Chapter 4.13.15.
102	UCSITPL	UCSI Template ID	STRING	O	1~359	UCSI Template ID and UCSI information will not appear at the same time. If the subscriber subscribes UCSI Template, the response will only return UCSI Template. If the subscriber subscribes UCSI information, the response will only return UCSI information. Obtained from HLR configuration data, see chapter 4.13.15. If the subscriber subscribes multiple UCSI Template, the format is 1-2-3.
103	SMSCSITPL	SMSCSI Template ID	NUMSTR	O	1...3	SMSCSI Template ID and SMSCSI information will not appear at the same time. If the subscriber subscribes SMSCSI Template, the response will only return SMSCSI Template. If the subscriber subscribes SMSCSI information, the response

						will only return SMSCSI information. Obtained from HLR configuration data, see chapter 4.13.15.
104	GRPSCSITPL	GPRSCSI Template ID	NUMSTR	O	1...3	<p>GPRSCSI Template ID and GPRSCSI information will not appear at the same time.</p> <p>If the subscriber subscribes GPRSCSI Template, the response will only return GPRSCSI Template.</p> <p>If the subscriber subscribes GPRSCSI information, the response will only return GPRSCSI information.</p> <p>Obtained from HLR configuration data see chapter 4.13.15.</p>

[Notes]

1. For OCSI, TCSI, GPRSCSI, VTCSI and DCSI, there might be several records. Each record has its own subscription information. For example, two OCSI records, and the output parameters can be OTDP1, OSK1, OTDP2, OSK2 ...

[Examples]

1. Querying CAMEL Service Subscription Information:

Qry User : IMSI=460001122334455, Item= CAMEL;

ACK:Qry

```
User:RETN=000000,DESC=success,ITEM=CAMEL,IMSI=460001122334455,MSISDN=8613905120001,OCount=1, OPhase=2 , ONC=1, OAct=1, OTDP1=2, OSK1=112, OSCF1=8613905120001, ODC1=1, TCount=1, TPhase=2, TNC=1, TAct=1, TTDP1=12, TSK1=112, TSCF1=8613905120001, TDC1=1,SSCount=1, SSNC=1, SSAct=1, SSSCF1=8613905120001, SSNoti=1-1-1-1-1, UCount=1, UNC=1, UAct=1, SrvCode1=123, USCF1=8613905120001, GPRSCount=1, GPRSPhase=3, GPRSNC=1, GPRSAct=1 , GPRSTDTP1=14,GPRSSK1=234, GPRSSCF1=8613905120001, GPRSDC1=1, SMSCount=1, SMSPhase=3, SMSNC=1, SMSAct=1, SMSSK1=234, SMSSCF1=8613905120001, SMSDC1=1, VTCount=1, VTPhase=3, VTNC=1, VTAct=1, VTTDP1=12, VTSK1=234, VTSCF1=8613905120001, VTDC1=1, MCount=1, MNC=1, MAct=1, MSK1=223,MSCF1=8613905120001, MTrig1=1-1-1-1-1, DCount=1, DPhase=3, DNC=1, DAct=1, DialNum1=8613905120001, DSK1=234, DSCF1=8613905120001, DDC1=1;
```

4.16.1.7 Querying LCS Service

[Command function]Query location service subscription information of mobile subscriber.

[Input format]

Qry User : IMSI/MSISDN=,Item=LCS

[Output Format]

```
ACK:Qry User:RETN=[,ITEM=],IMSI=,MSIDN=[GMLCList=],Uni=,BscSelf=,
    AutoSelf=,TrdParty=,CallRe=,RNFg=[,RN=][,RCount= ][,RAddr1=][,RGRFg1=]
    [,RGR1=][,RNFg1=][,RN1=],CallUnRe=,URNFg=[,URCount=][,URAddr1=]
    [,URGRFg1=][,URGR1=][,URNFg1=][,URN1=][,PLMN=][,PLMNcli=],
    [,ServiceType=][,SrvtypeCnt=][,SrvtypeList=][,HGMLCTYPE=]
    [,HGMLCADDRESS=][,PPRTYPE=][,PPRADDRESS=]
```

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	See appendix 1
2.	DESC	Result description	STRING	M	1..256	See appendix 1
3.	ITEM	Query option	STRING	M	3	Return LCS
4.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
6.	GMLCList	GMLC List	STRING	O	1..79	Separate GMLC by "-", for example, 8613905120001-8613905120002
7.	Uni	Common type	NUMSTR	M	1	0: not subscribed 1: subscribed
8.	BscSelf	UE requests its location	NUMSTR	M	1	0: not subscribed 1: subscribed
9.	AutoSelf	UE requests location auxiliary data	NUMSTR	M	1	0: not subscribed 1: subscribed
10.	TrdParty	UE requests to transmit its location to another LCS client side	NUMSTR	M	1	0: not subscribed 1: subscribed

11.	CallRe	Call Related type	NUMSTR	M	1	0: not subscribed 1: subscribed
12.	RNFg	Whether call related type is notified to UE subscriber	NUMSTR	M	1	0: not notify 1: notify
13.	RN	Type of UE subscriber that the call related type is notified to	NUMSTR	O	1	Scope: 0-3; When RNFg=0, this parameter is not returned.
14.	RCount	External client count of call related type	NUMSTR	O	1..2	1~40
15.	RAddr1	External client 1 address of call related type	NUMSTR	O	1..38	The parameter is returned only when RCount≥1.
16.	RGRFg1	Whether there is a GMLC restriction in external client 1 address of call related type	NUMSTR	O	1	0: not restricted 1: restricted The parameter is returned only when RCount≥1.
17.	RGR1	GMLC restriction type of call related type external client 1 address	NUMSTR	O	1	0: subscribed GMLC restriction 1: any of GMLC restriction of home country The parameter is returned only when RCount≥1.
18.	RNFg1	Whether call related type external client 1 is notified to UE	NUMSTR	O	1	0: not notify 1: notify The parameter is returned only when RCount≥1.
19.	RN1	Type of UE that the call related type external client 1 is notified to	NUMSTR	O	1	Scope: 0-3 The parameter is returned only when RCount≥1.
...
20.	CallUnRe	Call unrelated type	NUMSTR	M	1	0: not subscribed 1: subscribed
21.	URNFg	Whether call unrelated type is notified to UE subscriber	NUMSTR	M	1	0: not notify 1: notify

22.	URN	Type of UE subscriber that the call unrelated type is notified to	NUMSTR	O	1	Scope: 0-3; When URNFg=0, this parameter is not returned.
23.	URCount	External client count of call unrelated type	NUMSTR	O	1..2	1~40
24.	URAddr1	External client 1 address of call unrelated type	NUMSTR	O	1..38	The parameter is returned only when URCount≥1.
25.	URGRFg1	Whether there is a GMLC restriction in external client 1 address of call unrelated type	NUMSTR	O	1	0: not subscribed 1: subscribed The parameter is returned only when URCount≥1.
26.	URGR1	GMLC restriction type of call unrelated type external client 1 address	NUMSTR	O	1	0: subscribed GMLC restriction 1: any of GMLC restriction of home country The parameter is returned only when URCount≥1.
27.	URNFg1	Whether call unrelated type external client 1 is notified to UE	NUMSTR	O	1	0: not notify 1: notify The parameter is returned only when URCount≥1.
28.	URN1	Type of UE that the call unrelated type external client 1 is notified to	NUMSTR	O	1	Scope: 0-3 The parameter is returned only when URCount≥1.
...
29.	PLMN	PLMN operation and management type	NUMSTR	M	1	0: not subscribed 1: subscribed
30.	PLMNcli	Client type of PLMN and management type	NUMSTR	O	1..9	When PLMN=1, this parameter is available. Separate the each client by "-", for example: 1-0-1. See [Parameter Description] in Section 4.14.3.
31	ServiceType	Service type Provisioning State	NUMSTR	M	1	0:unsubscribe 1:subscribe
32	SrvtypeCnt	Count of subscribed service types	NUMSTR	O	2	1~32 This parameter is returned only when URCount≥1.

						SrvtypeCnt >0
33	SrvtypeList	List of one or more service types	STRING	O	9..383	This parameter is returned only when SrvtypeCnt >0. 1.ServiceTypeList Separate by “-” 2.ServiceType Separate by “:”, Inner parameters order like “serviceTypeId:GRestFg:GRest:ExNotifg:ExNoti”.For example: 100:1:1:1:1.All the parameters refer to Section 4.14.3.
34	HGMLCTYPE	The type of H-GMLC Address	NUMSTR	O	1	0: IP V4 1: IP V6 If not subscribed,the parameter is not returned.
35	HGMLCADDR	H-GMLC Address	STRING	O	7..39	If HGMLCTYPE is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If HGMLCTYPE is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xx, xxxx is hexadecimal digit. If not subscribed,the parameter is not returned.
36	PPRTYPE	The type of PPR Address	NUMSTR	O	1	0: IP V4 1: IP V6 If not subscribed,the parameter is not returned.
37	PPRADDRESS	PPR Address	STRING	O	7..39	If PPRTYPE is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If PPRTYPE is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xx, xxxx is hexadecimal digit. If not subscribed,the parameter is not returned.

[Notes]

1. For external client of call related type, the amount might be more than 1. For example, the amount is 2(RCount=2), then the output parameters can include RAddr1,RGRFg1,RGR1,RNFg1,RN1, and RAddr2,RGRFg2,RGR2,RNFg2,RN2 simultaneously. The rest can be done in the same manner.
2. For external client of call unrelated type, the amount might be more than 1. For

ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)
example, the amount is 2(URCount=2), then the output parameters can include
URAddr1,URGRFg1,URGR1,URNFg1,URN1, and URAddr2,URGRFg2,URGR2,URNFg2,URN2
simultaneously. The rest can be done in the same manner.

[Examples]

1. Query location service subscription information of mobile subscriber:

Qry User : IMSI=460001122334455, Item= LCS;

ACK:Qry

User:RETN=000000,DESC=success,ITEM=LCS,IMSI=460001122334455,MSISDN=8613905120001, GMLCList=8613905120001-8613905120002, Uni=1, BscSelf=1, AutoSelf=1, TrdParty=1, CallRe=1, RNFg=1, RN=2, RCount=1, RAAddr1=8613905129991, RGRFg1=1, RGR1=1, RNFg1=1, RN1=1, CallUnRe=1, URNFg=1, URN=1, URCount=0, PLMN=1, PLMNcli=1-1-0

4.16.1.8 Querying CUG Subscription Information

[Command function]Query CUG subscription information of mobile subscriber.

[Input format]

Qry User : IMSI/MSISDN=,Item=CUG

[Output Format]

ACK:Qry User:RETN=,DESC=,ITEM=,IMSI=,MSISDN=,CugCount=,[CugIC1=][,Index1=]
[,BsList1=][,ICR1=] [,Sph=] [,Sph_Idx=] [,Sph_ICA=][,Fac=]
[,Fac_Idx=][,Fac_ICA=][,CDA=][,CDA_Idx=][,CDA_ICA=][,CDS=]
[,CDS_Idx=][,CDS_ICA=][,PADA=][,PADA_Idx=][,PADA_ICA=]
[,PDS=][,PDS_Idx=][,PDS_ICA=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	6	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3.	ITEM	Query option	STRING	M	3	Return CUG
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number

6	CugCount	Number of subscribed CUG group	NUMSTR	M	1..2	0~10
7	CugIC1	Identifier of the first CUG group	HEXSTR	O	8	Available when CugCount≥1. 8-digit hexadecimal number
8	Index1	Index of the first CUG group	NUMSTR	O	1..5	Available when CugCount≥1. 0~32767
9	BsList1	Basic service list of the first CUG group	STRING	O	11	Available when CugCount≥1. See the following description.
10	ICR1	Call barring within the first CUG group	NUMSTR	O	1	Available when CugCount≥1. 0: no call barring within the same CUG group 1: incoming call barring within the CUG group 2: outgoing call barring within the CUG group.
11
12	Sph	voice	NUMSTR	O	1	Available when CugCount≥1. 0: no default index 1: there is default index
13	Sph_Idx	(voice service) preferential index	NUMSTR	O	1..5	Available when CugCount≥1. Available when Sph=1. 0~32767
14	Sph_ICA	(voice service) inter-group call	NUMSTR	O	1	Available when CugCount≥1. Available when Sph=1. 0: call confined within the CUG group 1: call outside CUG group allowed 2: call from outside CUG group allowed. 3. all calls allowed.
15	Fac	Facsimile	NUMSTR	O	1	Available when CugCount≥1. 0: no default index 1: there is default index
16	Fac_Idx	(Facsimile service) preferential index	NUMSTR	O	1..5	Available when CugCount≥1. Available when Fac=1.

						0~32767
17	Fac_ ICA	(Facsimile service) inter-group call	NUMSTR	O	1	Available when CugCount≥1. Available when Fac=1. The same as Sph_ICA
18	CDA	Asynchronous data	NUMSTR	O	1	Available when CugCount≥1. 0: no default index 1: there is default index
19	CDA_ Idx	(Asynchronous data) preferential index	NUMSTR	O	1..5	Available when CugCount≥1. Available when CDA=1. 0~32767
20	CDA_ ICA	(Asynchronous data) inter-group call	NUMSTR	O	1	Available when CugCount≥1. Available when CDA=1. The same as Sph_ICA
21	CDS	Synchronous data	NUMSTR	O	1	Available when CugCount≥1. 0: no default index 1: there is default index
22	CDS_ Idx	(Synchronous data) preferential index	NUMSTR	O	1..5	Available when CugCount≥1. Available when CDS=1. 0~32767
23	CDS_ ICA	(Synchronous data) inter-group call	NUMSTR	O	1	Available when CugCount≥1. Available when CDS=1. The same as Sph_ICA
24	PDS	Synchronous data(PDS)	NUMSTR	O	1	Available when CugCount≥1. 0: no default index 1: there is default index
25	PDS_ Idx	(PDS) preferential index	NUMSTR	O	1..5	Available when CugCount≥1. Available when PDS=1. 0~32767
26	PDS_ ICA	(PDS) inter-group call	NUMSTR	O	1	Available when CugCount≥1. Available when PDS=1. The same as Sph_ICA
27	PADA	Asynchronous data(PADA)	NUMSTR	O	1	Available when CugCount≥1. 0: no default index 1: there is default index
28	PADA_ Idx	(PADA) preferential index	NUMSTR	O	1..5	Available when CugCount≥1.

						Available when PADA=1. 0~32767
29	PADA_ ICA	(PADA) inter-group call	NUMSTR	0	1	Available when CugCount≥1. Available when PADA=1. The same as Sph_ICA

[Notes]

1. Parameter BsList1 is composed of “x-x-x-x-x-x” character string, among which “x” stands for “0” or “1”. 0 means not subscribed, and 1 means subscribed. The first “x” stands for voice subscription or not, the second “x” for facsimile subscription or not, the third for asynchronous data subscription (CDA)or not, and the fourth for synchronous data subscription (CDS) or not, and the fifth for synchronous data subscription (PADA) or not ,and the sixth for synchronous data subscription (PDS) or not.

For example, 1-1-0-0-0-0 means CUG group has subscribed voice and facsimile; not subscribed asynchronous and synchronous data.

2. There are multiple records of CUG when the CUGCount’s value is larger than 1, and there will be multiple CUG relative parameters, such as CUGCount’s value is 2, there will be CugIC1, Index1, BsList1, ICR1 , CugIC2, Index2, BsList2, ICR2.

[Examples]

Qry User: IMSI=460001122334455, Item= CUG;

ACK:Qry

User:RETN=000000,DESC=success,ITEM=CUG,IMSI=460001122334455,MSISDN=86139

05120001, CugCount=1,CugIC1=11223344, Index1=1, BsList1=1-0-0-0-0-0,
ICR1=0 , Sph=1, Sph_Idx=1, Sph_ICA=3;

4.16.1.9 Querying Multi-Number Information

[Command function]Query Multi -number information

[Input format]

Qry User : IMSI/MSISDN=,Item=MULTI

[Output Format]

ACK:Qry User:RETN=,DESC=[,ITEM=],IMSI=,MSISDN=,MultiCount= [,ISDN1=][,BS1=][,BCID1=][,ISDN2=][,BS2=][,BCID2=]..... [,ISDN11=][,BS11=][,BCID11=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description

1	RETN	Operation result code	NUMSTR	M	6	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3.	ITEM	Query option	STRING	M	5	Return MULTI
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic phone number
6	MultiCount	Quantity of subscribed batch numbers.	NUMSTR	M	1..2	0~11
7	ISDN1	The first subscribed batch-number	NUMSTR	O	6..15	Available when MultiCount≥1
8	BS1	The first batch-number corresponding basic service	NUMSTR	O	1..2	Available when MultiCount≥1. For values, please see BS parameter in 4.12.1
9	BCID1	The first batch-number corresponding bearer capability index	NUMSTR	O	1..5	Available when MultiCount≥1. Take from OMC configuration data "Public Service Configuration->WCDMA Global Service Configuration->Bearer Capability Configuration"
...	

[Notes]

1. For Multi-number, there might be several records. Each record has its own subscription information. For example, two Multi-number records, and the output parameters can be ISDN1、BS1、BCID1、ISDN2、BS2、BCID2.

[Examples]

1. Query Multi-number information:

Qry User : MSISDN=8613900000015,Item= MULTI;

ACK:Qry User:ITEM=MULTI, RETN=000000, DESC=success, IMSI=460000000000015, MSISDN=8613900000015, MultiCount=1, ISDN1=8613900001000, BS1=16, BCID1=1

4.16.1.10 Querying SCF Address Information

[Command function]Query SCF address information of subscriber.

[Input format]

Qry User : IMSI/MSISDN=, Item=SCF

[Output Format]

ACK:Qry User:RETN=[,ITEM=][,IMSI=][,MSISDN=][,CFSCF=][,CBSCF=]
 [,CAMELSCF=][,ODBSCF=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	6	See appendix 1
2	DESC	Result description	STRING	M	1..256	See appendix 1
3	ITEM	Query option	STRING	M	3	Return SCF
4	IMSI	International Mobile Subscriber Identity	NUMSTR	O	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	O	6..15	Basic phone number
6	CFSCF	SCF address of CF category	STRING	O	1..79	See description of Section 4.15.1 for parameter SCFList
7	CBSCF	SCF address of CB category	STRING	O	1..79	See description of Section 4.15.1 for parameter SCFList
8	CAMELSCF	SCF address of CAMEL category	STRING	O	1..79	See description of Section 4.15.1 for parameter SCFList
9	ODBSCF	SCF address of ODB category	STRING	O	1..79	See description of Section 4.15.1 for parameter SCFList

[Examples]

1. Query SCF address information of mobile subscriber:

Qry User : IMSI=460001122334455, Item=SCF;

ACK:Qry

User:RETN=000000,DESC=success,ITEM=SCF,IMSI=460001122334455,MSISDN=86139

05120001,CFSCF=8613806130001-8613806130002

4.16.1.11 Query Location Information of Subscribers

[Command function]Query location information of subscribers

[Input format]

Qry User : IMSI/MSISDN=,Item= LOC

[Output Format]

ACK:Qry USER:RETN=,DESC=,ITEM=,IMSI=,MSISDN=[,MSCNumber=][,VLRNumber=]
 [,SGSNNNumber=][,SGSNAddr=][,CSUpTime=][,PSUpTime=][,SCCASNu
 mber=][,EPCSGSNHost =][, EPCSGSNRealm =] [, EPCMMEHost =]
 [,EPCMMERealm=][,EPSUpTime=][,EPCIInterType=][,UEReachable=]
 [,EPCIMEISV=][,EPCMMEPFG=][,EPCSGSNPFG=] [,EPCGSNARFlag=]
 [,EPCMCEFlag=][,EPCMPRESENTFlag=][,EPCN3USTATUS=][,EPCVISIT
 EDNETID=][, EPCNO3GHOST =][, EPCN3GREALM =]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	ITEM	Query option	STRING	M	3	Return LOC
4.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
5.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
6.	MSCNumber	MSC number	STRING	O	0..16	Return when network access mode is CS or CS/PS Character string of 1 to 16 digits, If not subscribed, a value of null will be returned.

7.	VLRNumber	VLR number	STRING	O	0..16	Return when network access mode is CS or CS/PS Character string of 1 to 16 digits, If not subscribed, a value of null will be returned.
8.	SGSNNumber	SGSN number	STRING	O	0..16	Return when network access mode is PS or CS/PS Character string of 1 to 16 digits, If not subscribed, a value of null will be returned.
9.	SGSNAddr	SGSN number	STRING	O	0..15	Return when network access mode is PS or CS/PS. the format is xxx.xxx.xxx.xxx and "xxx" is decimal. If not subscribed, a value of null will be returned.

10.	CSUpTime	CS LU time	STRING	O	14	Return when network access mode is CS or CS/PS and format is YYYYMMDDHHMMSS From left to right YYYY-year MM-month DD-day HH-hour MM-minute SS-second For example:2007041113003 5means 13:00:35, Apr 11, 2007 If not updated, returned all 0.
11.	PSUpTime	PS LU time	STRING	O	14	Return when network access mode is PS or CS/PS and format is same as CSUpTime.
12.	SCCASNumber	SCC AS Number	STRING	O	1..16	String of 1 to 16 digits. If not available, this parameter will not be returned
It supports the following parameters only when the SubType is EPC						
13.	EPCSGSNHost	S4-SGSN Host name	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.
14.	EPCSGSNRealm	S4-SGSN Domain Name	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.

15.	EPCMMEHost	MME Host name	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.
16.	EPCMMEReal m	MME Domain Name	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.
17.	EPSUpTime	EPC LU time	STRING	O	14	format is same as CSUpTime
18.	EPCIInterTy pe	EPC LU access interface type	NUMSTR	O	1	0:it means LU access by S6d 1:it means LU access by S6a
19.	UEReachable	UE Reachable flag	NUMSTR	O	1	0:it means UE not be reachable 1:it means UE has become reachable
20.	EPCIMEISV	International Mobile Equipment Identity Software Version	HEXSTR	O	1..16	Return 16 "F" if subscriber has no IMEISV
21.	EPCMMEPFG	MME purge flag	NUMSTR	O	1	0:it means UE not be Purged by MME 1:it means UE be Purged by MME
22.	EPCSGSNPFG	SGSN purge flag	NUMSTR	O	1	0:it means UE not be Purged by SGSN 1:it means UE be Purged by SGSN
23.	EPCSGSNARF lag	GSPS Regional Restriction Flag	NUMSTR	O	1	0:it means not to set User Region Restriction 1:it means to set User Region Restriction

24.	EPCMCEFlag	Memory Capacity not Exceeded Flag	NUMSTR	O	1	0:it means Memory Available 1:it means no Memory Available
25.	EPCMPRESEN TFlag	Subscriber not Reachable Flag	NUMSTR	O	1	0:it means Subscriber Reachable 1:it means no Subscriber Reachable
26.	EPCN3USTAT US	User Status for non-3GPP access	NUMSTR	O	1	0:User Status is NOT_REGISTERED 1: User Status is REGISTERED
27.	EPCVISITED NETID	Visited-Network-Identifier	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.
28.	EPCNO3GHO ST	AAA Server Host	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.
29.	EPCN3GREAL M	AAA Server Ealm	STRING	O	0..128	Character string of 1 to 128, If not subscribed, a value of null will be returned.

[Examples]

1. Query the user location information:

```
Qry User:IMSI=4600000000000006,Item=LOC;
ACK:Qry User:ITEM=LOC, RETN=000000, DESC=success, IMSI=4600000000000006,
MSISDN=8613900000006, MSCNUMBER=, VLRNUMBER=, CSUpTime=0000000000000000,
EPCSGSNHost=, EPCSGSNRealm=, EPCMMEHost =, EPCMMERealm =,
EPSUpTime=0000000000000000, EPCIInterType=1, UEReachable=1,
EPCIMEISV=FFFFFFFFFFFF, EPCMMEPFG=0, EPCSGSNPFG=0, EPCSGSNARFlag=0,
EPCVISITEDNETID=, EPCNO3GHOST=, EPCN3GREALM=, EPCN3USTATUS=0,
EPCMCEFlag=0, EPCMPRESENTFlag=0
```

4.16.1.12 Query Subscription Information of EPC Basic Service

[Command function]Query EPC Basic Service Subscription Information of Subscribers

[Input format]

Qry User : IMSI/MSISDN=, Item=EPCBASIC

[Output Format]

```

ACK:Qry           User:RETN=,DESC=,           Item=EPCBASIC,          IMSI=,
MSISDN= ,EPCARD_0=,EPCARD_1=,EPCARD_2=,EPCARD_3=,EPCARD_4=,EPCARD_5=,
EPCCHARGCHRT=,EPCROAMSCH=,EPCSTNSR=,EPCAMBRUP=,EPCAMBRDOWN=,EPCAP
NOIRep=,EPCRFSR=,EPCICSIND= ,EPCDFTAPNCFGID=,EPCN3ARD_0=,EPCN3ARD_1=,E
PCN3ARD_2=,EPCN3ARD_3=,EPCN3ARD_4=,EPCN3IPACC=,EPCN3IPACCAPN=,EPCSTIM
EOUT=,NO3GPPROAMSCH=,EPCRELAYNODEIND=, SupMIP6FeaVec=[, MIP6FeaVec_1=][,
MIP6FeaVec_2=][,MIP6FeaVec_3=][,MIP6FeaVec_4=][,MIP6FeaVec_5=][,MIP6FeaVec_6
=][,MIP6FeaVec_7=][,MIP6FeaVec_8=][,MIP6FeaVec_9=][,EPCVSERVCC=][,MPSEPSPRIO
RITY=]

```

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	ITEM	Query option	STRING	M	8	Return EPCBASIC
4.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
5.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
6.	EPCARD_0	Access restriction parameter of UTRAN Not Allowed	NUMSTR	M	1	0: Allow to access UTRAN 1: Not allow to access UTRAN
7.	EPCARD_1	Access restriction parameter of GERAN Not Allowed	NUMSTR	M	1	0: Allow to access GERAN 1: Not allow to access GERAN
8.	EPCARD_2	Access restriction parameter of GAN Not Allowed	NUMSTR	M	1	0: Allow to access GAN 1: Not allow to access GAN
9.	EPCARD_3	Access restriction parameter of I-HSPA-Evolution Not Allowed	NUMSTR	M	1	0: Allow to access I-HSPA-Evolution 1: Not allow to access I-HSPA-Evolution

10.	EPCARD_4	Access restriction parameter of E-UTRAN Not Allowed	NUMSTR	M	1	0: Allow to access E-UTRAN 1: Not allow to access E-UTRAN
11.	EPCARD_5	Access restriction parameter of HO-To-Non-3GPP Not Allowed	NUMSTR	M	1	0: Allow to access HO-To-Non-3GPP 1: Not allow to access HO-To-Non-3GPP
12.	EPCCHARGC HRT	Charging features of EPC subscription	NUMSTR	M	1..3	Value:0~255 0: No charging 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4
13.	EPCROAMSC H	EPC Roaming Scheme Name	STRING	M	1..30	"*" indicates no roaming scheme subscription, Other data can be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration".
14.	EPCSTNSR	Session Transfer Number for SRVCC	NUMSTR	M	6..15	ISDN Number
15.	EPCAMBRUP	Max-Requested-Bandwidth-UL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	M	1..10	0~4294967295
16.	EPCAMBRDO WN	Max-Requested-Bandwidth-DL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	M	1..10	0~4294967295

)				
17.	EPCAPNOIRE p	APN-OI-replacement	STRING	M	0..64	The valid value is like: mnc.mcc.gprs '*' indicates no subscription.
18.	EPCRfsp	RAT-Frequency-Selection-Priority-ID	NUMSTR	M	1..3	0~256, 0 indicates no subscription
	EPCICSIND	ICS flag	NUMSTR	M	1	1: True 0: Flase
20.	EPCDFTAPNC FGID	Default APN CONFIGURATION (Context-Identifier)	NUMSTR	M	1..2	Value range: 0~50
21.	EPCN3ARD_0	non-3GPP Access restriction parameter of WLAN Not Allowed	NUMSTR	M	1	0: Allow to access WLAN 1: Not allow to access WLAN
22.	EPCN3ARD_1	non-3GPP Access restriction parameter of CDMA2000_1X Not Allowed	NUMSTR	M	1	0: Allow to access CDMA2000_1X 1: Not allow to access CDMA2000_1X
23.	EPCN3ARD_2	non-3GPP Access restriction parameter of HRPD Not Allowed	NUMSTR	M	1	0: Allow to access HRPD 1: Not allow to access HRPD
24.	EPCN3ARD_3	non-3GPP Access restriction parameter of UMB Not Allowed	NUMSTR	M	1	0: Allow to access UMB 1: Not allow to access UMB
25.	EPCN3ARD_4	non-3GPP Access restriction parameter of EHRPD Not Allowed	NUMSTR	M	1	0: Allow to access EHRPD 1: Not allow to access EHRPD
26.	EPCN3IPACC	whether allow the user to access EPC from non-3GPP network	NUMSTR	M	1	0: The subscriber has non-3GPP subscription to access EPC network 1: The subscriber has no non-3GPP subscription to access EPC network

27.	EPCN3IPACC APN	whether disable all APNs for a subscriber at one time	NUMSTR	M	1	0: Enable all APNs for a subscriber 1: Disable all APNs for a subscriber
28.	EPCSTIMEOU T	the maximum period for a session measured in seconds	NUMSTR	M	1..10	0~2147483647(s)
29.	NO3GPPROA MSCH	No 3GPP Roaming Scheme Name.	STRING	M	1..30	"*" indicates no roaming scheme subscription, Other data can be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration".
30.	EPCRELAYNO DEIND	EPC Relay Node Indicator	NUMSTR	M	1..3	0: NOT_RELAY_NODE 1: RELAY_NODE 255: NONE
31.	SupMIP6FeaVec	MIP6-Feature-Vector	NUMSTR	M	1	1: subscription 0: no subscription
32.	MIP6FeaVec_1	Whether support MIP6_INTEGRATED	NUMSTR	O	1	0: not support 1: support
33.	MIP6FeaVec_2	Whether support LOCAL_HOME_ADDRESS_ASSIGNMENT	NUMSTR	O	1	0: not support 1: support
34.	MIP6FeaVec_3	Whether support PMIP6_SUPPORTED	NUMSTR	O	1	0: not support 1: support
35.	MIP6FeaVec_4	Whether support IP4_HOA_SUPPORTED	NUMSTR	O	1	0: not support 1: support
36.	MIP6FeaVec_5	Whether support LOCAL_MAG_ROUTING_SUPPORTED	NUMSTR	O	1	0: not support 1: support
37.	MIP6FeaVec_6	Whether support ASSIGN_LOCAL_IP	NUMSTR	O	1	0: not support 1: support
38.	MIP6FeaVec_	Whether support	NUMSTR	O	1	0: not support

	7	MIP4_SUPPORTED				1: support
39.	MIP6FeaVec_8	Whether support OPTIMIZED_IDLE_MODE_MOBILITY	NUMSTR	O	1	0: not support 1: support
40.	MIP6FeaVec_9	Whether support GTPv2_SUPPORTED	NUMSTR	O	1	0: not support 1: support
41.	EPCVSRVCC	Subscribed VSRVCC	NUMSTR	O	1	1: Subscribed
42.	MPSEPPSPRIORITY	MPS-EPS-PRIORITY	NUMSTR	O	1	1: Subscribed

[Notes]

- When the parameter SupMIP6FeaVec's value is 1, the parameters MIP6FeaVec_1~MIP6FeaVec_9 should be returned.

