

GSMA Roaming Database

IR.21 Data

RAEX IR.21 Information

Creation date:	2020-12-15
Creation time:	08:07:53+01:00
File type:	IR.21
Sender TADIG:	HKGTC
Publish Comment:	Summary of updates: HKGTC; HKGM3
TADIG-GEN schema version:	2.4
RAEX-IR.21 schema version:	14.0

ORGANISATION INFORMATION

Section ID: 1 (Mandatory)

Organisation name:	Hong Kong Telecommunications (HKT) Limited
Country initials:	HKG

History of changes

TADIG Code	Section ID	Section	Date	Description
HKGTC	20	LTE Roaming Information	2020-12-08	No new S6a Diameter connection to Syniverse IPX.
HKGM3	20	LTE Roaming Information	2020-12-08	No new S6a Diameter connection to Syniverse IPX.
HKGTC	4	Routing Information	2020-07-22	Add new MSISDN Range 852 8480
HKGTC	4	Routing Information	2020-07-22	Add item "i" under "DIAMETER INFORMATION" in "Additional Information" to describe the realm of HKT.
HKGTC	13	Network Elements Information	2020-07-22	Add PGW 131.166.165.48/29
HKGTC	17	IP Roaming/Networking Information	2020-07-22	Add inter-PMN IP backbone address ranges: 131.166.165.48/29
HKGM3	4	Routing Information	2020-07-22	Add item "i" under "DIAMETER INFORMATION" in "Additional Information" to describe the realm of HKT.
HKGM3	13	Network Elements Information	2020-07-22	Add PGW 131.166.165.48/29
HKGM3	17	IP Roaming/Networking Information	2020-07-22	Add inter-PMN IP backbone address ranges: 131.166.165.48/29
HKGTC	4	Routing Information	2020-04-03	Add new MSISDN Range(s) 852 4654; 852 4655; 852 4656; 852 4657; 852 4658; 852 7080; 852 7081; 852 7082; 852 7083; 852 7084;
HKGTC	4	Routing Information	2020-04-03	Add MSISDN Range(s) 852 5149
HKGTC	13	Network Elements Information	2020-04-03	Add PGW 131.166.163.32/29 and PGW 131.166.165.32/29
HKGTC	17	IP Roaming/Networking Information	2020-04-03	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
HKGTC	17	IP Roaming/Networking Information	2020-04-03	Add ASN 22870 and 3321
HKGTC	17	IP Roaming/Networking Information	2020-04-03	Add remarks for GRX provider "PCCW Global".
HKGTC	20	LTE Roaming Information	2020-04-03	Add remarks for IPX Provider Name "PCCW Global".
HKGM3	13	Network Elements Information	2020-04-03	Add PGW 131.166.163.32/29 and PGW 131.166.165.32/29
HKGM3	13	Network Elements Information	2020-04-03	Add MSC/VLR +85292394627
HKGM3	17	IP Roaming/Networking Information	2020-04-03	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
HKGM3	17	IP Roaming/Networking Information	2020-04-03	Add ASN 22870 and 3321
HKGM3	17	IP Roaming/Networking Information	2020-04-03	Add remarks for GRX provider "PCCW Global".
HKGM3	20	LTE Roaming Information	2020-04-03	Add remarks for IPX Provider Name "PCCW Global".
HKGTC	4	Routing Information	2019-08-30	Add new MSISDN Range(s) 852 4614 and 852 6362
HKGTC	17	IP Roaming/Networking Information	2019-08-30	Update the GRX Provider information of PCCW Global
HKGTC	17	IP Roaming/Networking Information	2019-08-30	Remove the ASN 18101 and 3321
HKGTC	20	LTE Roaming Information	2019-08-30	For security reason, remove the host name of HKT DEA
HKGTC	20	LTE Roaming Information	2019-08-30	Update the IPX Provider Name information of PCCW Global
HKGM3	17	IP Roaming/Networking Information	2019-08-30	Update the GRX Provider information of PCCW Global
HKGM3	17	IP Roaming/Networking Information	2019-08-30	Remove the ASN 18101 and 3321
HKGM3	20	LTE Roaming Information	2019-08-30	For security reason, remove the host name of HKT DEA
HKGM3	20	LTE Roaming Information	2019-08-30	Update the IPX Provider Name information of PCCW Global
HKGTC	4	Routing Information	2019-04-30	New MSISDN Range 852 4613
HKGTC	17	IP Roaming/Networking Information	2019-04-30	Primary provider updated.
HKGTC	20	LTE Roaming Information	2019-04-30	Primary provider updated.
HKGM3	17	IP Roaming/Networking Information	2019-04-30	Primary provider updated.
HKGM3	20	LTE Roaming Information	2019-04-30	Primary provider updated.
HKGTC	20	LTE Roaming Information	2018-12-14	Add IPX_Provider_Name info to fulfill new RAEX schema.
HKGTC	20	LTE Roaming Information	2018-12-14	Add IPX_Provider_Name info to fulfill new RAEX schema.
HKGM3	20	LTE Roaming Information	2018-12-14	Add IPX_Provider_Name info to fulfill new RAEX schema.
HKGTC	20	LTE Roaming Information	2018-12-13	Add IPX Provider Information
HKGM3	13	Network Elements Information	2018-12-13	Remove those obsoleted network elements

TADIG Code	Section ID	Section	Date	Description
HKGM3	20	LTE Roaming Information	2018-12-13	Add IPX Provider Information
HKGTC	4	Routing Information	2018-12-12	Add new MSISDN Range 852 4611, 852 4640, 852 5749 and 852 8481
HKGTC	13	Network Elements Information	2018-12-12	Add new SMSC GT 852 902 40727
HKGM3	13	Network Elements Information	2018-12-12	Add new SMSC GT 852 902 40727
HKGTC	4	Routing Information	2018-05-21	Add New MSISDN Range 852 4610 and 852 6360
HKGTC	13	Network Elements Information	2018-05-21	Add New SMSC GT Address 85290240718, 85290240733.
HKGTC	13	Network Elements Information	2018-05-21	Add New SCP GT Address 85290240717.
HKGTC	17	IP Roaming/Networking Information	2018-05-21	Add RAI and ULI Additional MCC/MNC 454 16.
HKGTC	17	IP Roaming/Networking Information	2018-05-21	Remove PMN authoritative and local caching DNS server IP addresses 203.210.11.129
HKGM3	4	Routing Information	2018-05-21	Remove MSISDN Range 852 4647
HKGM3	13	Network Elements Information	2018-05-21	Add New SMSC GT Address 85290240718, 85290240733.
HKGM3	13	Network Elements Information	2018-05-21	Add New SCP GT Address 85290240717.
HKGM3	17	IP Roaming/Networking Information	2018-05-21	Add RAI and ULI Additional MCC/MNC 454 16.
HKGM3	17	IP Roaming/Networking Information	2018-05-21	Remove PMN authoritative and local caching DNS server IP addresses "202.4.198.36" & "203.210.11.129".
HKGTC	4	Routing Information	2018-02-13	Modify the wording of "Additional Information".
HKGTC	4	Routing Information	2018-02-13	Remove the wording HKGMC/454 16 and 45416 from segment "a" of "Additional Information [1] GENERAL INFORMATION".
HKGTC	4	Routing Information	2018-02-13	Remove 45416 from "segment "c" of "Additional Information - [2] PACKET DATA SERVICES INFORMATION".
HKGTC	4	Routing Information	2018-02-13	HKT has migrated all customers with HKGMC/45416 IMSI level to either HKGTC/45400 or HKGM3/45419. HKGMC/45416 will no longer be used for our outbound roaming, effective on 01st January 2018.
HKGM3	4	Routing Information	2018-02-13	Modify the wording of "Additional Information".
HKGM3	4	Routing Information	2018-02-13	Remove MCC MNC 454 16 to MGT (CC) MGT (NC) 852 923 from "Networks" of "Additional Information".
HKGM3	4	Routing Information	2018-02-13	Remove the wording HKGMC/454 16 and 45416 from segment "a" of "Additional Information [1] GENERAL INFORMATION".
HKGM3	4	Routing Information	2018-02-13	Remove 45416 from "segment "c" of "Additional Information - [2] PACKET DATA SERVICES INFORMATION".
HKGM3	4	Routing Information	2018-02-13	HKT has migrated all customers with HKGMC/45416 IMSI level to either HKGTC/45400 or HKGM3/45419. HKGMC/45416 will no longer be used for our outbound roaming, effective on 01st January 2018.
HKGM3	4	Routing Information	2018-02-13	Remove "16 (TADIG Code: HKGMC)" from "Networks" of Additional Information for MCC=454 MNC=16.
HKGTC	13	Network Elements Information	2018-02-12	Add two new SMSC GT addresses 85290240715 and 85290240731.
HKGTC	17	IP Roaming/Networking Information	2018-02-12	Remove 454/16 from of "RAI/ULI Additional MCC/MNC List".
HKGTC	17	IP Roaming/Networking Information	2018-02-12	Remove IP 203.210.10.129 of "List of PMN authoritative/local caching DNS server IP addresses and names".
HKGTC	17	IP Roaming/Networking Information	2018-02-12	Re-arrange the sequence of "List of PMN authoritative/local caching DNS server IP addresses and names".
HKGM3	13	Network Elements Information	2018-02-12	Add two new SMSC GT addresses 85290240715 and 85290240731.
HKGM3	16	Packet Data Service Information	2018-02-12	Delete "mnc016.mcc454.gprs & For 2G subscriber" from "List of APN Operator Identifiers".
HKGM3	16	Packet Data Service Information	2018-02-12	Delete the obsoleted APN from "APN" WEB List", only remain the APN pccw/blackberry.net/internet/mobile.
HKGM3	16	Packet Data Service Information	2018-02-12	Delete obsoleted APN from "APN WAP List", remain APN pccw/mobile.

