GSMA Roaming Database
IR.21 Data

RAEX IR.21 Information

Creation date:	2020-10-07
Creation time:	10:29:33+02:00
File type:	IR.21
Sender TADIG:	HKGH3
Publish Comment:	Add inter-PMN IP backbone address ranges: 131.166.134.0/24; 131.166.136.0/24; 131.166.130.0/24;131.166.132.0/24;131.166.163.32/29;131.166.165.32/29; Add ASN 22870 and 3321
TADIG-GEN schema version:	2.4
RAEX-IR.21 schema version:	13.1

ORGANISATION INFORMATION

Section ID: 1 (Mandatory)

Organisation name:	Hutchison Telecommunications Hong Kong Holdings Limited
Country initials:	HKG

History of changes

TADIG Code	Section ID	Section	Date	Description
HKGH3	17	IP Roaming/Networking Information	2020-10-06	Add inter-PMN IP backbone address ranges: 131.166.134.0/24; 131.166.136.0/24; 131.166.130.0/24;131.166.132.0/24;131.166.163.32/29;131.166.165.32/29; Add ASN 22870 and 3321
HKGH3	4	Routing Information	2020-05-20	Additional Information Updated - MGT translation: 45404->852 949; 45403->852 633
HKGH3	4	Routing Information	2019-04-01	Remove duplicate NDC - 941 & 963; add missing NDCs - 519 & 627
HKGH3	21	Contact Information	2019-03-20	Delete duplicate contact information
HKGH3	17	IP Roaming/Networking Information	2019-03-12	Update GRX provider list
HKGH3	13	Network Elements Information	2019-03-05	Add MSC addresses
HKGH3	15	CAMEL Information	2019-03-05	Add SCP GT addresses
HKGH3	4	Routing Information	2019-01-09	Delete NDCs 5234, 5718, 5719, 5768, 5769, 5908, 5909
HKGH3	13	Network Elements Information	2019-01-09	Add HLR GT 85263347864 & SMSC GT 85263347867
HKGH3	13	Network Elements Information	2018-10-30	Correct SGSN address from 85263347332 to 85263347732; Update Node Type from MME to SGSN; Update UTC offset time
HKGH3	13	Network Elements Information	2018-10-30	-
HKGH3	4	Routing Information	2018-10-26	Remove MSRN 852 519 & 852 627
HKGH3	13	Network Elements Information	2018-10-26	Updated SGSN IP address
HKGH3	13	Network Elements Information	2018-10-23	SGSN IP information updated
HKGH3	4	Routing Information	2018-09-03	Delete MSRN ranges: 852519; 852627; 852633; 852634; 852640; 852650; 852679; 852690; 852904; 852928; 852949 & 852950
HKGH3	13	Network Elements Information	2018-09-03	Add MSC GT 85263347958; Update HLR GT 85294986804 & 85294986824 to MSC GT; Delete HLR & MSC GTs
HKGH3	13	Network Elements Information	2018-09-03	Add IP information to SGSN GT
HKGH3	16	Packet Data Service Information	2018-09-03	Updated APN type
HKGH3	13	Network Elements Information	2018-05-11	New SMSC GT added 85294984713
HKGH3	4	Routing Information	2018-02-09	Additional routing information added
HKGH3	13	Network Elements Information	2018-02-09	initial document
HKGH3	16	Packet Data Service Information	2018-02-09	initial document
HKGH3	17	IP Roaming/Networking Information	2018-02-09	minor change
HKGH3	20	LTE Roaming Information	2018-02-09	minor change
HKGH3	4	Routing Information	2018-02-07	NDC 6260 added; Delete NDCs 5283, 5700, 5701, 5704, 5705, 5745-5748
HKGH3	10	MAP	2018-02-07	MAP version updated
HKGH3	16	Packet Data Service Information	2018-02-07	Delete ISP DNS IP address
HKGH3	16	Packet Data Service Information	2018-02-07	no change
HKGH3	17	IP Roaming/Networking Information	2018-02-07	APN list is updated; GRX provider changed
HKGH3	4	Routing Information	2018-02-06	initial document
HKGH3	14	USSD Information	2018-02-06	USSD
HKGH3	20	LTE Roaming Information	2018-02-06	initial document
HKGH3	16	Packet Data Service Information	2018-02-01	initial document
HKGH3	5	International SCCP Gateway	2018-01-31	SCCP Info
HKGH3	8	Subscriber Identity Authentication	2018-01-31	Initial document
HKGH3	10	MAP	2018-01-31	MAP
HKGH3	15	CAMEL Information	2018-01-31	CAMEL information added
HKGH3	16	Packet Data Service Information	2018-01-31	Packet Data Services Info
HKGH3	17	IP Roaming/Networking Information	2018-01-31	IP interworking information
HKGH3	20	LTE Roaming Information	2018-01-31	LTE roaming information