[Examples]

- Query EPC Basic Service Subscription Information of Subscribers:

```

Qry user:imsi=4600000000000000,item=epcbasic;
ACK: Qry User:ITEM=EPCBASIC, RETN=000000, DESC= success,
IMSI=4600000000000000, MSISDN=86139000000000, EPCARD_0=1, EPCARD_1=0,
EPCARD_2=1, EPCARD_3=1, EPCARD_4=1, EPCARD_5=1, EPCCHARGCHRT=255,
EPCROAMSCH=allow, EPCSTNSR=8613900000111, EPCAMBRUP=9990,
EPCAMBRDOWN=8000, EPCAPNOIRep=1234567890abcdefghijklmnopqrstuvwxyz,
EPCRFSR=254, EPCICSIND=1, EPCDFTAPNCFGID =1, EPCN3ARD_0 =1,
EPCN3ARD_1 =1, EPCN3ARD_2 =1, EPCN3ARD_3 =1, EPCN3ARD_4 =1,
EPCN3IPACC =1, EPCN3IPACCAPN =1, EPCSTIMEOUT =2147483647,
NO3GPROAMSCH=allow, EPCRELAYNODEIND = 1,
SupMIP6FeaVec=1,MIP6FeaVec_1=1,MIP6FeaVec_2=1,MIP6FeaVec_3=1,MIP6FeaVec_4=1,MIP6FeaVec_5=1,MIP6FeaVec_6=1,MIP6FeaVec_7=1,MIP6FeaVec_8=1,MIP6FeaVec_9=1

```

4.16.1.13 Query CSG Information of Subscriber

[Command function]Query CSG subscription information of subscriber.

[Input format]

Qry User : IMSI/MSISDN=, Item=CSG

[Output Format]

ACK:Qry User:RETN=, DESC=, Item=CSG, IMSI=, MSISDN=, CSGcount=[, CSGIDList=][, EPCEExpDateList=][, CSGAPNLIST=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description

1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	ITEM	Query option	STRING	M	3	Return CSG
4.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
5.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
6.	CSGCount	The number of CSG	NUMSTR	M	1..2	0~10
7.	CSGIDList	CSG ID List	STRING	O	1...2*9+9	Type of Each CSGID is NUMSTR , value range 1~134217727, more CSGID parameters are separated by "-"
8.	EPCExpDateList	CSG Expiration Date List	STRING	O	14...14*1 0+9	Type of each EPCExpirationDate: YYYYMMDDHHMMSS From left to right: YYYY-year MM-month DD-day HH-hour MM-minute SS-second For example: 20070411130035 means 13:00:35, Apr 11, 2007 more EPCExpirationDate parameters are separated by "-"
9.	CSGAPNLIST	APN List of all CSG	STRING	O	1..(62*50 +49)*10 +9	The maximal number of CSG is 10, separated with "\$". Each CSG can subscribe 50 APN at most,

						more APN parameters are separated by “^”.
--	--	--	--	--	--	----------------------------------------------

[Notes]

- When the parameter CSGCount's value is larger than 0, the parameters CSGIDList , EPCEExpDateList and CSGAPNLIST would be returned.

[Examples]

- Query CSG subscription information of subscriber:

Qry user:imsi=4600000000000000,item=csg;

ACK:Qry User:ITEM=CSG, RETN=000000, DESC=success, IMSI=4600000000000000,
MSISDN=8613900000000, CSGcount=1, CSGIDList=1, EPCEExpDateList=20130123000000

4.16.1.14 Query APN Subscription Information of EPC Subscriber

[Command function]Query APN subscription information of subscriber.

[Input format]

Qry User : IMSI/MSISDN=, Item=APNCP

[Output Format]

ACK:Qry User:RETN=, DESC=, Item=, IMSI= MSISDN=, EPCDFTAPNCFGID=[, EPCAPNCPTPL=][,APNCPCount=][,APNCPIDList=][,ServedPartyIPTYPE1List =][, ServedPartyIPAddr1List =][, ServedPartyIPTYPE2List =][, ServedPartyIPAddr2List =][, PDNTypeList =][, APNList =][, QOSIDList =][, VPLMNDynAddrAllowList =][,EPCPDNGWTYPE1List=][,EPCPDNGWAddr1List=][,EPCPDNGWTYPE2List=][,EPCPDNGWAddr2List=][,PDNGWHostList =][, PDNGWRealmList =][,PGWAllocationTypeList =][,PDNGWVPLMNLList =][,CHARGINGCHRTList =][, AMBRUPLList =][, AMBRDOWNLList =][, QOSList =][, APNOIREPList =][,APNLIPAPLIST=]

[Description of output parameter]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMS TR	M	6	Refer to Appendix 1
2	DESC	Operation result description	STRIN NG	M	1..256	Refer to Appendix 1
3	ITEM	Query option	STRIN NG	M	3	Return APNCP
4	IMSI	International Mobile Subscriber Identity	NUMS TR	M	6..15	IMSI



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5	MSISDN	Mobile Station International ISDN Number	NUMS TR	M	6..15	MSISDN
6	EPCDFTAPNCFGID	Default APN CONFIGURATION ID (Context-Identifier)	NUMS TR	M	1..2	Value range: 0~50
7	EPCAPNCPTPL	EPC APNCP Template ID	NUMS TR	C	1...3	1~255, It could be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN CP Template Configuration". 0 indicates no APNCPTPL. If its value is larger than 0, the following APN Configuration parameters will not return.
8	APNCPCount	The number of APN CP	NUMS TR	C	1..2	0~50, If its value is larger than 0, the following APN Configuration parameters will return.
9	APNCPIDList	APN CP ID List,	STRIN G	O	1..2*50+49	Type of Each APNCID is NUMSTR, value range:1~50 more APN CP ID parameters are separated by "-"
10	ServedPartyIPTYPE1List	ServedPartyIPTYPE1 List,	STRIN G	O	1..1*50+49	Type of Each ServedPartyIPTYPE1 is NUMSTR, Choose one of the following values: 0: IP V4 1: IP V6 More

						ServedPartyIPTYPE1 parameters are separated by “-”
11	ServedPartyIPAddr1 List	ServedPartyIPAddr1 List ,	STRIN G	O	7.. 39*50+49	Each ServedPartyIP Addr1 If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits More ServedPartyIPAddr1 parameters are separated by “-”
12	ServedPartyIPTYPE2List	ServedPartyIPTYPE2 List,	NUMS TR	O	1..1*50+49	Type of Each ServedPartyIPTYPE2 is NUMSTR, Choose one of the following values: 0: IP V4 1: IP V6 More ServedPartyIP TYPE2 parameters are separated by “-”
13	ServedPartyIPAddr2 List	ServedPartyIPAddr2 List ,	STRIN G	O	7..39*50+49	Each ServedPartyIP Addr1 If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits More ServedPartyIPAddr1 parameters are separated

						by “-”
14	PDNTypeList	PDN TYPE List,	NUMS TR	O	1..1*50+49	0: IPv4 1: IPv6 2: IPv4v6 3: IPv4_OR_IPv6 More PDN TYPE parameters are separated by “-”
15	APNList	APN List,	STRI NG	O	1..62*50+49	More APN parameters are separated by "\$"
16	QOSIDList	EPS Subscribe QOS profile ID	NUMS TR	O	1..3*50+49	More QOSID parameters are separated by “-”
17	VPLMNDynAddrAllo wList	Allow dynamic access to VPLMN,	NUMS TR	O	1..1*50+49	0: NOTALLOWED 1: ALLOWED More VPLMNDynAddrAllow parameters are separated by “-”
18	EPCPDNGWTYPE1Li st	PDN-GW IP Type1 List,	STRI NG	O	1..1*50+49	Type of Each EPCPDNGWTYPE1 is NUMSTR, Choose one of the following values: 0: IP V4 1: IP V6 More EPCPDNGWTYPE1 parameters are separated by “-”
19	EPCPDNGWAddr1Li st	PDN-GW IP Addr1 List,	STRI NG	O	7.. 39*50+49	Each EPCPDNGWAddr1 If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format:: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is

						hexadecimal digits More EPCPDNGWTYPE1 parameters are separated by “-”
20	EPCPDNGWTYPE2List	PDN-GW IP Type2 List,	STRING	O	1..1*50+49	Type of Each EPCPDNGWTYPE2 is NUMSTR, Choose one of the following values: 0: IP V4 1: IP V6 More EPCPDNGWTYPE2 parameters are separated by “-”
21	EPCPDNGWAddr2List	PDN-GW IP Addr2 List,	STRING	O	7.. 39*50+49	Each EPCPDNGWAddr2 If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits More EPCPDNGWTYPE2 parameters are separated by “-”
22	PDNGWHostList	PDNGW Host Name List,	STRING	O	1..128*50+49	The max length is 128 More PDNGWHost parameters are separated by “\$”
23	PDNGWRealmList	PDNGW Domain Name	STRING	O	1..128*50+49	The max length is 128 More PDNGWRealm parameters are separated by “\$”
24	PDNGWVPLMNList	Visited-Network-Identifier list, which indicates the PLMN	STRING	O	1..128*50+49	The max length is 128 More PDNGWVPLMN

		where the PGW was allocated, in case of dynamic PGW assignment.				parameters are separated by "\$". If the PDNGWVPLMN parameter is not available,a value of null will be returned on the corresponding position.If all the PDNGWVPLMN parameters are not available, the parameter will not return.
25	PGWAllocationTypeList	PGW Allocation Type List.	NUMS TR	O	1..1*50+49	0: STATIC 1: DYNAMIC More PGWAllocationType parameters are separated by "-"
26	CHARGINGCHRTList	Charging features of APN	NUMS TR	O	1..3*50+49	More CHARGINGCHRT parameters are separated by "-" 0~255, Choose one of the following values:: 0: No Charging 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4
27	AMBRUPList	Max-Requested-Bandwidth-UL of APN-AMBR(Aggregate Maximum Bit Rate)	NUMS TR	O	1..10*50+49	More AMBRUP parameters are separated by "-"
28	AMBRDOWNList	Max-Requested-Bandwidth-DL	NUMS	O	1..10*50+49	More AMBRDOWN

		L of APN-AMBR(Aggregate Maximum Bit Rate)	TR			parameters are separated by “-”
29	QOSList	EPS Subscribe QOS List	NUMS TR	O	7..10*50+49	Each unit of the list is a list composed of digits and “-”, for example: QOSList=1-1-1-0\$3-1-1-1\$1-1-0-0\$1-1-1-0 More QOS parameters are separated by "\$"
30	APNOIREPLIST	APN-OI-Replacement List	STRIN G	O	1.. 64*50+49	The max length of each unit is 64. More APN-OI-Replacement parameters are separated by "\$"
31	APNLIPAPLIST	LIPA Permission List	STRIN G	O	1..1*50+49	More APNLIPAP parameters are separated by "\$". Each APNLIPAP is NUMSTR, Choose one of the following values: 0: LIPA Prohibited 1: LIPA Only 2: LIPA Conditional 255:NONE If the value of APNLIPAP is 255, a value of null will be returned on the corresponding position. If all APNLIPAP are 255, the parameter is not returned.

[Notes]

- When the parameter APNCPCount's value is larger than 0, the list parameters of APN Configuration-related will be returned.

[Examples]

1. Query APN subscription information of subscriber:

Qry user:imsi=4600000000000000,item=apnscp;

ACK: Qry User:ITEM=APNCP, RETN=000000, DESC= success,
 IMSI=4600000000000000, MSISDN=8613900000000, EPCDFTAPNCFGID=1,
 APNCPCount=3, APNCPIList=1-2-3, ServedPartyIPTYPE1List=--0,
 ServedPartyIPAddr1List=--002.002.002.002, ServedPartyIPTYPE2List=--1,
 ServedPartyIPAddr2List=--1291:1111:1111:1291:1291:1291:1292,
 PDNTypeList=0-0-0, APNList=1\$*\$1111, QOSIDList=0-0-0,
 QOSList=0-1-1-0\$0-1-1-0\$1-1-1-1, VPLMNDynAddrAllowList=0-0-1,
 EPCPDNGWTYPE1List=--0, EPCPDNGWAddr1List=--001.001.001.001,
 EPCPDNGWTYPE2List=--1,
 EPCPDNGWAddr2List=--1291:1111:1111:1291:1291:1291:1291,
 PDNGWHostList=*\$\$mmc.ttt.ees, PDNGWRealmList=*\$\$mmc.ttt.ees,
 PGWAllocationTypeList=1-1-0, CHARGINGCHRTList=0-0-11, AMBRUPList=0-0-5555,
 AMBRDOWNList=0-0-7777, APNOIREPLList=*\$\$mmc.ttt.gprs;

4.16.1.15 Query Dynamic Identification of the Subscriber's ShortMsg**Related Information**

【Command Function】 Query Dynamic Identification of the Subscriber's ShortMsg
 Related Information

【Input Format】

Qry User : IMSI/MSISDN=, Item= DYSMS

【Output Format】

ACK:Qry User:RETN=, DESC=, Item=, SCAddrList=, MCEFlag=[,MNRGFlag=]
 [,MSNRFlag=][,IPSMGWNumber=][,UNRI=][,UNRR=]

【Description of output parameter】

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3	ITEM	Query option	STRING	M	5	Return DYSMS
4	SCAddrList	SCAddr list	NUMSTR	M	4..169	1, When the result of search has no SCAddr, "NONE" should be returned

						2, The maximum number of SCAddr is 10, and each SCAddr is separated by ',', For example: 1234-2446-3335
5	MCEFlag	Memory Capacity Exceeded Flag	NUMSTR	M	1	0:it means Memory Available 1:it means Memory not Available
6	MNRGFlag	Mobile station Not Reachable for GPRS flag	NUMSTR	O	1	NAM value is PS or CS/PS retrun this Parameter. 0:it means Subscriber Reachable 1:it means Subscriber not Reachable
7	MSNRFFlag	Mobile subscriber Not Reachable Flag	NUMSTR	O	1	NAM value is CS or CS/PS retrun this Parameter. 0:it means Subscriber Reachable 1:it means Subscriber not Reachable
8	IPSMGWNumber	IP-SM-GW Number	STRING	O	1..16	String of 1 to 16 digits. If not available, this parameter will not be returned
9	UNRI	IMS not Reachable Indication	NUMSTR	O	1	Only returned when the UE is not reachable in IMS 1: Not reachable
10	UNRR	IMS not Reachable Reason	NUMSTR	O	2	Only returned when the reason is available 11: UE deregistered; 12: No Response via the IP-SM-GW

[Examples]

1. Query Dynamic Info of ShortMsg Center Address:

Qry User : IMSI=4600000000000006,item=DYSMS;

ACK:Qry User:ITEM=DYSMS, RETN=000000, DESC=success, MCEFlag=0,

MSNRFFlag=0, MNRGFlag=0, SCAddrList=NONE

4.16.1.16 Query Common MSISDN Info of Subscribers**【Command Function】** Query Common MSISDN Info of Subscribers**【Input Format】**

Qry User : IMSI/MSISDN=, Item= MultiSIM

【Output Format】

ACK:Qry User:RETN=, DESC=,IMSI=, MSISDN=,CMSISDNLST=

【Description of output parameter】

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic ISDN number
6	CMSISDNLST	CMSISDNLST	NUMSTR	M	6..159	The maximum number of CMSISDN is 10, and each CMSISDN is separated by ',', For example: 123456-244689-333525

【Examples】

1. Query Common MSISDN Info of Subscribers:

Qry User : IMSI=4600000000000006,item=MultiSIM;

ACK:Qry User: RETN=000000, DESC=success, IMSI=4600000000000006,

MSISDN=861390000006,CMSISDNLST=861390000006-8613900000201

4.16.1.17 Query Specific APN Subscription Information of EPC Subscriber**【Command Function】** Query Specific APN subscription information of EPC subscriber.**【Input Format】**

Qry user: IMSI/MSISDN=,ITEM=SPEAPN

【Output Format】

ACK:Qry User:RETN=,DESC=,ITEM=SPEAPN,IMSI=,MSISDN=, SAPNCOUNT=

[,SAPNLIST=][,SAPGWTYP1LIST=][,SAPGWADDR1LIST=][,SAPGWTYP2LIST=][,SAPGWADDR2LIST=][,SAPGWHOSTLIST=][,SAPGWREALMLIST=][,VSTDNETIDLIST=]

【Description of output parameter】

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3	ITEM	Query option	STRING	M	6	Return SPEAPN
4	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
5	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic ISDN number
6	SAPNCOUNT	The number of APN CP	NUMSTR	M	1..2	The number of Specific APN. 0~50
7	SAPNLIST	APN List	STRING	O	1..62*50+ +49	Available when SAPNCOUNT≥1. More SAPN parameters are separated by "\$".
8	SAPGWTYPE1L IST	PDN-GW IP Type1 List	STRING	O	1..1*50+ 49	Available when SAPNCOUNT≥1. More SAPGWTYPE1 parameters are separated by "\$". Type of Each SAPGWTYPE1 is NUMSTR, Choose one of the following values: 0: IP V4 1: IP V6 If not subscribed, a value of null will be returned on the corresponding position. If all SAPGWTYPE1 not subscribed, the parameter

						is not returned.
9	SAPGWADDR1 LIST	PDN-GW IP Addr1 List	STRING	O	7..39*50 +49	<p>Available when SAPNCOUNT≥1.</p> <p>More SAPGWADDR1 parameters are separated by "\$".</p> <p>Each SAPGWADDR1</p> <p>If type is IPV4, Format: xxx.xxx.xxx.xxx, xxx is decimal digit</p> <p>If type is IPV6, Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits.</p> <p>If not subscribed, a value of null will be returned on the corresponding position. If all SAPGWADDR1 not subscribed, the parameter is not returned.</p>
10	SAPGWTYPE2L IST	PDN-GW IP Type1 List	STRING	O	1..1*50+ 49	<p>Available when SAPNCOUNT≥1.</p> <p>More SAPGWTYPE2 parameters are separated by "\$".</p> <p>Type of Each SAPGWTYPE2 is NUMSTR, Choose one of the following values:</p> <p>0: IP V4</p> <p>1: IP V6</p> <p>If not subscribed, a value of null will be returned on</p>

						the corresponding position. If all SAPGWTYP2 not subscribed,the parameter is not returned.
11	SAPGWADDR2 LIST	PDN-GW IP Addr1 List	STRING	O	7..39*50 +49	<p>Available when SAPNCOUNT≥1.</p> <p>More SAPGWADDR2 parameters are separated by "\$".</p> <p>Each SAPGWADDR2</p> <p>If type is IPV4,</p> <p>Format: xxx.xxx.xxx.xxx, xxx is decimal digit</p> <p>If type is IPV6,</p> <p>Format::: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digits.</p> <p>If not subscribed, a value of null will be returned on the corresponding position. If all SAPGWADDR2 not subscribed,the parameter is not returned.</p>
12	SAPGHOSTLI ST	PDNGW Host Name List	STRING	O	1..128*5 0+49	<p>Available when SAPNCOUNT≥1.</p> <p>More SAPGHOST parameters are separated by "\$".</p> <p>If not subscribed, a value of null will be returned on the corresponding position. If all</p>

						SAPGHOST not subscribed,the parameter is not returned.
13	SAPGWREALM LIST	PDNGW Domain Name List	STRING	O	1..128*5 0+49	Available when SAPNCOUNT≥1. More SAPGWREALM parameters are separated by "\$". If not subscribed, a value of null will be returned on the corresponding position. If all SAPGWREALM not subscribed,the parameter is not returned.
14	VSTDNETIDLIST	Visited-Network-Identifier List	STRING	O	1..128*5 0+49	Available when SAPNCOUNT≥1. More VSTDNETID parameters are separated by "\$". If not subscribed, a value of null will be returned on the corresponding position. If all VSTDNETID not subscribed,the parameter is not returned.

[Examples]

1. Query Specific APN subscription information of EPC subscriber:

Qry User : IMSI=4600000000000006,item=SPEAPN;
 ACK:Qry User: ITEM=SPEAPN, RETN=000000, DESC=success,
 IMSI=46000000000006,MSISDN=8613900000006, SAPNCOUNT=0

4.16.1.18 Query Extension Service

[Command function]Query Extension Service.

[Input format]

Qry ExtSrv: IMSI/MSISDN=

[Output Format]

```
ACK:Qry User:RETN=, DESC=, [,ExtSrv=][,GrpType=][,Reg=]
[,ExtBsg=][,ACTIVEDN=][,RINGFIRST=]
[,GrpList1=][,GrpList2=][,GrpList3=][,GrpList4=][,GrpList5=]
```

[Description of output parameter]

S/N	Para_Name		Para_Value			
	Name	Type	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	ExtSrv	Extension service provision state	NUMSTR	O	1	0: not subscribed 1: subscribed If ExtSrv is 0, the following parameters will be not returned.
4.	Reg	Extension service register state	NUMSTR	O	1	0: not registered 1: register If Reg is 0, the following parameters will be not returned.
5.	GrpType	Group type	NUMSTR	O	1	0: Single 1: Multiple
6.	ExtBsg	Extension service BC	NUMSTR	O	1	0: TS11 1: TSD1 3: SKIP
7.	ACTIVEDN	Active SIM card	NUMSTR	O	3..15	Specify the only one SIM Card to be activated. If no valid MSISDN is specified, all the MSISDNs are allowed to use.
8.	RINGFIRST	Ring first SIM card	NUMSTR	O	3..15	Specify the SIM Card to be first alerted.
9.	GrpList1	Group List 1	NUMSTR	O	7..84	1) GrpList1 consists of Group type, time, maximum 5 groups of MSISDNs, and they are separated by '-'; if all the 5 groups of MSISDNs are invalid, GrpList1 will not be returned; If there

						are multiple MSISDNs, the MSISDNs are separated by '&'. 2) The value of Group type is the same as GrpType; The value of time is a multiple of 5, between 5 and 90; MSISDN is character string of 3 to 15 digits; 3) Example: Example1: GrpList1=1-20-86139001&86139002 &86139003 Example2:GrpList1=0-30-86139001 Example3:GrpList1=0-90-86139001 &1234
10.	GrpList2	Group List 2	NUMSTR	O	7..84	Refer to GrpList1
11.	GrpList3	Group List 3	NUMSTR	O	7..84	Refer to GrpList1
12.	GrpList4	Group List 4	NUMSTR	O	7..84	Refer to GrpList1
13.	GrpList5	Group List 5	NUMSTR	O	7..84	Refer to GrpList1

[Examples]

1. Query extension information of mobile subscriber

Qry ExtSrv: IMSI=460000000000101;

ACK:Qry ExtSrv: RETN=000000, DESC=success, ExtSrv=1, Reg=1, GrpType=1, ExtBsg=0, GrpList1=0-20-1243&861394, GrpList3=0-20-1243&87139

4.16.2 Query IMEISV Information**[Command function]**Query IMEISV information**[Input format]**

Qry IMEISV: IMSI/MSISDN=

[Output Format]

ACK:Qry IMEISV:RETN=,DESC=,IMSI=,MSISDN=,IMEISV=

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description

1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	IMSI	International Mobile Subscriber Identity	HEXSTR	M	16	IMSI
4.	MSISDN	Mobile Station International ISDN Number	HEXSTR	M	16	Basic number
5.	IMEISV	International mobile equipment identity and software version	HEXSTR	M	16	Return 16 "F"s if subscriber has no IMEISV

[Notes]

1. ACK:Qry IMEISV, If the length of IMSI, MSISDN,IMEISV less than 16 , append "F", and then return them.
2. ACK:Qry User:RETN=, DESC=, Item= ALL. IMSI, MSISDN,IMEISV do not need to append "F", return directly.

[Examples]

1. Query IMEISV information:

Qry IMEISV: IMSI=4600000000000006;

ACK:Qry IMEISV: RETN=000000, DESC=success, IMSI=4600000000000006F, MSISDN=8613900000006FFF, IMEISV=FFFFFFFFFFFFFF

4.16.3 Querying User Subscription Information

[Command function]Querying User Subscription Information

[Input format]

Qry User : IMSI/MSISDN=, Item= ALL

[Output Format]

ACK:Qry User:RETN=, DESC=, Item= ALL, IMSI=, MSISDN=[..]

[Description of output parameter]

If the parameter, Item, equals to ALL, all user information is returned. The order of the returned service category is shown below:

- Subscription Information of Basic Service (chapter 4.16.1.2)
- CAMEL Service Subscription Information (chapter 4.16.1.6)
- Subscription Information of Supplementary Service (chapter 4.16.1.4)
- GPRS Subscription Information (chapter 4.16.1.5)
- Multi-Number Information (chapter 4.16.1.9)
- Location Information of Subscribers (chapter 4.16.1.11)
- SCF Address Information (chapter 4.16.1.10)

- Regional Restriction Subscription Information (chapter 4.16.1.3)
- LCS Service (chapter 4.16.1.7)
- CUG Subscription Information (chapter 4.16.1.8)
- IMEISV Information (chapter 4.16.2)
- Dynamic Identification of the Subscriber's ShortMsg Related Information (4.16.1.15)

When HLR doesn't support large data package (set "Provisioning Supports Large Package" in OMC configuration data "Configuration Management->Service Configuration->Control Options Configuration->WCN Control Options Configuration"), if the subscription information includes more than 7928 bytes, the service category leading the overflow doesn't return. And HLR returns error code, 110014, at the same time. If the subscription information includes more than 31928 bytes, the service category leading the overflow doesn't return whether HLR supports large data package or not. And HLR returns error code, 110014, at the same time.

