

## GSMA Roaming Database IR.21 Data



### RAEX IR.21 Information

Creation date:	2021-07-15
Creation time:	09:39:32+02:00
File type:	IR.21
Sender TADIG:	THAWN
Publish Comment:	IR21 THAWN 1 AUGUST 2021
TADIG-GEN schema version:	2.4
RAEX-IR.21 schema version:	14.0

## ORGANISATION INFORMATION

Section ID: 1 (Mandatory)

<b>Organisation name:</b>	Advanced Wireless Network Company Limited
<b>Country initials:</b>	THA

## History of changes

TADIG Code	Section ID	Section	Date	Description
THAWN	5	International SCCP Gateway	2021-08-01	Delete Orange and Add iBASIS
THAWN	13	Network Elements Information	2021-08-01	Add new IN GT address 66923011679, 66923011680
THAWN	15	CAMEL Information	2021-08-01	Add new GT 66923011679 & 66923011680 for Prepaid CBS(SK=71), PPS SIM2Fly CBS(SK=75), Postpaid CBS(SK=70,151)
THAWN	21	Contact Information	2021-08-01	Change contact email from fc-iro@ais.co.th to iro@ais.co.th
THAWN	13	Network Elements Information	2021-07-01	Add new IN GT address 66923011950
THAWN	15	CAMEL Information	2021-07-01	Add new CAMEL functionality 5 groups
THAWN	21	Contact Information	2021-07-01	Update IREG contact & other contact
THAWN	13	Network Elements Information	2021-04-20	Delete 19 HLR and 100 MSC/VLR
THAWN	17	IP Roaming/Networking Information	2021-04-20	Add new IP range 110.49.187.233/32, 110.49.187.234/32
THAWN	4	Routing Information	2021-03-15	Delete MSRN 180 records
THAWN	4	Routing Information	2021-01-15	Add MSISDN range 66671000000 - 66671399999
THAWN	15	CAMEL Information	2021-01-15	Delete Postpaid RTBS SK 151 ( GT 66923011991, 66923011992 )
THAWN	4	Routing Information	2020-11-16	Delete MSRN Prefix 6693205, 6693404, 6693405
THAWN	15	CAMEL Information	2020-08-01	Add new Camel functionality Postpaid CBS SK151
THAWN	21	Contact Information	2020-08-01	Update new contact
THAWN	4	Routing Information	2020-07-03	Delete MSRN 6693206, 6693207, 6693406, 6693407
THAWN	17	IP Roaming/Networking Information	2020-07-03	Delete IP 110.49.181.0/24, 110.49.182.0/24 Add IP 110.49.181.0/25, 110.49.181.128/25, 110.49.182.0/25, 110.49.182.128/25
THAWN	4	Routing Information	2020-07-01	Add new MSISDN 23 ranges
THAWN	13	Network Elements Information	2020-07-01	Add new SMSC GT 66923013001 - 66923013025
THAWN	13	Network Elements Information	2020-07-01	Add new HSS GT 66923010074 - 66923010077
THAWN	17	IP Roaming/Networking Information	2020-07-01	Add new IP 110.49.181.0/24, 110.49.182.0/24 and Delete old IP 110.49.181.128/25, 110.49.182.128/25
THAWN	13	Network Elements Information	2020-05-15	Delete IN node
THAWN	15	CAMEL Information	2020-05-15	Delete Prepaid RTBS, Postpaid BOS, Prepaid BOS, PPS SIM2Fly RTBS, PPS SIM2Fly BOS
THAWN	13	Network Elements Information	2020-04-16	Add new IN node
THAWN	15	CAMEL Information	2020-04-16	Add new CAMEL Postpaid CBS
THAWN	21	Contact Information	2020-04-16	Remove contact IREG
THAWN	20	LTE Roaming Information	2020-02-24	Update support SMS over IP
THAWN	20	LTE Roaming Information	2020-02-24	Add QCI for IMS Service
THAWN	20	LTE Roaming Information	2020-02-24	Add QCI Internet
THAWN	21	Contact Information	2020-02-24	Update email contact
THAWN	26	VoLTE Roaming Information Section	2020-02-24	Add VoLTE Information
THAWN	5	International SCCP Gateway	2019-11-01	Add new international SCCP gateway CITIC
THAWN	17	IP Roaming/Networking Information	2019-09-16	Add new IP backbone 110.49.181.128/25 and 110.49.182.128/25
THAWN	20	LTE Roaming Information	2019-09-16	Add new IPX provider CMI, iBasis and CITIC
THAWN	20	LTE Roaming Information	2019-09-16	Edit FQDN Diameter Edge Agent
THAWN	13	Network Elements Information	2019-09-01	Add new IN 66923012693
THAWN	15	CAMEL Information	2019-09-01	Add Prepaid BOS SCP 66923012693 & Postpaid BOS SCP 66923012693
THAWN	17	IP Roaming/Networking Information	2019-09-01	Add new GRX provider
THAWN	17	IP Roaming/Networking Information	2019-09-01	Add DNS name
THAWN	21	Contact Information	2019-09-01	Add new contact Tadig testing
THAWN	4	Routing Information	2019-06-24	Update Delete MSISDN range 6665588xxxx
THAWN	13	Network Elements Information	2019-06-24	Update New MSC/VLR & New SMSC