TADIG Code	Section ID	Section	Date	Description
HKGH3	21	Contact Information	2018-01-31	Contact info
HKGH3	21	Contact Information	2018-01-31	Contact Information

NETWORK

TADIG code: HKGH3
Section ID: 2 (Mandatory, Repeating)

TADIG code:	HKGH3
Network name:	Hutchison Telephone Company Limited
Network type:	Terrestrial
Technology:	**Frequency list:**
2G-GSM frequencies:	GSM 900, DCS 1800
3G-UTRA/FDD frequencies:	8 - 900 MHz, 1 - IMT 2.1 GHz
3G-UTRA/TDD frequencies:	Unsupported
4G-E-UTRAN frequencies:	Unsupported
4G-E-UTRAN-MIoT-LTE-M frequencies:	Unsupported
4G-E-UTRAN-MIoT-NB-IoT frequencies:	Unsupported
MIoT-NB-IoT deployment modes:	Unsupported
LTE:	900, 1800, 2300, 2600
Presentation of country initials and MNN:	HKGH3
Abbreviated MNN:	3 HK

NETWORK INFORMATION

TADIG code: HKGH3
Section ID: 3 (Mandatory)

The following information refer to the network identified by TADIG code HKGH3

ROUTING INFORMATION

TADIG code: HKGH3
Section ID: 4 (Mandatory)
Effective date of change: 2020-05-20

CCITT E.164 Number series	Country Code (CC)	National Destination Code (NDC)	SN Range Start	SN Range Stop	Primary International DPC	Secondary International DPC	MVNO Number	Location
MSISDN number ranges (s)								
	852	6040						
	852	6041						
	852	6042						
	852	6043						
	852	6044						
	852	607						
	852	608						
	852	610						
	852	619						
	852	620						
	852	640						
	852	647						
	852	650						
	852	679						
	852	904						
	852	912						
	852	928						
	852	932						
	852	935						
	852	936						
	852	937						
	852	941						
	852	942						
	852	947						
	852	948						
	852	949						
	852	950						
	852	957						
	852	963						
	852	967						
	852	974						
	852	975						
	852	981						
	852	983						
	852	5289						
	852	533						
	852	546						
	852	556						
	852	563						
	852	566						
	852	569						

CCITT E.164 Number series	Country Code (CC)	National Destination Code (NDC)	*SN Range Start*	*SN Range Stop*	*Primary International DPC*	*Secondary International DPC*	*MVNO Number*	*Location*
MSISDN number ranges (s)								
	852	596						
	852	597						
	852	6045						
	852	6046						
	852	6047						
	852	6048						
	852	6049						
	852	631						
	852	633						
	852	634						
	852	668						
	852	690						
	852	519						
	852	627						
	852	970						
	852	982						
	852	6260						
Network Nodes Global Title Number Range(s)								
	852	633						
	852	949						
MSRN Number Range(s)								
	852	912						
	852	974						
	852	975						

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	454	03

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	852	633

Does Number Portability apply ?	Yes

Is 15 Digit MSISDN Supported ?	Yes

Additional Information
2G network code: 454 04 (HKGHT)
MGT translation: 45404 -> 852 949; 45403 -> 852 633

History of changes

Date	Description
2020-05-20	Additional Information Updated - MGT translation: 45404->852 949; 45403->852 633
2019-04-01	Remove duplicate NDC - 941 & 963; add missing NDCs - 519 & 627
2019-01-09	Delete NDCs 5234, 5718, 5719, 5768, 5769, 5908, 5909
2018-10-26	Remove MSRN 852 519 & 852 627

Date	Description
2018-09-03	Delete MSRN ranges: 852519; 852627; 852633; 852634; 852640; 852650; 852679; 852690; 852904; 852928; 852949 & 852950
2018-02-09	Additional routing information added
2018-02-07	NDC 6260 added; Delete NDCs 5283, 5700, 5701, 5704, 5705, 5745-5748
2018-02-06	initial document