[Examples]

1. Query User Subscription Information:

```
Qry User:IMSI=460000000000015,Item=ALL;  
ACK:Qry User:ITEM=ALL, RETN=000000, DESC=success, IMSI=460000000000015,  
MSISDN=8613900000015,SubType=1,NAM=0,MSFg=0,MSType=10,SubRest=0,CSPri=0,  
NAEA=000000,Tele=0,EmegCall=0,SMMO=0,SMMT=0,Fac3=0,AutoFac3=0,Fac4=0,  
BOC=0, BIC=0, BSS=0, BR=0, BPR=0, BFN=0, BCT=0, BICT=0, BFICT=0, BT=0, BIP=0,  
BPOS=0,ODBPL_3=0,ODBPL_4=0,RoamSch=*, PsRoamSch=*, RCType=0, AddRCType=0,  
ODBNC=0,VGCS=0,VBS=0,ZCSet=65535,STYPE=0,OFAID=255,SIPID=0,BsgCount=0,Du  
alIMSI=46000000000051,BCID=0,CLIP_P=1,CLIPOpt=1,CLIR_P=0,COLP_P=0,COLR_P  
=0,CH_P=0,CW_P=0,CFU_P=1,CFU_R=0,CFU_A=0,CFUNTC=0,CFURDP=0,CFB_P=1,CF  
B_R=0,CFB_A=0,CFBNTC=0,CFBNTF=0,CFBRDP=0,CFNRY_P=1,CFNRY_R=0,CFNRY_A=0,  
CFNRYNTC=0,CFNRYNTF=0,CFNRYRDP=0,CFNRYTime=20,CFNRC_P=1,CFNRC_R=0,C  
FNRC_A=0,CFNRCNTC=0,CFNRCRDP=0,CBCtrl=0,CB_PWD=0000,CBNotChkPwd=0,PWA  
=0,BAOC_P=0,BOIC_P=0,BOICE_P=0,BAIC_P=0,BICR_P=0,BORO_P=0,MPTY_P=0,ECT  
_P=0,AOCC_P=0,AOCI_P=0,CUG_P=0,eMLPP_P=0,CD_P=0,CFBN_P=0,CFD_P=1,CFD_R  
=0,CFDNTC=0,CFDNTF=0,OVRCFB=0,OVRCFNRY=0,OVRCFNRC=0,PLSS_1=0,PLSS_2=0,  
PLSS_3=0, PLSS_4=0, PLSS_5=0,PLSS_6=0,PLSS_7=0, PLSS_8=0, PLSS_9=0, PLSS_A=0,  
PLSS_B=0,PLSS_C=0,PLSS_D=0,PLSS_E=0,PLSS_F=0,UUS1=0,UUS2=0,UUS3=0,CFNC=0,  
CBNC=0,MC=0,CNAP=0,SSET=0,SMOpt=0,Charge=8,PDPCount=1,PDPID1=1,PDPTyp  
e1=0,Qos1=2-3-4-2-9-31-2-1-2-3-150-3-4-2-62-104-104-255-255-0-0-0-0,VPLMN1=0,AP
```

N1=*,PDPCharge1=8,MultiCount=0,MSNUMBER=8613800,VLRNUMBER=8613800,CSUpTime=0000000000000000,SGSNNUMBER=8613800,SGSNADDR=001.001.001.001,PSUpTime=0000000000000000,ZCCount=0,Uni=0,BscSelf=0,AutoSelf=0,TrdParty=0,CallRe=0,RNFg=0,URNFg=0,CallUnRe=0,PLMN=0,ServiceType=0,CugCount=0,IMEISV=FFFFFFFFFFFFFFF,FFF,MCEFlag=0,MSNRFflag=0,MNRGFlag=0,SCAddrList=NONE

4.16.4 Query UDS User

[Command code]Query DSA User information

[Input format]

Qry WDSAUser:DSAID=XXX,ITEM=ALL/XXX\$XXX

[Output format]

ACK:Qry WDSAUser:RETN=,DESC=,[DSAID=]
[2GAUTH=],[3GAUTH=],[2GUSER=],[3GUSER=],[EPCUSER=],[TOTALAUTH=],[TOT
ALUSER=],[GSM2GUSER=],[GPRS2GUSER=],[GSMGPRS2GUSER=]
,[GSM3GUSER=],[GPRS3GUSER=],[GSMGPRS3GUSER=],[MSISDNUSER=],[INVALI
DUSER=],[NOPAYUSER=],[LCSUSER=],[CAMELUSER=],[CAMEL2GUSER=]
,[CAMEL3GUSER=],[OCSIUSER=],[TCSIUSER=],[SSCSIUSER=],[UCSIUSER=],[SMS
CSIUSER=],[GPRSCSIUSER=],[MCSIUSER=],[TIFCSIUSER=]
,[VTCSIUSER=],[DCSIUSER=],[NAEAUSER=],[IMEIUSER=],[CLIPUSER=],[CLIRUSE
R=],[COLPUSER=],[COLRUSER=],[CFUSER=],[CFUUSER=]
,[CFBUSER=],[CFNRYUSER=],[CFNRCUSER=],[CFDUSER=],[BAOCUSER=],[BOICU
SER=],[BOICEUSER=],[BAICUSER=],[BICRUSER=],[CWUSER=]
,[CHUSER=],[MPTYUSER=],[AOCCUSER=],[AOCIUSER=],[ECTUSER=],[EMLPPUSE
R=],[CDUSER=],[CUGUSER=],[BEARUSER=],[VGCSUSER=],[VBUSER=]
,[RSZIUSER=],[PLMNSS1USER=],[PLMNSS2USER=],[PLMNSS3USER=],[PLMNSS4
USER=],[PLMNSS5USER=],[PLMNSS6USER=],[PLMNSS7USER=]
,[PLMNSS8USER=],[PLMNSS9USER=],[PLMNSS10USER=],[PLMNSS11USER=],[PLM
NSS12USER=],[PLMNSS13USER=],[PLMNSS14USER=],[PLMNSS15USER=]
,[ODBPLMN1USER=],[ODBPLMN2USER=],[ODBPLMN3USER=],[ODBPLMN4USER=]
,[STYPEUSER=],[ZCSETUSER=],[HSPAUSER=],[MULTICALLUSER=]
,[CNAPUSER=],[LCS3GUSER=],[BEAR3GUSER=],[BORouser=],[INSERVICEUSER=]
,[HALTEDUSER=],[LOSTREPORTUSER=],[OVERDUEUSER=]
,[DUPLICATEUSER=],[OVERDUEINRESTUSER=],[OVERDUEOUTRESTUSER=],[NON
ODBBOCUSER=],[SIPINUSER=],[MPY3USER=],[SSETUSER=]
,[DUALIMSIUSER=],[SIMVALIDUSER=],[SIMAUTOREGUSER=],[ALSUSER=],[
OCCBSUSER=],[TCCBSUSER=],[FOLLOWMEUSER=],[GENCDSUSER=]
,[EXTSERVICEUSER=],[FRAUDPROUSER=],[INEXTENSIONUSER=],[E
PCLCSUSER=],[EPCCAMELUSER=],[EPCCDSUSER=]
,[ROHPLMN3GUSER=],[ROHPLMN2GUSER=],[RIHPLMN3GUSER=],[RIHPLMN2GUS
ER=],[RILA3GUSER=],[RILA2GUSER=],[UNREG3GUSER=]
,[UNREG2GUSER=],[PSROHPLMN3GUSER=],[PSROHPLMN2GUSER=],[PSRIHPLMN3
GUSER=],[PSRIHPLMN2GUSER=],[PSUNREG3GUSER=]
,[PSUNREG2GUSER=],[ROINSTATE3GUSER=],[ROINSTATE2GUSER=],[PSROINSTA

TE3GUSER=],[PSROINSTATE2GUSER=],[VLROHLPMN4GUSER=]
 ,[VLRIHLPMN4GUSER=],[VLRUNREG4GUSER=],[VLRINSTATE4GUSER=],[VLRINLA
 4GUSER=],[SGSNOHLPMN4GUSER=],[SGSNIHLPMN4GUSER=]
 ,[SGSNUNREG4GUSER=],[SGSNINSTATE4GUSER=],[EPSOHLPMN4GUSER=],[EPSI
 HLPMN4GUSER=],[EPSNUNREG4GUSER=],[EPSINSTATE4GUSER=]

[Description of output parameter]

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	DSAID	DSAID	NUMSTR	M	1..5	PDSAID 0~65000
4.	2GAUTH	The number of 2G auth subscriber	NUMSTR	M	1..10	0~4294967295
5.	3GAUTH	The number of 3G auth subscriber	NUMSTR	M	1..10	0~4294967295
6.	2GUSER	The number of 2G subscriber	NUMSTR	M	1..10	0~4294967295
7.	3GUSER	The number of 3G subscriber	NUMSTR	M	1..10	0~4294967295
8.	EPCUSER	The number of EPC subscriber	NUMSTR	M	1..10	0~4294967295
9.	TOTALAUTH	The Total Number of Authentications	NUMSTR	O	1..10	0~4294967295
10.	TOTALUSER	The Current Number of HLR User	NUMSTR	O	1..10	0~4294967295
11.	GSM2GUSER	The Number of The 2G Subscribers Whose NAM is CS Only	NUMSTR	O	1..10	0~4294967295
12.	GPRS2GUSER	The Number of The 2G Subscribers Whose NAM is PS Only	NUMSTR	O	1..10	0~4294967295
13.	GSMGPRS2GUSER	The Number of The 2G Subscribers	NUMSTR	O	1..10	0~4294967295

		Whose NAM is Both CS and PS				
14.	GSM3GUSER	The Number of The 3G Subscribers Whose NAM is CS Only	NUMSTR	O	1..10	0~4294967295
15.	GPRS3GUSER	The Number of The 3G Subscribers Whose NAM is PS Only	NUMSTR	O	1..10	0~4294967295
16.	GSMGPRS3GU SER	The Number of The 3G Subscriber Whose NAM is Both CS and PS	NUMSTR	O	1..10	0~4294967295
17.	MSISDNUSER	MSISDN Subscribers	NUMSTR	O	1..10	0~4294967295
18.	INVALIDUSER	Invalid Subscribers	NUMSTR	O	1..10	0~4294967295
19.	LCSUSER	The Total Number of The LCS 2G Subscribers	NUMSTR	O	1..10	0~4294967295
20.	CAMELUSER	The Total Number of The Camel Subscribers	NUMSTR	O	1..10	0~4294967295
21.	CAMEL2GUSER	2G Camel Subscriber	NUMSTR	O	1..10	0~4294967295
22.	CAMEL3GUSER	3G Camel Subscriber	NUMSTR	O	1..10	0~4294967295
23.	OCSIUSER	Number of User Who Register O-CSI in Operation	NUMSTR	O	1..10	0~4294967295
24.	TCSIUSER	Number of User Who Register T-CSI in Operation	NUMSTR	O	1..10	0~4294967295
25.	SSCSIUSER	Number of User Who Register SS-CSI in Operation	NUMSTR	O	1..10	0~4294967295
26.	UCSIUSER	Number of User Who Register U-CSI	NUMSTR	O	1..10	0~4294967295

		in Operation				
27.	SMSCSIUSER	Number of User Who Register SMS-CSI in Operation	NUMSTR	O	1..10	0~4294967295
28.	GPRSCSIUSER	Number of User Who Register GPRS-CSI in Operation	NUMSTR	O	1..10	0~4294967295
29.	MCSIUSER	Number of User Who Register M-CSI in Operation	NUMSTR	O	1..10	0~4294967295
30.	TIFCSIUSER	Number of User Who Register TIF-CSI in Operation	NUMSTR	O	1..10	0~4294967295
31.	VTCSIUSER	Number of User Who Register VT-CSI in Operation	NUMSTR	O	1..10	0~4294967295
32.	DCSIUSER	Number of User Who Register D-CSI in Operation	NUMSTR	O	1..10	0~4294967295
33.	NAEAUSER	The Total Number of The Subscribers Provided with NAEA	NUMSTR	O	1..10	0~4294967295
34.	IMEIUSER	IMEI Subscribers	NUMSTR	O	1..10	0~4294967295
35.	CLIPUSER	The Total Number of The Subscribers Provided with CLIP	NUMSTR	O	1..10	0~4294967295
36.	CLIRUSER	The Total Number of The Subscribers Provided with CLIR	NUMSTR	O	1..10	0~4294967295
37.	COLPUSER	The Total Number of The Subscribers Provided with COLP	NUMSTR	O	1..10	0~4294967295
38.	COLRUSER	The Total Number of	NUMSTR	O	1..10	0~4294967295

		The Subscribers Provided with COLR				
39.	CFUUSER	The Current Number of CFU Subscribers in HLR	NUMSTR	O	1..10	0~4294967295
40.	CFBUSER	The Current Number of CFB Subscribers in HLR	NUMSTR	O	1..10	0~4294967295
41.	CFNRYUSER	The Current Number of CFNRy Subscribers in HLR	NUMSTR	O	1..10	0~4294967295
42.	CFNRCUSER	The Current Number of CFNRc Subscribers in HLR	NUMSTR	O	1..10	0~4294967295
43.	CFDUSER	The Total Number of The Subscribers Provided with CFD	NUMSTR	O	1..10	0~4294967295
44.	BAOCUSER	The Total Number of The Subscribers Provided with BAOC	NUMSTR	O	1..10	0~4294967295
45.	BOICUSER	The Total Number of The Subscribers Provided with BOIC	NUMSTR	O	1..10	0~4294967295
46.	BOICEUSER	The Total Number of The Subscribers Provided with BOICE	NUMSTR	O	1..10	0~4294967295
47.	BAICUSER	The Total Number of The Subscribers Provided with BAIC	NUMSTR	O	1..10	0~4294967295
48.	BICRUSER	The Total Number of The Subscribers Provided with BICR	NUMSTR	O	1..10	0~4294967295
49.	CWUSER	The Total Number of The Subscribers Provided with CW	NUMSTR	O	1..10	0~4294967295

50.	CHUSER	The Total Number of The Subscribers Provided with CH	NUMSTR	O	1..10	0~4294967295
51.	MPTYUSER	The Total Number of The Subscribers Provided with sextuple MPTY	NUMSTR	O	1..10	0~4294967295
52.	AOCCUSER	The Total Number of The Subscribers Provided with AOCC	NUMSTR	O	1..10	0~4294967295
53.	AOCIUSER	The Total Number of The Subscribers Provided with AOCI	NUMSTR	O	1..10	0~4294967295
54.	ECTUSER	The Total Number of The Subscribers Provided with ECT	NUMSTR	O	1..10	0~4294967295
55.	EMLPPUSER	Total Number of The Subscribers Provided with EMLPP	NUMSTR	O	1..10	0~4294967295
56.	CDUSER	The Total Number of The Subscribers Provided with CD	NUMSTR	O	1..10	0~4294967295
57.	CUGUSER	The Total Number of The Subscribers Provided with CUG	NUMSTR	O	1..10	0~4294967295
58.	BEARUSER	The Total Number of 2G Circuit Data Subscribers	NUMSTR	O	1..10	0~4294967295
59.	VGCSUSER	Number of Subscribers with VGCS	NUMSTR	O	1..10	0~4294967295
60.	VBUSER	Number of Subscribers with VBS	NUMSTR	O	1..10	0~4294967295

61.	RSZIUSER	The Total Number of The Subscribers Provided with RSZI	NUMSTR	O	1..10	0~4294967295
62.	PLMNSS1USER	The Total Number of The Subscribers Provided with PLMNSS_1	NUMSTR	O	1..10	0~4294967295
63.	PLMNSS2USER	The Total Number of The Subscribers Provided with PLMNSS_2	NUMSTR	O	1..10	0~4294967295
64.	PLMNSS3USER	The Total Number of The Subscribers Provided with PLMNSS_3	NUMSTR	O	1..10	0~4294967295
65.	PLMNSS4USER	The Total Number of The Subscribers Provided with PLMNSS_4	NUMSTR	O	1..10	0~4294967295
66.	PLMNSS5USER	The Total Number of The Subscribers Provided with PLMNSS_5	NUMSTR	O	1..10	0~4294967295
67.	PLMNSS6USER	The Total Number of The Subscribers Provided with PLMNSS_6	NUMSTR	O	1..10	0~4294967295
68.	PLMNSS7USER	The Total Number of The Subscribers Provided with PLMNSS_7	NUMSTR	O	1..10	0~4294967295
69.	PLMNSS8USER	The Total Number of The Subscribers Provided with PLMNSS_8	NUMSTR	O	1..10	0~4294967295

70.	PLMNSS9USER	The Total Number of The Subscribers Provided with PLMNSS_9	NUMSTR	O	1..10	0~4294967295
71.	PLMNSS10USER	The Total Number of The Subscribers Provided with PLMNSS_A	NUMSTR	O	1..10	0~4294967295
72.	PLMNSS11USER	The Total Number of The Subscribers Provided with PLMNSS_B	NUMSTR	O	1..10	0~4294967295
73.	PLMNSS12USER	The Total Number of The Subscribers Provided with PLMNSS_C	NUMSTR	O	1..10	0~4294967295
74.	PLMNSS13USER	The Total Number of The Subscribers Provided with PLMNSS_D	NUMSTR	O	1..10	0~4294967295
75.	PLMNSS14USER	The Total Number of The Subscribers Provided with PLMNSS_E	NUMSTR	O	1..10	0~4294967295
76.	PLMNSS15USER	The Total Number of The Subscribers Provided with PLMNSS_F	NUMSTR	O	1..10	0~4294967295
77.	ODBPLMN1USER	The Total Number of The Subscribers Provided with PLMNODB_1	NUMSTR	O	1..10	0~4294967295
78.	ODBPLMN2USER	The Total Number of The Subscribers Provided with	NUMSTR	O	1..10	0~4294967295

		PLMNODB_2				
79.	ODBPLMN3US ER	The Total Number of The Subscribers Provided with PLMNODB_3	NUMSTR	O	1..10	0~4294967295
80.	ODBPLMN4US ER	The Total Number of The Subscribers Provided with PLMNODB_4	NUMSTR	O	1..10	0~4294967295
81.	STYPEUSER	The Total Number of The Subscribers Provided with STYPE	NUMSTR	O	1..10	0~4294967295
82.	ZCSETUSER	The Total Number of The Subscribers Provided with ZCSET	NUMSTR	O	1..10	0~4294967295
83.	HSPAUSER	The Total Number of The Subscribers Provided with HSDPA/HSUPA	NUMSTR	O	1..10	0~4294967295
84.	MULTICALLUS ER	The Number of The Multicall Subscribers	NUMSTR	O	1..10	0~4294967295
85.	CNAPUSER	The Number of The CNAP Subscribers	NUMSTR	O	1..10	0~4294967295
86.	LCS3GUSER	The Total Number of 3G LCS Subscribers	NUMSTR	O	1..10	0~4294967295
87.	BEAR3GUSER	The Total Number of 3G Circuit Data Subscribers	NUMSTR	O	1..10	0~4294967295
88.	BORouser	The Total Number of The Subscribers Provided with BORO	NUMSTR	O	1..10	0~4294967295
89.	INSERVICEUS ER	The Number of The Subscribers with Status is in Service	NUMSTR	O	1..10	0~4294967295
90.	HALTEDUSER	The Number of The	NUMSTR	O	1..10	0~4294967295

		Subscribers with Status is Halted				
91.	LOSTREPORTUSER	The Number of The Subscribers with Status is Lost Report	NUMSTR	O	1..10	0~4294967295
92.	OVERDUEUSER	The Number of The Subscribers with Status is Overdue	NUMSTR	O	1..10	0~4294967295
93.	DUPLICATEUSER	The Number of The Subscribers with Status is Duplicated	NUMSTR	O	1..10	0~4294967295
94.	OVERDUEINRESTUSER	The Number of The Subscribers with Status is Overdue (Outgoing Call Being Restricted)	NUMSTR	O	1..10	0~4294967295
95.	OVERDUEOUTRESTUSER	The Number of The Subscribers with Status is Overdue (Incoming Call Being Restricted)	NUMSTR	O	1..10	0~4294967295
96.	NONODDBOCUSER	The Number of The Subscribers with Status is in Service and Non-ODB BOC	NUMSTR	O	1..10	0~4294967295
97.	SIPINUSER	The Number of The Subscribers with SIP Intelligence Service	NUMSTR	O	1..10	0~4294967295
98.	MPTY3USER	The Number of The Triple MPTY Subscribers	NUMSTR	O	1..10	0~4294967295
99.	SSETUSER	The Number of The SSET Subscribers	NUMSTR	O	1..10	0~4294967295
100.	DUALIMSIUSER	The Number of The DualIMSI	NUMSTR	O	1..10	0~4294967295

		Subscribers				
101	SIMVALIDUSER	The Number of The SIM Valid Time Subscribers	NUMSTR	O	1..10	0~4294967295
102	SIMAUTOREGUSER	The Number of The SIM Auto Registered Subscribers	NUMSTR	O	1..10	0~4294967295
103	ALSUSER	The Number of The ALS Subscribers	NUMSTR	O	1..10	0~4294967295
104	OCCBSUSER	The Number of The OCCBS Subscribers	NUMSTR	O	1..10	0~4294967295
105	TCCBSUSER	The Number of The TCCBS Subscribers	NUMSTR	O	1..10	0~4294967295
106	FOLLOWMEUSER	The Number of The FOLLOW_ME Subscribers	NUMSTR	O	1..10	0~4294967295
107	GENCDSUSER	The Number of The GenCDS Subscribers	NUMSTR	O	1..10	0~4294967295
108	EXTSERVICEUSER	The Total Number of The Subscribers Provided with Extension Service	NUMSTR	O	1..10	0~4294967295
109	FRAUDPROUSER	The Total Number of The Subscribers Provided with Fraud Profile	NUMSTR	O	1..10	0~4294967295
110	INEXTENSIONUSER	Number of Subscribers Subscribed to in Extension	NUMSTR	O	1..10	0~4294967295
111	EPCLCSUSER	Number of EPC Subscribers Subscribed to LCS Service	NUMSTR	O	1..10	0~4294967295
112	EPCCAMELUSE	Number of EPC	NUMSTR	O	1..10	0~4294967295

	R	Subscribers Subscribed to Camel Service				
113	EPCCDSUSER	Number of EPC Subscribers Subscribed to Circuit Switched Data Service	NUMSTR	O	1..10	0~4294967295
114	ROHPLMN3GU SER	Number of 3G Subscribers Who Roam under International VLR	NUMSTR	O	1..10	0~4294967295
115	ROHPLMN2GU SER	Number of 2G Subscribers Who Roam under International VLR	NUMSTR	O	1..10	0~4294967295
116	RIHPLMN3GUS ER	Number of 3G Subscribers Who Roam under Domestic VLR	NUMSTR	O	1..10	0~4294967295
117	RIHPLMN2GUS ER	Number of 2G Subscribers Who Roam under Domestic VLR	NUMSTR	O	1..10	0~4294967295
118	RILA3GUSER	Number of 3G Subscribers Who Roam Native VLR	NUMSTR	O	1..10	0~4294967295
119	RILA2GUSER	Number of 2G Subscribers Who Roam Local VLR	NUMSTR	O	1..10	0~4294967295
120	UNREG3GUSE R	Number of 3G Subscribers Who unregister with VLR	NUMSTR	O	1..10	0~4294967295
121	UNREG2GUSE R	Number of 2G Subscribers Who	NUMSTR	O	1..10	0~4294967295

		Unregister with VLR				
122	PSROHPLMN3 GUSER	Number of 3G Subscribers Who Roam under International SGSN	NUMSTR	O	1..10	0~4294967295
123	PSROHPLMN2 GUSER	Number of 2G Subscribers Who Roam under International SGSN	NUMSTR	O	1..10	0~4294967295
124	PSRIHPLMN3G USER	Number of 3G Subscribers Who Roam under Domestic SGSN	NUMSTR	O	1..10	0~4294967295
125	PSRIHPLMN2G USER	Number of 2G Subscribers Who Roam under Domestic SGSN	NUMSTR	O	1..10	0~4294967295
126	PSUNREG3GU SER	Number of 3G Subscribers Who Unregister with SGSN	NUMSTR	O	1..10	0~4294967295
127	PSUNREG2GU SER	Number of 2G Subscribers Who Unregister with SGSN	NUMSTR	O	1..10	0~4294967295
128	ROINSTATE3G USER	Number of 3G Subscribers Who Roam under State VLR	NUMSTR	O	1..10	0~4294967295
129	ROINSTATE2G USER	Number of 2G Subscribers Who Roam under State VLR	NUMSTR	O	1..10	0~4294967295
130	PSROINSTATE 3GUSER	Number of 3G Subscribers Who	NUMSTR	O	1..10	0~4294967295

		Roam under State SGSN				
131	PSROINSTATE 2GUSER	Number of 2G Subscribers Who Roam under State SGSN	NUMSTR	O	1..10	0~4294967295
132	VLROHLPN4 GUSER	Number of 4G Subscribers Who Roam under International VLR	NUMSTR	O	1..10	0~4294967295
133	VLRIHLPN4G USER	Number of 4G Subscribers Who Roam under Domestic VLR	NUMSTR	O	1..10	0~4294967295
134	VLRUNREG4G USER	Number of 4G Subscribers Who Unregister with VLR	NUMSTR	O	1..10	0~4294967295
135	VLRINSTATE4 GUSER	Number of 4G Subscribers Who Roam under State VLR	NUMSTR	O	1..10	0~4294967295
136	VLRINLA4GUS ER	Number of 4G Subscribers Who Roam under Local VLR	NUMSTR	O	1..10	0~4294967295
137	SGSNOHLPN 4GUSER	Number of 4G Subscribers Who Roam under International GnGp SGSN	NUMSTR	O	1..10	0~4294967295
138	SGSNIHLPN4 GUSER	Number of 4G Subscribers Who Roam under Domestic GnGp SGSN	NUMSTR	O	1..10	0~4294967295

139	SGSNUNREG4 GUSER	Number of 4G Subscribers Who Unregister with GnGp SGSN	NUMSTR	O	1..10	0~4294967295
140	SGSNINSTATE4 4GUSER	Number of 4G Subscribers Who Roam under State GnGp SGSN	NUMSTR	O	1..10	0~4294967295
141	EPSOHLPMN4 GUSER	Number of 4G Subscribers Who Roam under International EPS	NUMSTR	O	1..10	0~4294967295
142	EPSIHLPMN4G USER	Number of 4G Subscribers Who Roam under Domestic EPS	NUMSTR	O	1..10	0~4294967295
143	EPSNUNREG4 GUSER	Number of 4G Subscribers Who Unregister with EPS	NUMSTR	O	1..10	0~4294967295
144	EPSINSTATE4 GUSER	Number of 4G Subscribers Who Roam under State EPS	NUMSTR	O	1..10	0~4294967295

[Notes]

1.In request command, the parameter “DSAID” and “ITEM” are optional, Max length of ITEM is 3712. we can list four condition :

In request command, DSAID is not appear, ITEM is not appear : DSAID will return 0, the output para:2GAUTH,3GAUTH,2GUSER,3GUSER,EPCUSER value will be obtained from all DSAIDs that support this nettype.

In request command, DSAID is not appear, ITEM appear : DSAID will return 0, the output para 2GAUTH...EPSINSTATE4GUSER value will be obtained from all DSAIDs that support this nettype.

In request command, DSAID appear, ITEM is not appear : DSAID will return, if value of DSAID is 0, the output para:2GAUTH,3GAUTH,2GUSER,3GUSER,EPCUSER value will be obtained from all DSAIDs that support this nettype; if value of DSAID above 0, the output

ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)
para: 2GAUTH,3GAUTH,2GUSER,3GUSER,EPCUSER value will be obtained from designated
DSAID that support this nettype.

In request command, DSAID appear, ITEM appear: DSAID will return, if value of DSAID is 0,
the output para 2GAUTH...EPSINSTATE4GUSER value will be obtained from all DSAIDs that
support this nettype; if value of DSAID above 0, the output para
2GAUTH...EPSINSTATE4GUSER value will be obtained from designated DSAID that support
this nettype.

2. The value of ITEM in request command include two condition:

If the parameter "ITEM" value is "ALL", the result data of ack from 2GAUTH to
EPSINSTATE4GUSER.

If the parameter "ITEM" value is the others(the value is same to the result parameter,
can include more elemet by "\$", the Max length of one element is 30, if \$ appear
consecutive, the parameter "ITEM" is error), the result data of ack is designated by the value,
for example: Qry WDSAIDUSER:ITEM=2GAUTH\$ EPSOHPMN4GUSER; the result data is :
ACK:Qry WDSAUser:RETN=,DESC=,2GAUTH=XXX, EPSOHPMN4GUSER=XXX

[Examples]

1. Query DSA User information:

Qry WDSAUser:DSAID=90;
ACK:QRY WDSAUSER: RETN=000000, DESC=success, DSAID=90, 2GAUTH=36,
3GAUTH=20, 2GUSER=1, 3GUSER=30, EPCUSER=7;

2. Query All DSA User information:

Qry WDSAUser:DSAID=0;
ACK:QRY WDSAUSER: RETN=000000, DESC=success, DSAID=0, 2GAUTH=512,
3GAUTH=60, 2GUSER=421, 3GUSER=30, EPCUSER=7;

4.16.5 Query Terminal State

[Command code]Query Terminal State

[Input format]

Qry TState:IMSI/MSISDN=XXX, LOCATION= , STATUS=, OnHLR=

[Output format]

ACK:Qry TState:RETN=,DESC=,IMSI=,MSISDN=,LOCATION =, STATUS =, OnHLR=[,
LocationTime =]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1

2	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
4	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic number
5	LOCATION	VLRNUMBER	STRING	M	0..20	<p>LOCATION(VLR ID or Cell ID),</p> <p>1. When OnHLR=0, the location is CellID returned from FE.</p> <p>2. When OnHLR=1, If LOCATION is 1 in the query request then returned VLRNUMBER, If LOCATION is 0 then a value of null will be returned.</p> <p>3. When OnHLR=2, the location is CellID returned from FE after a successfull paging.</p>
6	STATUS	Power-on or Purged State	NUMSTR	M	0..1	<p>1. When OnHLR=0, the STATUS is Power-on state returned from FE.</p> <p>2. When OnHLR=1, If STATUS is 1 in the query request then returned Purged state, If STATUS is 0 then a value of null will be returned.</p> <p>3. When OnHLR=2, the STATUS is Power-on state returned from FE after a</p>

						successfull paging.
7	OnHLR	PSI Query flag	NUMSTR	M	1	0:support PSI query 1:not support PSI query 2:support PSI query after paging.
8	LocationTime	CS LU time	STRING	O	14	Return when network access mode is CS or CS/PS and format is YYYYMMDDHHMMSS From left to right YYYY-year MM-month DD-day HH-hour MM-minute SS-second For example:2007041113003 5means 13:00:35, Apr 11, 2007 If all 0, not returned.