TADIG Code	Section ID	Section	Date	Description
THAWN	13	Network Elements Information	2019-02-20	new IN node
THAWN	15	CAMEL Information	2019-02-20	new SCP for Prepaid RTBS & PPS Sim2fly RTBS
THAWN	21	Contact Information	2019-02-20	new contact
THAWN	4	Routing Information	2019-01-16	Add new MSIDSN range
THAWN	5	International SCCP Gateway	2018-11-01	International SCCP gateway
THAWN	7	SCCP Protocol	2018-11-01	SCCP Information
THAWN	8	Subscriber Identity Authentication	2018-11-01	Subscriber Identity Authentication
THAWN	10	MAP	2018-11-01	MAP Information
THAWN	11	MAP Optional Routing	2018-11-01	MAP optimal routing
THAWN	12	MAP Inter Operator SMS Enhancement	2018-11-01	MAP Information
THAWN	14	USSD Information	2018-11-01	USSD Information
THAWN	16	Packet Data Service Information	2018-11-01	Packet-switched data
THAWN	17	IP Roaming/Networking Information	2018-11-01	IP roaming and inter-working
THAWN	18	MMS Interworking Information	2018-11-01	MMS Interworking hub provider
THAWN	20	LTE Roaming Information	2018-11-01	IPX provider

**NETWORK**

TADIG code: THAWN

Section ID: 2 (Mandatory, Repeating)

<b>TADIG code:</b>	THAWN
<b>Network name:</b>	Advanced Wireless Network Co., Ltd.
<b>Network type:</b>	Terrestrial
<b>Technology:</b>	<b>Frequency list:</b>
<b>2G-GSM frequencies:</b>	GSM 900, DCS 1800
<b>3G-UTRA/FDD frequencies:</b>	8 - 900 MHz, 1 - IMT 2.1 GHz
<b>3G-UTRA/TDD frequencies:</b>	Unsupported
<b>4G-E-UTRAN frequencies:</b>	8 - 900 MHz, 3 - DCS 1800, 1 - IMT 2.1 GHz
<b>4G-E-UTRAN-MIoT-LTE-M frequencies:</b>	8 - 900 MHz
<b>4G-E-UTRAN-MIoT-NB-IoT frequencies:</b>	8 - 900 MHz, 3 - DCS 1800, 1 - IMT 2.1 GHz
<b>MIoT-NB-IoT deployment modes:</b>	Unsupported
<b>Presentation of country initials and MNN:</b>	TH AIS
<b>Abbreviated MNN:</b>	AIS

---

## NETWORK INFORMATION

TADIG code: THAWN

Section ID: 3 (Mandatory)

---

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

---

**ROUTING INFORMATION**

TADIG code: THAWN

Section ID: 4 (Mandatory)