TADIG Code	Section ID	Section	Date	Description
HKGM3	16	Packet Data Service Information	2018-02-12	Delete obsoleted APN from "APN MMS List", remain APN pccw/mobile.
HKGM3	17	IP Roaming/Networking Information	2018-02-12	Remove 454/16 from of "RAI/ULI Additional MCC/MNC List".
HKGM3	17	IP Roaming/Networking Information	2018-02-12	Remove IP/name 202.4.210.32/YTG-4GGnDNS-2.epc.MNC019.MCC454.3gppnetwork.org, 202.4.210.32/YTG-4GGnDNS-2.MNC019.MCC454.GPRS, 203.210.10.129/ZDNS-Ex1.mnc016.mcc454.gprs of "List of PMN authoritative/local caching DNS server IP addresses and names".
HKGM3	17	IP Roaming/Networking Information	2018-02-12	Remove IP/name 202.4.210.32/YTG-4GGnDNS-2.MNC016.MCC454.GPRS, 203.210.10.129/ZDNS-Ex1.epc.mnc019.mcc454.3gppnetwork.org, 203.210.11.84/TPC-DNS11.mnc016.mcc454.gprs, of "List of PMN authoritative/local caching DNS server IP addresses and names".
HKGM3	17	IP Roaming/Networking Information	2018-02-12	Remove IP/name 203.210.11.85/TPC-DNS12.mnc016.mcc454.gprs, 203.210.11.68/KSG-DNS13.mnc016.mcc454.gprs, 203.210.11.69/KSG-DNS14.mnc016.mcc454.gprs of "List of PMN authoritative/local caching DNS server IP addresses and names".
HKGM3	17	IP Roaming/Networking Information	2018-02-12	Re-arrange the sequence of "List of PMN authoritative/local caching DNS server IP addresses and names".
HKGTC	4	Routing Information	2017-09-27	Add New MSISDN Number range 852 4647
HKGTC	4	Routing Information	2017-09-27	Add new MNP number ranges 852 4x/7x/8x
HKGTC	4	Routing Information	2017-09-27	Add MSISDN 852 (5140-5144), 852 520, 852 532, 852 (5702-5703)
HKGTC	13	Network Elements Information	2017-09-27	Delete PGW/SGW/SGSN-2G+3G IP 110.4.26.160/28 and GGSN IP 115.255.8.0/25, 131.166.254.0/29
HKGTC	17	IP Roaming/Networking Information	2017-09-27	Delete the non advertising IP_address 110.4.26.160/28, 115.255.8.0/25, 131.166.254.0/29.
HKGTC	17	IP Roaming/Networking Information	2017-09-27	PCCWG (merged its IPX domains with SAP's domains into a single domain and shares the same AS with SAP since Jun2017).
HKGM3	4	Routing Information	2017-09-27	Add new MSISDN range 852 4647
HKGM3	4	Routing Information	2017-09-27	Add new MNP number ranges 852 4x/7x/8x
HKGM3	17	IP Roaming/Networking Information	2017-09-27	Delete the non advertising IP_address 110.4.26.160/28, 115.255.8.0/25, 131.166.254.0/29
HKGM3	17	IP Roaming/Networking Information	2017-09-27	PCCWG (merged its IPX domains with SAP's domains into a single domain and shares the same AS with SAP since Jun2017).
HKGTC	21	Contact Information	2017-09-25	Contact List updated. Remove the contact of Vivian Li.
HKGM3	21	Contact Information	2017-09-25	Contact List updated. Remove the contact of Vivian Li.
HKGTC	4	Routing Information	2017-05-31	Add back the missing HKGTC MSISDN 852923
HKGTC	4	Routing Information	2017-05-31	Modify the MNP Range same as HKGM3
HKGTC	4	Routing Information	2017-05-31	Modify the "Additional Information:PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP)"
HKGM3	4	Routing Information	2017-05-31	Modify the "Additional Information:PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP)"
HKGM3	17	IP Roaming/Networking Information	2017-05-31	Remove the "IP Address 202.4.210.31 and DNS Name=YTG-4GGnDNS-1.epc.MNC019.MCC454.3gppnetwork.org" of the "List of PMN authoritative DNS server IP addresses and name" and "List of PMN local caching DNS server IP address and names"
HKGTC	4	Routing Information	2017-02-07	Add back the missing HKGTC MSISDN 852933
HKGTC	13	Network Elements Information	2017-02-03	Add SMSC GT Address 85290240712, 852902407(23-26) and SCP GT address 8529024071(3-4)
HKGTC	17	IP Roaming/Networking Information	2017-02-03	Add authoritative and local caching DNS server IP 203.210.11.68 and 203.210.11.69.
HKGTC	18	MMS Interworking Information	2017-02-03	Add a new MMSC with same Domain name "mmsc.hkcs.com" and new IP Addresses (for One-MMSC migration)
HKGM3	13	Network Elements Information	2017-02-03	Add SMSC GT Address 85290240712, 852902407(23-26) and SCP GT address 8529024071(3-4)

TADIG Code	Section ID	Section	Date	Description
HKGM3	17	IP Roaming/Networking Information	2017-02-03	Add authoritative and local caching DNS server IP 203.210.11.68 and 203.210.11.69
HKGM3	18	MMS Interworking Information	2017-02-03	Add a new MMSC with Domain name "mmsc.hkcs1.com" and new IP Addresses
HKGTC	21	Contact Information	2016-11-30	update the email address of IR21 distribution and contact person of TADIG
HKGM3	21	Contact Information	2016-11-30	Update the email address of IR21 distribution
HKGTC	4	Routing Information	2016-11-24	Add new MNP range 852 5702 xxxx to 852 5703 xxxx
HKGTC	17	IP Roaming/Networking Information	2016-11-24	Add authoritative/local caching DNS service IP 203.210.11.84 and 203.210.11.85. Remove GRX provider "SAP".
HKGTC	21	Contact Information	2016-11-24	Contact list update
HKGM3	17	IP Roaming/Networking Information	2016-11-24	Add authoritative/local caching DNS server IP 203.210.11.84 and 203.210.11.85. Remove GRX provider "SAP".
HKGM3	21	Contact Information	2016-11-24	Contact list update
HKGTC	20	LTE Roaming Information	2016-10-14	After the "maintenance window" of RAEX Tools on 13-Oct-2016 17:00 to 19:00 BST, we can choose "Unsupport" for 2G/3G LTE Roaming Agreement Scenario 5 without "validate error", so, we change back to "Unsupport" for bug error.
HKGM3	20	LTE Roaming Information	2016-10-14	After the "maintenance window" of RAEX Tools on 13-Oct-2016 17:00 to 19:00 BST, we can choose "Unsupport" for 2G/3G LTE Roaming Agreement Scenario 5 without "validate error", so, we change back to "Unsupport" for bug error.
HKGTC	4	Routing Information	2016-10-13	Add new MNP range 852 5720 - 852 5729
HKGTC	4	Routing Information	2016-10-13	Sort the E.164 number ranges for number portability
HKGTC	20	LTE Roaming Information	2016-10-13	According to IR 88 V 14.0, updated 2G/3G LTE Roaming Agreement Scenario 5 to "Support"
HKGM3	20	LTE Roaming Information	2016-10-13	According to IR 88 V 14.0, updated 2G/3G LTE Roaming Agreement Scenario 5 to "Support"
HKGTC	17	IP Roaming/Networking Information	2016-08-25	No change
HKGM3	17	IP Roaming/Networking Information	2016-08-25	No change
HKGTC	13	Network Elements Information	2016-06-07	Correction of SMSC Address 852 902 16742 to 852 902 16724, 852 902 40971-40973 to 852 902 40970-40973 and 852 902 40985-40986 to 852 902 40984-40986
HKGTC	13	Network Elements Information	2016-06-07	Correction of the SMSC Address 852 902 41233-41235 to 852 921 41233-41235, 852 902 41238 to 852 921 41238 and 852 902 44051-44055 to 852 921 44051-44055
HKGTC	4	Routing Information	2016-05-10	Add new MNP number range
HKGTC	13	Network Elements Information	2016-05-10	Add new SMSC address
HKGTC	21	Contact Information	2016-05-10	Modify IR21 Distribution Email address List
HKGM3	13	Network Elements Information	2016-05-10	Add new SMSC address
HKGM3	17	IP Roaming/Networking Information	2016-05-10	Add new DNS sever IP address, DNS name
HKGTC	21	Contact Information	2016-04-29	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	20	LTE Roaming Information	2016-04-29	Modify the 2G/3G/LTE Roaming Agreement
HKGTC	4	Routing Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	5	International SCCP Gateway	2016-04-01	Create a combined IR21 of HKGTC and HKGM3
HKGTC	7	SCCP Protocol	2016-04-01	Create a combined IR21 of HKGTC and HKGM3
HKGTC	8	Subscriber Identity Authentication	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	10	MAP	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	10	MAP	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	13	Network Elements Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	14	USSD Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	15	CAMEL Information	2016-04-01	Create a combined IR21 of HKGTC and HKGM3
HKGTC	16	Packet Data Service Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

TADIG Code	Section ID	Section	Date	Description
HKGTC	17	IP Roaming/Networking Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	18	MMS Interworking Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	20	LTE Roaming Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	21	Contact Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGTC	21	Contact Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	4	Routing Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	5	International SCCP Gateway	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	7	SCCP Protocol	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	8	Subscriber Identity Authentication	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	10	MAP	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	12	MAP Inter Operator SMS Enhancement	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	13	Network Elements Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	14	USSD Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	15	CAMEL Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	16	Packet Data Service Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3.
HKGM3	17	IP Roaming/Networking Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	18	MMS Interworking Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	20	LTE Roaming Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	21	Contact Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
HKGM3	21	Contact Information	2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

NETWORK

TADIG code: HKGTC

Section ID: 2 (Mandatory, Repeating)

TADIG code:	HKGTC
Network type:	Terrestrial
Technology:	Frequency list:
2G-GSM frequencies:	GSM 900, DCS 1800
3G-UTRA/FDD frequencies:	1 - IMT 2.1 GHz, 8 - 900 MHz
3G-UTRA/TDD frequencies:	Unsupported
4G-E-UTRAN frequencies:	8 - 900 MHz, 3 - DCS 1800, 7 - 2.6 GHz
4G-E-UTRAN-MIoT-LTE-M frequencies:	Unsupported
4G-E-UTRAN-MIoT-NB-IoT frequencies:	Unsupported
MIoT-NB-IoT deployment modes:	Unsupported
Presentation of country initials and MNN:	HKG, CSL
Abbreviated MNN:	CSL

NETWORK INFORMATION

TADIG code: HKGTC
Section ID: 3 (Mandatory)

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

ROUTING INFORMATION

TADIG code: HKGTC

Section ID: 4 (Mandatory)

Effective date of change: 2020-07-22

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	511						
	852	514	0	4				
	852	520						
	852	521						
	852	524						
	852	527						
	852	528	0	2				
	852	529						
	852	532						
	852	540						
	852	543						
	852	547						
	852	552						
	852	554	0	8				
	852	568						
	852	570	2	3				
	852	571	0	7				
	852	579						
	852	591						
	852	592						
	852	599						
	852	602						
	852	603						
	852	605						
	852	613						
	852	614						
	852	616						
	852	617						
	852	628						
	852	629						
	852	636	0	0				
	852	637						
	852	639						
	852	641						
	852	642						
	852	653						
	852	654						
	852	659						
	852	665						
	852	671						
	852	675						

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	677						
	852	682						
	852	689						
	852	697						
	852	902						
	852	903						
	852	908						
	852	909						
	852	910						
	852	915						
	852	918						
	852	919						
	852	921						
	852	923						
	852	925						
	852	926						
	852	930						
	852	933						
	852	940						
	852	946						
	852	953						
	852	955						
	852	961						
	852	962						
	852	965						
	852	976						
	852	978						
	852	987						
	852	988						
	852	4610	0	9				
	852	4611	0	9				
	852	4613	0	9				
	852	4614	0	9				
	852	4640	0	9				
	852	4647	0	9				
	852	5749	0	9				
	852	6362	0	9				
	852	8481	0	9				
	852	4654	0	9				
	852	4655	0	9				
	852	4656	0	9				
	852	4657	0	9				
	852	4658	0	9				
	852	7080	0	9				
	852	7081	0	9				

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	7082	0	9				
	852	7083	0	9				
	852	7084	0	9				
	852	5149	0	9				
	852	8480	0	9				