INTERNATIONAL SCCP GATEWAY

TADIG code: HKGH3
Section ID: 5 (Optional)
Effective date of change: 2018-02-01

International SCCP carrier list	
SCCP carrier name:	CITIC
Connectivity information:	Primary
MNO TADIG code list:	

DPC info:	
Signature:	CITIC
Type:	ISC
International DPC:	4.178.3
Comments:	

DPC info:	
Signature:	CITIC
Type:	ISC
International DPC:	4.177.1
Comments:	

DPC info:	
Signature:	CITIC
Type:	ISC
International DPC:	4.176.4
Comments:	

DPC info:	
Signature:	CITIC
Type:	ISC
International DPC:	4.179.0
Comments:	

SCCP carrier name:	REACH
Connectivity information:	Primary
MNO TADIG code list:	

DPC info:	
Signature:	REACH ELECTRA
Type:	ISC
International DPC:	4.108.0
Comments:	

DPC info:	
Signature:	REACH HERMES
Type:	ISC
International DPC:	4.108.1
Comments:	

SCCP carrier name:	HGC
Connectivity information:	Primary
MNO TADIG code list:	

DPC info:	
Signature:	HGC
Type:	ISC
International DPC:	4.183.0
Comments:	HTHKSTP1

DPC info:	
Signature:	HGC
Type:	ISC
International DPC:	4.183.1
Comments:	HTHKSTP2

DPC info:	
Signature:	HGC
Type:	ISC
International DPC:	5.226.1
Comments:	HTUKSTP1

DPC info:	
Signature:	HGC
Type:	ISC
International DPC:	5.226.2
Comments:	HTUKSTP2

History of changes

Date	Description
2018-01-31	SCCP Info

SUBSCRIBER IDENTITY AUTHENTICATION

TADIG code: HKGH3
Section ID: 8 (Optional)
Effective date of change: 2018-01-31

Authentications	Performed (Yes / No)
Authentication performed for Roaming subscribers at the commencement of GSM service	Yes
Authentication performed for roaming subscribers in case of GPRS	Yes
A5 Cipher Algorithm version in use	A5-1; A5-3

History of changes

Date	Description
2018-01-31	Initial document

MOBILE APPLICATION PART (MAP)

TADIG code: HKGH3
Section ID: 10 (Optional)
Effective date of change: 2018-02-07

Interworking specifically for roaming				
Application context name	**Current version in**			**Comments**
	Inbound roaming		**Outbound roaming**	
	MSC/VLR	**SGSN**	**Outbound roaming**	
networkLocUp	MAPv3	N/A	MAPv3	
roamingNumberEnquiry	MAPv3	N/A	MAPv3	
InfoRetrieval	MAPv3	-	MAPv3	
subscribeDataMngt	MAPv3	-	MAPv3	
networkFunctionalSs	MAPv2	N/A	MAPv2	
mwdMngt	MAPv3	-	MAPv3	
shortMsgMT-Relay (called shortMsgRelay in v1)	MAPv3	-	-	
shortMsgMO-Relay (called shortMsgRelay in v1)	MAPv3	-	-	
ss-InvocationNotification	MAPv3	N/A	-	
subscriberInfoEnquiry	MAPv3	-	MAPv3	
gprsLocationUpdate	N/A	MAPv3	MAPv3	
locationCancellation	MAPv3	-	MAPv3	
msPurging	MAPv3	-	MAPv3	
reset	MAPv2	-	MAPv2	
networksUnstructuredSs	MAPv2	N/A	MAPv2	
reporting	MAPv3	N/A	MAPv3	
callCompletion	MAPv3	N/A	MAPv3	
istAlerting	MAPv3	N/A	MAPv3	
service Termination	-	N/A	MAPv3	
locationSvcGateway	N/A	N/A	MAPv3	
mm-EventReporting	MAPv3	N/A	-	
authenticationFaillureReport	MAPv3	-	MAPv3	
imsiRetrieval	MAPv2	N/A	MAPv2	
gprsNotifyContext	N/A	-	-	
gprsLocationInfoRetrieval	N/A	-	MAPv3	
faillureReport	N/A	-	MAPv3	
secureTransportHandling	-	-	-	