Effective date of change: 2021-03-15

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
<b>MSISDN number ranges (s)</b>								
	66	610	180000	219999				
	66	610	230000	329999				
	66	610	340000	439999				
	66	610	450000	549999				
	66	610	560000	659999				
	66	610	670000	769999				
	66	610	780000	879999				
	66	610	890000	989999				
	66	6110	10000	99999				
	66	611	100000	219999				
	66	611	230000	329999				
	66	611	340000	439999				
	66	611	450000	549999				
	66	611	560000	659999				
	66	611	670000	769999				
	66	611	780000	879999				
	66	611	890000	989999				
	66	6120	10000	99999				
	66	612	100000	109999				
	66	612	120000	329999				
	66	612	340000	439999				
	66	612	450000	549999				
	66	612	560000	659999				
	66	612	670000	769999				
	66	612	780000	879999				
	66	612	890000	989999				
	66	6130	10000	99999				
	66	613	100000	109999				
	66	613	120000	219999				
	66	613	230000	439999				
	66	613	450000	549999				
	66	613	560000	659999				
	66	613	670000	769999				
	66	613	780000	879999				
	66	613	890000	989999				
	66	6140	10000	99999				
	66	614	100000	109999				
	66	614	120000	219999				
	66	614	230000	329999				
	66	614	340000	659999				
	66	614	670000	769999				

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
<b>MSISDN number ranges (s)</b>								
	66	614	780000	879999				
	66	614	890000	999999				
	66	6150	10000	99999				
	66	615	100000	109999				
	66	615	120000	219999				
	66	615	230000	329999				
	66	615	340000	439999				
	66	615	450000	659999				
	66	615	670000	769999				
	66	615	780000	879999				
	66	615	890000	989999				
	66	6160	10000	99999				
	66	616	100000	109999				
	66	616	120000	219999				
	66	616	230000	329999				
	66	616	340000	439999				
	66	616	450000	549999				
	66	616	560000	769999				
	66	616	780000	839999				
	66	6210	10000	99999				
	66	621	100000	109999				
	66	621	110000	119999				
	66	621	120000	219999				
	66	621	230000	329999				
	66	621	340000	439999				
	66	621	450000	549999				
	66	621	560000	659999				
	66	621	670000	769999				
	66	621	780000	879999				
	66	621	890000	999999				
	66	6220	10000	99999				
	66	622	100000	109999				
	66	622	120000	329999				
	66	622	340000	439999				
	66	622	450000	549999				
	66	622	560000	659999				
	66	622	670000	769999				
	66	622	780000	879999				
	66	622	890000	989999				
	66	6230	10000	99999				
	66	623	100000	109999				
	66	623	120000	219999				
	66	623	230000	439999				
	66	623	450000	549999				
	66	623	560000	659999				



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
<b>MSISDN number ranges (s)</b>								
	66	623	670000	769999				
	66	623	780000	879999				
	66	623	890000	999999				
	66	6240	10000	99999				
	66	624	100000	109999				
	66	624	120000	219999				
	66	624	230000	329999				
	66	624	340000	659999				
	66	624	670000	769999				
	66	624	780000	879999				
	66	624	890000	989999				
	66	6250	10000	99999				
	66	625	100000	109999				
	66	625	120000	219999				
	66	625	230000	329999				
	66	625	340000	439999				
	66	625	450000	659999				
	66	625	670000	769999				
	66	625	780000	879999				
	66	625	890000	989999				
	66	6260	10000	99999				
	66	626	100000	109999				
	66	626	120000	139999				
	66	629	830000	879999				
	66	629	890000	999999				
	66	6	30000000	30009999				
	66	6300	10000	99999				
	66	630	100000	109999				
	66	630	120000	219999				
	66	630	230000	329999				
	66	630	340000	439999				
	66	630	450000	549999				
	66	630	560000	659999				
	66	630	670000	769999				
	66	630	780000	879999				
	66	630	890000	989999				
	66	6310	10000	99999				
	66	631	100000	219999				
	66	631	230000	329999				
	66	631	340000	439999				
	66	631	450000	549999				
	66	631	560000	659999				
	66	631	670000	769999				
	66	631	780000	879999				
	66	631	890000	989999				