Network Nodes Global Title Number Range(s)								
	852	902	00000	99999				
	852	921	00000	99999				

MSRN Number Range(s)								
	852	616	40000	49999				
	852	639	45000	45999				
	852	902	40400	40499				
	852	902	44000	44999				
	852	902	46000	46999				
	852	921	49000	49999				
	852	940	70000	70999				
	852	940	71000	71999				
	852	940	72000	72999				
	852	940	73000	73999				
	852	940	74000	74999				

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	454	00

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	852	902

Does Number Portability apply ?	Yes
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Is 15 Digit MSISDN Supported ?	No
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USIM SIM Header	8985200, 8985210
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E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	852	42	2	9
	852	43	3	9
	852	44	0	9
	852	45	1	9
	852	46	0	9
	852	47	0	9
	852	51	0	9
	852	52	0	9
	852	53	0	9
	852	54	0	9
	852	55	0	9
	852	56	0	9
	852	57	0	9
	852	59	0	9
	852	60	1	9
	852	61	0	9
	852	62	0	9
	852	63	0	9
	852	64	0	9

E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	852	65	0	9
	852	66	0	9
	852	67	0	9
	852	68	0	9
	852	69	0	9
	852	70	1	8
	852	71	4	5
	852	71	7	8
	852	72	4	6
	852	73	4	6
	852	82	4	5
	852	82	8	9
	852	83	5	6
	852	83	8	9
	852	84	0	9
	852	85	3	9
	852	86	0	9
	852	87	0	9
	852	89	0	9
	852	90	1	9
	852	91	0	0
	852	91	2	9
	852	92	0	9
	852	93	0	9
	852	94	0	9
	852	95	0	9
	852	96	0	9
	852	97	0	9
	852	98	0	9
	852	404	0	9
	852	406	0	9
	852	409	3	9
	852	420	0	9
	852	481	0	9
	852	482	1	9
	852	486	0	9
	852	489	0	9
	852	492	3	9
	852	495	2	9
	852	498	0	9
	852	710	4	7
	852	710	9	9
	852	711	4	5
	852	711	8	8
	852	712	0	9
	852	713	2	2
	852	713	4	9
	852	716	0	8
	852	719	2	2
	852	719	4	5
	852	719	7	9
	852	721	0	0
	852	721	2	7
	852	721	9	9
	852	727	0	1
	852	727	3	6
	852	737	4	5
	852	737	7	8
	852	739	0	1
	852	739	4	4
	852	739	6	6
	852	815	0	9
	852	818	0	9
	852	827	5	9
	852	831	0	9
	852	832	5	8
	852	837	1	9
	852	850	0	1

Additional Information
NETWORK
MCC=454, MNC=00 (TADIG Code: HKGTC), 10 (TADIG Code: HKGNW)
IMSI to MGT Translations, please remove 5 digits and replace with 6 digits
45400 -> 852902
45410 -> 852921
additional service access number level :
+852 171 ABC / +852 171 ABCD
+852 178 ABC / +852 178 ABCD
+852 179 ABC / +852 179 ABCD
PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP) : 45400 / 45402 / 45409 / 45416 / 45418 / 45419
[1] GENERAL INFORMATION
CSL (HKGTC /45400, HKGNW/45410) and HKT (HKGM3 /45419) completed network integration process, eventually, there is only one core network when the integration completed in late 2016.
Apart from the changes specified in this IR21, you should not need to perform any other changes to your network.
SCCP/GT/MSRN Information
a. By mid-end Q2 2016, for our outbound roaming, CSL(454-00/454-10) and HKT(454-19) merged with combined HLR using E.164 address with starting prefix of 852902.. We continue to use CSL IMSI 45400/45410 and HKT IMSI 45419 for our outbound roaming.
b. By late Q2 to mid Q3 2016, for our inbound roaming, CSL (454-00) and HKT(454-19) merged using combined MSC and SGSN using E.164 address with starting prefix of 852902 with PLMN codes in radio broadcasting as listed above.
c. PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP) : 45400 / 45402 / 45409 / 45416 / 45418 / 45419
d. For the time being, separate SCCP Providers are used for CSL (GT = 852902/852921) and HKT (GT = 852923) traffic until further notification. Platform GT range 852902/852921 *MUST* CONTINUE TO BE ROUTED as per other CSL (454-00) GT ranges.
Please note HKT network keeps using E.164 address with starting prefix of both 852902 and 852923.
e. HKT network requires carrier(s) to support old CSL/HKT MSRN range (85263804(3-9)xx, 85263849(5-9)xx, 8529234xxxx & 8529239xxxx)and new MSRN range (8526164(5,6,9)xxx, 85263945xxx, 85292149xxx, 8529407(0-3)xxx and 852902404(60-99))
simultaneously.
DIAMETER INFORMATION
f. Networks will be integrated gradually, such as using same IP address(es) / network elements for both networks (e.g. sharing DEA/DRA IP and ASN in this IR21 update).
g. For support of our outbound LTE roaming service for CSL (454-00) and HKT (454-19) LTE roamers, please implement in your MME to configure two IMSI->REALM mapping (i.e.45400->epc.mnc000.mcc454.3gppnetwork.org and 45419->epc.mnc019.mcc454.3gppnetwork.org.)
In this situation, obviously you will also need to configure your DEA for routing towards both Diameter Realms (i.e., epc.mnc000.mcc454.3gppnetwork.org and epc.mnc019.mcc454.3gppnetwork.org), and request your Diameter Signalling Provider to allow routing
towards both Diameter Realms (i.e., epc.mnc000.mcc454.3gppnetwork.org and epc.mnc019.mcc454.3gppnetwork.org).
h. By Q3, 2016, for our inbound LTE roaming, CSL (454-00) and HKT (454-19) networks merged using combined MME using realm epc.mnc000.mcc454.3gppnetwork.org.
i. Both 45400 and 45419 SIM was served by HKT realm which was "epc.mnc000.mcc454.3gppnetwork.org".
[2] PACKET DATA SERVICES INFORMATION
The following is recommended for Packet Data Services Network Set-up:
a. Advise your GRX Operator to allow route adverts from the ASNs of both CSL(454-00) and HKT(454-19);
b. Allow all Inter PLMN GSN Backbone IP address ranges in your firewalls. If you utilise GTP aware firewalls, it is recommended that an HKT handoverlist is created containing the Inter PLMN GSN Backbone IP address ranges of
both CSL(454-00) and HKT(454-19).
c. For those operators make using ULI and RAI fields for own charging purpose, please help to configure all below MCC-MNC combinations in corresponding platform.
45400 / 45402 / 45409 / 45416 / 45418 / 45419
f. We would like to inform you that HKT has migrated all customers with HKGMC/45416 IMSI level to either HKGTC/45400 or HKGM3/45419. As a result, HKGMC/45416 will no longer be used for our outbound roaming, effective on 01st January 2018.

History of changes

Date	Description
2020-07-22	Add new MSISDN Range 852 8480
2020-07-22	Add item "i" under "DIAMETER INFORMATION" in "Additional Information" to describe the realm of HKT.
2020-04-03	Add new MSISDN Range(s) 852 4654; 852 4655; 852 4656; 852 4657; 852 4658; 852 7080; 852 7081; 852 7082; 852 7083; 852 7084;
2020-04-03	Add MSISDN Range(s) 852 5149
2019-08-30	Add new MSISDN Range(s) 852 4614 and 852 6362
2019-04-30	New MSISDN Range 852 4613
2018-12-12	Add new MSIDN Range 852 4611, 852 4640, 852 5749 and 852 8481
2018-05-21	Add New MSISDN Range 852 4610 and 852 6360
2018-02-13	Modify the wording of "Additional Information".
2018-02-13	Remove the wording HKGMC/454 16 and 45416 from segment "a" of "Additional Information [1] GENERAL INFORMATION".
2018-02-13	Remove 45416 from "segment "c" of "Additional Information - [2] PACKET DATA SERVICES INFORMATION".
2018-02-13	HKT has migrated all customers with HKGMC/45416 IMSI level to either HKGTC/45400 or HKGM3/45419. HKGMC/45416 will no longer be used for our outbound roaming, effective on 01st January 2018.
2017-09-27	Add New MSISDN Number range 852 4647
2017-09-27	Add new MNP number ranges 852 4x/7x/8x
2017-09-27	Add MSISDN 852 (5140-5144), 852 520, 852 532, 852 (5702-5703)
2017-05-31	Add back the missing HKGTC MSISDN 852923
2017-05-31	Modify the MNP Range same as HKGM3
2017-05-31	Modify the "Additional Information:PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP)"
2017-02-07	Add back the missing HKGTC MSISDN 852933
2016-11-24	Add new MNP range 852 5702 xxxx to 852 5703 xxxx
2016-10-13	Add new MNP range 852 5720 - 852 5729
2016-10-13	Sort the E.164 number ranges for number portability
2016-05-10	Add new MNP number range
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

INTERNATIONAL SCCP GATEWAY

TADIG code: HKGTC

Section ID: 5 (Optional)

Effective date of change: 2016-04-01

International SCCP carrier list

SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary
Comments:	TATA Communications
MNO TADIG code list:	

DPC info:	
Signature:	VPD
Type:	STP/SCCP
International DPC:	3.4.1
Comments:	3.4.1 is the alias point code used for Montreal STP (3.6.0) and Toronto STP (3.5.0). Tata Communications

DPC info:	
Signature:	VPP
Type:	STP/SCCP
International DPC:	3.10.7
Comments:	3.10.7 is the alias point code used for London STP (3.11.0) and Frankfurt STP (3.11.1) . Tata Communications

SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary
Comments:	Telstra Global
MNO TADIG code list:	

DPC info:	
Signature:	HKE
Type:	ISC
International DPC:	4.108.0
Comments:	

DPC info:	
Signature:	HKH
Type:	ISC
International DPC:	4.108.1
Comments:	

SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary
Comments:	CITIC Telecom International Limited
MNO TADIG code list:	

DPC info:	
Signature:	CITP4
Type:	ISC
International DPC:	4.177.1
Comments:	

DPC info:	
Signature:	CITP3
Type:	ISC
International DPC:	4.178.3
Comments:	

History of changes

Date	Description
2016-04-01	Create a combined IR21 of HKGTC and HKGM3

SCCP Protocol available at PMN for connection for International SS7 Roaming

TADIG code: HKGTC

Section ID: 7 (Optional)

Effective date of change: 2016-04-01

SCCP Protocol available at PMN	Availability (Yes / No)
ETSI (ITU):	Yes
ANSI:	No

History of changes

Date	Description
2016-04-01	Create a combined IR21 of HKGTC and HKGM3

SUBSCRIBER IDENTITY AUTHENTICATION

TADIG code: HKGTC

Section ID: 8 (Optional)

Effective date of change: 2016-04-01

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 A5/2 A5/3

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

MOBILE APPLICATION PART (MAP)

TADIG code: HKGTC

Section ID: 10 (Optional)

Effective date of change: 2016-04-01

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

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

NETWORK ELEMENTS INFORMATION

TADIG code: HKGTC

Section ID: 13 (Optional)