History of changes

Date	Description
2018-02-07	MAP version updated
2018-01-31	MAP

NETWORK ELEMENTS INFORMATION

TADIG code: HKGH3
Section ID: 13 (Optional)
Effective date of change: 2019-03-05

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
HLR		852 949 80891 / 80891					+08:00
HLR		852 949 81704 / 81704					+08:00
HLR		852 949 81876 / 81876					+08:00
HLR		852 949 81971 / 81971					+08:00
HLR		852 949 83201 / 83201					+08:00
HLR		852 949 83211 / 83212					+08:00
HLR		852 949 84401 / 84401					+08:00
HLR		852 949 84430 / 84430					+08:00
HLR		852 949 85442 / 85442					+08:00
HLR		852 949 85489 / 85489					+08:00
MSC		852 949 86804 / 86804					+08:00
MSC		852 949 86824 / 86824					+08:00
HLR		852 949 87642 / 87642					+08:00
HLR		852 949 84173 / 84173					+08:00
HLR		852 949 8181500 / 8181599					+08:00
HLR		852 949 8186100 / 8186199					+08:00
HLR		852 633 49001 / 49001					+08:00
HLR		852 633 49021 / 49021					+08:00
HLR		852 633 49034 / 49034					+08:00
HLR		852 633 49048 / 49048					+08:00
HLR		852 633 49071 / 49071					+08:00
HLR		852 633 47846 / 47846					+08:00
HLR		852 633 47876 / 47876					+08:00
HLR		852 633 47880 / 47880					+08:00
HLR		852 633 47885 / 47885					+08:00
HLR		852 633 47899 / 47899					+08:00
HLR		852 633 47741 / 47741					+08:00
HLR		852 633 47750 / 47752					+08:00
HLR		852 633 47761 / 47761					+08:00
HLR		852 633 47747 / 47747					+08:00
HLR		852 633 477471 / 477471					+08:00
HLR		852 633 47777 / 47778					+08:00
HLR		852 633 47757 / 47757					+08:00
HLR		852 633 47701 / 47702					+08:00
HLR		852 633 47769 / 47769					+08:00
HLR		852 633 47739 / 47739					+08:00
HLR		852 633 49056 / 49056					+08:00
MSC		852 949 80476 / 80476					+08:00
MSC		852 949 81740 / 81740					+08:00
MSC		852 949 81972 / 81972					+08:00
MSC		852 949 82014 / 82014					+08:00
MSC		852 949 82024 / 82024					+08:00
MSC		852 949 82409 / 82409					+08:00
MSC		852 949 82436 / 82436					+08:00
MSC		852 949 82492 / 82492					+08:00
MSC		852 949 84143 / 84143					+08:00
MSC		852 949 84145 / 84145					+08:00
MSC		852 949 84431 / 84431					+08:00
MSC		852 949 85495 / 85495					+08:00
MSC		852 949 86579 / 86579					+08:00
MSC		852 949 86814 / 86814					+08:00
MSC		852 949 86854 / 86854					+08:00
MSC		852 949 87642 / 87642					+08:00
MSC		852 949 87695 / 87695					+08:00
MSC		852 633 47877 / 47877					+08:00
MSC		852 633 47881 / 47881					+08:00
MSC		852 633 47886 / 47886					+08:00
MSC		852 633 49017 / 49017					+08:00
MSC		852 633 49058 / 49058					+08:00
MSC		852 633 49070 / 49070					+08:00
MSC		852 633 47766 / 47766					+08:00