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
<b>MSISDN number ranges (s)</b>								
	66	6320	10000	99999				
	66	632	100000	109999				
	66	632	120000	329999				
	66	632	340000	439999				
	66	632	450000	549999				
	66	632	560000	659999				
	66	632	670000	739999				
	66	635	550000	559999				
	66	635	730000	769999				
	66	635	780000	879999				
	66	635	890000	989999				
	66	6360	10000	99999				
	66	636	100000	109999				
	66	636	120000	219999				
	66	636	230000	329999				
	66	636	340000	359999				
	66	636	360000	439999				
	66	636	450000	549999				
	66	636	560000	769999				
	66	636	780000	879999				
	66	649	300000	329999				
	66	649	340000	439999				
	66	649	450000	549999				
	66	649	560000	659999				
	66	649	670000	769999				
	66	649	780000	879999				
	66	649	890000	999999				
	66	6	50000000	50009999				
	66	6500	10000	99999				
	66	650	100000	109999				
	66	650	120000	219999				
	66	650	230000	329999				
	66	650	340000	439999				
	66	650	450000	659999				
	66	650	670000	769999				
	66	650	780000	879999				
	66	650	890000	999999				
	66	6510	10000	99999				
	66	651	100000	219999				
	66	651	230000	239999				
	66	652	360000	439999				
	66	652	450000	549999				
	66	652	560000	659999				
	66	652	670000	769999				
	66	652	780000	879999				

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
<b>MSISDN number ranges (s)</b>								
	66	652	890000	989999				
	66	6530	10000	99999				
	66	653	100000	109999				
	66	653	120000	219999				
	66	653	230000	439999				
	66	653	450000	549999				
	66	653	560000	659999				
	66	653	670000	769999				
	66	653	780000	879999				
	66	653	890000	989999				
	66	6540	10000	99999				
	66	654	100000	109999				
	66	654	120000	219999				
	66	654	230000	329999				
	66	654	340000	769999				
	66	654	780000	879999				
	66	654	890000	989999				
	66	6550	10000	99999				
	66	655	100000	109999				
	66	655	120000	219999				
	66	655	230000	329999				
	66	655	340000	439999				
	66	655	450000	659999				
	66	655	670000	769999				
	66	655	780000	879999				
	66	655	890000	989999				
	66	6560	10000	99999				
	66	656	100000	109999				
	66	656	120000	219999				
	66	656	230000	329999				
	66	656	340000	439999				
	66	656	450000	549999				
	66	656	560000	769999				
	66	656	780000	989999				
	66	6570	10000	99999				
	66	657	100000	109999				
	66	657	120000	219999				
	66	657	230000	329999				
	66	657	340000	349999				
	66	6590	10000	99999				
	66	659	100000	109999				
	66	659	120000	219999				
	66	659	230000	329999				
	66	659	340000	439999				
	66	659	450000	769999				

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
<b>MSISDN number ranges (s)</b>								
	66	659	780000	879999				
	66	659	890000	979999				
	66	659	990000	999999				
	66	8000	10000	99999				
	66	800	100000	109999				
	66	800	120000	219999				
	66	800	230000	329999				
	66	800	340000	439999				
	66	800	450000	549999				
	66	800	560000	659999				
	66	800	670000	769999				
	66	800	780000	879999				
	66	800	890000	989999				
	66	8010	10000	99999				
	66	801	100000	109999				
	66	801	120000	219999				
	66	801	230000	329999				
	66	801	340000	439999				
	66	801	450000	549999				
	66	801	560000	659999				
	66	801	670000	769999				
	66	801	780000	879999				
	66	801	890000	989999				
	66	803	370000	379999				
	66	803	980000	989999				
	66	8060	10000	99999				
	66	806	100000	109999				
	66	806	120000	219999				
	66	806	230000	329999				
	66	806	340000	439999				
	66	806	450000	549999				
	66	806	560000	659999				
	66	806	670000	769999				
	66	806	780000	879999				
	66	806	890000	989999				
	66	8070	10000	99999				
	66	807	100000	109999				
	66	807	120000	219999				
	66	807	230000	329999				
	66	807	340000	439999				
	66	807	450000	549999				
	66	807	560000	659999				
	66	807	670000	769999				
	66	807	780000	879999				
	66	807	890000	989999				