Effective date of change: 2020-07-22

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
HLR		852 902 00000 / 99999					+08:00
HSS		852 902 00000 / 99999	14.0.185.0/24				+08:00
HSS		852 902 00000 / 99999	14.0.184.0/24				+08:00
MSC/VLR-2G+3G		852 902 00000 / 99999					+08:00
PGW			110.4.10.0/24				+08:00
PGW			203.210.11.0/24				+08:00
PGW			203.210.10.0/24				+08:00
SCP		852 902 03724 / 03724					+08:00
SCP		852 902 07944 / 07944					+08:00
SCP		852 902 40713 / 40714					+08:00
SCP		852 902 40717 / 40717					+08:00
SGSN-2G+3G		852 902 00000 / 99999	203.210.11.0/24				+08:00
SGSN-2G+3G		852 902 00000 / 99999	203.210.10.0/24				+08:00
SGSN-2G+3G		852 902 00000 / 99999	110.4.10.0/24				+08:00
SGW			110.4.10.0/24				+08:00
SGW			203.210.11.0/24				+08:00
SGW			203.210.10.0/24				+08:00
SMSC		852 902 00006 / 00006					+08:00
SMSC		852 902 00107 / 00107					+08:00
SMSC		852 902 00427 / 00427					+08:00
SMSC		852 902 00496 / 00496					+08:00
SMSC		852 902 00513 / 00513					+08:00
SMSC		852 902 00573 / 00573					+08:00
SMSC		852 902 01452 / 01452					+08:00
SMSC		852 902 01478 / 01478					+08:00
SMSC		852 902 01714 / 01714					+08:00
SMSC		852 902 01949 / 01949					+08:00
SMSC		852 902 02940 / 02940					+08:00
SMSC		852 902 03449 / 03449					+08:00
SMSC		852 902 03465 / 03465					+08:00
SMSC		852 902 03467 / 03467					+08:00
SMSC	IOSMS	852 902 03529 / 03529					+08:00
SMSC		852 902 04204 / 04204					+08:00
SMSC		852 902 04258 / 04258					+08:00
SMSC		852 902 04647 / 04647					+08:00
SMSC		852 902 06244 / 06244					+08:00
SMSC		852 902 07542 / 07543					+08:00
SMSC		852 902 08147 / 08147					+08:00
SMSC		852 902 09342 / 09342					+08:00
SMSC		852 902 09537 / 09537					+08:00
SMSC		852 902 09572 / 09572					+08:00
SMSC		852 902 10724 / 10724					+08:00
SMSC		852 902 11047 / 11047					+08:00
SMSC		852 902 12247 / 12247					+08:00
SMSC		852 902 15647 / 15647					+08:00
SMSC		852 902 16724 / 16724					+08:00
SMSC		852 902 18347 / 18347					+08:00
SMSC		852 902 19461 / 19461					+08:00
SMSC		852 902 24047 / 24047					+08:00
SMSC		852 902 24147 / 24147					+08:00
SMSC		852 902 25124 / 25124					+08:00
SMSC		852 902 25614 / 25614					+08:00
SMSC		852 902 25814 / 25814					+08:00
SMSC		852 902 26124 / 26124					+08:00
SMSC		852 902 26714 / 26714					+08:00
SMSC		852 902 26914 / 26914					+08:00
SMSC		852 902 33686 / 33688					+08:00
SMSC		852 902 37773 / 37775					+08:00
SMSC		852 902 39090 / 39092					+08:00
SMSC	IOSMS	852 902 39093 / 39093					+08:00
SMSC		852 902 40712 / 40712					+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		852 902 40715 / 40715					+08:00
SMSC		852 902 40718 / 40718					+08:00
SMSC		852 902 40723 / 40726					+08:00
SMSC		852 902 40727 / 40727					+08:00
SMSC		852 902 40731 / 40731					+08:00
SMSC		852 902 40733 / 40733					+08:00
SMSC		852 902 40960 / 40969					+08:00
SMSC		852 902 40970 / 40973					+08:00
SMSC		852 902 40980 / 40980					+08:00
SMSC		852 902 40981 / 40982					+08:00
SMSC		852 902 40983 / 40983					+08:00
SMSC		852 902 40984 / 40986					+08:00
SMSC		852 902 43454 / 43454					+08:00
SMSC		852 902 43964 / 43964					+08:00
SMSC		852 902 49574 / 49574					+08:00
SMSC		852 902 49904 / 49904					+08:00
SMSC		852 902 50108 / 50110					+08:00
SMSC		852 902 50282 / 50282					+08:00
SMSC		852 902 50714 / 50714					+08:00
SMSC		852 902 50742 / 50742					+08:00
SMSC		852 902 50842 / 50842					+08:00
SMSC		852 902 55224 / 55224					+08:00
SMSC		852 902 55581 / 55581					+08:00
SMSC		852 902 55586 / 55586					+08:00
SMSC		852 902 55647 / 55647					+08:00
SMSC		852 902 55742 / 55742					+08:00
SMSC		852 902 56014 / 56014					+08:00
SMSC		852 902 56444 / 56444					+08:00
SMSC		852 902 56447 / 56447					+08:00
SMSC		852 902 56542 / 56542					+08:00
SMSC		852 902 57144 / 57144					+08:00
SMSC		852 902 57224 / 57224					+08:00
SMSC		852 902 57614 / 57614					+08:00
SMSC		852 902 57724 / 57724					+08:00
SMSC		852 902 58342 / 58342					+08:00
SMSC		852 902 59435 / 59435					+08:00
SMSC		852 902 59824 / 59824					+08:00
SMSC		852 902 60314 / 60314					+08:00
SMSC		852 902 60342 / 60342					+08:00
SMSC		852 902 61147 / 61147					+08:00
SMSC		852 902 61414 / 61414					+08:00
SMSC		852 902 61444 / 61444					+08:00
SMSC		852 902 61547 / 61547					+08:00
SMSC		852 902 65424 / 65424					+08:00
SMSC		852 902 66647 / 66647					+08:00
SMSC		852 902 66744 / 66744					+08:00
SMSC		852 902 66799 / 66799					+08:00
SMSC		852 902 70694 / 70694					+08:00
SMSC		852 902 71242 / 71242					+08:00
SMSC		852 902 74224 / 74224					+08:00
SMSC		852 902 75644 / 75644					+08:00
SMSC		852 902 88000 / 88000					+08:00
SMSC		852 902 90747 / 90747					+08:00
SMSC		852 902 95914 / 95914					+08:00
SMSC		852 902 96747 / 96747					+08:00
SMSC		852 921 41233 / 41235					+08:00
SMSC		852 921 41238 / 41238					+08:00
SMSC		852 921 44051 / 44055					+08:00
PGW			131.166.163.32/29				+08:00
PGW			131.166.165.32/29				+08:00
PGW			131.166.165.48/29				+08:00

History of changes

Date	Description
2020-07-22	Add PGW 131.166.165.48/29
2020-04-03	Add PGW 131.166.163.32/29 and PGW 131.166.165.32/29
2018-12-12	Add new SMSC GT 852 902 40727
2018-05-21	Add New SMSC GT Address 85290240718, 85290240733.
2018-05-21	Add New SCP GT Address 85290240717.
2018-02-12	Add two new SMSC GT addresses 85290240715 and 85290240731.
2017-09-27	Delete PGW/SGW/SGSN-2G+3G IP 110.4.26.160/28 and GGSN IP 115.255.8.0/25, 131.166.254.0/29
2017-02-03	Add SMSC GT Address 85290240712, 852902407(23-26) and SCP GT address 8529024071(3-4)
2016-06-07	Correction of SMSC Address 852 902 16742 to 852 902 16724, 852 902 40971-40973 to 852 902 40970-40973 and 852 902 40985-40986 to 852 902 40984-40986
2016-06-07	Correction of the SMSC Address 852 902 41233-41235 to 852 921 41233-41235, 852 902 41238 to 852 921 41238 and 852 902 44051-44055 to 852 921 44051-44055
2016-05-10	Add new SMSC address
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

USSD Information

TADIG code: HKGTC
Section ID: 14 (Optional)
Effective date of change: 2016-04-01

USSD capability available	Yes
Supported phase	Phase 2

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

CAMEL INFO

TADIG code: HKGTC

Section ID: 15 (Conditional)

Effective date of change: 2016-04-01

gsmSSF/MSC

CAP Version supported (Inbound)	CAP Version supported (Outbound)
CAPv1 CAPv2 CAPv3	CAPv1 CAPv2 CAPv3

CAPv4 Partial Implementations

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

History of changes

Date	Description
2016-04-01	Create a combined IR21 of HKGTC and HKGM3

Packet Data Services Information

TADIG code: HKGTC

Section ID: 16 (Conditional)

Effective date of change: 2018-12-13

List of APN Operator Identifiers

APN Operator Identifier	Description	Example
mnc000.mcc454.gprs		
mnc010.mcc454.gprs		
apn.epc.mnc000.mcc454.3gppnetwork.org		

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			
hkcs1	na	na	H-APN		
internet	na	na	H-APN		
mobile	na	na	H-APN		
lte.internet	na	na	H-APN		
blackberry.net	na	na	H-APN		

APN WAP List

APN Credential			APN Type	WAP Gateway IP address	WAP Server URL	WAP Port ver 1	WAP Port ver 2
APN	Username	Password					
hkcs1	na	na	H-APN	192.168.59.51		8080	9201
mobile	na	na	H-APN	192.168.59.51		8080	9201

APN MMS List

APN	APN Credential		WAP Gateway IP address for MMS	Messaging Server URL
	Username	Password		
hkcs1	na	na	192.168.59.51	http://192.168.58.171:8002/
mobile	na	na	192.168.59.51	http://192.168.58.171:8002/
mms	na	na	192.168.111.1	http://mmsc.nwmobility.com:8002

IPv6 Connectivity Information

	IPv6 PDP Supported	IPv4v6 PDP Supported
SGSN Support	No	No
GGSN Support	No	No

List of 2G/3G QOS profiles

Profile name:	Background QoS
Traffic class:	Interactive
ARP:	2
Evolved ARP support:	Yes
Evolved ARP priority level:	2
Evolved APR preemption vulnerability list:	
Evolved APR preemption capability list:	

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
HSDPA	
HSUPA	
3GPP	

Multiple PDP Context Support	
Number of Primary PDP Context	2

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

IP - Roaming and IP - Interworking Information

TADIG code: HKGTC

Section ID: 17 (Conditional)

Effective date of change: 2020-07-22

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	203.210.10.0/24
	203.210.11.0/24
	110.4.10.0/24
	202.4.198.0/24
	202.4.210.0/25
	202.4.197.128/25
	14.0.184.0/24
	14.0.185.0/24
	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
	131.166.165.48/29

ULI Additional MCC/MNC List	MCC	MNC
	454	19
	454	18
	454	09
	454	02
	454	00
	454	16

RAI Additional MCC/MNC List	MCC	MNC
	454	19
	454	18
	454	09
	454	02
	454	00
	454	16