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
MSC		852 633 47753 / 47753					+08:00
MSC		852 633 47798 / 47798					+08:00
MSC		852 633 47775 / 47775					+08:00
MSC		852 633 47701 / 47702					+08:00
MSC		852 633 47905 / 47908					+08:00
SGSN		852 633 47732 / 47732	202.45.89.1/32				+08:00
SGSN		852 633 47735 / 47735	203.145.68.8/32				+08:00
SGSN		852 633 47787 / 47787	202.45.89.122/32				+08:00
SGSN		852 949 88013 / 88013	203.145.68.1/32				+08:00
SGSN		852 949 88070 / 88070	203.145.68.8/32				+08:00
SGSN		852 949 88082 / 88082	202.45.89.122/32				+08:00
SMSC		852 949 81046 / 81046					+08:00
SMSC		852 949 81564 / 81564					+08:00
SMSC		852 949 81717 / 81717					+08:00
SMSC		852 949 81947 / 81947					+08:00
SMSC		852 949 82169 / 82169					+08:00
SMSC		852 949 82276 / 82276					+08:00
SMSC		852 949 82405 / 82405					+08:00
SMSC		852 949 82485 / 82485					+08:00
SMSC		852 949 82562 / 82562					+08:00
SMSC		852 949 82568 / 82568					+08:00
SMSC		852 949 82614 / 82614					+08:00
SMSC		852 949 82694 / 82694					+08:00
SMSC		852 949 83153 / 83153					+08:00
SMSC		852 949 83335 / 83335					+08:00
SMSC		852 949 83442 / 83442					+08:00
SMSC		852 949 83513 / 83513					+08:00
SMSC		852 949 83533 / 83533					+08:00
SMSC		852 949 83644 / 83644					+08:00
SMSC		852 949 83653 / 83653					+08:00
SMSC		852 949 83716 / 83716					+08:00
SMSC		852 949 84143 / 84143					+08:00
SMSC		852 949 84149 / 84149					+08:00
SMSC		852 949 84439 / 84439					+08:00
SMSC		852 949 84779 / 84779					+08:00
SMSC		852 949 84794 / 84794					+08:00
SMSC		852 949 84974 / 84974					+08:00
SMSC		852 949 85464 / 85464					+08:00
SMSC		852 949 85795 / 85795					+08:00
SMSC		852 949 85954 / 85954					+08:00
SMSC		852 949 86139 / 86139					+08:00
SMSC		852 949 86237 / 86237					+08:00
SMSC		852 949 86259 / 86259					+08:00
SMSC		852 949 87047 / 87047					+08:00
SMSC		852 949 87631 / 87631					+08:00
SMSC		852 949 87642 / 87642					+08:00
SMSC		852 633 47811 / 47815					+08:00
SMSC		852 633 47818 / 47819					+08:00
SMSC		852 633 47821 / 47822					+08:00
SMSC		852 633 47859 / 47859					+08:00
SMSC		852 633 49006 / 49006					+08:00
SMSC		852 633 49024 / 49024					+08:00
SMSC		852 633 49028 / 49028					+08:00
SMSC		852 633 49032 / 49032					+08:00
SMSC		852 633 49042 / 49042					+08:00
SMSC		852 633 49051 / 49051					+08:00
SMSC		852 633 49061 / 49061					+08:00
SMSC		852 633 49064 / 49064					+08:00
SMSC		852 633 49068 / 49068					+08:00
SMSC		852 633 49086 / 49086					+08:00
SMSC		852 633 49096 / 49097					+08:00
SMSC		852 633 53535 / 53535					+08:00
SMSC		852 633 47896 / 47896					+08:00
SMSC		852 633 47898 / 47898					+08:00
SMSC		852 633 47771 / 47771					+08:00