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
<b>MSISDN number ranges (s)</b>								
	66	80	8000000	8009999				
	66	8080	10000	99999				
	66	808	100000	949999				
	66	8100	10000	99999				
	66	810	100000	109999				
	66	810	120000	219999				
	66	810	230000	329999				
	66	810	340000	439999				
	66	810	450000	549999				
	66	810	560000	659999				
	66	810	670000	769999				
	66	810	780000	879999				
	66	810	890000	989999				
	66	8110	10000	99999				
	66	811	100000	109999				
	66	811	130000	139999				
	66	811	160000	169999				
	66	811	230000	239999				
	66	811	260000	269999				
	66	811	290000	329999				
	66	811	340000	439999				
	66	811	450000	499999				
	66	811	500000	549999				
	66	811	560000	659999				
	66	811	670000	769999				
	66	811	780000	879999				
	66	811	890000	989999				
	66	812	500000	549999				
	66	812	560000	659999				
	66	812	670000	769999				
	66	812	780000	879999				
	66	812	890000	989999				
	66	813	600000	659999				
	66	813	670000	719999				
	66	8210	10000	99999				
	66	821	100000	109999				
	66	821	120000	219999				
	66	821	230000	329999				
	66	821	340000	439999				
	66	821	450000	549999				
	66	821	560000	659999				
	66	821	670000	769999				
	66	821	780000	879999				
	66	821	890000	989999				
	66	8220	10000	99999				

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
<b>MSISDN number ranges (s)</b>								
	66	822	100000	109999				
	66	822	120000	219999				
	66	822	230000	329999				
	66	822	340000	439999				
	66	822	450000	549999				
	66	822	560000	659999				
	66	822	670000	769999				
	66	822	780000	879999				
	66	822	890000	989999				
	66	8260	60000	69999				
	66	826	670000	689999				
	66	8280	10000	99999				
	66	828	100000	109999				
	66	828	120000	219999				
	66	828	230000	329999				
	66	828	340000	439999				
	66	828	450000	549999				
	66	828	560000	659999				
	66	828	670000	769999				
	66	828	780000	879999				
	66	828	890000	989999				
	66	829	270000	289999				
	66	829	940000	949999				
	66	843	120000	139999				
	66	843	200000	219999				
	66	843	230000	329999				
	66	843	340000	439999				
	66	843	450000	549999				
	66	843	560000	659999				
	66	843	670000	769999				
	66	843	780000	879999				
	66	843	890000	989999				
	66	889	960000	999999				
	66	893	640000	649999				
	66	90	1000000	1009999				
	66	90	1110000	1119999				
	66	90	1220000	1229999				
	66	90	1330000	1339999				
	66	90	1440000	1449999				
	66	90	1550000	1559999				
	66	90	1660000	1669999				
	66	90	1770000	1779999				
	66	90	1880000	1889999				
	66	90	1990000	1999999				
	66	90	3000000	3009999				

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
<b>MSISDN number ranges (s)</b>								
	66	90	3110000	3119999				
	66	90	3330000	3339999				
	66	90	3440000	3449999				
	66	90	3550000	3559999				
	66	90	3660000	3669999				
	66	90	3770000	3779999				
	66	90	3880000	3889999				
	66	90	3990000	3999999				
	66	90	4000000	4009999				
	66	90	4110000	4119999				
	66	90	4220000	4229999				
	66	90	4330000	4339999				
	66	90	4440000	4449999				
	66	90	4550000	4559999				
	66	90	4660000	4669999				
	66	90	4770000	4779999				
	66	90	4880000	4889999				
	66	90	4990000	4999999				
	66	90	5000000	5009999				
	66	90	7440000	7449999				
	66	90	7550000	7559999				
	66	90	7660000	7669999				
	66	90	7770000	7779999				
	66	90	7880000	7889999				
	66	90	7990000	7999999				
	66	90	8000000	8009999				
	66	90	8110000	8119999				
	66	90	8220000	8229999				
	66	90	8330000	8339999				
	66	90	8440000	8449999				
	66	90	8550000	8559999				
	66	90	8660000	8669999				
	66	90	8770000	8779999				
	66	91	2110000	2119999				
	66	91	2220000	2229999				
	66	91	2330000	2339999				
	66	91	2440000	2449999				
	66	91	2550000	2559999				
	66	91	2660000	2669999				
	66	91	2770000	2779999				
	66	91	2880000	2889999				
	66	91	2990000	2999999				
	66	91	3000000	3009999				
	66	91	3110000	3119999				
	66	91	3220000	3229999				