List of Autonomous System Number (ASN):	ASN
	64574
	9444
	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
203.210.11.84		
203.210.11.85		
203.210.11.68		
203.210.11.69		

List of PMN local caching DNS server IP addresses and names		
IP address	IPv6 address	DNS Name
203.210.11.84		
203.210.11.85		
203.210.11.68		
203.210.11.69		

List of GRX Providers	GRX Provider
	(Preferred) PCCW Global / SAP Syniverse BICS

History of changes

Date	Description
2020-07-22	Add inter-PMN IP backbone address ranges: 131.166.165.48/29
2020-04-03	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
2020-04-03	Add ASN 22870 and 3321
2020-04-03	Add remarks for GRX provider "PCCW Global".
2019-08-30	Update the GRX Provider information of PCCW Global
2019-08-30	Remove the ASN 18101 and 3321
2019-04-30	Primary provider updated.
2018-05-21	Add RAI and ULI Additional MCC/MNC 454 16.
2018-05-21	Remove PMN authoritative and local caching DNS server IP addresses 203.210.11.129
2018-02-12	Remove 454/16 from of "RAI/ULI Additional MCC/MNC List".
2018-02-12	Remove IP 203.210.10.129 of "List of PMN authoritative/local caching DNS server IP addresses and names".
2018-02-12	Re-arrange the sequence of "List of PMN authoritative/local caching DNS server IP addresses and names".
2017-09-27	Delete the non advertising IP_address 110.4.26.160/28, 115.255.8.0/25, 131.166.254.0/29.
2017-09-27	PCCWG (merged its IPX domains with SAP's domains into a single domain and shares the same AS with SAP since Jun2017).
2017-02-03	Add authoritative and local caching DNS server IP 203.210.11.68 and 203.210.11.69.
2016-11-24	Add authoritative/local caching DNS service IP 203.210.11.84 and 203.210.11.85. Remove GRX provider "SAP".
2016-08-25	No change
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

MMS Interworking Information

TADIG code: HKGTC

Section ID: 18 (Optional)

Effective date of change: 2017-02-03

MMS Elements Data

Domain name of MMSC	IP Address	Max. size of MMS allowed	Delivery Report allowed? (Yes / No)	Read Report allowed? (Yes / No)	IP address(es) of Incoming MTA	IP address(es) of Outgoing MTA
mmsc.hkcs1.com	110.4.26.166	300	Yes	Yes	110.4.26.166	110.4.26.161 110.4.26.162

List of MMS IW Hub Provider

MMS IW Hub Provider Name	GT address(es)
Aicent	

MMS Elements Data

Domain name of MMSC	IP Address	Max. size of MMS allowed	Delivery Report allowed? (Yes / No)	Read Report allowed? (Yes / No)	IP address(es) of Incoming MTA	IP address(es) of Outgoing MTA
mmsc1.hkcs1.com	110.4.26.161	300	Yes	Yes	110.4.26.166	110.4.26.161 110.4.26.162

List of MMS IW Hub Provider

MMS IW Hub Provider Name	GT address(es)
Aicent	

MMS Elements Data

Domain name of MMSC	IP Address	Max. size of MMS allowed	Delivery Report allowed? (Yes / No)	Read Report allowed? (Yes / No)	IP address(es) of Incoming MTA	IP address(es) of Outgoing MTA
mmsc2.hkcs1.com	110.4.26.162	300	Yes	Yes	110.4.26.166	110.4.26.161 110.4.26.162

List of MMS IW Hub Provider

MMS IW Hub Provider Name	GT address(es)
Aicent	

MMS Elements Data

Domain name of MMSC	IP Address	Max. size of MMS allowed	Delivery Report allowed? (Yes / No)	Read Report allowed? (Yes / No)	IP address(es) of Incoming MTA	IP address(es) of Outgoing MTA
mmsc.hkcs1.com	202.4.197.181	300	Yes	Yes	116.48.214.211 116.48.214.214 202.4.197.181 202.4.197.184	116.48.214.211 116.48.214.210 116.48.214.212 116.48.214.214 116.48.214.213 116.48.214.215 202.4.197.181 202.4.197.180 202.4.197.182 202.4.197.184 202.4.197.183 202.4.197.185

List of MMS IW Hub Provider

MMS IW Hub Provider Name	GT address(es)
Aicent	

History of changes

Date	Description
2017-02-03	Add a new MMSC with same Domain name "mmsc.hkcs1.com" and new IP Addresses (for One-MMSC migration)
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

LTE Roaming Information

TADIG code: HKGTC

Section ID: 20 (Optional)

Effective date of change: 2020-12-08

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
(Preferred) PCCW Global / SAP		
Primary IP address of DA	Secondary IP address of DA	

Roaming Interconnection

EPC Realms For Roaming	
	epc.mnc000.mcc454.3gppnetwork.org

FQDN Diameter Edge Agent

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
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S6a Supported without IWF	S6a MAP IWF supported to HSS	S6a MAP IWF supported to MME
true	false	false

S6d used for legacy SGSN	S9 used for PCC
false	false

SMS ITW

SMS delivery over IP	SMS delivery over SGs
false	true

Voice ITW

CSFB

Roaming CS Fallback

Roaming Retry (MTRR)

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

Information for Diameter certificates exchange**5G early drop support**

	As HPMN	AS VPMN
5G NSA (non-standalone access) supported	No	No
DNS PGW NAPTR includes +nc-nr	No	No
NSA options for EN-DC		
ARD set to support of NR as secondary RAT	No	
Restrict NR access if HSS is not set to support NR as secondary RAT		No

History of changes

Date	Description
2020-12-08	No new S6a Diameter connection to Syniverse IPX.
2020-04-03	Add remarks for IPX Provider Name "PCCW Global".

Date	Description
2019-08-30	For security reason, remove the host name of HKT DEA
2019-08-30	Update the IPX Provider Name information of PCCW Global
2019-04-30	Primary provider updated.
2018-12-14	Add IPX_Provider_Name info to fulfill new RAEX schema.
2018-12-14	Add IPX_Provider_Name info to fulfill new RAEX schema.
2018-12-13	Add IPX Provider Information
2016-10-14	After the "maintenance window" of RAEX Tools on 13-Oct-2016 17:00 to 19:00 BST, we can choose "Unsupport" for 2G/3G LTE Roaming Agreement Scenario 5 without "validate error", so, we change back to "Unsupport" for bug error.
2016-10-13	According to IR 88 V 14.0, updated 2G/3G LTE Roaming Agreement Scenario 5 to "Support"
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

CONTACT INFORMATION

TADIG code: HKGTC

Section ID: 21 (Optional, Repeating)

Effective date of change: 2017-09-25

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
	Mon Tue Wed Thu Fri	09:00:00	18:00:00

Main Contact for Troubleshooting (Office Hours)

Team Name	Tel.	Mobile	Fax	Email
ISOC	85223464808	85292125406		ENGINEERING-NS-ISOC-Mobile@pccw.com pccw-roaming_support@pccw.com

Escalation Contact for Troubleshooting

Person Name	Tel.	Mobile	Fax	Email
Alfred Chung	+85228884050	+85290521264		alfred.hs.chung@pccw.com

24 x 7 Troubleshooting (contact out of Office Hours)

Team Name	Tel.	Mobile	Fax	Email
ISOC	85223464808	85292125406		ENGINEERING-NS-ISOC-Mobile@pccw.com pccw-roaming_support@pccw.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
Tata Telecommunication			
JobTitle		Email	
Link Setup		roaming@tatacommunications.com	
Person Name	Tel.	Mobile	Fax
Tata Communications	+15148687875	+15148688996	
JobTitle		Email	
GCSC Customer Service		mobilecustomer.service@tatacommunications.com	
Person Name	Tel.	Mobile	Fax
CITIC Telecom International Ltd	+85223778877		
JobTitle		Email	
NOC			
Person Name	Tel.	Mobile	Fax
CITIC Telecom International Ltd	+85234236414	+85292291616 +85297671616	
JobTitle		Email	
NOC Manager		nocmgr@citictel.com	
Person Name	Tel.	Mobile	Fax
CITIC Telecom International Ltd	+85234236471		
JobTitle		Email	
Network Operation Director		nosdir@citictel.com	
Person Name	Tel.	Mobile	Fax
Telstra International Ms Helen Wong	+85229834171		
JobTitle		Email	
Manager			

Roaming Coordinator

Person Name	Tel.	Mobile	Fax
Ms. Vince Lam	+85228830428	+85266204295	+85229685177
JobTitle		Email	
Senior Manager		vince.sk.lam@hkcsf.com	

IREG Tests

Person Name	Tel.	Mobile	Fax
Wilson Lau	+85228889365		
JobTitle		Email	
Engineer		pccw-roaming_support@pccw.com	
Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle		Email	

Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		

TADIG Tests

Person Name	Tel.	Mobile	Fax
Mr. Andy Liu	+85228883745	+85292304519	
JobTitle	Email		
Assistant Vice President	tadig@pccw.com		

CAMEL Tests

Person Name	Tel.	Mobile	Fax
Wilson Lau	+85228889365		
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		

Contact Person(s) in PMN for GRX connectivity

Person Name	Tel.	Mobile	Fax
Wilson Lau	+85228889365		
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Mr. David Wong		+85263848221	
JobTitle	Email		
GPRS Support	david.h.wong@pccw.com		

Other contact(s)

Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Koon-Cheung Ho	+85228887352	+85290375008	
JobTitle	Email		
Center Manager	koon-cheung.ho@pccw.com		

IR21 Distribution Email Address	Email
	gsm.roaming@hkcsll.com

History of changes

Date	Description
2017-09-25	Contact List updated. Remove the contact of Vivian Li.
2016-11-30	update the email address of IR21 distribution and contact person of TADIG
2016-11-24	Contact list update

Date	Description
2016-05-10	Modify IR21 Distribution Email address List
2016-04-29	Create a Combined IR21 of HKGTC and HKGM3
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

SECTIONS NOT IN USE

TADIG Code	Section ID	Section Name
HKGTC	6	Domestic SCCP Gateway
HKGTC	9	Test Numbers Information
HKGTC	11	MAP Optimal Routing Section
HKGTC	12	MAP Inter Operator SMS Enhancement
HKGTC	19	WLAN Information
HKGTC	22	Hosted Networks
HKGTC	23	M2M Roaming Information
HKGTC	24	MVNO Information
HKGTC	26	VoLTE Roaming Information Section
HKGTC	27	LPWA Roaming Information Section

NETWORK

TADIG code: HKGM3

Section ID: 2 (Mandatory, Repeating)

TADIG code:	HKGM3
Network type:	Terrestrial
Technology:	Frequency list:
2G-GSM frequencies:	GSM 900, DCS 1800
3G-UTRA/FDD frequencies:	1 - IMT 2.1 GHz, 8 - 900 MHz
3G-UTRA/TDD frequencies:	Unsupported
4G-E-UTRAN frequencies:	8 - 900 MHz, 3 - DCS 1800, 7 - 2.6 GHz
4G-E-UTRAN-MIoT-LTE-M frequencies:	Unsupported
4G-E-UTRAN-MIoT-NB-IoT frequencies:	Unsupported
MIoT-NB-IoT deployment modes:	Unsupported
Presentation of country initials and MNN:	HKG, CSL
Abbreviated MNN:	HKT