[Examples]

1. Query Terminal State:

```
Qry TState:IMSI=4600000000000006, LOCATION=1, STATUS=1, OnHLR=1;
ACK:QRY TSTATE: RETN=000000, DESC=success, IMSI=4600000000000006,
MSISDN=8613900000006, LOCATION=861334514, STATUS=0, OnHLR=1;
```

4.16.6 Qry Licese Usage

[Command code]Query License Usage

[Input format]

Qry WLICUSAGE:

[Output format]

```
ACK:QryLICUSAGE:RETN=,DESC=,[TOTALAUTH=],[TOTALAUTHLIC=],[TOTALUSER=],[TOTALUSERLIC=],[2GAUTH=],[LIC2GAUTH=],[3GAUTH=]
,[LIC3GAUTH=],[2GUSER=],[LIC2GUSER=],[3GUSER=],[LIC3GUSER=],[EPCUSER=],[EPCUSERLIC=],[CAMELUSER=],[CAMELUSERLIC=],[GPRSALL2GUSER=],[GPRS2GUSERLIC=],[GPRSALL3GUSER=],[GPRS3GUSERLIC=],[GPRSALLUSER=],[GPRSUSERLIC=],
,[CFDUSER=],[CFDUSERLIC=],[CUGUSER=],[CUGUSERLIC=],[RSZIUSER=],[RSZIUSER=]
```

ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)
 LIC=],[PLMNSS1USER=],[PLMNSS1USERLIC=],[PLMNSS2USER=],[PLMNSS2USERLIC=],[
 PLMNSS3USER=],[PLMNSS3USERLIC=],[PLMNSS4USER=],[PLMNSS4USERLIC=],[PLMNS
 S5USER=],[PLMNSS5USERLIC=],[PLMNSS6USER=],[PLMNSS6USERLIC=],[PLMNSS7USE
 R=],[PLMNSS7USERLIC=],[PLMNSS8USER=],[PLMNSS8USERLIC=],[PLMNSS9USER=],[P
 LMNSS9USERLIC=],[PLMNSS10USER=],[PLMNSS10USERLIC=],[PLMNSS11USER=],[PLM
 NSS11USERLIC=],[PLMNSS12USER=],[PLMNSS12USERLIC=],[PLMNSS13USER=],[PLMN
 SS13USERLIC=],[PLMNSS14USER=],[PLMNSS14USERLIC=],[PLMNSS15USER=],[PLMNSS
 15USERLIC=],[ODBPLMN1USER=],[ODBPLMN1USERLIC=],[ODBPLMN2USER=],[ODBPL
 MN2USERLIC=],[ODBPLMN3USER=],[ODBPLMN3USERLIC=],[ODBPLMN4USER=],[ODBP
 LMN4USERLIC=],[STYPEUSER=],[STYPEUSERLIC=],[ZCSETUSER=],[ZCSETUSERLIC=],[
 HSPAUSER=],[HSPAUSERLIC=],[MULTICALLUSER=],[MULTICALLLIC=],[CNAPUSER=],[C
 NAPUSERLIC=],[SIPINUSER=],[SIPINUSERLIC=]
 ,[DUALIMSIUSER=],[DUALIMSIUSERLIC=],[ALSUSER=],[ALSUSERLIC=],[OCCBSUSER=]
 ,[OCCBSUSERLIC=],[TCCBSUSER=],[TCCBSUSERLIC=],[FOLLOWMEUSER=],[FOLLOWM
 EUSERLIC=],[GENCDSUSER=],[GENCDSUSERLIC=],[EXTSERVICEUSER=],[EXTSERVICEU
 SERLIC=],[INEXTENSIONUSER=],[INEXTENSIONUSERLIC=]

[Description of output parameter]

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	TOTALAUTH	The Number of Authentications	NUMSTR	O	1..10	0~4294967295
4.	TOTALAUTHLI C	Max Value of Authentications	NUMSTR	O	1..10	0~4294967295
5.	TOTALUSER	The Current Number of HLR User	NUMSTR	O	1..10	0~4294967295
6.	TOTALUSERLI C	Max Value of Subscribers	NUMSTR	O	1..10	0~4294967295
7.	2GAUTH	The Number of 2G Authentications	NUMSTR	O	1..10	0~4294967295
8.	LIC2GAUTH	Max Value of 2G Authentications	NUMSTR	O	1..10	0~4294967295
9.	3GAUTH	The Number of	NUMSTR	O	1..10	0~4294967295

		3G Authentications				
10.	LIC3GAUTH	Max Value of 3G Authentications	NUMSTR	O	1..10	0~4294967295
11.	2GUSER	The Number of 2G Subscribers	NUMSTR	O	1..10	0~4294967295
12.	LIC2GUSER	Max Value of 2G Subscribers	NUMSTR	O	1..10	0~4294967295
13.	3GUSER	The Number of 3G Subscribers	NUMSTR	O	1..10	0~4294967295
14.	LIC3GUSER	Max Value of 3G Subscribers	NUMSTR	O	1..10	0~4294967295
15.	EPCUSER	The Number of EPC Subscribers	NUMSTR	O	1..10	0~4294967295
16.	EPCUSERLIC	Max Value of EPC Subscribers	NUMSTR	O	1..10	0~4294967295
17.	CAMELUSER	The Number of The Camel Subscribers	NUMSTR	O	1..10	0~4294967295
18.	CAMELUSERLI C	Max Value of The Camel Subscribers	NUMSTR	O	1..10	0~4294967295
19.	GPRSALL2GUS ER	The Number of The 2G Subscribers Whose NAM Support PS	NUMSTR	O	1..10	0~4294967295
20.	GPRS2GUSERL IC	Max Value of The 2G Subscribers Whose Nam Support PS	NUMSTR	O	1..10	0~4294967295
21.	GPRSALL3GUS ER	The Number of The 3G Subscribers Whose NAM	NUMSTR	O	1..10	0~4294967295

		Support PS				
22.	GPRS3GUSERLIC	Max Value of The 3G Subscribers Whose Nam Support PS	NUMSTR	O	1..10	0~4294967295
23.	GPRSALLUSER	The Number of The Subscribers Whose NAM Support PS	NUMSTR	O	1..10	0~4294967295
24.	GPRSUSERLIC	Max Value of The Subscribers Whose Nam Support PS	NUMSTR	O	1..10	0~4294967295
25.	CFDUSER	The Number of The Subscribers Provided with CFD	NUMSTR	O	1..10	0~4294967295
26.	CFDUSERLIC	Max Value of The Subscribers Provided with CFD	NUMSTR	O	1..10	0~4294967295
27.	CUGUSER	The Number of The Subscribers Provided with CUG	NUMSTR	O	1..10	0~4294967295
28.	CUGUSERLIC	Max Value of The Subscribers Provided with CUG	NUMSTR	O	1..10	0~4294967295
29.	RSZIUSER	The Number of The Subscribers Provided with RSZI	NUMSTR	O	1..10	0~4294967295
30.	RSZIUSERLIC	Max Value of The Subscribers	NUMSTR	O	1..10	0~4294967295

		Provided with RSZI				
31.	PLMNSS1USER	The Number of The Subscribers Provided with PLMNSS_1	NUMSTR	O	1..10	0~4294967295
32.	PLMNSS1USER LIC	Max Value of The Subscribers Provided with PLMNSS_1	NUMSTR	O	1..10	0~4294967295
33.	PLMNSS2USER	The Number of The Subscribers Provided with PLMNSS_2	NUMSTR	O	1..10	0~4294967295
34.	PLMNSS2USER LIC	Max Value of The Subscribers Provided with PLMNSS_2	NUMSTR	O	1..10	0~4294967295
35.	PLMNSS3USER	The Number of The Subscribers Provided with PLMNSS_3	NUMSTR	O	1..10	0~4294967295
36.	PLMNSS3USER LIC	Max Value of The Subscribers Provided with PLMNSS_3	NUMSTR	O	1..10	0~4294967295
37.	PLMNSS4USER	The Number of The Subscribers Provided with PLMNSS_4	NUMSTR	O	1..10	0~4294967295
38.	PLMNSS4USER LIC	Max Value of The Subscribers Provided with PLMNSS_4	NUMSTR	O	1..10	0~4294967295
39.	PLMNSS5USER	The Number of	NUMSTR	O	1..10	0~4294967295

		The Subscribers Provided with PLMNSS_5				
40.	PLMNSS5USER LIC	Max Value of The Subscribers Provided with PLMNSS_5	NUMSTR	O	1..10	0~4294967295
41.	PLMNSS6USER	The Number of The Subscribers Provided with PLMNSS_6	NUMSTR	O	1..10	0~4294967295
42.	PLMNSS6USER LIC	Max Value of The Subscribers Provided with PLMNSS_6	NUMSTR	O	1..10	0~4294967295
43.	PLMNSS7USER	The Number of The Subscribers Provided with PLMNSS_7	NUMSTR	O	1..10	0~4294967295
44.	PLMNSS7USER LIC	Max Value of The Subscribers Provided with PLMNSS_7	NUMSTR	O	1..10	0~4294967295
45.	PLMNSS8USER	The Number of The Subscribers Provided with PLMNSS_8	NUMSTR	O	1..10	0~4294967295
46.	PLMNSS8USER LIC	Max Value of The Subscribers Provided with PLMNSS_8	NUMSTR	O	1..10	0~4294967295
47.	PLMNSS9USER	The Number of The Subscribers Provided with PLMNSS_9	NUMSTR	O	1..10	0~4294967295

48.	PLMNSS9USER LIC	Max Value of The Subscribers Provided with PLMNSS_9	NUMSTR	O	1..10	0~4294967295
49.	PLMNSS10USER R	The Number of The Subscribers Provided with PLMNSS_A	NUMSTR	O	1..10	0~4294967295
50.	PLMNSS10USER RLIC	Max Value of The Subscribers Provided with PLMNSS_A	NUMSTR	O	1..10	0~4294967295
51.	PLMNSS11USER R	The Number of The Subscribers Provided with PLMNSS_B	NUMSTR	O	1..10	0~4294967295
52.	PLMNSS11USER RLIC	Max Value of The Subscribers Provided with PLMNSS_B	NUMSTR	O	1..10	0~4294967295
53.	PLMNSS12USER R	The Number of The Subscribers Provided with PLMNSS_C	NUMSTR	O	1..10	0~4294967295
54.	PLMNSS12USER RLIC	Max Value of The Subscribers Provided with PLMNSS_C	NUMSTR	O	1..10	0~4294967295
55.	PLMNSS13USER R	The Number of The Subscribers Provided with PLMNSS_D	NUMSTR	O	1..10	0~4294967295
56.	PLMNSS13USER RLIC	Max Value of The Subscribers Provided with	NUMSTR	O	1..10	0~4294967295

		PLMNSS_D				
57.	PLMNSS14USE R	The Number of The Subscribers Provided with PLMNSS_E	NUMSTR	O	1..10	0~4294967295
58.	PLMNSS14USE RLIC	Max Value of The Subscribers Provided with PLMNSS_E	NUMSTR	O	1..10	0~4294967295
59.	PLMNSS15USE R	The Number of The Subscribers Provided with PLMNSS_F	NUMSTR	O	1..10	0~4294967295
60.	PLMNSS15USE RLIC	Max Value of The Subscribers Provided with PLMNSS_F	NUMSTR	O	1..10	0~4294967295
61.	ODBPLMN1US ER	The Number of The Subscribers Provided with PLMNODB_1	NUMSTR	O	1..10	0~4294967295
62.	ODBPLMN1US ERLIC	Max Value of The Subscribers Provided with PLMNODB_1	NUMSTR	O	1..10	0~4294967295
63.	ODBPLMN2US ER	The Number of The Subscribers Provided with PLMNODB_2	NUMSTR	O	1..10	0~4294967295
64.	ODBPLMN2US ERLIC	Max Value of The Subscribers Provided with PLMNODB_2	NUMSTR	O	1..10	0~4294967295
65.	ODBPLMN3US ER	The Number of The Subscribers	NUMSTR	O	1..10	0~4294967295

		Provided with PLMNODB_3				
66.	ODBPLMN3US ERLIC	Max Value of The Subscribers Provided with PLMNODB_3	NUMSTR	O	1..10	0~4294967295
67.	ODBPLMN4US ER	The Number of The Subscribers Provided with PLMNODB_4	NUMSTR	O	1..10	0~4294967295
68.	ODBPLMN4US ERLIC	Max Value of The Subscribers Provided with PLMNODB_4	NUMSTR	O	1..10	0~4294967295
69.	STYPEUSER	The Number of The Subscribers Provided with STYPE	NUMSTR	O	1..10	0~4294967295
70.	STYPEUSERLIC	Max Value of The Subscribers Provided with STYPE	NUMSTR	O	1..10	0~4294967295
71.	ZCSETUSER	The Number of The Subscribers Provided with ZCSET	NUMSTR	O	1..10	0~4294967295
72.	ZCSETUSERLI C	Max Value of The Subscribers Provided with ZCSET	NUMSTR	O	1..10	0~4294967295
73.	HSPAUSER	The Number of The Subscribers Provided with HSDPA/HSUPA	NUMSTR	O	1..10	0~4294967295
74.	HSPAUSERLIC	Max Value of The	NUMSTR	O	1..10	0~4294967295

		Subscribers Provided with HSDPA/HSUPA				
75.	MULTICALLUS ER	The Number of The Multicall Subscribers	NUMSTR	O	1..10	0~4294967295
76.	MULTICALLLIC	Max Value of The Multicall Subscribers	NUMSTR	O	1..10	0~4294967295
77.	CNAPUSER	The Number of The CNAP Subscribers	NUMSTR	O	1..10	0~4294967295
78.	CNAPUSERLIC	Max Value of The CNAP Subscribers	NUMSTR	O	1..10	0~4294967295
79.	SIPINUSER	The Number of The Subscribers with SIP Intelligence Service	NUMSTR	O	1..10	0~4294967295
80.	SIPINUSERLIC	Max Value of The Subscribers with SIP Intelligence Service	NUMSTR	O	1..10	0~4294967295
81.	DUALIMSIUSE R	The Number of The DualIMSI Subscribers	NUMSTR	O	1..10	0~4294967295
82.	DUALIMSIUSE RLIC	Max Value of The DualIMSI Subscribers	NUMSTR	O	1..10	0~4294967295
83.	ALSUSER	The Number of The ALS Subscribers	NUMSTR	O	1..10	0~4294967295
84.	ALSUSERLIC	Max Value of The ALS Subscribers	NUMSTR	O	1..10	0~4294967295

85.	OCCBSUSER	The Number of The OCCBS Subscribers	NUMSTR	O	1..10	0~4294967295
86.	OCCBSUSERLI C	Max Value of The OCCBS Subscribers	NUMSTR	O	1..10	0~4294967295
87.	TCCBSUSER	The Number of The TCCBS Subscribers	NUMSTR	O	1..10	0~4294967295
88.	TCCBSUSERLI C	Max Value of The TCCBS Subscribers	NUMSTR	O	1..10	0~4294967295
89.	FOLLOWMEUS ER	The Number of The FOLLOW_ME Subscribers	NUMSTR	O	1..10	0~4294967295
90.	FOLLOWMEUS ERLIC	Max Value of The FOLLOW_ME Subscribers	NUMSTR	O	1..10	0~4294967295
91.	GENCDSUSER	The Number of The GenCDS Subscribers	NUMSTR	O	1..10	0~4294967295
92.	GENCDSUSERL IC	Max Value of The GenCDS Subscribers	NUMSTR	O	1..10	0~4294967295
93.	EXTSERVICEU SER	The Total Number of The Subscribers Provided with Extension Service	NUMSTR	O	1..10	0~4294967295
94.	EXTSERVICEU SERLIC	Max Value of The Subscribers Provided with Extension	NUMSTR	O	1..10	0~4294967295

		Service				
95.	INEXTENSION USER	Number of Subscribers Subscribed to in Extension	NUMSTR	O	1..10	0~4294967295
96.	INEXTENSION USERLIC	Max Value of Subscribers Subscribed to IN Extension	NUMSTR	O	1..10	0~4294967295

[Examples]

1. Query License Usage:

Qry WLICUSAGE:;

ACK:Qry WLICUSAGE: RETN=000000, DESC=success, TOTALAUTH=65, TOTALAUTHLIC=10000, TOTALUSER=47, TOTALUSERLIC=10000, 2GAUTH=37, LIC2GAUTH=10000, 3GAUTH=28, LIC3GAUTH=10000, 2GUSER=4, LIC2GUSER=10000, 3GUSER=35, LIC3GUSER=10000, EPCUSER=8, EPCUSERLIC=10000, CAMELUSER=14, CAMELUSERLIC=10000, GPRSALL2GUSER=4, GPRS2GUSERLIC=10000, GPRSALL3GUSER=30, GPRS3GUSERLIC=10000, GPRSALLUSER=34, GPRSUSERLIC=10000, CFDUSER=20, CFDUSERLIC=10000, CUGUSER=0, CUGUSERLIC=10000, RSZIUSER=0, RSZIUSERLIC=10000, PLMNSS1USER=0, PLMNSS1USERLIC=10000, PLMNSS2USER=0, PLMNSS2USERLIC=10000, PLMNSS3USER=0, PLMNSS3USERLIC=10000, PLMNSS4USER=0, PLMNSS4USERLIC=10000, PLMNSS5USER=0, PLMNSS5USERLIC=10000, PLMNSS6USER=0, PLMNSS6USERLIC=10000, PLMNSS7USER=0, PLMNSS7USERLIC=10000, PLMNSS8USER=0, PLMNSS8USERLIC=10000, PLMNSS9USER=0, PLMNSS9USERLIC=10000, PLMNSS10USER=0, PLMNSS10USERLIC=10000, PLMNSS11USER=0, PLMNSS11USERLIC=10000, PLMNSS12USER=0, PLMNSS12USERLIC=10000, PLMNSS13USER=0, PLMNSS13USERLIC=10000, PLMNSS14USER=0, PLMNSS14USERLIC=10000, PLMNSS15USER=0, PLMNSS15USERLIC=10000, ODBPLMN1USER=2, ODBPLMN1USERLIC=10000, ODBPLMN2USER=2, ODBPLMN2USERLIC=10000, ODBPLMN3USER=2, ODBPLMN3USERLIC=10000, ODBPLMN4USER=2, ODBPLMN4USERLIC=10000, STYPEUSER=0, STYPEUSERLIC=10000, ZCSETUSER=0, ZCSETUSERLIC=10000, HSPAUSER=35, HSPAUSERLIC=10000, MULTICALLUSER=0, MULTICALLLIC=10000, CNAPUSER=0, CNAPUSERLIC=10000, SIPINUSER=0, SIPINUSERLIC=10000, DUALIMSIUSER=2, DUALIMSIUSERLIC=1000, ALSUSER=5, ALSUSERLIC=10000, OCCBSUSER=0, OCCBSUSERLIC=10000, TCCBSUSER=0, TCCBSUSERLIC=10000, FOLLOWMEUSER=0, FOLLOWMEUSERLIC=10000, GENCDSDUSER=0, GENCDSDUSERLIC=10000, EXTSERVICEUSER=1, EXTSERVICEUSERLIC=10000, INEXTENSIONUSER=0, INEXTENSIONUSERLIC=10000;

4.17 Number-change Record Maintenance

4.17.1 Delete Number-change Records

[Command code]Del ISDNChg

[Command function]Delete number-change records

[Input format]

Del ISDNChg : NewISDN/OldISDN=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	NewISDN	New ISDN	STRING	M	6..15	MSISDN Number
2.	OldISDN	Old ISDN	STRING	M	6..15	MSISDN Number

[Examples]

1. Delete the ISDN-changed record of subscriber:

Del ISDNChg : OldISDN=8613900000000;

4.17.2 Query Number-change Records

[Command code]Qry ISDNChg

[Command function]Query number-change records

[Input format]Query request

Qry ISDNChg : NewISDN/OldISDN=

[Output Format]Query response

ACK: Qry ISDNChg:RETN=,DESC=,NewISDN=,OldISDN=

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1

2.	DESC	Operation result description	NUMSTR	M	1..256	Refer to Appendix 1
3.	NewISDN	New ISDN	STRING	M	6..15	MSISDN Number
4.	OldISDN	Old ISDN	STRING	M	6..15	MSISDN Number

[Examples]

1. Query the ISDN-changed record of subscriber:

Qry ISDNChg: OldISDN=86139000000000;

ACK:QRY ISDNCHG: RETN=000000, DESC=success, NewISDN=8613900000002,
OldISDN=86139000000000

4.18 Profile Used in Add User Command Maintenance**4.18.1 Add Profile**

[Command code] Add Pro

[Command function] Add profile

[Input format]

```
Add Pro:PROSTATE=,PRODESC=,PROID=,HLRID=,SUBTYPE=,NAM=,MSTYPE=
[ ,SN=][,CSPRI=][,ARDFG=][,ARD=][,NAEA=][,ROAMSCHID=][,RCTYPE=]
[ ,ADDRCTYPE=][,PSROAMSCHID=][,ZCSET=][,Stype=][,OFAID=]
[ ,CTRLSCHE=][,CTRLSCHEID=][,TELE=][,EMEGCALL=][,SMMO=][,SMMT=]
[ ,FAC3=][,AUTOFAC3=][,FAC4=][,BOC=][,BIC=][,BSS=][,BR=][,BPR=]
[ ,BFN=][,BCT=][,BICT=][,BFICT=][,BT=][,BIP=][,PLMNODB_3=]
[ ,PLMNODB_4=][,BPOS=][,CLIP=][,CLIPOPT=][,CLIR=][,CLIROPT=]
[ ,COLP=][,COLPOPT=][,COLR=][,CW=][,CH=][,CFU=][,CFUNTC=]
[ ,CFURDP=][,CFB=][,CFBNTC=][,CFBNTF=][,CFBRDP=][,CFNRY=]
[ ,CFNRYNTC=][,CFNRYNTF=][,CFNRYRDP=][,CFNRC=][,CFNRCNTC=]
[ ,CFNRCRDP=][,CFD=][,CFDNTC=][,CFDNTF=][,OVRCFB=][,OVRCFNRC=]
[ ,OVRCFNRY=][,BAOC=][,BOIC=][,BOICE=][,BAIC=][,BICR=][,MPTY=]
[ ,ECT=][,CD=][,CDNTC=][,CDRDP=][,AOCC=][,AOCI=][,CUG=][,PLSS_1=]
[ ,PLSS_2=][,PLSS_3=][,PLSS_4=][,PLSS_5=][,PLSS_6=][,PLSS_7=]
[ ,PLSS_8=][,PLSS_9=][,PLSS_A=][,PLSS_B=][,PLSS_C=][,PLSS_D=]
[ ,PLSS_E=][,PLSS_F=][,eMLPP=][,CBCTRL=][,CFBN=][,UUS1=][,UUS2=]
[ ,UUS3=][,MC=][,NBR_SB=][,NBR_USER=][,CNAP=][,CNAPOPT=]
[ ,SMOpt=][,Charge=][,PDPCOUNT=][,PDPTYPE1=][,APN1=][,APNRANGE1=]
[ ,VPLMN1=][,QOSID1=][,QOS1=][,PDPCHARGE1=][,ExtPDPType1=]...[,PDP
TYPE50=][,APN50=][,APNRANGE50=][,VPLMN50=][,QOSID50=][,QOS50=][
,PDPCHARGE50=][,ExtPDPType50=][,STATE=][,LOCINFO=][,TrigTCSI=][,OP
hase=]
[ ,OCount=][,ONC=][,OACT=][,OTDP1=][,OSK1=][,OSCF1=][,ODC1=]
[ ,OTDP2=][,OSK2=][,OSCF2=][,ODC2=][,TPhase=][,TCount=][,TNC=]
[ ,TACT=][,TTDP1=][,TSK1=][,TSCF1=][,TDC1=]...[,TTDP3=][,TSK3=]
```

[,TSCF3=][,TDC3=][,SSNC=][,SSACT=][,SSSCF=][,SSNOTI=][,UCount=]
[,USCF1=][,USRVCODE1=]...[,USCF10=][,USRVCODE10=][,GPRSPHASE=]
[,GPRSCOUNT=][,GPRSNC=][,GPRSACT=][,GPRSTDP1=][,GPRSSK1=]
[,GPRSSCF1=][,GPRSDC1=]...[,GPRSTDP5=][,GPRSSK5=][,GPRSSCF5=]
[,GPRSDC5=][,SMSPHASE=][,SMSNC=][,SMSACT=][,SMSSK=][,SMSSCF=]
[,SMSDC=][,VTPhase=][,VTCOUNT=][,VTNC=][,VTACT=][,VTTDP1=]
[,VTSK1=][,VTSCF1=][,VTDC1=]...[,VTTDP3=][,VTSK3=][,VTSCF3=]
[,VTDC3=][,TIFFLAG=][,TIFNC=][,MNC=][,MACT=][,MSK=][,MSCF=]
[,MTRIG=][,DPHASE=][,DCOUNT=][,DNC=][,DACT=][,DIALNUM1=]
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[,DDC10=][,ALLCDA=][,ALLCDS=][,CDA300=][,CDA1200=][,CDA75=]
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[,PA75=][,PA2400=][,PA4800=][,PA9600=][,GENPACA=][,PDS2400=]
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[,ZCLIST10=][,BORO=][,GPRSTPL=][,OCSITPL=][,TCSITPL=][,UCSITPL=]
[,TRIMPTY=][,CB_PWD=][,EXTTypeID=][,SSET=][,SIPID=][,DEFCALL=]
[,FM=][,FMGRP=][,FMSUPER=][,OCCBS=][,TCCBS=][,SSNoti_CCBS=]
[,OriginFAID=][,OINI=][,TINI=][,OINR=][,TINR=][,SMSRouterID=]
[,FRAUDID=][,ISTAlertTimer=][,ISTAlertOpt=][,ISTVLROPT=]
[,ISTGMSCOPT=][,SMSCSITPL=][,GPRSCSITPL=][,RestrictCF=]
[,CamelCtlId=][,CBNotChkPwd=][,BCID=][CFF=][,MDTUSERCONSENT=][,A
REASRVID=][,EOINR=][,ETINR=]
[,EPCCHARGCHRT=][,EPCROAMSCH=][,EPCSTNSR=]
[,EPCAMBRUP=][,EPCAMBRDOWN=][,EPCAPNOIRep=][,EPCRFP=]
[,EPCICSIND=][,EPCCSGID=][,EPCEExpirationDate=][,EPCAPNCPTPL=]
[,EPCAPNConfCount=][,EPCDFTAPN=][,EPCDFTAPNType=][,EPCAPN1=]
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PNLIPAP1=]...
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[,SupMIP6FeaVec=][,MIP6FeaVec_1=][,MIP6FeaVec_2=][,MIP6FeaVec_3=]
[,MIP6FeaVec_4=][,MIP6FeaVec_5=][,MIP6FeaVec_6=][,MIP6FeaVec_7=]



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ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)

[,MIP6FeaVec_8=][,MIP6FeaVec_9=][,SDSCtlName=][,PREIPSMGW=][,SCA
DDRESS=][,NOTIFYIMSAS=][,CSGAPN=][,EPCVSRVCC=]
[,SUPLAUTIMER=][,LAUTIMER=][,SUPRAUTAUTIMER=][,RAUTAUTIMER=][,
MPSEPSPRIORITY=]

[Parameter Description]

S/ N	Para_Name		Para_Value					Network Access Mode	
	Name	Meaning	Type	At tr.	Code Length	Para_value Description			
1.	ProState	Profile status	NUMSTR	M	1	1:Valid; 2:Invalid;	CS PS-GPRS PS-EP S		
2.	ProDesc	Profile description	STRING	M	1..40	Composed by letter (A-Z and a-z) , numbers (0~9), sign'_', sign'(', sign')', the Chinese characters	CS PS-GPRS PS-EP S		
3.	ProID	Profile ID	NUMSTR	M	1..5	Value Range: 0~65535	CS PS-GPRS PS-EP S		
4.	SN	Modify Serial Number of Profile	NUMSTR	O	1..10	SystemTime 1, Add a Profile, the SN omit 2, Mod Profile, if the MML instruction take SN parameter, ensure the value is equal to the SN value queried from the database.	CS PS-GPRS PS-EP S		
5.	HLRID	Administration Domain ID	NUMSTR	M	1..3	Value Range:1~128 The parameter is obtained form OMC configuration data "Public Service Configuration->AdminDomain Basic Configuration->AdminDomain main Configuration".	CS PS-GPRS PS-EP S		
6.	SubType	Subscriber type	NUMSTR	M	1	0: GSM subscriber 1: WCDMA subscriber 2: LTE subscriber	CS PS-GPRS PS-EP S		
7.	NAM	Network access mode	NUMSTR	M	1	0: Access CS and PS 1: Only access CS 2: Only access PS	CS PS-GPRS PS-EP S		
8.	MSType	Mobile Station	NUMSTR	M	1..3	The valid value is as	CS		