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
SMSC		852 633 47833 / 47833					+08:00
SMSC		852 633 47781 / 47781					+08:00
SMSC		852 633 47791 / 47791					+08:00
SMSC		852 633 47760 / 47760					+08:00
SMSC		852 633 47776 / 47776					+08:00
SMSC		852 633 47779 / 47779					+08:00
SMSC		852 633 477472 / 477473					+08:00
SMSC		852 633 47756 / 47756					+08:00
SMSC		852 633 47816 / 47817					+08:00
SMSC		852 633 49072 / 49072					+08:00
SMSC		852 633 49082 / 49082					+08:00
SMSC		852 633 47717 / 47718					+08:00
SMSC		852 633 47701 / 47702					+08:00
SMSC		852 633 47731 / 47731					+08:00
SMSC		852 633 47729 / 47729					+08:00
SMSC		852 633 49076 / 49076					+08:00
SMSC		852 633 47942 / 47942					+08:00
SMSC		852 949 84713 / 84713					+08:00
MSC		852 633 47958 / 47958					+08:00
SGSN		852 633 47913 / 47913	203.145.68.90/32				+08:00
SGSN		852 633 47919 / 47919	203.145.68.98/32				+08:00
SGSN		852 633 47732 / 47732	202.45.89.2/32				+08:00
SGSN		852 633 47732 / 47732	203.145.68.17/32				+08:00
SGSN		852 633 47732 / 47732	203.145.68.18/32				+08:00
SGSN		852 633 47733 / 47733	202.45.89.64/32				+08:00
SGSN		852 633 47733 / 47733	202.45.89.65/32				+08:00
SGSN		852 633 47733 / 47733	203.145.68.25/32				+08:00
SGSN		852 633 47733 / 47733	203.145.68.26/32				+08:00
SGSN		852 633 47735 / 47735	203.145.68.9/32				+08:00
SGSN		852 633 47735 / 47735	203.145.68.29/32				+08:00
SGSN		852 633 47735 / 47735	203.145.68.30/32				+08:00
SGSN		852 633 47736 / 47736	203.145.68.1/32				+08:00
SGSN		852 633 47736 / 47736	203.145.68.2/32				+08:00
SGSN		852 633 47736 / 47736	203.145.68.21/32				+08:00
SGSN		852 633 47736 / 47736	203.145.68.22/32				+08:00
SGSN		852 633 47787 / 47787	202.45.89.123/32				+08:00
SGSN		852 633 47913 / 47913	203.145.68.91/32				+08:00
SGSN		852 633 47914 / 47914	203.145.68.90/32				+08:00
SGSN		852 633 47914 / 47914	203.145.68.91/32				+08:00
SGSN		852 949 88013 / 88013	203.145.68.2/32				+08:00
SGSN		852 949 88013 / 88013	203.145.68.21/32				+08:00
SGSN		852 949 88013 / 88013	203.145.68.22/32				+08:00
SGSN		852 949 88070 / 88070	203.145.68.9/32				+08:00
SGSN		852 949 88070 / 88070	203.145.68.29/32				+08:00
SGSN		852 949 88070 / 88070	203.145.68.30/32				+08:00
SGSN		852 949 88082 / 88082	202.45.89.123/32				+08:00
HLR		852 633 47864 / 47864					+08:00
SMSC		852 633 47867 / 47867					+08:00
MSC		852 633 47884 / 47884					+08:00
MSC		852 633 47889 / 47889					+08:00
MSC		852 633 49045 / 49046					+08:00

History of changes

Date	Description
2019-03-05	Add MSC addresses
2019-01-09	Add HLR GT 85263347864 & SMSC GT 85263347867
2018-10-30	Correct SGSN address from 85263347332 to 85263347732; Update Node Type from MME to SGSN; Update UTC offset time
2018-10-30	-
2018-10-26	Updated SGSN IP address
2018-10-23	SGSN IP information updated

Date	Description
2018-09-03	Add MSC GT 85263347958; Update HLR GT 85294986804 & 85294986824 to MSC GT; Delete HLR & MSC GTs
2018-09-03	Add IP information to SGSN GT
2018-05-11	New SMSC GT added 85294984713
2018-02-09	initial document

USSD Information

TADIG code: HKGH3
Section ID: 14 (Optional)
Effective date of change: 2018-02-06

USSD capability available	Yes
Supported phase	Phase 2

History of changes

Date	Description
2018-02-06	USSD

CAMEL INFO

TADIG code: HKGH3
Section ID: 15 (Conditional)
Effective date of change: 2019-03-05

gsmSSF/MSC	
CAP Version supported (Inbound)	**CAP Version supported (Outbound)**
CAPv3	CAPv2 CAPv3

CAMEL Functionality Information			
Service(s) Name	**SK**	**CAP Version**	**SCP GT addresses**
Prepaid	1	CAPv3	85263349013
			85263349038
			85263349044
			85263349054
			85263349056
			85263349076
			85263347800
			85263347897
			85263347895
			85263347758
			852633477470
			85263347792
			85263347759
			85263347770
			85263347926
			85263347945
			85263347946

CAPv4 Partial Implementations		
CAMEL Phase 4 CSIs:	**Supported (Yes / No)**	*Planned Date*
MT-SMS-CSI		
MG-CSI		
PSI Enhancements		

History of changes

Date	Description
2019-03-05	Add SCP GT addresses
2018-01-31	CAMEL information added

Packet Data Services Information

TADIG code: HKGH3
Section ID: 16 (Conditional)
Effective date of change: 2018-09-03

List of APN Operator Identifiers		
APN Operator Identifier	**Description**	**Example**
mnc004.mcc454.gprs		
mnc003.mcc454.gprs		
apn.epc.mnc003.mcc454.3gppnetwork.org	LTE	

List of APN's available for testing and troubleshooting

APN WEB List					
APN Credential			**APN Type**	**ISP DNS IP address (primary)**	**ISP DNS IP address (secondary)**
APN	**Username**	**Password**			
mobile.three.com.hk			H-APN		
web-g.three.com.hk			H-APN		