NETWORK INFORMATION

TADIG code: HKGM3
Section ID: 3 (Mandatory)

The following information refer to the network identified by TADIG code HKGM3

ROUTING INFORMATION

TADIG code: HKGM3

Section ID: 4 (Mandatory)

Effective date of change: 2020-07-22

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	514	5	8				
	852	518						
	852	523	0	3				
	852	536						
	852	541						
	852	558						
	852	590	0	5				
	852	594						
	852	612						
	852	618						
	852	625						
	852	630						
	852	638						
	852	644						
	852	649						
	852	651						
	852	660						
	852	662						
	852	669						
	852	680						
	852	692						
	852	907						
	852	923						
	852	927						
	852	952						
	852	964						
	852	969						
	852	977						
	852	980						
Network Nodes Global Title Number Range(s)								
	852	923						
	852	902						
	852	921						
MSRN Number Range(s)								
	852	638	04300	04999				
	852	638	49500	49999				
	852	923	40000	49999				
	852	923	90000	99999				
	852	616	45000	46999				
	852	616	49000	49999				
	852	639	45000	45999				

MSRN Number Range(s)							
	852	921	49000	49999			
	852	940	70000	73999			
	852	902	40460	40499			

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	454	19

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	852	923

Does Number Portability apply ?	Yes
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Is 15 Digit MSISDN Supported ?	No
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USIM SIM Header	8985219, 8985216
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E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	852	42	2	9
	852	43	3	9
	852	44	0	9
	852	45	1	9
	852	46	0	9
	852	47	0	9
	852	51	0	9
	852	52	0	9
	852	53	0	9
	852	54	0	9
	852	55	0	9
	852	56	0	9
	852	57	0	9
	852	59	0	9
	852	60	1	9
	852	61	0	9
	852	62	0	9
	852	63	0	9
	852	64	0	9
	852	65	0	9
	852	66	0	9
	852	67	0	9
	852	68	0	9
	852	69	0	9
	852	70	1	8
	852	71	4	5
	852	71	7	8
	852	72	4	6
	852	73	4	6
	852	82	4	5
	852	82	8	9
	852	83	5	6
	852	83	8	9
	852	84	0	9
	852	85	3	9
	852	86	0	9
	852	87	0	9
	852	89	0	9
	852	90	1	9
	852	91	0	0
	852	91	2	9
	852	92	0	9
	852	93	0	9
	852	94	0	9
	852	95	0	9
	852	96	0	9
	952	97	0	9

E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	852	98	0	9
	852	404	0	9
	852	406	0	9
	852	409	3	9
	852	420	0	9
	852	481	0	9
	852	482	1	9
	852	486	0	9
	852	489	0	9
	852	492	3	9
	852	495	2	9
	852	498	0	9
	852	710	4	7
	852	710	9	9
	852	711	4	5
	852	711	8	8
	852	712	0	9
	852	713	2	2
	852	713	4	9
	852	716	0	8
	852	719	2	2
	852	719	4	5
	852	719	7	9
	852	721	0	0
	852	721	2	7
	852	721	9	9
	852	727	0	1
	852	727	3	6
	852	737	4	5
	852	737	7	8
	852	739	0	1
	852	739	4	4
	852	739	6	6
	852	815	0	9
	852	818	0	9
	852	827	5	9
	852	831	0	9
	852	832	5	8
	852	837	1	9
	852	850	0	1

Additional Information
Networks:
MCC=454, MNC=19 (TADIG Code: HKGM3)
E212 -> E214 translation:
45419 -> 852923 (3G subscriber)
Additional service code access:
+852 176 ABCD
Number Portability information:
Hong Kong had implemented Mobile Number Portability (MNP) since 1 March 1999. This means that HKT subscribers can have a MSISDN which is taken from any HK mobile network NDC.
Therefore, HKT's MSISDNs listed in the MSISDN Number Range (In Section MSISDN Number Ranges) may belong to other HK operators. Similarly, other HK PLMN operators mobile numbers
(as listed in their respective IR.21) may belong to HKT. In general, HK Mobile Number level shall fall in numbering blocks listed in the Section E.164 Number Ranges for Number Portability.
PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP) : 45400 / 45402 / 45409 / 45416 / 45418 / 45419
[1] GENERAL INFORMATION
CSL (HKGTC /45400, HKGNW/45410) and HKT (HKGM3 /45419) completed network integration process, eventually, there is only one core network when the integration completed in late 2016.
Apart from the changes specified in this IR21, you should not need to perform any other changes to your network.
SCCP/GT/MSRN Information

Additional Information	
a.	By mid-end Q2 2016, for our outbound roaming, CSL(454-00/454-10) and HKT(454-19) merged with combined HLR using E.164 address with starting prefix of 852902.. We continue to use CSL IMSI 45400/45410 and HKT IMSI 45419 for our outbound roaming.
b.	By late Q2 to mid Q3 2016, for our inbound roaming, CSL (454-00) and HKT(454-19) merged using combined MSC and SGSN using E.164 address with starting prefix of 852902 with PLMN codes in radio broadcasting as listed above.
c.	PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP) : 45400 / 45402 / 45409 / 45416 / 45418 / 45419
d.	For the time being, separate SCCP Providers are used for CSL (GT = 852902/852921) and HKT (GT = 852923) traffic until further notification. Platform GT range 852902/852921 *MUST* CONTINUE TO BE ROUTED as per other CSL (454-00) GT ranges.
Please note HKT network keeps using E.164 address with starting prefix of both 852902 and 852923.	
e.	HKT network requires carrier(s) to support old CSL/HKT MSRN range (85263804(3-9)xx, 85263849(5-9)xx, 8529234xxxx & 8529239xxxx)and new MSRN range (8526164(5-6,9)xxx, 85263945xxx, 85292149xxx, 8529407(0-3)xxx and 852902404(60-99))
simultaneously.	
Diameter Information	
f.	Networks will be integrated gradually, such as using same IP address(es) / network elements for both networks (e.g. sharing DEA/DRA IP and ASN in this IR21 update).
g.	For support of our outbound LTE roaming service for CSL (454-00) and HKT (454-19) LTE roamers, please implement in your MME to configure two IMSI->REALM mapping (i.e.45400->epc.mnc000.mcc454.3gppnetwork.org and 45419->epc.mnc019.mcc454.3gppnetwork.org.)
In this situation, obviously you will also need to configure your DEA for routing towards both Diameter Realms (i.e., epc.mnc000.mcc454.3gppnetwork.org and epc.mnc019.mcc454.3gppnetwork.org), and request your Diameter Signalling Provider to allow routing	
towards both Diameter Realms (i.e., epc.mnc000.mcc454.3gppnetwork.org and epc.mnc019.mcc454.3gppnetwork.org).	
h.	By Q3, 2016, for our inbound LTE roaming, CSL (454-00) and HKT (454-19) networks merged using combined MME using realm epc.mnc000.mcc454.3gppnetwork.org.
i.	Both 45400 and 45419 SIM was served by HKT realm which was "epc.mnc000.mcc454.3gppnetwork.org".
[2] PACKET DATA SERVICES INFORMATION	
The following is recommended for Packet Data Services Network Set-up:	
a.	Advise your GRX Operator to allow route adverts from the ASNs of both CSL(454-00) and HKT(454-19);
b.	Allow all Inter PLMN GSN Backbone IP address ranges in your firewalls. If you utilise GTP aware firewalls, it is recommended that an HKT handover list is created containing the Inter PLMN GSN Backbone IP address ranges of
both CSL(454-00) and HKT(454-19).	
c.	For those operators make using ULI and RAI fields for own charging purpose, please help to configure all below MCC-MNC combinations in corresponding platform.
45400 / 45402 / 45409 / 45416 / 45418 / 45419	
f.	We would like to inform you that HKT has migrated all customers with HKGMC/45416 IMSI level to either HKGTC/45400 or HKGM3/45419. As a result, HKGMC/45416 will no longer be used for our outbound roaming, effective on 01st January 2018.

History of changes

Date	Description
2020-07-22	Add item "i" under "DIAMETER INFORMATION" in "Additional Information" to describe the realm of HKT.
2018-05-21	Remove MSISDN Range 852 4647
2018-02-13	Modify the wording of "Additional Information".
2018-02-13	Remove MCC MNC 454 16 to MGT (CC) MGT (NC) 852 923 from "Networks" of "Additional Information".
2018-02-13	Remove the wording HKGMC/454 16 and 45416 from segment "a" of "Additional Information [1] GENERAL INFORMATION".
2018-02-13	Remove 45416 from "segment "c" of "Additional Information - [2] PACKET DATA SERVICES INFORMATION".
2018-02-13	HKT has migrated all customers with HKGMC/45416 IMSI level to either HKGTC/45400 or HKGM3/45419. HKGMC/45416 will no longer be used for our outbound roaming, effective on 01st January 2018.
2018-02-13	Remove "16 (TADIG Code: HKGMC)" from "Networks" of Additional Information" for MCC=454 MNC=16.
2017-09-27	Add new MSISDN range 852 4647
2017-09-27	Add new MNP number ranges 852 4x/7x/8x
2017-05-31	Modify the "Additional Information:PLMN used in Radio Broadcast: (essential if HPLMN analyze them during CAMEL PSI, IDP)"
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

INTERNATIONAL SCCP GATEWAY

TADIG code: HKGM3

Section ID: 5 (Optional)

Effective date of change: 2016-04-01

International SCCP carrier list	
SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary
Comments:	CITIC Telecom International Limited
MNO TADIG code list:	
DPC info:	
Signature:	STP3
Type:	ISC
International DPC:	4.178.3
Comments:	
DPC info:	
Signature:	STP4
Type:	ISC
International DPC:	4.177.1
Comments:	
DPC info:	
Signature:	STP5
Type:	ISC
International DPC:	4.176.4
Comments:	
DPC info:	
Signature:	STP6
Type:	ISC
International DPC:	4.179.0
Comments:	
SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary
Comments:	TATA Communications
MNO TADIG code list:	
DPC info:	
Signature:	VPD
Type:	STP/SCCP
International DPC:	3.4.1
Comments:	3.4.1 is the alias point code used for Montreal STP (3.6.0) and Toronto STP (3.5.0)
DPC info:	
Signature:	VPP
Type:	STP/SCCP
International DPC:	3.10.7
Comments:	3.10.7 is the alias point code used for London STP (3.11.0) and Frankfurt STP (3.11.1)

DPC info:	
Signature:	NDI
Type:	STP/SCCP
International DPC:	4.8.1
Comments:	4.8.1 is the alias point code used for Mumbai STP (4.7.5) and New Delhi STP (4.7.6)

SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary
Comments:	Telstra International Limited
MNO TADIG code list:	

DPC info:	
Signature:	Electra
Type:	ISC
International DPC:	4.108.0
Comments:	

DPC info:	
Signature:	Hermes
Type:	ISC
International DPC:	4.108.1
Comments:	