		Category				follows: 0: unknown source 1: operator, French 2: operator, English 3: operator, German 4: operator, Russian 5: operator, Spanish 6: language agreed by both parties (Chinese) 7: language agreed by both parties 8: language agreed by both parties (Japanese) 9: domestic operator 10: ordinary subscriber 11: subscriber with priority 12: data call 13: test call 14: EGSM subscriber 15: payphone 16~219: Operator-defined 240: ordinary, free 241: ordinary, regular 242: ordinary, user list, prompt 243: ordinary, printer, prompt 244: priority, free 245: priority, regular 248: ordinary user, used between local offices	
9.	CSPri	The assigned priority level of CS	NUMSTR	O	1..2	Value Range:0~63	CS
10.	ARDFG	Flag of ARD	NUMSTR	O	1	0: not subscribed 1: subscribed	CS PS-GPRS PS-EP S
11.	ARD	Access restriction parameter	NUMSTR	O	1..2	Valid when ARDFG=1 0~63: 0-Allow to access GERAN、UTRAN、GAN、	CS PS-GPRS PS-EP S

						I-HSPA-Evolution 、 E-UTRAN 、 HO-To-Non-3GPP-Access; 1-Not allow to access UTRAN; 2-Not allow to access GERAN; 4-Not allow to access GAN; 8-Not allow to access I-HSPA-Evolution; 16-Not allow to access E-UTRAN; 32- Not allow to access HO-To-Non-3GPP-Access. Other value is combined with above values. Default value: 0	
12.	NAEA	Equal Access	NUMSTR	O	6	The first two are constantly input as 22 and the latter four are taken from OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->NAEA Configuration" If the value is 000000, it means NAEA is not subscribed	CS
13.	RoamSchID	Roaming Scheme ID	NUMSTR	O	1..5	Value range: 0~65535 0: desubscribe Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->Roaming Data Configuration->Circuit-Switching Domain Roaming Scheme Configuration"	CS
14.	RCType	Routing Type	NUMSTR	O	1..3	Value range:0..254	CS

15.	AddRCType	Additional routing typ	NUMSTR	O	1,3..5	Value range:0,255~65789	CS
16.	PsRoamSch ID	PS roaming scheme ID	NUMSTR	O	1..5	Value range: 0~65535 0: desubscribe Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->Roaming Data Configuration->Packet-Switching Domain Roaming Scheme Configuration".	PS-GPRS
17.	ZCSet	Zone Code Set	NUMSTR	O	1..5	Value range:1~65535 Take from OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->Zone Charge Configuration". If the value of ZCSet is 65535, it means ZCSet not subscribed	CS PS-GPRS
18.	Stype	Specifical Subscriber Type	NUMSTR	O	1..3	Value range:0~255	CS PS-GPRS
19.	OFAID	ID of control table of black and white CF lists	NUMSTR	O	1..3	Value range:0~255; OFA ID is valid if value is in the range of 0~254. it can be taken from OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->Forwarding White-Black List Configuration".It is not registered if its value is 255.	CS

20.	CtrlScheID	ID of service control scheme	NUMSTR	O	1..3	Value range: 0~255) 0: not subscribed Others can be taken from OMC configuration data "WCN Domain Service Configuration->VPLMN Service Configuration->Control Scheme Configuration".	CS PS-GPRS
21.	CtrlSche	Name of service control scheme	STRING	O	1...30	"*" means no control scheme has been subscribed. Others can be taken from OMC configuration data "WCN Domain Service Configuration->VPLMN Service Configuration->Control Scheme Configuration". Ignored when CtrlScheID exists.	CS PS-GPRS
22.	Tele	Telephone	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
23.	EmegCall	Emergency Call	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
24.	SMMO	Point-to-Point Short Message Call Originating	NUMSTR	O	1	0: not subscribed 1: subscribed	CS PS-GPRS
25.	SMMT	Point-to-Point Short Message Call Terminating	NUMSTR	O	1	0: not subscribed 1: subscribed	CS PS-GPRS
26.	Fac3	Facsimile group and alternative voice	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
27.	AutoFac3	Automatic Facsimile Group3	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
28.	Fac4	Facsimile Group 4	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
29.	BOC	(ODB)Barring of Outgoing Calls	NUMSTR	O	1	Select one from the followings: 0: no call barring	CS PS-GPRS PS-EP S

						1: All outgoing calls barred 2: International outgoing calls barred 3: International outgoing calls barred except in the home PLMN 4: Barring of all outgoing calls roaming outside the home PLMN country 5: International region outgoing calls barred 6: International region outgoing calls barred except in the home PLMN. 7: International outgoing calls barred except in the home PLMN country and international region outgoing calls barred	
30.	BIC	(ODB)Barring of Incoming Calls	NUMSTR	O	1	The value is one of the followings: 0: No incoming call barred 1: Barring all incoming calls; 2: Barring incoming calls roaming outside the home PLMN country 3: Barring incoming calls roaming outside the zone of the home PLMN country.	CS
31.	BSS	(ODB)Barring of Supplementary Service	NUMSTR	O	1	0: No restriction 1: Restriction	CS
32.	BR	(ODB)Barring of Roaming	NUMSTR	O	1	The value is one of the followings: 0: No roaming barring 1: Barring of Roaming outside the home PLMN 2: Barring of Roaming outside the home PLMN country	CS PS-GPRS PS-EP S

33.	BPR	(ODB)Barring of High Rate Calling	NUMSTR	O	1	The value is one of the following: 0: No barring 1: Barring of PRC Information calls 2: Barring of PRC Entertainment calls. 3: Barring of PRC Information & Entertainment calls	CS
34.	BFN	(ODB)Barring of Forwarding Number Registration	NUMSTR	O	1	The value is one of the followings: 0: No barring 1: Barring of registration of any call forwarded-to number 2: Barring of registration of any international call forwarded-to number; 3: Barring of registration of any international call forwarded-to number except in the HPLMN country 4: Barring of registration of any International region call forwarded-to number. 5: Barring of registration of any International region forwarded-to number except in the HPLMN country	CS
35.	BCT	(ODB)Barring of Call Transferring	NUMSTR	O	1	The value is one of the followings: 0: No barring of call transferring 1: Barring of call transferring 2: Barring of call transferring when at least one of the two calls should be charged. 3: Barring of call	CS

						transferring when at least one of the two calls should be charged at international rates, 4: Barring of call transferring when at least one of the two calls should be charged at international region rates	
36.	BICT	(ODB)Barring of call transfer when both calls should be charged.	NUMSTR	O	1	0: No barring 1: Barring	CS
37.	BFICT	(ODB)Barring of call transfer when there is already one ongoing transferred call for the subscriber in the same MSC/VLR	NUMSTR	O	1	0: No barring 1: Barring	CS
38.	BT	Self-define the first ODB service(ODB of long-distance calls unauthorized)	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration" and is valid after activation: 0: No barring of long-distance calls 1: Barring of long-distance calls	CS PS-GPRS PS-EP S
39.	BIP	Self-define the second ODB service(ODB of IP calls authorized)	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration"	CS PS-GPRS PS-EP S

						Configuration->ODB Service Definition Configuration" and is valid after activation: 0: No barring of IP calls 1: Barring of IP calls	
40.	PlmnODB_3	Self-define the third ODB service	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration" and is valid after activation: The parameter is configured in configuration system and is valid after activation: 0: Not subscribed 1: Subscribed	CS PS-GPRS PS-EP S
41.	PlmnODB_4	Self-define the forth ODB service	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->ODB Service Definition Configuration" and is valid after activation: The parameter is configured in configuration system and is valid after activation: 0: Not subscribed 1: Subscribed	CS PS-GPRS PS-EP S
42.	BPOS	Packet domain ODB incoming and outgoing call restriction	NUMSTR	O	1	Select one of the following values: 0: No restriction 1: Bar all packet domain	PS-GPRS PS-EPS

						incoming and outgoing calls 2: The subscriber is not allowed to originate service request from access point in the home network while roaming outside home network. 3: The subscriber is not allowed to originate service request from access point in the visiting network while roaming outside home network.	
43.	CLIP	Calling Line Identification Presentation	NUMSTR	O	1	0: not subscribed 1: Subscribed	CS
44.	CLIPOpt	Calling Line Identification Presentation Extension	NUMSTR	O	1	Valid when CLIP=1 0: OverrideEnabled 1: OverrideDisabled	CS
45.	CLIR	Calling Line Identification Restriction	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
46.	CLIROpt	Calling Line Identification Restriction Extension	NUMSTR	O	1	Valid when CLIR=1 0: Permanent 1: TempDefaultRestricted 2: TempDefaultAllowed	CS
47.	COLP	Called Line Identification Presentation	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
48.	COLPOpt	Called Line Identification Presentation Extension	NUMSTR	O	1	Valid when COLP=1 0: OverrideEnabled 1: OverrideDisabled	CS
49.	COLR	Called Line Presentation Identification Restriction	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
50.	CW	Call Waiting Subscription	NUMSTR	O	1	0: not subscribed 1: Subscribed	CS
51.	CH	Call Holding Subscription	NUMSTR	O	1	0: not subscribed 1: Subscribed	CS
52.	CFU	Subscription of	NUMSTR	O	1	0: not subscribed	CS

		Call Forwarding Unconditional				1: Subscribed	
53.	CFUNTC	Notify the caller of call forwarding unconditional	NUMSTR	O	1	Valid when CFU=1 0: not inform 1: inform	CS
54.	CFURDP	Called number Presentation of call forwarding unconditional	NUMSTR	O	1	Valid when CFU=1 0: not show 1: show	CS
55.	CFB	Subscription of Call Forwarding on Busy	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
56.	CFBNTC	Notify the caller of call forwarding on busy	NUMSTR	O	1	Valid when CFB=1 0: not inform 1: inform	CS
57.	CFBNTF	Notify the forwarded-to subscriber of call forwarding on busy	NUMSTR	O	1	Valid when CFB=1 0: not inform 1: inform	CS
58.	CFBRDP	Called number presentation of call forwarding on busy	NUMSTR	O	1	Valid when CFB=1 0: not show 1: show	CS
59.	CFNRY	Subscription of Call Forwarding on No Reply	NUMSTR	O	1	0: not subscribed 1: Subscribed	CS
60.	CFNRYNTC	Notify the caller of call forwarding on no reply	NUMSTR	O	1	Valid when CFNRY=1 0: no notification 1: notification	CS
61.	CFNRYNTF	Notify the forwarded-to subscriber of call forwarding on no reply	NUMSTR	O	1	Valid when CFNRY=1 0: No notification 1: notification	CS
62.	CFNRYRDP	Called number presentation of call forwarding	NUMSTR	O	1	Valid when CFNRY=1 0: not show	CS

		on no reply				1: show	
63.	CFNRC	Subscription of Call Forwarding on Not Reachable	NUMSTR	O	1	0: not subscribed 1: Subscribed	CS
64.	CFNRCNTC	Notify the caller of Call forwarding on not reachable	NUMSTR	O	1	Valid when CFNRC=1 0: not inform 1: inform	CS
65.	CFNRCRDP	Called number presentation of call forwarding on not reachable	NUMSTR	O	1	Valid when CFNRC=1 0: not show 1:Show	CS
66.	CFD	Call Forwarding Default	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
67.	CFDNTC	Notice the calling party when CFD occurs	NUMSTR	O	1	Valid when CFD=1 0: Not notice 1: Notice	CS
68.	CFDNTF	Notice the forwarding party when CFD occurs	NUMSTR	O	1	Valid when CFD=1 0: Not notice 1: Notice	CS
69.	OVRCFB	CFD overriding CFB	NUMSTR	O	1	Valid when CFD=1 0: not overriding 1: overriding	CS
70.	OVRCFNRY	CFD overriding CFNRY	NUMSTR	O	1	Valid when CFD=1 0: not overriding 1: overriding	CS
71.	OVRCFNRC	CFD overriding CFNRC	NUMSTR	O	1	Valid when CFD=1 0: not overriding 1: overriding	CS
72.	BAOC	(SS) Barring of all outgoing calls	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
73.	BOIC	(SS) Barring of international outgoing calls	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
74.	BOICE	(SS) Barring of international outgoing calls except in the	NUMSTR	O	1	0: not subscribed 1: subscribed	CS

		home HPLMN					
75.	BAIC	(SS) Barring of all incoming call	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
76.	BICR	(SS) Barring of incoming calls roaming abroad	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
77.	MPTY	Multi-party call	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
78.	ECT	Explicit call transfer	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
79.	CD	Call Diversion	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
80.	CDNTC	Notify the caller of call diversion	NUMSTR	O	1	Valid when CD=1 0: not subscribed 1: subscribed	CS
81.	CDRDP	Called number presentation of call diversion	NUMSTR	O	1	Valid when CD=1 0: not subscribed 1: subscribed	CS
82.	AOCC	Advice of Charge Charging	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
83.	AOCI	Advice of Charge Information	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
84.	CUG	Subscription of Closing User Group	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
85.	PLSS_1	Self-define Supplementary Service 1	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation:	CS

						0: not subscribed 1: subscribed	
86.	PLSS_2	Self-define Supplementary Service 2	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
87.	PLSS_3	Self-define Supplementary Service 3	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
88.	PLSS_4	Self-define Supplementary Service 4	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
89.	PLSS_5	Self-define Supplementary Service 5	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service"	CS

						Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	
90.	PLSS_6	Self-define Supplementary Service 6	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
91.	PLSS_7	Self-define Supplementary Service 7	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
92.	PLSS_8	Self-define Supplementary Service 8	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
93.	PLSS_9	Self-define Supplementary	NUMSTR	O	1	The parameter is configured in OMC	CS

		Service 9				configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	
94.	PLSS_A	Self-define Supplementary Service 10	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
95.	PLSS_B	Self-define Supplementary Service 11	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
96.	PLSS_C	Self-define Supplementary Service 12	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Customer Service Configuration->PLMN Specific SS Configuration" and is valid after activation:	CS

						0: not subscribed 1: subscribed	
97.	PLSS_D	Self-define Supplementary Service 13	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
98.	PLSS_E	Self-define Supplementary Service 14	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
99.	PLSS_F	Self-define Supplementary Service 15	NUMSTR	O	1	The parameter is configured in OMC configuration data "WCN Domain Service Configuration->Custom Service Configuration->PLMN Specific SS Configuration" and is valid after activation: 0: not subscribed 1: subscribed	CS
100.	eMLPP	enhanced Multi-Level Precedence and Pre-emption service	NUMSTR	O	1	0: not subscribed 1: subscribed	CS

101.	CBCtrl	Call Barring Password Control authority	NUMSTR	O	1	0: controlled by operator 1:controlled by subscriber	CS
102.	CFBN	Network switch	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
103.	UUS1	User-to-User Signaling 1	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
104.	UUS2	User-to-User Signaling 2	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
105.	UUS3	User-to-User Signaling 3	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
106.	MC	MultiCall	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
107.	Nbr_SB	MAX number of co-existing bearer set by operator	NUMSTR	O	1	Value range: 2~7 Valid when MC=1	CS
108.	Nbr_User	MAX number of co-existing bearer set by user	NUMSTR	O	1	Value range: 1~7 Valid when MC=1 and no greater than Nbr_SB	CS
109.	CNAP	Calling name presentation	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
110.	CNAPOpt	CNAP override option	NUMSTR	O	1	Valid when CNAP=1 0: OverrideEnabled 1: OverrideDisabled	CS
111.	SMOpt	Short message sending item when GMSC does not support GPRS	NUMSTR	O	1	0: sent by MSC 1: sent by SGSN Fill in 1 in case of NAM=2	PS-GPRS PS-EPS
112.	Charge	GPRS charging features	NUMSTR	O	1..5	The same as the Charge parameter in paragraph 4.2.1	PS-GPRS PS-EPS
113.	PDPCount	Number of PDP context	NUMSTR	O	1..2	Value range: 0~50	PS-GPRS PS-EPS
114.	PDPType1	PDP address type	NUMSTR	C	1	When carrying the PDPCount parameter and PDPCount≥1, this parameter must be exist: 0: IP V4 1: IPV6	PS-GPRS PS-EPS



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						3: PPP	
115.	APN1	PDP access point name	STRING	C	1..62	When carrying the PDPCount parameter and PDPCount≥1, this parameter must be exist. The value comes from OMC configuration data "AdminDomain Public Configuration->PS Service Configuration->APN Configuration".	PS-GPRS PS-EPS
116.	APNRANGE 1	APN range	NUMSTR	O	1..5	When carrying the PDPCount parameter and PDPCount≥1 The value comes from PSRoamSchID, the default value is 0; 0 means available in all plmn.	PS-GPRS PS-EPS
117.	VPLMN1	Allow MS to use address dynamically distributed in VPLMN	NUMSTR	O	1	0: Not allowed 1: Allowed	PS-GPRS PS-EPS
118.	QOSID1	QoS Profile ID	NUMSTR	C	1..3	Value range: 1~255 Taken from OMC configuration data "Admin Domain Public Configuration->PS Service Configuration->Qos Profile Configuration".	PS-GPRS PS-EPS
119.	QoS1	PDP service quality	STRING	C	11..69	Ignored when QOSID exists. When carrying the PDPCount parameter and PDPCount≥1, QOSID1 or QoS1 must be exist. Refer to the note in Section 4.10.2	PS-GPRS PS-EPS
120.	pdpCharge 1	PDP context charging features	NUMSTR	O	1..5	The same as the Charge parameter in paragraph 4.2.1	PS-GPRS PS-EPS

121.	ExtPDPType1	Extend PDP Address Type	NUMSTR	O	1	Choose one of the following values: 0:IPV4; 1:IPV6; 4:NONE PDPType and ExtPDPType cannot be IPV4 or IPV6 in both	PS-GPRS PS-EPS
122.	...						
123.	State	Whether to send the user state to GMSC as a part of call terminating processing	NUMSTR	O	1	0: not subscribed 1: subscribed	CS PS-GPRS
124.	LocInfo	Whether to send location information to GMSC as a part of call terminating processing	NUMSTR	O	1	0: not subscribed 1: subscribed	CS PS-GPRS
125.	TrigTCSI	Whether to trigger T-CSI	NUMSTR	O	1	0: not triggered 1: triggered	CS
126.	OPhase	OCSI version No.	NUMSTR	O	1	1:Phase 1 2:Phase 2 3:Phase 3 4:Phase 4 When Phase is 1 or 2, at most one O_CSI can be subscribed for each subscriber; when Phase=3 or 4, at most two O_CSIs can be subscribed, but their TDPs should be different.	CS
127.	OCount	Number of OCSI	NUMSTR	O	1	Value range: 0~2	CS
128.	ONC	Whether OCSI is notified to	NUMSTR	O	1	Valid when Ophase>2: 0: not notify	CS



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		CSE				1: notify	
129.	OAct	Whether OCSI is activated	NUMSTR	O	1	Valid when Ophase>2: 0: not activated 1: activated	CS
130.	OTDP1	OCSI TDP	NUMSTR	C	1	When carrying the OCount parameter and OCount≥1, this parameter must be exist. When Phase is 1 or 2, TDP can only be filled with 2. When Phase is 3 or 4, TDP can be filled with 2 or 4.	CS
131.	OSK1	OCSI service key Name	STRING	C	1..50	When carrying the OCount parameter and OCount≥1, this parameter must be exist. Take value from OMC configuration data "WCN Domain Service Configuration-->WCN Service Key Configuration".	CS
132.	OSCF1	OCSI gsmSCF address	NUMSTR	C	1..15	When carrying the OCount parameter and OCount≥1, this parameter must be exist. Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
133.	ODC1	OCSI Default Call	NUMSTR	O	1	When carrying the OCount parameter and OCount≥1, Ophase>1, this parameter must be exist	CS

						0: continue Call 1: release Call	
134.	...						
135.	TPhase	TCSI version No.	NUMSTR	O	1	1:Phase 1 2:Phase 2 3:Phase 3 4:Phase 4 When Phase is 1 or 2, at most one T_CSI can be subscribed for each subscriber; when Phase=3 or 4, at most three T_CSIs can be subscribed, but their TDPs should be different.	CS
136.	TCount	Number of TCSI	NUMSTR	O	1	Value range: 0~3	CS
137.	TNC	Whether TCSI is notified to CSE	NUMSTR	O	1	Valid when Tphase>2: 0: not notify 1: notify	CS
138.	TAct	Whether TCSI is activated	NUMSTR	O	1	Valid when Tphase>2: 0: not activated; 1: activated	CS
139.	TTDP1	TCSI TDP	NUMSTR	C	1..2	When carrying the TCount parameter and TCount≥1, this parameter must be exist Fill in 12 when the parameter is 1 or 2; Fill in 12, 13 or 14 when the parameter is 3 or 4	CS
140.	TSK1	TCSI service key Name	STRING	C	1..50	When carrying the TCount parameter and TCount≥1, this parameter must be exist Take value from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration".	CS

141.	TSCF1	TCSI gsmSCF address	NUMSTR	C	1..15	When carrying the TCount parameter and TCount≥1, this parameter must be exist Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
142.	TDC1	TCSI Default Call	NUMSTR	C	1	When carrying the TCount parameter and TCount≥1, Tphase>1, this parameter must be exist 0: continue Call 1: release Call	CS
143.	...						
144.	SSNC	Whether SSCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify	CS
145.	SSAct	Whether SSCSI is activated	NUMSTR	O	1	0: not activated; 1: activated	CS
146.	SSSCF	SSCSI gsmSCF address	NUMSTR	O	1..15	Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
147.	SSNoti	SSCSI Notification standard	STRING	O	5	Parameter is composed of "x-x-x" character string. "x" stands for "0" or "1". "0" means "unsubscribed", "1" means "subscribed". The first "x" stands for subscribing or unsubscribing of ECT; the second "x" stands for subscribing or	CS

						unsubscribing of CD; the third "x" stands for subscribing or unsubscribing of MPTY.	
148.	UCount	UCSI Count	NUMSTR	O	1..2	Value range: 0~10	CS
149.	USrvCode1	UCSI Service Code	NUMSTR	C	1..16	When carrying the UCount parameter and UCount≥1, this parameter must be exist Value range: 0~9999999999999999	CS
150.	USCF1	UCSI gsmSCF address	NUMSTR	C	1..15	When carrying the UCount parameter and UCount≥1, this parameter must be exist Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
151.	...						
152.	GPRSPhase	GPRSCSI Version No	NUMSTR	O	1	3: Phase 3	PS-GPRS
153.	GPRSCount	Number of GPRSCSI	NUMSTR	O	1	Value range: 0~5	PS-GPRS
154.	GPRSNC	Whether GPRSCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify	PS-GPRS
155.	GPRSAct	Whether GPRSCSI is activated	NUMSTR	O	1	0: not activated 1: activated	PS-GPRS
156.	GPRSTDTP1	GPRSCSI TDP	NUMSTR	C	1..2	When carrying the GPRSCount parameter and GPRSCount≥1, this parameter must be exist Select one of the following:	PS-GPRS

						1: attached 2:location attachment change 11:PDP context establishment 12:PDP context establishing response 14: location PDP context change	
157.	GPRSSK1	GPRSCSI service key Name	STRING	C	1..50	When carrying the GPRSCount parameter and GPRSCount≥1, this parameter must be exist Take value from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration".	PS-GPRS
158.	GPRSSCF1	GPRSCSI gsmSCF address	NUMSTR	C	1..15	When carrying the GPRSCount parameter and GPRSCount≥1, this parameter must be exist Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	PS-GPRS
159.	GPRSDC1	GPRSCSI Default Call	NUMSTR	C	1	When carrying the GPRSCount parameter and GPRSCount≥1, this parameter must be exist 0: continue Call 1: release Call	PS-GPRS
160.	...						
161.	SMSPhase	SMSCSI Version No	NUMSTR	O	1	3: Phase 3	CS PS-GPRS

162.	SMSNC	Whether SMSCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify	CS PS-GPRS
163.	SMSAct	Whether SMSCSI is activated	NUMSTR	O	1	0: not activated 1: activated	CS PS-GPRS
164.	SMSSK	SMSCSI service key Name	STRING	O	1..50	Take value from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration".	CS PS-GPRS
165.	SMSSCF	SMSCSI gsmSCF address	NUMSTR	O	1..15	Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS PS-GPRS
166.	SMSDC	SMSCSI Default Call	NUMSTR	O	1	0: continue Call 1: release Call	CS PS-GPRS
167.	VTPhase	VTCSI Version No	NUMSTR	O	1	3: Phase 3 4: Phase 4	CS
168.	VTCount	Number of VTCSI	NUMSTR	O	1	Value range: 0~3	CS
169.	VTNC	Whether VTCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify	CS
170.	VTAct	Whether VTCSI is activated	NUMSTR	O	1	0: not activated 1: activated	CS
171.	VTTDP1	VTCSI TDP	NUMSTR	C	1..2	When carrying the VTCount parameter and VTCount \geq 1,this parameter must be exist Value range: 12~14.	CS
172.	VTSK1	VTCSI service key Name	STRING	C	1..50	When carrying the VTCount parameter and VTCount \geq 1,this parameter must be exist Take value from OMC configuration data "WCN Domain Service"	CS

						Configuration->WCN Service Key Configuration".	
173.	VTSCF1	VTCSI gsmSCF address	NUMSTR	C	1..15	When carrying the VTCount parameter and VTCount≥1, this parameter must be exist Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
174.	VTDC1	VTCSI Default Call	NUMSTR	C	1	When carrying the VTCount parameter and VTCount≥1, this parameter must be exist 0: continue Call 1: release Call	CS
175.	...						
176.	TIFFlag	CAMEL service basic information contents: conversion information flag	NUMSTR	O	1	0: not subscribed 1: Subscribed	CS
177.	TIFNC	Whether TIFCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify	CS
178.	MNC	Whether MCSI is notified to CSE	NUMSTR	O	1	0: do not notice CSE; 1: notice CSE	CS
179.	MAct	Whether MCSI is activated	NUMSTR	O	1	0: not activated; 1: activated	CS
180.	MSK	MCSI service key Name	STRING	O	1..50	Take value from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration".	CS

181.	MSCF	MCSI gsmSCF address	NUMSTR	O	1..15	Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
182.	MTrig	MCSI Trigger list	NUMSTR	O	1..9	Parameter is composed of "x-x-x-x-x" character string. "x" stands for "0" or "1". "0" means "unsubscribed", "1" means "subscribed". The first "x" stands for the subscribing or withdrawing of trigger InSameVlr; the second "x" stands for the subscribing or withdrawing of trigger ToOtherVlr; the third "x" stands for that of trigger ImsiAttach; the fourth "x" stands for that of trigger MsInitImsiDetach; the fifth "x" stands for that of trigger NetworkInitImsiDetach.	CS
183.	DPhase	DCSI Version No	NUMSTR	O	1	3: Phase 3 4: Phase 4	CS
184.	DCount	Number of DCSI	NUMSTR	O	1..2	Value range: 0~10	CS
185.	DNC	Whether MCSI is notified to CSE	NUMSTR	O	1	0: not notify 1: notify	CS
186.	DAct	Whether MCSI is activated	NUMSTR	O	1	0: not activated; 1: activated	CS
187.	DialNum1	DCSI Called number	NUMSTR	C	1..16	When carrying the DCount parameter and DCount≥1, this parameter must be exist DCSI Called number	CS



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188.	DSK1	DCSI service key Name	STRING	C	1..50	When carrying the DCount parameter and DCount≥1, this parameter must be exist Take value from OMC configuration data "WCN Domain Service Configuration->WCN Service Key Configuration".	CS
189.	DSCF1	DCSI gsmSCF address	NUMSTR	C	1..15	When carrying the DCount parameter and DCount≥1, this parameter must be exist Take value from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->GSMSCF Address Configuration".	CS
190.	DDC1	DCSI Default Call	NUMSTR	C	1	When carrying the DCount parameter and DCount≥1, this parameter must be exist 0: continue Call 1: release Call	CS
191.	...						
192.	AllCDA	All CDA services	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
193.	AllCDS	All CDS services	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
194.	CDA300	CDA data service (300)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
195.	CDA1200	CDA data service (1200)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
196.	CDA75	CDA data service (1200_75)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
197.	CDA2400	CDA data	NUMSTR	O	1	0: not subscribed	CS

		service (2400)				1: subscribed 0: not subscribed	
198.	CDA4800	CDA data service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
199.	CDA9600	CDA data service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
200.	GenCDA	General DataCDA	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
201.	CDS1200	CDS data service (1200)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
202.	CDS2400	CDS data service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
203.	CDS4800	CDS data service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
204.	CDS9600	CDS data service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
205.	GenCDS	General DataCDS	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
206.	PA300	PadAccessCA service (300)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
207.	PA1200	PadAccessCA service (1200)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
208.	PA75	PadAccessCA service (1200_75)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
209.	PA2400	PadAccessCA service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
210.	PA4800	PadAccessCA service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
211.	PA9600	PadAccessCA service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
212.	GenPACA	General PadAccessCA	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
213.	PDS2400	PDS data service (2400)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
214.	PDS4800	PDS data service (4800)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
215.	PDS9600	PDS data service (9600)	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
216.	GenPDS	General DataPDS	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
217.	ASCDa	AllAlternateSp	NUMSTR	O	1	0: not subscribed	CS