APN WAP List							
APN Credential			**APN Type**	**WAP Gateway**	**WAP Server URL**	**WAP Port ver 1**	**WAP Port ver 2**
APN	**Username**	**Password**		**IP address**			

APN MMS List				
APN Credential			**WAP Gateway IP address for MMS**	**Messaging Server URL**
APN	**Username**	**Password**		
mobile.three.com.hk			172.20.97.116	http://mms.um.three.com.hk:10021/mmsc

IPv6 Connectivity Information		
	IPv6 PDP Supported	**IPv4v6 PDP Supported**
SGSN Support	No	No
GGSN Support	No	No

List of 2G/3G QOS profiles

GTP Version	
SGSN	GTPv1
GGSN	GTPv1

List of Data Service supported

2G Data Services	Multislot Class Capability
GPRS	
EDGE	

3G Data Services	UE 3G Category
3GPS	
HSDPA	
HSUPA	

Multiple PDP Context Support	
Number of Primary PDP Context	2

History of changes

Date	Description
2018-09-03	Updated APN type
2018-02-09	initial document
2018-02-07	Delete ISP DNS IP address

Date	Description
2018-02-07	no change
2018-02-01	initial document
2018-01-31	Packet Data Services Info

IP - Roaming and IP - Interworking Information
TADIG code: HKGH3
Section ID: 17 (Conditional)
Effective date of change: 2020-10-06

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	202.45.89.0/24
	203.145.67.0/24
	203.145.70.0/24
	203.145.68.0/24
	203.145.65.0/25
	131.166.134.0/24
	131.166.136.0/24
	131.166.130.0/24
	131.166.132.0/24
	131.166.134.241/29
	131.166.132.241/29

List of Autonomous System Number (ASN):	ASN
	64575
	64678
	22870
	3321

List of Autonomous System Number (ASN4B):	ASN4B

List of PMN authoritative DNS server IP addresses and names		
IP address	**IPv6 address**	**DNS Name**
203.145.67.39		dns01.mnc003.mcc454.gprs
203.145.67.72		dns02.mnc003.mcc454.gprs
202.45.89.57		hdns01.epc.mnc003.mcc454.3gppnetwork.org (LTE)
202.45.89.61		hdns02.epc.mnc003.mcc454.3gppnetwork.org (LTE)
203.145.67.39		dns01.mnc004.mcc454.gprs
203.145.67.72		dns02.mnc004.mcc454.gprs

List of GRX Providers	GRX Provider
	Syniverse HGC

History of changes

Date	Description
2020-10-06	Add inter-PMN IP backbone address ranges: 131.166.134.0/24; 131.166.136.0/24; 131.166.130.0/24;131.166.132.0/24;131.166.163.32/29;131.166.165.32/29; Add ASN 22870 and 3321
2019-03-12	Update GRX provider list
2018-02-09	minor change
2018-02-07	APN list is updated; GRX provider changed
2018-01-31	IP interworking information

LTE Roaming Information

TADIG code: HKGH3
Section ID: 20 (Optional)
Effective date of change: 2018-02-09

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
HGC		

Primary IP address of DA	Secondary IP address of DA	

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Syniverse		

Primary IP address of DA	Secondary IP address of DA	

Roaming Interconnection

EPC Realms For Roaming	
	epc.mnc003.mcc454.3gppnetwork.org

FQDN Diameter Edge Agent

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
epc.mnc003.mcc454.3gppnetwork.org	202.45.89.5	202.45.89.53
epc.mnc003.mcc454.3gppnetwork.org	202.45.89.69	202.45.89.117

S6a Supported without IWF	S6a MAP IWF supported to HSS	S6a MAP IWF supported to MME
false	false	false

S6d used for legacy SGSN	S9 used for PCC
false	false

SMS ITW

SMS delivery over IP	SMS delivery over NAS
false	true

Voice ITW

CSFB

Roaming CS Fallback

Roaming Retry (MTTR)

		HPMN	VPMN
LTE Roaming Agreement Only	**LTE Only Roaming Supported**	Yes	Yes
2G/3G Roaming Agreement Only	**Scenario 2 Supported**	No	Yes
	Scenario 3 Supported	No	Yes
2G/3G/LTE Roaming Agreement	**Scenario 1 Supported**	Yes	Yes
	Scenario 2 Supported	Yes	Yes
	Scenario 3 Supported	Yes	No
	Scenario 4 Supported	Yes	No
	Scenario 5 Supported	No	No
	Scenario 6 Supported	No	No