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

SCCP Protocol available at PMN for connection for International SS7 Roaming

TADIG code: HKGM3

Section ID: 7 (Optional)

Effective date of change: 2016-04-01

SCCP Protocol available at PMN	Availability (Yes / No)
ETSI (ITU):	Yes
ANSI:	No

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

SUBSCRIBER IDENTITY AUTHENTICATION

TADIG code: HKGM3

Section ID: 8 (Optional)

Effective date of change: 2016-04-01

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	

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

MOBILE APPLICATION PART (MAP)

TADIG code: HKGM3

Section ID: 10 (Optional)

Effective date of change: 2016-04-01

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	MAPv3	
subscribeDataMngt	MAPv3	MAPv3	MAPv3	
networkFunctionalSs	MAPv2	N/A	MAPv2	
mwdMngt	MAPv2	-	MAPv2	
shortMsgMT-Relay (called shortMsgRelay in v1)	MAPv2	-	MAPv2	
shortMsgMO-Relay (called shortMsgRelay in v1)	MAPv2	-	MAPv2	
ss-InvocationNotification	-	N/A	-	
subscriberInfoEnquiry	MAPv3	-	MAPv3	
gprsLocationUpdate	N/A	MAPv3	MAPv3	
locationCancellation	MAPv3	MAPv3	MAPv3	
msPurging	MAPv2	MAPv3	MAPv3	
reset	MAPv2	MAPv2	MAPv2	
networksUnstructuredSs	MAPv2	N/A	MAPv2	
reporting	-	N/A	-	
callCompletion	-	N/A	-	
istAlerting	-	N/A	-	
service Termination	-	N/A	-	
locationSvcGateway	N/A	N/A	MAPv3	
mm-EventReporting	-	N/A	-	
authenticationFailureReport	MAPv3	MAPv3	MAPv3	
imsiRetrieval	MAPv3	N/A	MAPv3	
gprsNotifyContext	N/A	-	-	
gprsLocationInfoRetrieval	N/A	-	-	
failureReport	N/A	-	-	
secureTransportHandling	-	-	-	

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

MAP Inter Operator SMS Enhancement

TADIG code: HKGM3

Section ID: 12 (Optional)

Effective date of change: 2016-04-01

Inter - Operator SMS Enhancement				
Application context name	Current version in			Comments
	SMS - IWMSC	SMS - GMSC	HLR	
shortMsgGateway	N/A	MAPv2	MAPv2	
shortMsgAlert	MAPv2	N/A	MAPv2	

History of changes

Date	Description
2016-04-01	Create a Combnd IR21 of HKGTC and HKGM3

NETWORK ELEMENTS INFORMATION

TADIG code: HKGM3

Section ID: 13 (Optional)

Effective date of change: 2020-07-22

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
HLR		852 902 40000 / 40999					+08:00
HSS		852 902 40000 / 40999					+08:00
MSC/VLR-2G+3G		852 902 40000 / 40999					+08:00
SGSN-2G+3G		852 902 40000 / 40999	203.210.11.0/24				+08:00
SGSN-2G+3G		852 902 40000 / 40999	203.210.10.0/24				+08:00
SCP		852 902 40713 / 40714					+08:00
SCP		852 902 40717 / 40717					+08:00
SMSC		852 902 40712 / 40712					+08:00
SMSC		852 902 40715 / 40715					+08:00
SMSC		852 902 40718 / 40718					+08:00
SMSC		852 902 40723 / 40727					+08:00
SMSC		852 902 40731 / 40731					+00:00
SMSC		852 902 40733 / 40733					+08:00
SMSC		852 902 40960 / 40969					+08:00
SMSC		852 902 40971 / 40973					+08:00
SMSC		852 902 40980 / 40980					+08:00
SMSC		852 902 40981 / 40982					+08:00
SMSC		852 902 40983 / 40983					+08:00
SMSC		852 902 40985 / 40986					+08:00
SMSC		852 921 00000 / 99999					+08:00
SMSC		852 923 47934 / 47934					+08:00
SMSC		852 923 47948 / 47948					+08:00
SMSC		852 923 47949 / 47949					+08:00
SMSC		852 923 47960 / 47960					+08:00
SMSC		852 923 47976 / 47976					+08:00
SMSC		852 923 47977 / 47977					+08:00
SMSC		852 923 47983 / 47983					+08:00
SMSC		852 923 47990 / 47990					+08:00
SMSC		852 923 47999 / 47999					+08:00
SMSC		852 923 94602 / 94602					+08:00
SMSC		852 923 94679 / 94679					+08:00
SMSC		852 923 94680 / 94680					+08:00
SMSC		852 923 94689 / 94689					+08:00
SMSC		852 923 94696 / 94696					+08:00
SMSC		852 923 94697 / 94697					+08:00
SMSC		852 923 94699 / 94699					+08:00
SMSC		852 923 95781 / 95781					+08:00
SMSC		852 923 95782 / 95782					+08:00
SMSC		852 923 95783 / 95783					+08:00
SMSC		852 923 95799 / 95799					+08:00
MSC/VLR		852 923 94627 / 94627					+08:00
PGW			131.166.163.32/29				+08:00
PGW			131.166.165.32/29				+08:00
PGW			131.166.165.48/29				+08:00

History of changes

Date	Description
2020-07-22	Add PGW 131.166.165.48/29
2020-04-03	Add PGW 131.166.163.32/29 and PGW 131.166.165.32/29
2020-04-03	Add MSC/VLR +85292394627
2018-12-13	Remove those obsoleted network elements
2018-12-12	Add new SMSC GT 852 902 40727
2018-05-21	Add New SMSC GT Address 85290240718, 85290240733.
2018-05-21	Add New SCP GT Address 85290240717.
2018-02-12	Add two new SMSC GT addresses 85290240715 and 85290240731.

Date	Description
2017-02-03	Add SMSC GT Address 85290240712, 852902407(23-26) and SCP GT address 8529024071(3-4)
2016-05-10	Add new SMSC address
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

USSD Information

TADIG code: HKGM3
Section ID: 14 (Optional)
Effective date of change: 2016-04-01

USSD capability available	Yes
Supported phase	Phase 2

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

CAMEL INFO

TADIG code: HKGM3

Section ID: 15 (Conditional)

Effective date of change: 2016-04-01

gsmSSF/MSC

CAP Version supported (Inbound)	CAP Version supported (Outbound)
CAPv1 CAPv2 CAPv3	CAPv1 CAPv2 CAPv3

CAPv4 Partial Implementations

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

History of changes

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

Packet Data Services Information

TADIG code: HKGM3

Section ID: 16 (Conditional)

Effective date of change: 2018-12-13

List of APN Operator Identifiers

APN Operator Identifier	Description	Example
mnc019.mcc454.gprs	For 3G subscriber	
apn.epc.mnc019.mcc454.3gppnetwork.org		

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			
pccw	na	na	H-APN		
blackberry.net	na	na	H-APN		
internet	na	na	H-APN		
mobile	na	na	H-APN		

APN WAP List

APN Credential			APN Type	WAP Gateway IP address	WAP Server URL	WAP Port ver 1	WAP Port ver 2
APN	Username	Password					
pccw	na	na	H-APN	10.140.14.10	http://m.hkcs1.com		
pccw	na	na	H-APN	10.131.2.8	http://m.hkcs1.com	8080	
mobile	na	na	H-APN	10.140.14.10	http://m.hkcs1.com		
mobile	na	na	H-APN	10.131.2.8	http://m.hkcs1.com	8080	

APN MMS List

APN	APN Credential		WAP Gateway IP address for MMS	Messaging Server URL
	Username	Password		
pccw	na	na	10.140.14.10	http://mms.hkcs1.com:8080
pccw	na	na	10.131.2.8	http://mms.hkcs1.com:8080
mobile	na	na	10.140.14.10	http://mms.hkcs1.com:8080
mobile	na	na	10.131.2.8	http://mms.hkcs1.com:8080

IPv6 Connectivity Information

	IPv6 PDP Supported	IPv4v6 PDP Supported
SGSN Support	No	No
GGSN Support	No	No

List of 2G/3G QOS profiles

Profile name:	Default
Traffic class:	Interactive
ARP:	2
Evolved ARP support:	Yes
Evolved ARP priority level:	6
Evolved APR preemption vulnerability list:	
Evolved APR preemption capability list:	

GTP Version

SGSN	GTPv1
GGSN	GTPv1

List of Data Service supported

2G Data Services	Multislot Class Capability
GPRS	4
EDGE	

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

Multiple PDP Context Support	
Number of Primary PDP Context	2

History of changes

Date	Description
2018-02-12	Delete "mnc016.mcc454.gprs & For 2G subscriber" from "List of APN Operator Identifiers".
2018-02-12	Delete the obsoleted APN from "APN" WEB List", only remain the APN pccw/blackberry.net/internet/mobile.
2018-02-12	Delete obsoleted APN from "APN WAP List", remain APN pccw/mobile.
2018-02-12	Delete obsoleted APN from "APN MMS List", remain APN pccw/mobile.
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3.

IP - Roaming and IP - Interworking Information

TADIG code: HKGM3

Section ID: 17 (Conditional)

Effective date of change: 2020-07-22

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	202.4.197.128/25
	202.4.198.0/24
	202.4.210.0/25
	203.210.10.0/24
	203.210.11.0/24
	110.4.10.0/24
	14.0.184.0/24
	14.0.185.0/24
	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
	131.166.165.48/29

ULI Additional MCC/MNC List	MCC	MNC
	454	19
	454	18
	454	09
	454	02
	454	00
	454	16

RAI Additional MCC/MNC List	MCC	MNC
	454	19
	454	18
	454	09
	454	02
	454	00
	454	16

List of Autonomous System Number (ASN):	ASN
	9444
	64574
	22870
	3321

List of Autonomous System Number (ASN4B):	ASN4B
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List of PMN authoritative DNS server IP addresses and names		
IP address	IPv6 address	DNS Name
203.210.11.84		TPC-DNS11.mnc019.mcc454.gprs
203.210.11.84		TPC-DNS11.epc.mnc019.mcc454.3gppnetwork.org
203.210.11.85		TPC-DNS12.mnc019.mcc454.gprs
203.210.11.85		TPC-DNS12.epc.mnc019.mcc454.3gppnetwork.org
203.210.11.68		KSG-DNS13.mnc019.mcc454.gprs
203.210.11.68		KSG-DNS13.epc.mnc019.mcc454.3gppnetwork.org
203.210.11.69		KSG-DNS14.mnc019.mcc454.gprs
203.210.11.69		KSG-DNS14.epc.mnc019.mcc454.3gppnetwork.org

List of PMN local caching DNS server IP addresses and names		
IP address	IPv6 address	DNS Name
203.210.11.84		TPC-DNS11.mnc019.mcc454.gprs
203.210.11.84		TPC-DNS11.epc.mnc019.mcc454.3gppnetwork.org
203.210.11.85		TPC-DNS12.mnc019.mcc454.gprs
203.210.11.85		TPC-DNS12.epc.mnc019.mcc454.3gppnetwork.org
203.210.11.68		KSG-DNS13.mnc019.mcc454.gprs
203.210.11.68		KSG-DNS13.epc.mnc019.mcc454.3gppnetwork.org