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		eech_DataCDA				1: subscribed 0: not subscribed 1: subscribed	
218.	ASCDSD	AllAlternateSpeech_DataCDS	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
219.	SFCDA	AllSpeechFollowedByDataCD_A	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
220.	SFCDS	AllSpeechFollowedByDataCD_S	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
221.	PLMNBS_1	Specific bear service 1	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
222.	...						
223.	PLMNBS_F	Specific bear service 3	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
224.	RSZICount	Subscribed CCNDC number	NUMSTR	O	1..2	Value range:0~4	CS PS-GPRS PS-EP S
225.	CCNDC1	The first subscribed CCNDC	NUMSTR	O	2..12	Country Code and Network Access Code	CS PS-GPRS PS-EP S
226.	ZCList1	Zone Code List	STRING	O	4..49	Each zone code has a 4-digit length; use “-” to separate two adjacent zones; at most 10 code zones can be set.	CS PS-GPRS PS-EP S
227.	...						
228.	BORO	Barring of all outgoing calls when roaming out of home PLMN	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
229.	GPRSTPL	GPRS Template ID	STRING	O	1..249	GPRSTPL value like: X-X-X..,X is GPRS Template ID; Value range: 1~8192. X should be obtained from OMC configuration data “WCN Domain Service Configuration->Template Configuration->GPRS	PS-GPRS PS-EPS



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						Template Configuration". The maximum number of GPRS template ID is 50. The parameters related to PDP will be ignored when GPRSTPL exists in command.If GPRSTPL is equal to 0, it means the subscriber does not subscribe PDP	
230.	OCSITPL	OCSI Template ID	NUMSTR	O	1...3	Obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->OCSI Template Configuration".The parameters related to OCSI except ONC and OAct will be ignored when OCSITPL exists in command. If OCSITPL is equal to 0, which means the subscriber does not subscribe OCSI	CS
231.	TCSITPL	TCSI Template ID	NUMSTR	O	1...3	Obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->TCSI Template Configuration". The parameters related to TCSI except TNC and TAct will be ignored when TCSITPL exists in command. If TCSITPL is equal to 0, which means the subscriber does not subscribe TCSI	CS
232.	UCSITPL	UCSI Template ID	STRING	O	1..359	UCSITPL value like: X-X-X.., X is UCSI Template ID; Value	CS

						range: 1~65535. X should be obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->UCSI Template Configuration". The maximum number of GPRS template ID is 60. The parameters related to UCSI will be ignored when UCSITPL exists in command. If UCSITPL is equal to 0, it means the subscriber does not subscribe UCSI	
233.	TRIMPTY	Triple MPTY	NUMSTR	O	1	Valid when MPTY=1: 0: No Triple MPTY 1: Triple MPTY	CS
234.	CB_PWD	Call barring password	NUMSTR	O	4	Character string of 4 digits	CS
235.	EXTTypeID	Extended User Type ID	NUMSTR	O	1..2	Value range:0~32 0 indicates that no contract; and Other values are obtained from OMC configuration data "WCN Domain Service Configuration->Custom service Configuration->Extended Subscriber Type Configuration"	CS PS-GPRS PS-EP S
236.	SSET	Service Set	NUMSTR	O	1..4	Value range: 1~1999 0: not subscribed	CS
237.	SIPID	SIP IN service	NUMSTR	O	1.. 5	Value range: 0~65535, The ID obtained from OMC configuration data "Admin Domain Public Configuration->SIP IN Service Configuration->SIP IN Configuration". parameter of SIPID is conflict with	CS



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						CS CAMEL Service.	
238.	DEFCALL	Default call service code	STRING	O	1..16	The default call service code used when BC is not applied in SendRoutingInfo request received by HLR. The values and descriptions are shown in chapter 4.2.1. * means not subscribed	CS
239.	FM	Follow Me	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
240.	FMGRP	FM Group Name	STRING	O	1..30	"*" indicates that no FM Group is subscribed. Other values are obtained from OMC configuration data "WCN Domain Service Configuration->Follow Me Service Configuration->Follow Me Group Configuration". Valid while FM=1	CS
241.	FMSUPER	Follow Me supervisor	NUMSTR	O	1	0: NO 1: YES Valid while FM=1	CS
242.	OCCBS	Originating Call Completion to Busy subscriber	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
243.	TCCBS	Terminating Call Completion to Busy subscriber	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
244.	SSNoti_CC BS	SSCSI CCBS Notification Criteria	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
245.	OriginFAID	Origin for Forwarded-to Number Analysis	STRING	O	1..3	*: not Subscribed Value range:0~511; the parameter is obtained form OMC configuration data "WCN Domain	CS

						Service Configuration->Custom Service Configuration->Origin for Forwarded-to Number Analysis Configuration”.	
246.	OINI	Originating Intelligent Network Indication	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
247.	TINI	Terminating Intelligent Network Indication	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
248.	OINR	Originating Intelligent Network Reference	NUMSTR	O	1..3	0: not subscribed 1~999: subscribed	CS
249.	TINR	Terminating Intelligent Network Reference	NUMSTR	O	1..3	0: not subscribed 1~999: subscribed	CS
250.	SMSRouter ID	SMS ROUTER ID	NUMSTR	O	1..3	Value range: 0~255, 1) 0 means SMS ROUTER desubscribed; 2) Not 0 means SMS ROUTER subscribed; Taken from OMC configuration data “WCN Domain Service Configuration->SMS Router Configuration->SMS Router Configuration”.	CS PS-GPRS
251.	FRAUDID	The Fraud Profile ID for Subscriber	STRING	O	1..3	*: not Subscribed Value range:0~250 The parameter is obtained form OMC configuration data “WCN Domain Service Configuration->Fraud Profile Configuration”.	CS



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252.	ISTAlertTimer	IST Alert Timer	NUMSTR	O	1..3	Value range:0, 15~255	CS
253.	ISTAlertOpt	IST Alert Option	NUMSTR	O	1	Value range:0~3 0: Call allowed 1: Terminate call Activity referred 2: Continue monitor call activity 3: terminate all call activities	CS
254.	ISTVLROPT	VLR Not Support IST Option	NUMSTR	O	1	Value range:0~3 0: ignore 1: Supplementary service Barring of Outgoing Call 2: Supplementary service Barring of Incoming Call 3: Supplementary service Barring of Outgoing call and Incoming Call	CS
255.	ISTGMSCOPT	GMSC Not Support IST Option	NUMSTR	O	1	Value range:0~2 0: ignore 1: Operator Determined Barring of all incoming calls 2: Supplementary service Barring of All Outgoing Calls	CS
256.	SMSCSITPL	The Profile ID of SMS_CSI	NUMSTR	O	1...3	Obtained from OMC configuration data "WCN Domain Service Configuration->Template Configuration->SMS-CSI Template Configuration".The parameters related to SMS CSI except SMSNC and SMSAct will be ignored when SMSCSITPL exists in command. If SMSCSITPL is equal to 0, which means the subscriber does not subscribe SMS CSI	CS PS-GPRS
257.	GPRSCSITP	The Profile ID	NUMSTR	O	1...3	Obtained from OMC	PS-GPRS

	L	of GPRS_CSI				configuration data "WCN Domain Service Configuration->Template Configuration->GPRS-CSI Template Configuration".The parameters related to GPRS CSI except GPRSNC and GPRSAct will be ignored when GPRSCSITPL exists in command. If GPRSCSITPL is equal to 0, which means the subscriber does not subscribe GPRS CSI	
258.	RestrictCF	Restrict User register or unregister forward-number	NUMSTR	O	1	0: Unrestrict 1: Restrict	CS
259.	CamelCtlId	Camel Control Strategy Identifier	NUMSTR	O	1..5	Value range: 1~65535 Value 0 means not subscribed, Other data can be obtained from OMC configuration data "AdminDomain Public Configuration->ITU IN Service Configuration->Camel Control Strategy Configuration"	CS PS-GPRS
260.	CBNotChkP wd	Call barring not check password	NUMSTR	O	1	0:check 1:not check	CS
261.	BCID	Bearer capability index	NUMSTR	O	1..5	Value range: 0~65535 Take from OMC configuration data "Public Service Configuration->WCDMA Global Service Configuration->Bearer Capability Configuration"	CS



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262.	CFF	Disable call forward	NUMSTR	O	1	0: not subscribed 1: subscribed	CS
263.	MDTUSERC ONSENT	MDT User Consent	NUMSTR	O	1	0 : CONSENT_NOT_GIVEN 1: CONSENT_GIVEN 255: NONE	CS PS-GPRS PS-EP S
264.	AREASRVI D	Service Area ID	NUMSTR	O	1..5	Value range: 0~65535 0: not Subscribed Other data can be Obtained from OMC configuration data "WCN Domain Service Configuration->Area Service Configuration->Roaming Service Configuration".	CS PS-GPRS PS-EP S
265.	EOINR	Extended OCSI Reference	NUMSTR	O	1..3	0: not Subscribed 1~999: Subscribed	CS
266.	ETINR	Extended TCSI Reference	NUMSTR	O	1..3	0: not Subscribed 1~999: Subscribed	CS
267.	SUPLAUTI MER	Support LAU Timer	NUMSTR	O	1	0: Not Support 1: Support	CS
268.	LAUTIMER	LAU Timer	NUMSTR	O	1..10	0~4294967295	CS
269.	SUPRAUTA UTIMER	Support RAU/TAU Timer	NUMSTR	O	1	0: Not Support 1: Support	PS-GPRS PS-EPS
270.	RAUTAUTI MER	RAU/TAU Timer	NUMSTR	O	1..10	0~4294967295	PS-GPRS PS-EPS
It supports the following parameters only when the SubType is EPC							
271.	EPCCHARG CHRT	Charging features of EPC subscription	NUMSTR	O	1..3	Value:0~255 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4 "0" indicates no charging	PS-EPS

						characteristics	
272.	EPCROAMSCH	EPC Roaming Scheme Name	STRING	O	1..30	"*" indicates no roaming scheme subscription; Other data can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". If subscriber signed both EPCROAMSCHID and EPCROAMSCH, then return failed	PS-EPS
273.	EPCSTNSR	Session Transfer Number for SRVCC	NUMSTR	O	6..15	ISDN STRING	PS-EPS
274.	EPCAMBRUP	Max-Requeste d-Bandwidth-U L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295	PS-EPS
275.	EPCAMBRDOWN	Max-Requeste d-Bandwidth-D L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295	PS-EPS
276.	EPCAPNOIRep	APN-OI-replacement	STRING	O	1..64	APN-OI-replacement, for example: mnc.mcc.gprs , "*" indicates not Subscribed	PS-EPS
277.	EPCRFSP	RAT-Frequency -Selection-Priority-ID	NUMSTR	O	1..3	0~256, 0 indicates no subscription	PS-EPS
278.	EPCICSIND	ICS flag	NUMSTR	O	1	1: True 0: Flase	PS-EPS



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279.	EPCCSGID	CSG ID	NUMSTR	O	1..9	1~134217727	PS-EPS
280.	EPCExpirationDate	CSG Expiration Date	STRING	O	14	Valid when EPCCSGID exists Format: YYYYMMDDHHMMSS From left to right: YYYY-year MM-month DD-day HH-hour MM-minute SS-second For example: 20070411130035means 13:00:35, Apr 11, 2007	PS-EPS
281.	EPCAPNCP TPL	EPC APNCP Template ID	NUMSTR	O	1...3	Value range:0~255, EPC APNCP Template ID can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN CP Template Configuration". The parameters related to APN Configuration will be ignored when EPCAPNCPTPL exists in command.If EPCAPNCPTPL is equal to 0, which means the subscriber does not subscribe APNCP.	PS-EPS
282.	EPCAPNConfCount	the number if APN Configuration group	NUMSTR	O	1..2	Value range:0~50	PS-EPS
283.	EPCDFTAP N	APNConf defalt Access name	STRING	O	1..62	It cannot be "*". If EPCAPNConfCount>1, this parameter must be	PS-EPS



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						exist	
284.	EPCDFTAP NType	The type of defalt Access PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6 This Paramter is not use temporary.	PS-EPS
285.	EPCAPN1	APNConf Access name	STRING	O	1..62	obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration". It cannot be "*". The APN Configuration parameters	PS-EPS
286.	PDNType1	The type of PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6 The APN Configuration parameters	PS-EPS
287.	EPSQOS1	APN Configuration Service Quality	STRING	O	7..10	Ignored when EPSQOSID exists. Refer to the description in paragraph 4.22.2 The APN Configuration parameters	PS-EPS
288.	EPSQOSID 1	EPS Qos Profile ID	NUMSTR	O	1..3	Value range:1~255 Obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->EPS Subscribed QOS Profile Configuration".	PS-EPS



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						One of EPSQOSID and EPSQOS parameters must be input. If all of them are input, EPSQOS will be ignored. The APN Configuration parameters	
289.	VPLMNDAA1	Dynamic VPLMN allowed	NUMSTR	O	1	0:not permit 1:permit The APN Configuration parameters	PS-EPS
290.	PDNGWATYPE1	PDN GW allocation type	NUMSTR	O	1	1: dynamic The APN Configuration parameters	PS-EPS
291.	PDNGWFQDNHost1	The Host of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z) , numbers (0~9), connectors (-) , the delimiter (.), which can only by letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates not Subscribed. The APN Configuration parameters	PS-EPS
292.	PDNGWFQDNRealm1	The Realm of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z) , numbers (0~9), connectors (-) , the delimiter (.), which can only by letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates not Subscribed. The APN Configuration parameters	PS-EPS
293.	APNCHARGE1	Charging features of	NUMSTR	O	1..3	Refer to EPCCHARGCHRT parameter	PS-EPS



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		APNCONFIG					
294.	APNAMBRUP1	Max-Requeste d-Bandwidth-U L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	Value range:0~4294967295 The APN Configuration parameters	PS-EPS
295.	APNAMBRD OWN1	Max-Requeste d-Bandwidth-D L of UE-AMBR(Aggr egate Maximum Bit Rate)	NUMSTR	O	1..10	Value range:0~4294967295 The APN Configuration parameters	PS-EPS
296.	APNOIRep1	APN-OI-replacement	STRING	O	1..64	Composed by letter (A-Z and a-z) , numbers (0~9), connectors (-) , the delimiter (.), which can only by letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates not Subscribed. The APN Configuration parameters	PS-EPS
297.	APNLIPAP1	LIPA Permission	NUMSTR	O	1..3	0: LIPA Prohibited 1: LIPA Only 2: LIPA Conditional 255:NONE The APN Configuration parameters	PS-EPS
298.	...						
299.	EPCN3ARD _0	non-3GPP Access restriction parameter of WLAN Not	NUMSTR	O	1	0: Allow to access WLAN 1: Not allow to access WLAN	PS-EPS

		Allowed					
300.	EPCN3ARD_1	non-3GPP Access restriction parameter of CDMA2000_1X Not Allowed	NUMSTR	O	1	0: Allow to access CDMA2000_1X 1: Not allow to access CDMA2000_1X	PS-EPS
301.	EPCN3ARD_2	non-3GPP Access restriction parameter of HRPD Not Allowed	NUMSTR	O	1	0: Allow to access HRPD 1: Not allow to access HRPD	PS-EPS
302.	EPCN3ARD_3	non-3GPP Access restriction parameter of UMB Not Allowed	NUMSTR	O	1	0: Allow to access UMB 1: Not allow to access UMB	PS-EPS
303.	EPCN3ARD_4	non-3GPP Access restriction parameter of EHRPD Not Allowed	NUMSTR	O	1	0: Allow to access EHRPD 1: Not allow to access EHRPD	PS-EPS
304.	EPCN3IPAC_C	whether allow the user to access EPC from non-3GPP network	NUMSTR	O	1	0: The subscriber has non-3GPP subscription to access EPC network 1: The subscriber has no non-3GPP subscription to access EPC network	PS-EPS
305.	EPCN3IPAC_CAPN	whether disable all APNs for a subscriber at one time	NUMSTR	O	1	0: Enable all APNs for a subscriber 1: Disable all APNs for a subscriber	PS-EPS
306.	EPCSTIME_OUT	the maximum period for a session measured in seconds	NUMSTR	O	1..10	0~2147483647(s)	PS-EPS
307.	NO3GPPRO_AMSCH	No 3GPP Roaming Scheme Name.	STRING	O	1..30	“*” indicates no roaming scheme subscription; Other data can be	PS-EPS



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ZXUN USPPV4.14.10_interface specification of command line(HLR&EPC-HSS fascicule)

						obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration".	
308.	EPCRELAY NODEIND	EPC Relay Node Indicator	NUMSTR	O	1..3	0: NOT_RELAY_NODE 1: RELAY_NODE 255:NONE	PS-EPS
309.	EPCROAMS CHID	EPC Roaming Scheme ID	STRING	O	1..5	Value range: 0~65535 0: not Subscribed Other data can be Obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". If subscriber signed both EPCROAMSCHID and EPCROAMSCH, then return failed.	PS-EPS
310.	SupMIP6Fe aVec	MIP6-Feature- Vector	NUMSTR	O	1	0: not subscribed 1: subscribed	PS-EPS
311.	MIP6FeaVe c_1	Whether support MIP6_INTEGR ATED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
312.	MIP6FeaVe c_2	Whether support LOCAL_HOME _AGENT_ASSI GNMENT	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
313.	MIP6FeaVe c_3	Whether support PMIP6_SUPPO RTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
314.	MIP6FeaVe c_4	Whether support IP4_HOA_SUP PORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS

315.	MIP6FeaVe c_5	Whether support LOCAL_MAG_R OUTING_SUPPOR TED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
316.	MIP6FeaVe c_6	Whether support ASSIGN_LOCA L_IP	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
317.	MIP6FeaVe c_7	Whether support MIP4_SUPPOR TED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
318.	MIP6FeaVe c_8	Whether support OPTIMIZED_I DLE_MODE_M OBILITY	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
319.	MIP6FeaVe c_9	Whether support GTPv2_SUPPO RTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support	PS-EPS
320.	SDSCtlNam e	SDS Control Strategy Name	STRING	O	1...30	"* indicates no SDS Control Strategy subscription; Other data can be obtained from OMC configuration data "WCDMA Global Service Configuration->SDS Control Strategy Configuration"	CS PS-GPRS PS-EP S
321.	PREIPSMG W	Preconfigured IP-SM-GW	STRING	O	1..16	Character string of 1 to 16 digits. "*" indicates no subscription	CS PS-GPRS PS-EP S
322.	SCADDRES S	Service Centre Address	STRING	O	1..38	Character string of 1 to 38 digits. "*" indicates no subscription	CS PS-GPRS PS-EP S
323.	NOTIFYIM SAS	Notify IMS AS	STRING	O	1..16	Character string of 1 to 16 digits.	CS PS-GPRS PS-EP S

						“*” indicates no subscription	
324.	CSGAPN	APN List	STRING	O	1..62*50 +49	Valid when EPCCSGID exists Each APN can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration", and the maximal number is 50, separated with "\$". When the value of CSGAPN is \$, it means not subscribed.	PS-EPS
325.	EPCVSRVC C	Subscribed VSRVCC	NUMSTR	O	1	0: Not Subscribed 1: Subscribed	PS-EPS
326.	MPSEPSPRI ORITY	MPS-EPS-PRIORITY	NUMSTR	O	1	0: Not Subscribed 1: Subscribed	PS-EPS

[Notes]

1. For PDP context, there might be several records. Each record has its own subscription information. For example, two PDP context records, and the input parameters can be PDPType1, APN1, VPLMN1, QoS1/QoS1, PDPCharge1, ExtPDPType1, PDPType2 ...
2. For OCSI, there might be several records. Each record has its own subscription information. For example, two OCSI records, and the input parameters can be OTDP1, OSK1, OSCF1, ODC1, OTDP2, OSK2, OSCF2, ODC2.
3. For TCSI, there might be several records. Each record has its own subscription information. For example, two TCSI records, and the input parameters can be TTDP1, TSK1, TSCF1, TDC1, TTDP2, TSK2, TSCF2, TDC2.
4. For UCSI, there might be several records. Each record has its own subscription information. For example, two UCSI records, and the input parameters can be USrvCode1, USCF1, UsrvCode2, USCF2.
5. For GPRSCSI, there might be several records. Each record has its own subscription information. For example, two GPRSCSI records, and the input parameters can be GPRSTDP1, GPRSSK1, GPRSSCF1, GPRSDC1, GPRSTDP2, GPRSSK2, GPRSSCF2, GPRSDC2.
6. For VTCSI, there might be several records. Each record has its own

subscription information. For example, two VTCSI records, and the input parameters can be VTTDP1, VTSK1,VTSCF1,VTDC1,VTTDP2,VTSK2,VTSCF2,VTDC2.

7. For DCSI, there might be several records. Each record has its own subscription information. For example, two DCSI records, and the input parameters can be DialNum1, DSK1,DSCF1,DDC1,DialNum2,DSK2,DSCF2,DDC2.
8. For CCNDC, there might be several records. Each record has its own subscription information. For example, two CCNDC records, and the input parameters can be CCNDC1, ZCList1, CCNDC1, ZCList1.
9. For EPC APN, there might be several records. Each record has its own subscription information. For example, two EPC APN records, and the input parameters can be EPCAPN1,PDNType1,EPSQOS1,EPSQOSID1,VPLMNDA1,PDNGWATYPE1,PDNGWFQDNHost1,PDNGWFQDNRealm1,APNCHARGE1,APNAMBRUP1,APNAMBRDOWN1, APNOIRep1, APNLIPAP1,EPCAPN2 ...

[Examples]

1. Add profile:

```
ADD PRO:PROID=1000,PRODESC=1000,PROSTATE=1,HLRID=1,NAM=2,  
SUBTYPE=1,MSTYPE=10,EXTTYPEID=0,SMSROUTERID=0,ZCSET=65535,CTRLSCHEID=255,  
ARDFG=0,ARD=0,SMMT=1,SMMO=1,BOC=2,BIC=0,BR=2,BPOS=0,BT=1,BIP=1,  
PLMNODB_3=1,PLMNODB_4=1,RSZICount=0,PSROAMSCHID=0,CLIOPT=1,CLIROPT=0,  
SMOPT=0,CHARGE=8,PDPCount=1,PDPType1=0,APN1=*,VPLMN1=0,ExtPDPType1=4,QoS1=3-3-4-2-9-31-2-1-2-3-150-3-4-2-62-104-104-255-255-0-0-0-0-0,pdpCharge1=8,ST  
ATE=0,LOCINFO=0,OCSITPL=0,TCSITPL=0,UCSITPL=0,TIFFlag=0,TIFNC=0,GPRSCSITPL=0,SMSCSITPL=0,STYPE=0;
```

4.18.2 Modify Profile

[Command code] Mod Pro

[Command function] Modify profile

[Input format]

Mod Pro: The parameters are the same as those in Add Profile.

[Parameter Description]

Refer to 4.18.1

[Examples]

1. Modify profile:

```
Mod Pro:PROID=1000,PRODESC=1000,PROSTATE=1,HLRID=1, SUBTYPE=1,  
NAM=2,MSTYPE=10,SMMT=1,SMMO=0;
```

4.18.3 Delete Profile

[Command code]Del Pro

[Command function]Delete profile

[Input format]

Del Pro: PROID=,SN= ,HLRID=

[Parameter Description]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	ProID	Profile ID	NUMSTR	M	1..5	Value range:0~65535;
2.	SN	Modify Serial Number of Profile	NUMSTR	O	1..10	SystemTime if the MML instruction take SN parameter, ensure the value is equal to the SN value which query from the database.
3.	HLRID	Administration Domain ID	STRING	M	1..3	Value Range:1~128 The parameter is obtained form OMC configuration data "Public Service Configuration->AdminDomain Basic Configuration-> AdminDomain Configuration".

[Examples]

1. Delete profile:

Del Pro: PROID=1000, HLRID=1;

4.18.4 Query Profile**[Command code]**Qry Pro**[Command function]**Query profile**[Input format]**

Qry Pro: PROID= ,HLRID=

[Description of output parameter]

ACK:Qry Pro: RETN=,DESC=,PROID=,HLRID=,SN= ... , The other parameters, please refer to 4.18.1

[Parameter Description]

Refer to 4.18.1

[Examples]

1. Query profile:

Qry Pro: PROID=1000,HLRID=1;

ACK:QRY PRO: RETN=000000, DESC=success, PROID=1000,PRODESC=1000, PROSTATE=1,HLRID=1,NAM=2,SUBTYPE=1,MSTYPE=10,EXTTYPEID=0,SMSROUTERID=0,ZCSET=65535,CTRLSCHEID=255,ARDFG=0,ARD=0,SMMT=1,SMMO=1,BOC=2,BIC=0, BR=2,BPOS=0,BT=1,BIP=1,PLMNODB_3=1,PLMNODB_4=1,RSZICount=0,PSROAMSCHI D=0,CLIPOPT=1,CLIROPT=0,SMOPT=0,CHARGE=8,PDPCount=1,PDPType1=0,APN1=*, VPLMN1=0,ExtPDPType1=4,QoS1=3-3-4-2-9-31-2-1-2-3-150-3-4-2-62-104-104-255-255-0-0-0-0-0,pdpCharge1=8,STATE=0,LOCINFO=0,OCSITPL=0,TCSITPL=0,UCSITPL=0,TI

4.19 Dual IMSI

[Command code] Mod DualIMSI

[Command function] Subscribe DualIMSI Number

[Input Format]

Mod DualIMSI: IMSI/MSISDN= , DUALIMSI=

[Parameter Description]

S/ N	Para_Name		Para_Value					Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description		
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI	CS PS-GPRS PS-EP S	
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN	CS PS-GPRS PS-EP S	
3.	DualIMSI	DualIMSI Num ber	STRING	M	6..15	Input "*" means deleting Dual Imsi	CS PS-GPRS	

[Examples]

1. Subscribe DualIMSI service:

Mod DualIMSI:IMSI=4600000000000006,DualIMSI=4600000000000007;

4.20 Modify Subscriber ALS Service Information

[Command Code] Mod Als

[Command Function] Modify subscriber ALS service information.

[Input Format]

Mod Als: IMSI/MSISDN=, LINE2NUM=

[Parameter Description]

S/ N	Para_Name		Para_Value					Network Access Mode
	Name	Meaning	Type	At tr.	Code Length	Para_value Description		
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number	CS PS-GPRS PS-E PS	

2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number	CS PS-GPRS PS-EP
3.	LINE2NUM	Line2 MSISDN	NUMSTR	M	6..15	Line 2 MSISDN Number “*” refers to ALS service desubscription. Others refer to subscribe ALS service	CS PS-GPRS

[Examples]

1. Subscribe ALS service:

Mod Als:imsi=460000000000310,Line2Num=8613900000311;

2. Desubscribe ALS service:

Mod Als:imsi=460000000000310,Line2Num=*

4.21 Query QoS Profile ID List Information

[Command Code]Qry QosID

[Command Function]Query QoS Profile ID List Information。

[Input Format]

Qry QosID: [HlrNumber=]

[Output Format]

ACK:Qry QosID:RETN=,DESC=, IDCount= [, IDList=]

[Parameter Description]

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code length	Para_value Description
1.	HlrNumber	HLR number (request parameter)	NUMSTR	O	1..16	HLR number. If this parameter is provided, QoS Profile ID list information under HLRNUMBER is queried. If this parameter is not provided, all QoS Profile IDs are queried. The QoS Profile IDs with the same ID of different HLRNUMBER are displayed as one ID in the list
2.	RETN	Operation result code	NUMSTR	M	6	See appendix 1

3.	DESC	Operation result description	STRING	M	1..256	See appendix 1
4.	IDCount	Count of QoS Profile	NUMSTR	M	1..3	0~250
5.	IDList	QoS Profile ID list	STRING	O	1..999	In case of IDCount>0, this parameter exists. For QoS Profile ID list, two adjacent IDs should be separated by "-". For example, for two QoS Profile ID 1 and 250, then ID list is 1-250

[Examples]

1. Query all the QoS Profile ID information in HLR:

Qry QoSID:HLRNUMBER=86139001000;

ACK:Qry QoSID: RETN=000000, DESC=success, IDCount=4, IDLIST=1-2-3-4

4.22 EPC Services**4.22.1 Set Subscription Information of EPC Basic Service****[Command function]**

Set Subscription Information of EPC Basic Service

[Input format]

```
Set EPCBsc: IMSI/MSISDN= [,EPCCHARGCHRT=]
[,EPCROAMSCH=][,EPCSTNSR=][,EPCAMBRUP=][,EPCAMBRDOWN=]
[,EPCAPNOIRep=][,EPCRFSR=][,EPCICSIND=][,EPCDFTAPN=][,EPCDFTAPNType=]
[,EPCDFTAPNID=][,EPCN3ARD_0=][,EPCN3ARD_1=][,EPCN3ARD_2=]
[,EPCN3ARD_3=][,EPCN3ARD_4=][,EPCN3IPACC=][,EPCN3IPACCAPN=]
[,EPCSTIMEOUT=][,NO3GPPROAMSCH=][,EPCRELAYNODEIND=]
[,SupMIP6FeaVec=][,MIP6FeaVec_1=][,MIP6FeaVec_2=][,MIP6FeaVec_3=]
[,MIP6FeaVec_4=][,MIP6FeaVec_5=][,MIP6FeaVec_6=][,MIP6FeaVec_7=]
[,MIP6FeaVec_8=][,MIP6FeaVec_9=][,EPCROAMSCHID=][,EPCVSRVCC=][,MPSEPSP
RIORITY=]
```

[Description of output parameter]

S/N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN

3.	EPCCHAR GCHRT	Charging features of EPC subscription	NUMSTR	O	3	Value:0~255 0: No Charging 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4
4.	EPCROA MSCH	EPC Roaming Scheme Name	STRING	O	1..30	"*" indicates no roaming scheme subscription, Other data can be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". EPCROAMSCHID and EPCROAMSCH should not exist simultaneously.
5.	EPCSTNS R	Session Transfer Number for SRVCC	NUMSTR	O	6..15	ISDN Number
6.	EPCAMBR UP	Max-Requested-Bandwidth-UL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295
7.	EPCAMBR DOWN	Max-Requested-Bandwidth-DL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295
8.	EPCAPNO IRep	APN-OI-replacement	STRING	O	1..64	The valid value is like: mnc.mcc.gprs '*' indicates no subscription.
9.	EPCRFP	RAT-Frequency-Selection-Priority-ID	NUMSTR	O	1..3	0~256, 0 indicates no subscription.