IPv6 Connectivity Information		
	IPv6 PDP Supported	**IPv4v6 PDP Supported**
MME Support	No	No
SGW Support	No	No
PGW Support	No	No

History of changes

Date	Description
2018-02-09	minor change
2018-02-06	initial document
2018-01-31	LTE roaming information

CONTACT INFORMATION

TADIG code: HKGH3
Section ID: 21 (Optional, Repeating)
Effective date of change: 2020-05-20

List of Roaming Troubleshooting Contact Information				
Roaming Troubleshooting Contact Information				
Location			Hong Kong	
Office Time Zone in UTC			+08:00	

Office Hours	**Week Day (s)**	**Start Time**	**End Time**
	all week days	00:00:00	23:59:00

Main Contact for Troubleshooting (Office Hours)				
Team Name	**Tel.**	**Mobile**	**Fax**	**Email**
CNCC	85221282904 85221282940			IREG@hthk.com

Escalation Contact for Troubleshooting				
Person Name	**Tel.**	**Mobile**	**Fax**	**Email**
Mr. WK Kwong	85221282001		85221218404	wk.kwong@htms.huawei.com

24 x 7 Troubleshooting (contact out of Office Hours)				
Team Name	**Tel.**	**Mobile**	**Fax**	**Email**
CNCC	85221282904 85221282940			IREG@hthk.com

Roaming Troubleshooting Ticketing System Information
Ticket system web address
Ticket system email address
Additional Contacts
SCCP Inquires and ordering of SS7 Routes

	Person Name	**Tel.**	**Mobile**	**Fax**
	CNCC Centralized Network Control Central)	85221282904 85221282940		
	JobTitle		**Email**	
			IREG@hthk.com	

Roaming Coordinator				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Ms. Maggie Tang	85221286580		
	JobTitle		**Email**	
	Senior International Services Executive		roamhk@hthk.com	

IREG Tests				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Mr. Mickey Wong	85231568587		
	JobTitle		**Email**	
	Senior Engineer (Packet Switch)		ireg.ps-support@htms.huawei.com	
	Person Name	**Tel.**	**Mobile**	**Fax**
	Mr. Albert Lee	85221285774		
	JobTitle		**Email**	
	Engineer (Circuit Switching)		ireg.cs-support@htms.huawei.com	

TADIG Tests				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Ms. Maggie Tang	85221286580		
	JobTitle		**Email**	
	Senior International Services Executive		roamhk@hthk.com	

CAMEL Tests				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Mr. Albert Lee	85221285774		
	JobTitle		**Email**	
	Engineer (Circuit Switching)		ireg.cs-support@htms.huawei.com	

GPRS Tests				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Mr. Mickey Wong	85231568587		
	JobTitle		**Email**	
	Senior Engineer (Packet Switch)		ireg.ps-support@htms.huawei.com	

Contact Person(s) in PMN for GRX connectivity				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Mr. Ringo Chan	85221285401		

JobTitle	Email
Senior Manager - Core Network Engineering	ringo.chan@hthk.com

Contact Person(s) in PMN for GRX Provider

Person Name	Tel.	Mobile	Fax
Mr. Ringo Chan	85221285401		

JobTitle	Email
Senior Manager - Core Network Engineering	ringo.chan@hthk.com

IR21 Distribution Email Address	Email
	roam@hthk.com

History of changes

Date	Description
2019-03-20	Delete duplicate contact information
2018-01-31	Contact info
2018-01-31	Contact Information

SECTIONS NOT IN USE

TADIG Code	Section ID	Section Name
HKGH3	6	Domestic SCCP Gateway
HKGH3	7	SCCP Protocol available at PMN for connection for International SS7 Roaming
HKGH3	9	Test Numbers Information
HKGH3	11	MAP Optimal Routing Section
HKGH3	12	MAP Inter Operator SMS Enhancement
HKGH3	18	MMS Interworking Information
HKGH3	19	WLAN Information
HKGH3	22	Hosted Networks
HKGH3	23	M2M Roaming Information
HKGH3	24	MVNO Information
HKGH3	26	VoLTE Roaming Information Section
HKGH3	27	LPWA Roaming Information Section