203.210.11.69		KSG-DNS14.mnc019.mcc454.gprs
203.210.11.69		KSG-DNS14.epc.mnc019.mcc454.3gppnetwork.org

List of GRX Providers	GRX Provider
	(Preferred) PCCW Global / SAP Syniverse BICS

History of changes

Date	Description
2020-07-22	Add inter-PMN IP backbone address ranges: 131.166.165.48/29
2020-04-03	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
2020-04-03	Add ASN 22870 and 3321
2020-04-03	Add remarks for GRX provider "PCCW Global".
2019-08-30	Update the GRX Provider information of PCCW Global
2019-08-30	Remove the ASN 18101 and 3321
2019-04-30	Primary provider updated.
2018-05-21	Add RAI and ULI Additional MCC/MNC 454 16.
2018-05-21	Remove PMN authoritative and local caching DNS server IP addresses "202.4.198.36" & "203.210.11.129".
2018-02-12	Remove 454/16 from of "RAI/ULI Additional MCC/MNC List".
2018-02-12	Remove IP/name 202.4.210.32/YTG-4GGnDNS-2.epc.MNC019.MCC454.3gppnetwork.org, 202.4.210.32/YTG-4GGnDNS-2.MNC019.MCC454.GPRS, 203.210.10.129/ZDNS-Ex1. mnc016.mcc454.gprs of "List of PMN authoritative/local caching DNS server IP addresses and names".
2018-02-12	Remove IP/name 202.4.210.32/YTG-4GGnDNS-2.MNC016.MCC454.GPRS, 203.210.10.129/ZDNS-Ex1.epc.mnc019.mcc454.3gppnetwork.org, 203.210.11.84/TPC-DNS11.mnc016.mcc454.gprs, of "List of PMN authoritative/local caching DNS server IP addresses and names".
2018-02-12	Remove IP/name 203.210.11.85/TPC-DNS12.mnc016.mcc454.gprs, 203.210.11.68/KSG-DNS13.mnc016.mcc454.gprs, 203.210.11.69/KSG-DNS14.mnc016.mcc454.gprs of "List of PMN authoritative/local caching DNS server IP addresses and names".
2018-02-12	Re-arrange the sequence of "List of PMN authoritative/local caching DNS server IP addresses and names".
2017-09-27	Delete the non advertising IP_address 110.4.26.160/28, 115.255.8.0/25, 131.166.254.0/29
2017-09-27	PCCWG (merged its IPX domains with SAP's domains into a single domain and shares the same AS with SAP since Jun2017).
2017-05-31	Remove the "IP Address 202.4.210.31 and DNS Name= YTG-4GGnDNS-1.epc.MNC019.MCC454.3gppnetwork.org" of the "List of PMN authoritative DNS server IP addresses and name" and "List of PMN local caching DNS server IP address and names"
2017-02-03	Add authoritative and local caching DNS server IP 203.210.11.68 and 203.210.11.69
2016-11-24	Add authoritative/local caching DNS server IP 203.210.11.84 and 203.210.11.85. Remove GRX provider "SAP".
2016-08-25	No change
2016-05-10	Add new DNS sever IP address, DNS name
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

MMS Interworking Information

TADIG code: HKGM3

Section ID: 18 (Optional)

Effective date of change: 2017-02-03

MMS Elements Data

Domain name of MMSC	IP Address	Max. size of MMS allowed	Delivery Report allowed? (Yes / No)	Read Report allowed? (Yes / No)	IP address(es) of Incoming MTA	IP address(es) of Outgoing MTA
3gmms.sunday.com	202.4.197.146	300	Yes	Yes	202.4.197.146	202.4.197.146

List of MMS IW Hub Provider	MMS IW Hub Provider Name	GT address(es)
	SAP	
	Aicent	

MMS Elements Data

Domain name of MMSC	IP Address	Max. size of MMS allowed	Delivery Report allowed? (Yes / No)	Read Report allowed? (Yes / No)	IP address(es) of Incoming MTA	IP address(es) of Outgoing MTA
mmsc.hkcs1.com	202.4.197.181	300	Yes	Yes	116.48.214.211 116.48.214.214 202.4.197.181 202.4.197.184	116.48.214.211 116.48.214.210 116.48.214.212 116.48.214.214 202.4.197.181 202.4.197.180 202.4.197.182 202.4.197.184 202.4.197.183 202.4.197.185 116.48.214.213 116.48.214.215

List of MMS IW Hub Provider	MMS IW Hub Provider Name	GT address(es)
	Aicent	

History of changes

Date	Description
2017-02-03	Add a new MMSC with Domain name "mmsc.hkcs1.com" and new IP Addresses
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

LTE Roaming Information

TADIG code: HKGM3

Section ID: 20 (Optional)

Effective date of change: 2020-12-08

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
(Preferred) PCCW Global / SAP		

Primary IP address of DA	Secondary IP address of DA
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Roaming Interconnection

EPC Realms For Roaming
epc.mnc019.mcc454.3gppnetwork.org

FQDN Diameter Edge Agent

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
------	--------------------------------	----------------------------------

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

S6d used for legacy SGSN	S9 used for PCC
false	false

SMS ITW

SMS delivery over IP	SMS delivery over SGs
false	true

Voice ITW

CSFB

Roaming CS Fallback

Not Supported

		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	No
2G/3G/LTE Roaming Agreement	Scenario 1 Supported	Yes	Yes
	Scenario 2 Supported	No	No
	Scenario 3 Supported	No	No
	Scenario 4 Supported	No	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

Information for Diameter certificates exchange**5G early drop support**

	As HPMN	AS VPMN
5G NSA (non-standalone access) supported	No	No
DNS PGW NAPTR includes +nc-nr	No	No
NSA options for EN-DC		
ARD set to support of NR as secondary RAT	No	
Restrict NR access if HSS is not set to support NR as secondary RAT		No

History of changes

Date	Description
2020-12-08	No new S6a Diameter connection to Syniverse IPX.
2020-04-03	Add remarks for IPX Provider Name "PCCW Global".

Date	Description
2019-08-30	For security reason, remove the host name of HKT DEA
2019-08-30	Update the IPX Provider Name information of PCCW Global
2019-04-30	Primary provider updated.
2018-12-14	Add IPX_Provider_Name info to fulfill new RAEX schema.
2018-12-13	Add IPX Provider Information
2016-10-14	After the "maintenance window" of RAEX Tools on 13-Oct-2016 17:00 to 19:00 BST, we can choose "Unsupport" for 2G/3G LTE Roaming Agreement Scenario 5 without "validate error", so, we change back to "Unsupport" for bug error.
2016-10-13	According to IR 88 V 14.0, updated 2G/3G LTE Roaming Agreement Scenario 5 to "Support"
2016-04-29	Modify the 2G/3G/LTE Roaming Agreement
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

CONTACT INFORMATION

TADIG code: HKGM3

Section ID: 21 (Optional, Repeating)

Effective date of change: 2017-09-25

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
	Mon Tue Wed Thu Fri	09:00:00	18:00:00

Main Contact for Troubleshooting (Office Hours)

Team Name	Tel.	Mobile	Fax	Email
ISOC	85223464808	85292125406		ENGINEERING-NS-ISOC-Mobile@pccw.com pccw-roaming_support@pccw.com

Escalation Contact for Troubleshooting

Person Name	Tel.	Mobile	Fax	Email
Alfred Chung	+85228884050	+85290521264		alfred.hs.chung@pccw.com

24 x 7 Troubleshooting (contact out of Office Hours)

Team Name	Tel.	Mobile	Fax	Email
ISOC	85223464808	85292125406		ENGINEERING-NS-ISOC-Mobile@pccw.com pccw-roaming_support@pccw.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
Mr. Harris CM Tang	+85229833553		+85225987699
JobTitle	Email		
Service Provisioning Department (Telstra)	harris.tang@team.telstra.com		
Person Name	Tel.	Mobile	Fax
Customer service center CITIC	85223778899		
JobTitle	Email		
Customer service center	roaming@citic1616.com		
Person Name	Tel.	Mobile	Fax
NOC Center (7x24 hrs) CITIC	+85223778877		
JobTitle	Email		
NOC Center	noc@citic1616.com		
Person Name	Tel.	Mobile	Fax
Mr. Ricky Poon	85234236405		
JobTitle	Email		
Support (CITIC)	rickypoon@citic1616.com		
Person Name	Tel.	Mobile	Fax
Link Setup TATA			
JobTitle	Email		
Link Setup	roaming@tatacommunications.com		
Person Name	Tel.	Mobile	Fax
GCSC Customer Service TATA	+15148687875	+15148688996	
JobTitle	Email		
GCSC Customer Service	mobilecustomer.service@tatacommunications.com		

Roaming Coordinator

Person Name	Tel.	Mobile	Fax
Ms. Vince Lam	+85228830428	+85266204295	+85229685177
JobTitle	Email		
Senior Manager	vince.sk.lam@hkcs.com		

IREG Tests

Person Name	Tel.	Mobile	Fax
Wilson Lau	+85228889365		
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle	Email		

Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		

TADIG Tests

Person Name	Tel.	Mobile	Fax
Mr. Andy Liu	+85228883745	+85292304519	
JobTitle	Email		
Assistant Vice President	tadig@pccw.com		

CAMEL Tests

Person Name	Tel.	Mobile	Fax
Wilson Lau	+85228889365		
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Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		

Contact Person(s) in PMN for GRX connectivity

Person Name	Tel.	Mobile	Fax
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Person Name	Tel.	Mobile	Fax
Anthony Lam	+85228834795	+85266004153	
JobTitle	Email		
Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Mr. David Wong		+85263848221	
JobTitle	Email		
GPRS Support	david.h.wong@pccw.com		

Other contact(s)

Person Name	Tel.	Mobile	Fax
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JobTitle	Email		
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Person Name	Tel.	Mobile	Fax
Nelson Ng	+85228889361		
JobTitle	Email		
Senior Engineer	pccw-roaming_support@pccw.com		
Person Name	Tel.	Mobile	Fax
Koon-Cheung Ho	+85228887352	+85290375008	
JobTitle	Email		
Center Manager	koon-cheung.ho@pccw.com		

IR21 Distribution Email Address	Email
	gsm.roaming@hkcs.com

History of changes

Date	Description
2017-09-25	Contact List updated. Remove the contact of Vivian Li.
2016-11-30	Update the email address of IR21 distribution
2016-11-24	Contact list update

Date	Description
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3
2016-04-01	Create a Combined IR21 of HKGTC and HKGM3

SECTIONS NOT IN USE

TADIG Code	Section ID	Section Name
HKGM3	6	Domestic SCCP Gateway
HKGM3	9	Test Numbers Information
HKGM3	11	MAP Optimal Routing Section
HKGM3	19	WLAN Information
HKGM3	22	Hosted Networks
HKGM3	23	M2M Roaming Information
HKGM3	24	MVNO Information
HKGM3	26	VoLTE Roaming Information Section
HKGM3	27	LPWA Roaming Information Section