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10.	EPCICSDIN D	ICS flag	NUMSTR	O	1	1: True 0,: Flase
11.	EPCDFTA PN	APNConf defalt Access name	STRING	O	1..62	It should not be '*', Other data could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration".
12.	EPCDFTA PNTYPE	The type of defalt Access PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6
13.	EPCDFTA PNID	defalt APN Configration flag	NUMSTR	O	1..2	0~50, EPCDFTAPN and EPCDFTAPNID should not exist simultaneously.
14.	EPCN3AR D_0	non-3GPP Access restriction parameter of WLAN Not Allowed	NUMSTR	O	1	0: Allow to access WLAN 1: Not allow to access WLAN
15.	EPCN3AR D_1	non-3GPP Access restriction parameter of CDMA2000_1X Not Allowed	NUMSTR	O	1	0: Allow to access CDMA2000_1X 1: Not allow to access CDMA2000_1X
16.	EPCN3AR D_2	non-3GPP Access restriction parameter of HRPD Not Allowed	NUMSTR	O	1	0: Allow to access HRPD 1: Not allow to access HRPD
17.	EPCN3AR D_3	non-3GPP Access restriction parameter of UMB Not Allowed	NUMSTR	O	1	0: Allow to access UMB 1: Not allow to access UMB
18.	EPCN3AR D_4	non-3GPP Access restriction parameter of EHRPD Not Allowed	NUMSTR	O	1	0: Allow to access EHRPD 1: Not allow to access EHRPD
19.	EPCN3IP	whether allow the	NUMSTR	O	1	0: allow to access EPC

	ACC	user to access EPC from non-3GPP network				network by non-3GPP 1: do not allow to access EPC network by non-3GPP
20.	EPCN3IP ACCAPN	whether disable all APNs for a subscriber at one time	NUMSTR	O	1	0: Enable all APNs for a subscriber 1: Disable all APNs for a subscriber
21.	EPCSTIM EOUT	the maximum period for a session measured in seconds	NUMSTR	O	1..10	0~2147483647(s)
22.	NO3GPP ROAMSC H	No 3GPP Roaming Scheme Name.	STRING	O	1..30	"*" indicates no roaming scheme subscription, Other data can be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration".
23.	EPCRELA YNODEIND	EPC Relay Node Indicator	NUMSTR	O	1..3	0: NOT_RELAY_NODE 1: RELAY_NODE 255: NONE
24.	SupMIP6 FeaVec	MIP6-Feature-Vector	NUMSTR	O	1	1: subscription 0: no subscription
25.	MIP6Fea Vec_1	Whether support MIP6_INTEGRATED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
26.	MIP6Fea Vec_2	Whether support LOCAL_HOME_ASSIGNMENT	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
27.	MIP6Fea Vec_3	Whether support PMIP6_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
28.	MIP6Fea Vec_4	Whether support IP4_HOA_SUPPORT	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support

29.	MIP6Fea Vec_5	Whether support LOCAL_MAG_ROUTI NG_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
30.	MIP6Fea Vec_6	Whether support ASSIGN_LOCAL_IP	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
31.	MIP6Fea Vec_7	Whether support MIP4_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
32.	MIP6Fea Vec_8	Whether support OPTIMIZED_IDLE_ MODE_MOBILITY	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
33.	MIP6Fea Vec_9	Whether support GTPv2_SUPPORTED	NUMSTR	O	1	Valid when SupMIP6FeaVec=1 0: not support 1: support
34.	EPCROA MSCHID	EPC Roaming Scheme ID	STRING	O	1..5	value range: 0~65535, 0 indicates no roaming scheme subscription, other data could be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->Roaming Schema Configuration". EPCROAMSCHID and EPCROAMSCH should not exist simultaneously.
35.	EPCVSERV CC	Subscribed VSRVCC	NUMSTR	O	1	0: De-subscribe 1: Subscribed
36.	MPSEPSP RORITY	MPS-EPS-PRIORITY	NUMSTR	O	1	0: De-subscribe 1: Subscribed

[Notes]

1. The interface for NAM=0/2 users.

[Examples]

1. Set Subscription Information of EPC Basic Service:

Set

```
EPCBsc:IMSI=4600000000000000,EPCCHARGCHRT=255,EPCRFSR=254,EPCSTNS
R=8613900000111,EPCAPNOIREP=1234567890abcdefghijklmnoprstuvwxyz,EPC
ICSIND=1,EPCAMBRUP=9990,EPCAMBRDOWN=8000,EPCROAMSCH=allow,NO3
GPPROAMSCH=allow,EPCRELAYNODEIND=1,SUPMIP6FEAVEC=1,MIP6FEAVEC_1
=1,MIP6FEAVEC_2=1,MIP6FEAVEC_3=1,MIP6FEAVEC_4=1,MIP6FEAVEC_5=1,MI
P6FEAVEC_6=1,MIP6FEAVEC_7=1,MIP6FEAVEC_8=1,MIP6FEAVEC_9=1;
```

4.22.2 Add APN Context Configuration(EPC)
[Command function]

Add APN Context Configuration of EPC Subscriber

[Input format]

```
Add APNPROF : IMSI/MSISDN=, EPCAPN= [,PDNType=] [,EPCPDNNUM=]
[,EPCPDNTYPE1=] [,EPCPDNAddr1=][,EPCPDNTYPE2=][,EPCPDNAddr2=][EPSQOS=]
[,EPSQOSID=][,VPLMNDA=][,PDNGWATYPE=][,EPCPDNGWNUM=][,EPCPDNGWTYP
E1=][,EPCPDNGWAddr1=][,EPCPDNGWTYP2=][,EPCPDNGWAddr2=][,PDNGWFQDN
Host=][,PDNGWFQDNRealm=][,APNCHARGE=][,APNAMBRUP=][,APNAMBRDOWN=][
,APNOIRep=][,APNLIPAP=]
```

[Description of output parameter]

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
3.	EPCAPN	APNConf Access name	STRING	M	1..62	It could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration".
4.	PDNType	The type of PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6

						3: IPv4_OR_IPv6 Default: 0
5.	EPCPDNNUM	The number of PDN IP Address	NUMSTR	O	1	The valid value: 0~2
6.	EPCPDNTYPE1	The type of PDN IP Address1	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 Default: 0
7.	EPCPDNAddr1	PDN IP Address1	STRING	O	1..39	If EPCPDNTYPE1 is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If EPCPDNTYPE1 is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digit. * Indicates no subscription.
8.	EPCPDNTYPE2	The type of PDN IP Address2	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 Default: 0 EPCPDNTYPE1 and EPCPDNTYPE2 should not be IPV4 or IPV6 simultaneously.
9.	EPCPDNAddr2	PDN IP Address2	STRING	O	1..39	If EPCPDNTYPE2 is IPV4, its format is xxx.xxx.xxx.xxx, xxx is decimal digit. If EPCPDNTYPE2 is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digit. * Indicates no subscription. EPCPDNAddr1 and EPCPDNAddr2 should not be IPV4 or IPV6 simultaneously.



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10.	EPSQOS	APN Configuration Service Quality	STRING	C	7..10	Ignored when EPSQOSID exists. Please refer to the description.
11.	EPSQOSID	EPS Qos Profile ID	NUMSTR	C	1..3	1~255. It could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->EPS Subscribed QOS Profile Configuration". Either of EPSQOSID and EPSQOS must be exist. If both of them exist, EPSQOS will be ignored.
12.	VPLMNDAAM	Dynamic VPLMN allowed	NUMSTR	O	1	0: not permit 1: permit Default: 0
13.	PDNGWATYPE	PDN GW allocation type	NUMSTR	O	1	0: static 1: dynamic Default: 0
14.	ECPDNGWNU M	The number of PDN-GW IP Address	NUMSTR	O	1	The valid value: 0~2
15.	ECPDNGWT YPE1	The type of PDN-GW IP Address1	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 Default: 0
16.	ECPDNGWAd dr1	PDN-GW IP Address1	STRING	O	1..39	If ECPDNGWTYPE1 is IPV4, its format is xxx.xxx.xxx.xxx, xxx is decimal digit. If ECPDNGWTYPE1 is IPV6, Its format is xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is

						hexadecimal digit. * Indicates no subscription.
17.	EPCPDNGWTY PE2	The type of PDN-GW IP Address2	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 Default: 0 EPCPDNGWTYPE1 and EPCPDNGWTYPE2 should not be IPV4 or IPV6 simultaneously.
18.	EPCPDNGWAd dr2	PDN-GW Address2	IP STRING	O	1..39	If EPCPDNGWTYPE2 is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If type is IPV6, Format: xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx; xxxx is hexadecimal digit. * Indicates no subscription. EPCPDNGWAddr1 and EPCPDNGWAddr2 should not be IPV4 or IPV6 simultaneously.
19.	PDNGWFQDN Host	The Host of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z) , numbers (0~9), connectors (-) , the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates not Subscribed.
20.	PDNGWFQDNR ealm	The Realm of FQDN of PDN GW	STRING	O	1..128	Composed by letter (A-Z and a-z) , numbers (0~9), connectors (-) , the delimiter (.), which can only be letters or numbers to the beginning

						and the end, cannot have a continuous separator (.). “*” indicates not Subscribed.
21.	APNCHARGE	Charging features of APNCONFIG	NUMSTR	O	1..3	Value:0~255 0: No Charging 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4 Default: 0
22.	APNAMBRUP	Max-Requested-Bandwidth-UL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 Default: 0
23.	APNAMBRDOWN	Max-Requested-Bandwidth-DL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	0~4294967295 Default: 0
24.	APNOIRep	APN-OI-replacement	STRING	O	0..64	Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates not Subscribed.
25.	APNLIPAP	LIPA Permission	NUMSTR	O	1..3	0: LIPA Prohibited 1: LIPA Only 2: LIPA Conditional 255:NONE

[Notes]

1. The interface for NAM=0/2 users.
2. The listed couple parameters should exist together: EPCPDNTYPE1 and EPCPDNAaddr1, EPCPDNTYPE2 and EPCPDNAaddr2, EPCPDNGWTYPE1 and EPCPDNGWAddr1, EPCPDNGWTYPE2 and EPCPDNGWAddr2.
3. When the parameters EPCPDNTYPE1 and EPCPDNTYPE2 exist, their value could not be same.
4. When carrying the parameter EPCPDNGWNUM, if EPCPDNGWTYPE2 and EPCPDNGWAddr2 exist, there must be EPCPDNGWTYPE1 and EPCPDNGWAddr1. EPCPDNGWAddr1 or EPCPDNGWAddr2 is not allowed to be *.

When not carrying the parameter EPCPDNGWNUM, the couple parameters of EPCPDNGWTYPE1 and EPCPDNGWAddr1, EPCPDNGWTYPE2 and EPCPDNGWAddr2 can be existed separately.* can be carried with EPCPDNGWAddr1 or EPCPDNGWAddr2, indicating that the address information would not be subscribed.

5. When carrying the parameter EPCPDNNUM, if EPCPDNTYPE2 and EPCPDNAaddr2 exist, there must be EPCPDNTYPE1 and EPCPDNAaddr1. EPCPDNAaddr1 or EPCPDNAaddr2 is not allowed to be *.
- When not carrying the parameter EPCPDNNUM, the couple parameters of EPCPDNTYPE1 and EPCPDNAaddr1, EPCPDNTYPE2 and EPCPDNAaddr2 can be existed separately. * can be carried with EPCPDNAaddr1 or EPCPDNAaddr2, indicating that the address information would not be subscribed.
6. When the EPCAPN's value is *, the PDNGWATYPE's value must be 1.
7. Both of the parameters PDNGWFQDNHost and PDNGWFQDNRealm should be valid together, if either of them's value is *, both of them would be *.
8. When the value of PDNGWATYPE is 0, one of the parameters EPCPDNAaddr1, EPCPDNAaddr2 and PDNGWFQDNHost(PDNGWFQDNRealm should exist simultaneously) should be valid at least.
9. Input Format of Parameter EPSQOS:

Separate each parameter of QoS with "-". For example, in the form x-x-x-x.

The value range of each parameter of EPSQOS is below:

1	EPSQCI	EPS QoS type flag:	Value range 0~255. 0~255 example: 0: Reserved 1: Conversational Voice 2: Conversational Video (Live Streaming) 3: Real Time Gaming 4: Non-Conversational Video (Buffered Streaming) 5: IMS Signalling 6: Video (Buffered Streaming) TCP-based (e.g., www, e-mail, chat, ftp, p2p file sharing, progressive video, etc.) 7: Voice, Video (Live Streaming) Interactive Gaming 8~9: Video (Buffered Streaming) TCP-based (e.g., www, e-mail, chat, ftp, p2p file sharing, progressive video, etc.) 10~127: Reserved 128~254: Operator Specific 255: Reserved
2	ARPPRILEVEL	ARP Priority Level	1~15
3	ARPPREEMPTCAP	ARP Pre-emption Ability	0: Enabled; 1: Disabled. Default : 1
4	ARPPREEMPTVUL	ARP Pre-emption Vulnerability	0: Enabled; 1: Disabled. Default : 0

[Examples]

1. Add APN Subscription Information of Subscriber by configuration profile:
add
APNPROF:IMSI=4600000000000000,EPCAPN=1,EPSQOS=0-1-1-0,VPLMNDAA=0,E
PCPDNNUM=2,EPCPDNTYPE1=0,EPCPDNAaddr1=4.4.5.6,EPCPDNTYPE2=1,EPCPD
NAddr2=1291:1111:1111:1291:1291:1291:1291:1291,EPCPDNGWNUM=2,EPCPD
NGWTYPE2=1,EPCPDNGWAddr2=1291:1111:1111:1291:1291:1291:1291:1291,E
PCPDNGWTYPE1=0,EPCPDNGWAddr1=4.4.5.6;

4.22.3 Modify APN Context Configuration(EPC)**[Command function]**

Modify APN Context Configuration of EPC Subscriber

[Input format]

MOD APNPROF : IMSI/MSISDN= [,OEPCAPN/OAPNCFGID=][, OPDNTYPE=]
[,OEPCADDROPTION=][,PDNType=][,EPCPDNNUM=][,EPCPDNTYPE1=][,EPCPDNAAd

dr1=][,EPCPDNType2=][,EPCPDNAddr2=][,EPSQOS=][,EPSQOSID=][,VPLMNDA=][,
 PDNGWATYPE=][,EPCPDNGWNUM=][,EPCPDNGWTYPE1=][,EPCPDNGWAddr1=][,EPC
 PDNGWTYPE2=][,EPCPDNGWAddr2=][,PDNGWFQDNHost=][,PDNGWFQDNRealm=][,
 APNCHARGE=][,APNAMBRUP=][,APNAMBRDOWN=][,APNOIRep=][,APNLIPAP=]

[Description of output parameter]

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
3.	OAPNCFGID	Old APN Configuration flag	NUMSTR	C	1..2	The valid value: 1~50
4.	OEPCAPN	Old APNConf Access name	STRING	C	1..62	It could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration". One of OAPNCFGID and OEPCAPN must exist, and should not exist simultaneously.
5.	OPDNTYPE	Old The type of PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6
6.	OEPCAddrOpti on	Old PDN GW allocation option	NUMSTR	O	1	1: static
7.	PDNTYPE	The type of PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6



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						When the parameters OPDNType and PDNType are valid, PDNType's value is accepted.
8.	EPCPDNNUM	The number of PDN IP Address	NUMSTR	O	1	The valid value: 0~2
9.	EPCPDNTYPE1	The type of PDN IP Address1	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6
10.	EPCPDNAddr1	PDN IP Address1	STRING	O	1..39	If EPCPDNTYPE1 is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If EPCPDNTYPE1 is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx; xxxx is hexadecimal digit.
11.	EPCPDNTYPE2	The type of PDN IP Address2	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 EPCPDNTYPE1 and EPCPDNTYPE2 should not be IPV4 or IPV6 simultaneously.
12.	EPCPDNAddr2	PDN IP Address2	STRING	O	1..39	If EPCPDNTYPE2 is IPV4, Its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If EPCPDNTYPE2 is IPV6, Its format is xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx; xxxx is hexadecimal digit. EPCPDNAddr1 and EPCPDNAddr2 should not be IPV4 or IPV6 simultaneously.
13.	EPSQOS	APN Configuration Service Quality	STRING	O	3..10	Ignored when EPSQOSID exists.

						Refer to the description.
14.	EPSQOSID	EPS Qos Profile ID	NUMSTR	O	1..3	0~255. 0 indicates no EPSQOSID, other data could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->EPS Subscribed QOS Profile Configuration". If both of EPSQOSID and EPSQOS exist, EPSQOS will be ignored.
15.	VPLMNDAAC	Dynamic VPLMN allowed	NUMSTR	O	1	0:not permit 1:permit
16.	PDNGWATYPE	PDN GW allocation type	NUMSTR	O	1	0: static 1: dynamic
17.	EPCPDNGWNU M	The number of PDN-GW IP Address	NUMSTR	O	1	The valid value: 0~2
18.	EPCPDNGWTY PE1	The type of PDN-GW IP Address1	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6
19.	EPCPDNGWAd dr1	PDN-GW IP Address1	STRING	O	1..39	If EPCPDNGWTYTYPE1 is IPV4, its format is xxx.xxx.xxx.xxx; xxx is decimal digit. If EPCPDNGWTYTYPE1 is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx:xxxx; xxxx is hexadecimal digit.
20.	EPCPDNGWTY PE2	The type of PDN-GW IP Address2	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 EPCPDNGWTYTYPE1 and EPCPDNGWTYTYPE2 should not be IPV4 or IPV6



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						simultaneously.
21.	EPCPDNGWAd dr2	PDN-GW Address2	IP	STRING	O	1..39 <p>If EPCPDNGWTYPE2 is IPV4, its format is xxx.xxx.xxx.xxx, xxx is decimal digit. If EPCPDNGWTYPE2 is IPV6, its format is xxxx:xxxx:xxxx:xxxx:xxxx :xxxx:xxxx:xxxx, xxxx is hexadecimal digit. EPCPDNGWAddr1 and EPCPDNGWAddr2 should not be IPV4 or IPV6 simultaneously.</p>
22.	PDNGWFQDN Host	The Host of FQDN of PDN GW	STRING	O	1..128 <p>Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates De-subscribe</p>	
23.	PDNGWFQDNR ealm	The Realm of FQDN of PDN GW	STRING	O	1..128 <p>Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (.). “*” indicates De-subscribe</p>	
24.	APNCHARGE	Charging features of APNCONFIG	NUMSTR	O	1..3 <p>Value:0~255 0: No Charging 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2</p>	

						64: Behaviour3 128: Behaviour4
25.	APNAMBRUP	Max-Requested-Bandwidth-UL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	The APN Configuration parameters, 0~4294967295
26.	APNAMBRDOWN	Max-Requested-Bandwidth-DL of UE-AMBR(Aggregate Maximum Bit Rate)	NUMSTR	O	1..10	The APN Configuration parameters, 0~4294967295
27.	APNOIRep	APN-OI-replacement	STRING	O	0..64	Composed by letter (A-Z and a-z), numbers (0~9), connectors (-), the delimiter (.), which can only be letters or numbers to the beginning and the end, cannot have a continuous separator (..). "*" indicates De-subscribe
28.	APNLIPAP	LIPA Permission	NUMSTR	O	1..3	0: LIPA Prohibited 1: LIPA Only 2: LIPA Conditional 255:NONE

[Notes]

1. The interface for NAM=0/2 users.
2. The command to clear all PDNGW address is

Mod APNPROF:IMSI=, OEPCAPN=, PDNType=, EPCPDNGWNUM=0.

Conditions of use: PDNGW type is dynamic, or PDNGW type is static and PDNGWFQDNHost exists at the same time.

3. The command to modify two PDNGW addresses to one PDNGW address is:

Mod APNPROF:IMSI=, OEPCAPN=, PDNType=, EPCPDNGWNUM=1, EPCPDNGWTYPE1=, EPCPDNGWAddr1=.

4. For other information, refer to the notes of Section 4.22.2.
5. OPDNTYPE and OEPCADDROPTION are reserved parameters, temporarily not in use.

[Examples]

1. Modify APN Subscription Information of Subscriber by configuration profile:

```
mod APNPROF:IMSI=4600000000000000,  
OEPCAPN=1,EPSQOS=0-1-1-0,VPLMNDAA=0,EPCPDNNUM=2,EPCPDNTYPE1=0,
```

EPCPDNAddr1=4.4.5.6,EPCPDNTYPE2=1,EPCPDNAddr2=1291:1111:1111:1291:1
 291:1291:1291:1291,EPCPDNGWNUM=2,EPCPDNGWTYPE2=1,EPCPDNGWAddr2
 =1291:1111:1111:1291:1291:1291:1291,EPCPDNGWTYPE1=0,EPCPDNGW
 Addr1=4.4.5.6;

4.22.4 Delete APN Context Configuration(EPC)

[Command function]

Delete APN Context Configuration of EPC Subscriber

[Input format]

Del APNPROF : IMSI/MSISDN=[,EPCAPN/APNCFGID =] [,PDNType=]

[Description of output parameter]

S / N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
3.	EPCAPN	APNConf Access name	STRING	C	1..62	It could be obtained from the OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration".
4.	PDNType	The type of PDN Address	NUMSTR	O	1	Choose the value from the following: 0: IP V4 1: IP V6 2: IPv4v6 3: IPv4_OR_IPv6
5.	APNCFGID	APN Configuration flag	NUMSTR	C	1..2	The valid value: 1~50, Either APNCFGID or EPCAPN must exist, and should not exist simultaneously.

[Notes]

1. The interface for NAM=0/2 users.
2. The default EPCAPN should be deleted at last.

3. PDNType is reserved parameter, temporarily not in use.

[Examples]

1. Delete APN Subscription Information of Subscriber by configuration profile:
Del APNPROF : IMSI=4600000000000000, APNCFGID =2;

4.22.5 Modify APNCP template of subscriber

【Command code】 Set TPLAPNCP

【Command function】 Modify APN template

【Input format】

Set TPLAPNCP: IMSI/MSISDN= [, EPCAPNCPTPL=] [,EPCCCHARGCHRT =]

【Parameter Description】

S/ N	Para_Name		Para_Value			
	Name	Type	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI Number
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN Number
3.	EPCAPNCPTPL	APNCP Template ID	NUMSTR	O	1...3	0~255, It could be obtained from OMC configuration "WCN Domain Service Configuration->EPC Service Configuration->APN CP Template Configuration". 0 indicates no APNCPTPL.
4.	EPCCCHARGCHRT	EPS Charging Feature	NUMSTR	O	1..3	Value:0~255 0: No charging 1: Hot Billing 2: Flat Rate 4: Prepaid Service 8: Normal Billing 16: Behaviour1 32: Behaviour2 64: Behaviour3 128: Behaviour4

[Notes]

1. The interface for NAM=0/2 users.
2. It would return success, when the parameter EPCAPNCPTPL does not exist.

[Examples]

1. Modify APN template:

Set TPLAPNCP:IMSI=4600000000000000,EPCAPNCPTPL=2, EPCCHARGCHRT=23;

4.23 CSG Service
4.23.1 Subscribe CSG
[Command function]

Add or modify the CSG subscription information of subscriber.

[Input format]

Mod Csg : IMSI/MSISDN=, EPCCSGID= [, EPCEExpirationDate=][,CSGAPN=]

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
2.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
3.	EPCCSGID	CSG ID	STRING	M	1..9	Value range 1~134217727
4.	EPCExpiratio nDate	CSG Expiration Date	STRING	O	14	Format: YYYYMMDDHHMMSS From left to right: YYYY-year MM-month DD-day HH-hour MM-minute SS-second For example: 20070411130035means 13:00:35, Apr 11, 2007 00000000000000 means

						to delete CSG-ID Expires
5.	CSGAPN	APN List	STRING	O	1..62*50 +49	Each APN can be obtained from OMC configuration data "WCN Domain Service Configuration->EPC Service Configuration->APN Name Configuration", and the maximal number is 50, separated with "\$". When the value of CSGAPN is \$, it means De-subscribed.

[Notes]

1. The interface for NAM=0/2 users.
2. If CSGID has been subscribed, update the CSG data; if CSGID has not been subscribed, add a new CSG group .

[Examples]

1. ADD or Modify CSG subscription information of subscriber:

Mod Csg :

IMSI=4600000000000000,EPCCSGID=1,EPCEExpirationDate=20000101000001;

4.23.2 Delete CSG

[Command function]

Delete CSG subscription information of subscriber.

[Input format]

Del Csg : IMSI/MSISDN=, EPCCSGID=

[Description of output parameter]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
2.	MSISDN	Mobile Station International ISDN	NUMSTR	M	6..15	MSISDN

		Number				
3.	EPCCSGID	CSG ID	NUMSTR	M	1..9	Value range 1~134217727

[Notes]

1. The interface for NAM=0/2 users.

[Examples]

1. Delete CSG subscription information of subscriber:

Del Csg:IMSI=4600000000000000,EPCCSGID=2;

4.24 Extension Service

4.24.1 SET Extension Service

[Command function]

Set Extension Service.

[Input format]

Set ExtSrv:

IMSI/MSISDN=[,ExtSrv=[,GrpType=[,Reg=[,ExtBsg=[,ACTIVEDN=[,RINGFIRST=[
[,GrpList1=[,GrpList2=[, GrpList3=[,GrpList4=[,GrpList5=[

[Description of input parameter]

S/N	Para_Name		Para_Value			
	Name	Type	Type	Attr.	Code Length	Para_value Description
14.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI number
15.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	Basic ISDN number
16.	ExtSrv	Extension service provision state	NUMSTR	O	1	0: not subscribed 1: subscribed
17.	Reg	Extension service register state	NUMSTR	O	1	0: not registered 1: register Only when ExtSrv=1, this parameter can be input.
18.	GrpType	Group type	NUMSTR	O	1	0: Single

						1: Multiple Only when ExtSrv=1 and Reg=1, this parameter can be input.
19.	ExtBsg	Extension service BC	NUMSTR	O	1	0: TS11 1: TSD1 3: SKIP Only when ExtSrv=1 and Reg=1, this parameter can be input.
20.	ACTIVEDN	Active SIM card	NUMSTR	O	1..15	Specify the only one SIM Card to be activated. If no valid MSISDN is specified, all the MSISDNs are allowed to use. "**" indicates delete the ACTIVEDN
21.	RINGFIRST	Ring first SIM card	NUMSTR	O	1..15	Specify the SIM Card to be first alerted. "**" indicates delete the RINGFIRST
22.	GrpList1	Group List 1	NUMSTR	O	7..84	1) Only when ExtSrv=1 and Reg=1, this parameter can be input; 2) If Reg=1, GrpList1,GrpList2, GrpList3,GrpList4,GrpList5 present at least one list; 3) GrpList1 consists of Group type,time,maximum 3 groups of MSISDNs, and they are separated by '-'; 4) The value of Group type is the same as GrpType; The value of time is a multiple of 5, between 5 and 90;MSISDN is character string of 3 to 15 digits; 5) GrpType and Time is mandatory parameter for GrpList1; 6) At least one valid MSISDN is provided in GrpList1.If there are multiple MSISDNs,each MSISDN

						separated by '&' 7) Example: Example1: GrpList1=1-20-86139001&86139002 &86139003 Example2:GrpList1=0-30-86139001 Example3:GrpList1=0-90-86139001 &1234
23.	GrpList2	Group List 2	NUMSTR	O	7..84	Refer to GrpList1
24.	GrpList3	Group List 3	NUMSTR	O	7..84	Refer to GrpList1
25.	GrpList4	Group List 4	NUMSTR	O	7..84	Refer to GrpList1
26.	GrpList5	Group List 5	NUMSTR	O	7..84	Refer to GrpList1

[Notes]

1. The interface for NAM=0/1 users.

[Examples]

1. Modify the information of Extension Service:

Set ExtSrv:

IMSI=460000000000101,ExtSrv=1,GrpType=1,Reg=1,GrpList1=0-20-1243&861394,
GrpList3=0-20-1243&87139;

4.25 ADC Services

4.25.1 IMEISV Change Inform Interface

[Command code] INF IMEISVCHG

[Command function] IMEISV change inform

[Output Format] Inform request

INF IMEISVCHG:IMSI=,MSISDN=,NEWIMEISV=

[Input format] Inform response

ACK: INF IMEISVCHG:RETN=,DESC=,IMSI =

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1

2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
4.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
5.	NEWIMEIS V	International mobile equipment identity and software version	NUMSTR	M	1..16	IMEISV
Note: After sending IMEISV change information, HLR will wait for response. If no response is returned, HLR will repeat for as many times as it is being set.						

4.25.2 Delete subscriber Inform Interface

[Command code] INF DELUSER

[Command function] Delete subscriber Inform

[Output Format] Inform request

INF DELUSER:IMSI/MSISDN=

[Input format] Inform response

ACK: INF DELUSER:RETN=,DESC=,IMSI/ MSISDN =

[Parameter Description]

S/ N	Para_Name		Para_Value			
	Name	Meaning	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	IMSI	International Mobile Subscriber Identity	NUMSTR	O	6..15	IMSI
4.	MSISDN	Mobile Station International ISDN Number	NUMSTR	O	6..15	MSISDN

Note: After sending delete subscriber information, HLR will wait for response. If no response is returned, HLR will repeat for as many times as it is being set.

4.25.3 IMEISV Initial Inform Interface

【Command code】 INF IMEISVINIT

【Command function】 IMEISV Initial Inform

【Output format】 Inform Request

INF IMEISVINIT: MSISDN=, IMSI=, IMEI=

【Input format】 Inform Response

ACK: INF IMEISVINIT:RETN=,DESC=

【Description of input parameter】

S / N	Para_Name		Para_Value			
	Name	Type	Type	Attr.	Code Length	Para_value Description
1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
4.	IMSI	International Mobile Subscriber Identity	NUMSTR	M	6..15	IMSI
5.	IMEI	International Mobile Equipment Identity	NUMSTR	M	6..15	IMEI
Note: After sending IMEISV initial information, HLR will wait for response. If no response is returned, HLR will repeat for as many times as it is being set.						

4.25.4 APN Change Inform Interface

【Command code】 INF APNCHG

【Command function】 APN Change Inform

【Output format】 Inform Request

INF APNCHG: MSISDN=,APN=,TRIGGER=

【Input format】 Inform Response

ACK: INF APNCHG:RETN=,DESC=

【Description of input parameter】

S / N	Para_Name		Para_Value			
	Name	Type	Type	Attr.	Code Length	Para_value Description

1.	RETN	Operation result code	NUMSTR	M	6	Refer to Appendix 1
2.	DESC	Operation result description	STRING	M	1..256	Refer to Appendix 1
3.	MSISDN	Mobile Station International ISDN Number	NUMSTR	M	6..15	MSISDN
4.	APN	PDP Access Point Name	STRING	M	1..3149	If there are multiple APNs, each APN separated by space.
5.	TRIGGER	ADC trigger status	STRING	M	4..5	true false

Note: After sending APN change information, HLR will wait for response. If no response is returned, HLR will repeat for as many times as it is being set.

5 Appendix

5.1 Appendix 1 Operation Result Code

Table 1 Definition of Operation Result Code from HLR Interface Processor to BOSS Interface Processor

S/N	Operation Result Code	Description
1.	000000	success
2.	000001	Invalid data package
3.	000002	Session control digit error
4.	000003	Transaction control digit error
5.	000004	Grammar error or command code invalid
6.	000005	Session has already been established
7.	000006	Fail to access the proxy into the system
8.	000007	System internal error
9.	000008	Parameter[%] is error.
10.	000009	Command code mismatch
11.	000010	Operation number error
12.	000011	Operation timeout
13.	000012	Not authorized to access data
14.	000013	Operation authentication failure
15.	000025	Service name error

16.	000026	Message transferring failure
17.	000027	The system ends the current session by force
18.	000028	Operation code does not exist
19.	000031	The maximum subscriber LICENSE has been reached
20.	000032	The maximum operation LICENSE has been reached
21.	000033	Terminal ID error
22.	000034	Client transaction ID error
23.	000035	Fail to cancel the transaction
24.	000036	Session ID error
25.	000039	System overload and operation request is prohibited
26.	000040	The processing results between HLR are not consistent
27.	000041	HLR office information is invalid
28.	000042	The DSAID does not support this nettype
29.	000043	Fail to get count of DSAID User
30.	000044	The length of number is invalid, the minimum length is X
31.	000101	The parameters are missing
32.	001001	Invalid user
33.	001002	Incorrect password
34.	001003	Login flag of the operator expired
35.	001004	Password of the operator expired
36.	001005	User is invalid or in blacklist
37.	001006	No access allowed in current time
38.	001008	This terminal not allowed to access in current time
39.	001009	Exceed the maximum times of the user's login
40.	001100	Version incompatible
41.	001101	The current operator is not authorized to log out this operator
42.	001102	The specified user has not logged in
43.	001103	Operator not exist
44.	011901	Reject boss request because of HLR module switch internal
45.	011902	Reject boss request because of HLR DR switch internal
46.	011903	Reject boss request because of manual set
47.	011904	Reject boss request because of the queue of other NE is full
48.	100001	Abnormal communication with HLR server
49.	100002	Profile is inexistent

50.	100003	HLR system time out
51.	100004	The length of message is incorrect
52.	100005	The No. of communication message packet with HLR server is wrong
53.	100087	Account has been locked
54.	100088	Account is inactive
55.	100089	Account has been overdue
56.	100090	Account has been locked because the password has been wrong continuously
57.	100091	Operator password is overdue
58.	100092	Operator account has been unlocked
59.	100255	hsmapp and dbio link is broken
60.	100998	Check code error
61.	100999	Starting ID error
62.	101000	Unknown error
63.	101001	Data inconsistent
64.	101002	The length of operation message is not multiple of 4
65.	101003	Non-MML or number of batch commands over 50
66.	101004	This command is forbidden
67.	101006	the user number is repeated
68.	101007	This command does not exist
69.	101008	The name of command is empty
70.	101009	The value of parameter is empty
71.	101010	The parameter repeats
72.	101020	Can not find the SIM card information
73.	101021	Missing The Primary Key NO
74.	101030	IMSI does not exist
75.	101040	ISDN is unavailable
76.	101041	MSID already exists
77.	101045	Can not find configuration data
78.	101050	Can not find the subscriber
79.	101051	The number already exists
80.	101060	IMSI number is occupied
81.	101061	The new IMSI is same as the old IMSI
82.	101062	The new MSISDN is same as the old MSISDN

83.	101063	IMSI is invalid
84.	101064	Mandatory parameter missed
85.	101065	Parameter value is invalid
86.	101066	Parameter name is invalid
87.	101067	IMSI and ISDN not match
88.	101068	The number does not match the vhlr configuration
89.	101069	Auth data is not integrated
90.	101100	The input number is not in range of database node
91.	101103	The parameter NAM in profile conflicts with AddUser Req
92.	101104	Operator has no AdminDomain right
93.	101105	Can not get key of KI
94.	101106	DUA Not Support the AdminDomain which the operator belong to
95.	101107	Can not get key of OPC
96.	101110	This Number is not MSISDN
97.	101310	The subscriber has no GPRS information
98.	101320	Query data failed
99.	101410	Subscriber type does not match
100.	101415	The relevant service of the subscriber has not subscribed
101.	101418	The authentication data not exists
102.	101420	IMSI and ISDN should not include the same number segment
103.	101600	The input IMSI flag is incorrect
104.	101605	can not process crossed number
105.	102100	SIM card has been inhabited
106.	103020	The CCNDC does not exist
107.	103030	The CCNDC has reached the maximum
108.	103040	The CCNDC is existing
109.	103050	Can not find the basic services group
110.	103900	The SIM card does not exist
111.	104010	The GPRS information of the subscriber does not exist
112.	104020	GPRS information already exists
113.	104030	The provided GPRS data not completed
114.	104070	The IP address is beyond the configuration range
115.	104080	Can not find the corresponding PDP information
116.	104090	PDP context already exists

117.	104091	The PDP context id is incorrect
118.	104100	PDP address already exists
119.	104105	The static PDP address is not illegal when the type of PDP is PPP
120.	104106	APN option conflicted
121.	104107	The type of PDP can not be identical when one user has two same APN
122.	104108	Invalid format of APN
123.	104110	The PDP information allowed to subscribe for user has reached the maximum
124.	104120	Query GPRS information failed
125.	104130	The subscriber should subscribe to at least one piece of PDP information
126.	104200	GPRS information is not full
127.	104202	The number of OCSI is more than one
128.	104203	The number of TCSI is more than one
129.	104204	The number of PDP context is more than one
130.	105009	Invalid supplementary service
131.	105010	The relevant supplementary service to the basic service groups has not been registered
132.	105015	Supplementary service is prohibited
133.	105018	Supplementary service number analysis error
134.	105020	Please remove related supplementary services before de-provision the basic services
135.	105021	Associated supplementary service shall be firstly de-subscribed before multiple number can be deleted or updated
136.	105030	Indicated supplementary services not provided
137.	105040	Indicated supplementary services provided
138.	105050	The eMLPP default priority level is higher than the maximum priority level
139.	105060	The forward number not registered
140.	105061	Non-Reply time only for CFNRy
141.	105062	The CFD address only for CFD
142.	105063	The corresponding service such as CFB/CFNRy/CFNrC wasn't provisioned when registering call forwarding default number
143.	105064	The CFD has been registered
144.	105065	CFD address missed in configuration data
145.	106010	The non MSISDN already exists

146.	106020	The entered rate is illegal
147.	106030	Multi ISDN has reached the maximum
148.	106040	Can not modify MSISDN
149.	106050	The non MSISDN does not exist
150.	106060	The basic service code is occupied
151.	106070	The entered rate is occupied
152.	106080	The basic service code is invalid
153.	108000	The camel parameter does not match the phase of camel
154.	108010	CAMEL basic services does not subscribed
155.	108020	CAMEL services does not subscribed
156.	108030	CAMEL 3 services does not subscribed
157.	108040	The TDP is unsupported
158.	108050	Can not find the CSI
159.	108055	The length of multinumber is not the same with the length of basic number
160.	108056	Standby database is prohibited to be accessed
161.	108057	Standby database node crossed
162.	108058	The roam scheme is not in home HLR
163.	108060	The SrvKey is beyond configuration range
164.	108070	The GSMSCF is beyond configuration range
165.	108071	SrvKey or GSMSCF address repeats with SCP
166.	108072	GSMSCF address is invalid
167.	108080	Missing OPhase
168.	108081	Missing OTDP
169.	108082	Missing OSK or OSKID
170.	108083	Missing OSCF or OSCFID
171.	108090	Missing TPhase
172.	108091	Missing TTDP
173.	108092	Missing TSK or TSKID
174.	108093	Missing TSCF or TSCFID
175.	108110	SMSCSI has reached the maximum
176.	108120	GPRSCSI has reached the maximum
177.	108130	OCSI has reached the maximum
178.	108131	The modified Camel conflicts with existed TDP

179.	108132	The group of CSI has reached the maximum
180.	108135	CSI must be provided
181.	108140	TCSI has reached the maximum
182.	108150	SSCSI has reached the maximum
183.	108151	here has no NC parameter of SS-CSI
184.	108160	UCSI has reached the maximum
185.	108170	MCSI has reached the maximum
186.	108180	VTCSI has reached the maximum
187.	108190	DCSI has reached the maximum
188.	108200	Conflict between SIP WIN and Camel which is supported CS
189.	108210	MGCSI has reached the maximum
190.	108220	MTSMSCSI has reached the maximum
191.	108221	CSG has reached the maximum
192.	108222	DYNAPN has reached the maximum
193.	108223	Basic Service and its corresponding Bearer capability not configured
194.	108224	Bearer capability index is not configured
195.	108225	Basic Service and its corresponding Bearer capability have been occupied
196.	109010	No LCSUE information exists
197.	110001	The database operation is error
198.	110005	The message head is not complete
199.	110006	The length of message is incorrect
200.	110008	Profile is invalid
201.	110009	The length of command is invalid
202.	110010	Bearer service not provided
203.	110011	The configuration data has been changed
204.	110012	The configuration data has no change
205.	110014	User subscription information length is greater than the system
206.	110015	Temporary memory allocation error
207.	110020	Teleservice not provided
208.	110021	The user of hlagent is illegal
209.	110022	The Password of hlagent is error
210.	110023	The hlagent is invalid
211.	110024	The operator group of the agent operator does not exist

212.	110025	You have no right of this operation
213.	110026	You have no right to operate the Physical number
214.	110027	You have no right to operate the Logical number
215.	110028	You have no right to operate the Physical number or the Logical number
216.	110029	You may need to log-in again
217.	110052	Get cfgData Failed
218.	110056	HLR Server has not initialized
219.	110057	The buffer of DBIO agent message has been full
220.	110058	The buffer of MAP message has been full
221.	110059	DBIO has timed out because there has no idle application processes
222.	110060	Send message to wrong module
223.	110100	The parameters are missing
224.	110101	Parameter(s) is illegal
225.	110107	ISDN number is occupied
226.	110108	IMSI has already been allocated by MSISDN
227.	110109	Subscriber does not exist
228.	110110	HLR not supporting long forwarded-to number
229.	110111	The same record existed in the database
230.	110112	Short Message not supporting long forwarded-to number
231.	110113	HLR not supporting CCBS
232.	110114	It is not existent or supported in the OMC configuration[XXX]
233.	110119	KeyID is not in the range of the configuration data
234.	110120	CF is activated
235.	110121	The subscriber only accesses CS
236.	110122	The subscriber only accesses PS
237.	110124	KeyID of OPc is not in the range of the configuration data
238.	110130	CB is activated
239.	110140	CB or CFU is activated
240.	110142	There are wrong user numbers in the r_hISDN
241.	110143	Can not operate the command besides SHLR User
242.	110144	Can not operate the command besides 3G or 2G User
243.	110151	The parameter does not occur in the command
244.	110152	The user id repeated
245.	110161	User data has no change

246.	110170	Roam scheme does not exist in configuration data
247.	110171	PS roam scheme does not exist in configuration data
248.	110180	VPLMN data inserting scheme does not exist in configuration data
249.	110181	Qos Profile ID does not exist in HLR configuration
250.	110182	SSET is not supported to subscribe in configuration data
251.	110183	RDI is not supported to subscribe in configuration data
252.	110184	When SSET/RDI is supported to subscribe in configuration data,it is not allowed to operate the corresponding Customized Supplementary alone
253.	110189	The NAM of ALS Subscriber cannot be PS only
254.	110190	Line2 number is not allowed be modified
255.	110191	Line2 number has been occupied
256.	110192	Line2 number is forbidden to delete Tele,EmegCall or PLMNTS_1
257.	110193	Line2 number is forbidden to use these services
258.	110194	Need to delete Als before deleting the user
259.	110195	Dual IMSI is out of allowed range
260.	110196	Dual IMSI is occupied
261.	110197	Dual IMSI and IMSI number are the same
262.	110198	The new IMSI is already Dual IMSI
263.	110199	The IMSI or NewIMSI already bound to other IMSI
264.	110200	Extension subscriber type does not exist in configuration data
265.	110201	OVID does not exist in configuration data
266.	110202	SMS Router does not exist in configuration data
267.	110203	bound relation error
268.	110204	not allow to bound relation in two admindomain
269.	110205	HSM key ID does not exist in configuration data
270.	110206	HSM Encrypt or Decrypt Failed
271.	110207	TriDESKeyID does not exist in configuration data
272.	110210	Call Barring is restricted by ODB
273.	110211	OSB forward number is restricted in user-defined ODB configuration data
274.	110212	No user-defined ODB in configuration data
275.	110213	Subscribe GPRS template above 50
276.	110214	GPRS template ID repeat between GPRSTPLADD and GPRSTPLDEL
277.	110218	Subscribe UCSI template above 60

278.	110219	UCSI template ID repeated
279.	110220	The forwarded-to number is invalid
280.	110221	Register forward-to number is restricted by OFA
281.	110230	Register forward-to number is restricted by ODB
282.	110240	The basic service group code BSCode is omitted in register forward-to number
283.	110250	The supplementary service is not activated
284.	110260	ODB restricts supplementary services,please remove the restriction in ODB first
285.	110270	The CUG group not existed
286.	110271	CUG groups have reached the maximum
287.	110272	CUG index already exists
288.	110273	Basic service not provided when provide CUG
289.	110274	CUG index not exists
290.	110275	The left four digits of parameter CUGIC are invalid
291.	110276	Outgoing barring is subscribed in CUG to which preference index belongs
292.	110277	CUG groups PrefIndex have reached the maximum
293.	110280	Short message forward platform address does not exist
294.	110281	Default short message forward platform address does not exist
295.	110282	Primary User not exist
296.	110283	User has not subscribed CMSISDN
297.	110284	Group Member Number Reach Limitation
298.	110285	Primary User forbids modifying CMSISDN
299.	110286	Unsubscribe the vice CMSISDN before unsubscribing Primary CMSISDN
300.	110287	Unsubscribe vice CMSISDN before deleting Primary user
301.	110288	Unsubscribe vice CMSISDN before Modifying ISDN of Primary user
302.	110289	Line2NUM subscribes Common MSISDN,need unsubscribing CMSISDN information first
303.	110290	Camel control strategy does not exist in configuration data
304.	110291	Camel control strategy does not support when CAMEL Control Policy Mode is 0
305.	110292	SDS control strategy does not exist in configuration data
306.	110300	Ki and KeyID Must be included both

307.	110301	OPc and OPcKeyID Must be included both
308.	110302	3DES conflicts with HSM
309.	110303	AES conflicts with HSM
310.	110306	Subscribed Teleservice exceeds the maximal count
311.	110307	The length of CCNDC is incorrect
312.	110308	The length of ZoneCode is incorrect
313.	110309	The OFAID is not in the range of the configuration data
314.	110310	Not Support FTN Analysis
315.	110420	The APN is not in the range of the configuration data
316.	110506	Invalid forward number
317.	110512	Supplementary service has been activated
318.	110513	Supplementary service has been de-activated
319.	110514	There has no forwarded-to number parameter
320.	110515	Customized ODB services not exist or not used in config data
321.	110516	Customized supplementary services do not exist or are not in config data
322.	110525	Parameter Bsg is Invalid
323.	110609	Can Not Change MSISDN for Non-Basic ISDN
324.	110610	The subscriber does not support GPRS Template
325.	110611	GPRS Template does not exist
326.	110612	The subscriber only supports GPRS Template
327.	110613	The subscriber does not support OCSI Template
328.	110614	OCSI Template does not exist
329.	110615	The subscriber only supports OCSI Template
330.	110616	The subscriber does not support TCSI Template
331.	110617	TCSI Template does not exist
332.	110618	The subscriber only supports TCSI Template
333.	110619	The subscriber does not support UCSI Template
334.	110620	UCSI Template does not exist
335.	110621	The subscriber only supports UCSI Template
336.	110622	The subscriber does not support SMSCSI Template
337.	110623	SMSCSI Template does not exist
338.	110624	The subscriber only supports SMSCSI Template
339.	110625	The subscriber does not support GPRSCSI Template
340.	110626	GPRSCSI Template does not exist

341.	110627	The subscriber only supports GPRSCSI Template
342.	110628	Not Support Restrict registering/unregistering call forward numbers
343.	110629	Not Support the Dual-Stack of PDP-Context
344.	110630	Not Support the CF Forbidden
345.	110702	Query location information failed
346.	110703	The format of the entered IP address is illegal
347.	110821	Camel Name is incorrect
348.	110822	There has no TDP parameter
349.	110823	The value of the TDP parameter is illegal
350.	110824	There has no DialNum parameter
351.	110825	There has no Trigger parameter of M-CSI or MG-CSI
352.	110902	Without subscribing call related class
353.	110903	Without subscribing call unrelated class
354.	110904	GMLC is not in the range of the configuration data
355.	110905	Parameter GMLCList missed
356.	110906	The number of GMLC is invalid
357.	110910	VGCS or VBS Can not be provided for GPRS user
358.	110911	Parameter GROUPID missed when subscribing VGCS or VBS
359.	110912	The number of GroupID has reached the maximum
360.	110913	The length of parameter GROUPID is incorrect
361.	110914	The Parameter GROUPID is not decimal
362.	110915	GROUPID repeats in parameter VGCS or VBS
363.	110916	The parameter VBSInitEnt is incorrect
364.	111027	The supplementary service does not registered
365.	111050	Subscribed Teleservice exceed the maximal count,the maximum of teleservice is 20
366.	111051	The number of bearer service has reached the maximum
367.	111052	The number of provision Supplementary service has reached the maximum
368.	111053	The number of SSinfo Recorder has reached the maximum
369.	111054	The number of PDP Information has reached the maximum
370.	111060	The number of External LCS Client has reached the maximum
371.	111061	The number of LCS Service type has reached the maximum
372.	111203	Unknown HSDB error

373.	111204	The response from HSDB is timed out
374.	111205	The user number has been used by other user
375.	111301	This subscriber is not in the HSDB.
376.	111302	DBIO sents error message to HSDB error tablename
377.	111303	DBIO sents error message to HSDB error operation type
378.	111304	HSDB failed to add a subscriber
379.	111305	HSDB failed to delete a subscriber
380.	111306	HSDB failed to modify a subscriber
381.	111307	HSDB is being modified by Mobile Equipment
382.	111308	Unknown HSDB error
383.	111309	HSDBACK is time out
384.	111400	There has no configuration data in the applicaiton process
385.	111401	Can not find the database according to the number
386.	111402	Fail to connect to the database
387.	111404	can not find the module of HSDB by subscribers number
388.	111500	The capacity of authentication has been full
389.	111501	The capacity of all subscribers has been full
390.	111504	The capacity of LCS subscribers has been full
391.	111505	The capacity of Camel subscribers has been full
392.	111506	The capacity of IMEI subscribers has been full
393.	111550	Camel Phase can not support the service
394.	111701	BOSS does not support adding profile
395.	111702	BOSS does not support modifying profile
396.	111703	BOSS does not support deleting profile
397.	111704	Failed to open ProFile.ini
398.	111705	Failed to write ProFile.ini
399.	111706	Failed to read ProFile.ini
400.	111707	Failed to create ProFile.ini
401.	111708	The number of the profile has reached maximum
402.	111709	The profile ID is invalid
403.	111710	The description of profile repeats
404.	111711	The profile was modified by other user, require or modify SN please
405.	111712	Failed to backup ProFile file
406.	111713	Failed to restore ProFile file

407.	111714	The parameters are illogical
408.	111715	ProFile file does not exist
409.	111716	The parameters of Profile file are error
410.	111717	The profile ID does not exist
411.	111718	The modification command can not be used to delete the profile
412.	111719	The length of the parameter name is beyond the range
413.	111720	The number of MML parameters is beyond the maximum
414.	111721	The value of the MML parameter is beyond the range
415.	111722	The profile failed to convert to the subscriber structure
416.	111723	The profile ID already exists
417.	111730	The roaming scheme of profile is not in the configuration data
418.	111731	The APN of profile is not in the configuration data
419.	111732	The SrvKey of profile is not in the configuration data
420.	111733	The gsmSCF of profile is not in the configuration data
421.	111734	Customized ODB services in profile do not exist or are not in the configuration data
422.	111735	Customized supplementary in profile do not exist or are not in the configuration data
423.	111800	BOSS can not delete CCBS Queue
424.	111801	Relation between IMSI and PVI
425.	112100	The record does not exist
426.	115051	Nbr_User can not be greater than Nbr_SB
427.	120001	The name of parameter is error
428.	120002	The value of parameter is error
429.	120003	The required parameter does not exist
430.	120004	The specified parameter does not exist
431.	120006	The parameter is same
432.	120007	Invalid parameter
433.	120008	Invalid parameter type
434.	120100	Extension service not provided
435.	120102	ExtSrv tele is missing
436.	120103	ExtSrv SubGroup is missing
437.	120104	ServiceTypeId is missing
438.	120105	APN range does not exist in configuration data

439.	121001	Reject boss request because of HLR module switch internal
440.	121002	Reject boss request because of HLR DR switch internal
441.	121003	Reject boss request because of manual set
442.	121004	Reject boss request because of the queue of other NE is full
443.	121005	Reject mix cug request because of HLR DR switch internal
444.	121006	Reject boss request because of the HLRNumber is both main
445.	121011	Reject disaster recovery request because of HLR module switch internal
446.	121012	Reject disaster recovery request because of HLR DR switch internal
447.	121013	Reject disaster recovery request because of manual set
448.	121014	Reject disaster recovery request because the queue of other NE is full
449.	121030	Reject boss directly request because of backup number group
450.	121050	Not allow to change physical number in two number groups
451.	121051	Not allow to change logical number in two number groups
452.	121052	Not allow to add user in two number groups
453.	121060	Not allow to change physical number in two admindomain
454.	121061	Not allow to change logical number in two admindomain
455.	121062	Not allow to add user in two hlr number
456.	121063	Adding authentication is not allowed to cross HLRNumber
457.	121070	Not allow to change physical number between master hlr and backup hlr
458.	121071	Not allow to change logical number between master hlr and backup hlr
459.	121072	Not allow to add user between master hlr and backup hlr
460.	121075	Not allow to change physical number in two Bno
461.	122000	Service not allowed by the License
462.	122001	User number is beyond the License limit
463.	122002	Max Camel CSI number is beyond the License limit
464.	145999	HLR System error
465.	222001	The APN has not existed
466.	222002	The APN has existed
467.	222003	The default APN can be deleted at last
468.	222004	The EPC roam schema isn't set in OMM
469.	222005	Fail to get EPC OMM configure
470.	222006	The EPC APN isn't set in OMM
471.	222007	Non-EPC users can't include the parameters only for EPC users
472.	222008	The QOS isn't set in OMM

473.	222009	The number of EPC APN is wrong
474.	222010	APN Configuration Profile ID not existed
475.	222011	APN parameter not legal
476.	222012	The APN is not in the range of the configuration data
477.	222013	Can not find the corresponding APN information
478.	222014	Qos Profile ID not exist in HLR configuration
479.	222015	The APN information allowed to subscribe for user has reached the maximum
480.	222016	The provided APN data not complete
481.	222017	The number of APN context is more than one
482.	222018	The wildcard APN can't set as the default APN
483.	222019	APN option conflicted
484.	222020	The subscriber only supports APN Template
485.	222021	The type of APN Configuration can not be identical when one user has two same APN
486.	222022	The subscriber does not support APN Template
487.	222023	The default APN is Inconsistent
488.	222024	The wildcard APN can't use static PDN GW
489.	222025	The subscriber can only have one wildcard APN
490.	222026	Need to set the default APN
491.	222027	The CSG information allowed to subscribe for user has reached the maximum
492.	222028	The CSG has not existed
493.	222029	It does not support this interface when the SubType is not LTE
494.	222030	The PDN-GW IP Address must exist when PDN GW allocation option is static
495.	222031	Must provide Host and Realm when modify EPC Loc
496.	222032	PDN IP Address violates Constraints
497.	222033	PDNGW IP Address violates Constraints

Note:

1. % mean parameter name and is variable.
2. XXX mean service item and is variable.

5.2 Appendix 2 Basic Service trigger Definition in CAMEL Service

Appendix 2 Basic Service trigger Definition in CAMEL Service

Value	Basic Service Definition
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1	Voice
4	Short message
7	Facsimile
11	All telecommunication service
12	Voice Group call service
15	Asynchronous bi-way circuit data
23	Synchronous bi-way circuit data
29	Asynchronous PAD access to circuit service
37	Synchronous PAD access to circuit service
46	All asynchronous circuit data
47	All asynchronous bearer services
48	All synchronous circuit data
49	All synchronous bearer services
50	All bearer services
Note: use “-” (hyphen)to connect each service, e.g. 1-2-3-11-12, means 5 groups of basic services. They are 1,2,3,11 and 12.	

5.3 Appendix 3 Definition of Failure Code Trigger in CAMEL Service

Appendix 3 Definition of Failure Code Trigger in CAMEL Service

Value	Failure Code Definition
1	Not assigned number
2	Not router to assigned transit network.
3	No router to destination
4	Send special information tone
5	Misdial toll prefix
8	Preoccupy
9	Preoccupy—circuit is reserved for re-use
16	NORMAL call release
17	User is busy
18	User no response
19	User no reply
20	User absent
21	Call rejected
22	Number changed
27	Destination not reachable

28	Invalid number format
29	Performance reject
31	Normal (General Unsuccess)
34	No circuit/ channel valid
38	No circuit/Network works smoothly
41	Temporary breakdown
42	Switch equipment congested
43	Access information discard
44	Circuit/ channel not available
46	Priority call blocked
47	Resources not available
49	Service quality not available
50	The request performance is not subscribed.
53	Barring of outgoing calls in CUG
55	Barring of incoming calls in CUG
57	Bearer capability unauthorized
58	Bearer capability is not available
62	Specific access information does not match user type.
63	Service/choices not available (not specified)
65	Bearer capacity is not realized
69	The requested performance is not realized
70	Only restricted digital information bearer capability can be used.
79	Service/choices is not realized (not assigned)
87	The called subscriber is not CUG member
88	Incompatible destination
90	Non-existed CUG
91	Invalid transit network choice
95	Invalid information (not assigned)
97	Information type does not exist or not realized
99	Parameter does not exist or not realized
102	Timer resume when expired.
103	Parameter does not exist or not realized (pass)
109	Abnormal information received when call setup
110	Unidentified parameters (discard) contained in message

111	Protocol error (not assigned)
127	Interworking (not assigned)
Note: use “-” (hyphen) to connect each failure code, e.g. 1-2-3-8-9, means 5 groups of failure code and they are 1,2,3,8 and 9.	