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
<b>MSISDN number ranges (s)</b>								
	66	91	3330000	3339999				
	66	91	3440000	3449999				
	66	91	3550000	3559999				
	66	91	3660000	3669999				
	66	91	3770000	3779999				
	66	91	5660000	5669999				
	66	91	5770000	5779999				
	66	91	5880000	5889999				
	66	91	5990000	5999999				
	66	91	6000000	6009999				
	66	91	6110000	6119999				
	66	91	6220000	6229999				
	66	91	6330000	6339999				
	66	91	6440000	6449999				
	66	91	6550000	6559999				
	66	91	6660000	6669999				
	66	91	6770000	6779999				
	66	91	6880000	6889999				
	66	922	460000	999999				
	66	92	3000000	3999999				
	66	92	4000000	4999999				
	66	92	5000000	5999999				
	66	92	6000000	6999999				
	66	92	7000000	7999999				
	66	92	8000000	8999999				
	66	92	9000000	9999999				
	66	9	30000000	30999999				
	66	93	1000000	1999999				
	66	93	2000000	2999999				
	66	93	3000000	3999999				
	66	93	4000000	4999999				
	66	93	5000000	5999999				
	66	93	6000000	6999999				
	66	93	7000000	7950000				
	66	951	550000	559999				
	66	95	2000000	2009999				
	66	952	440000	449999				
	66	95	3000000	3009999				
	66	953	770000	779999				
	66	979	180000	769999				
	66	979	780000	999999				
	66	9	80000000	89999999				
	66	9	90000000	90170000				
	66	67	1000000	1399999				



Network Nodes Global Title Number Range(s)								
	66	92301	0000	9999				
	66	818010	000	999				
	66	818110	000	999				
	66	818160	000	999				
	66	818210	000	999				
	66	818310	000	999				
	66	818410	000	999				
	66	818510	000	999				
	66	818560	000	999				
	66	818600	000	999				
	66	818610	000	999				
	66	818710	000	999				
	66	818760	000	999				
	66	818810	000	999				
	66	818860	000	999				
	66	818900	000	999				
	66	818910	000	999				
	66	818960	000	999				

MSRN Number Range(s)								
	66	88996						
	66	88997						
	66	88998						
	66	89364						
	66	92301						
	66	92302						
	66	92303						
	66	92304						
	66	92305						
	66	92306						
	66	92307						
	66	92308						
	66	92309						
	66	93201						
	66	93202						
	66	93203						
	66	93204						
	66	93331						
	66	93401						
	66	93402						
	66	93403						
	66	93701						
	66	93702						
	66	93703						
	66	93704						
	66	93705						
	66	93706						
	66	93707						

MSRN Number Range(s)								
	66	818110						
	66	818160						
	66	818210						
	66	818310						
	66	818410						
	66	818560						
	66	818600						
	66	818710						
	66	818760						
	66	818900						
	66	818910						
	66	818960						

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	520	03

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	66	923

Does Number Portability apply ?	Yes
---------------------------------	-----

Is 15 Digit MSISDN Supported ?	Yes
--------------------------------	-----

USIM SIM Header	896603
-----------------	--------

E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	66	6	00000000	99999999
	66	8	00000000	99999999
	66	90	00000000	99999999
	66	91	00000000	99999999
	66	92	00000000	99999999
	66	93	00000000	99999999
	66	94	00000000	99999999
	66	95	00000000	99999999
	66	96	00000000	99999999
	66	97	00000000	99999999
	66	99	00000000	99999999

Additional Information
Network Nodes Global Title 66 818 xxxxxx will be used for inbound roaming with MCC 520 MNC 01
All THAAS MSISDN ranges were ported to THAWN already and there are mobile number portability for all operators in Thailand.

#### History of changes

Date	Description
2021-03-15	Delete MSRN 180 records
2021-01-15	Add MSISDN range 66671000000 - 66671399999
2020-11-16	Delete MSRN Prefix 6693205, 6693404, 6693405
2020-07-03	Delete MSRN 6693206, 6693207, 6693406, 6693407
2020-07-01	Add new MSISDN 23 ranges
2019-06-24	Update Delete MSISDN range 6665588xxxx
2019-01-16	Add new MSISDN range

**INTERNATIONAL SCCP GATEWAY**

TADIG code: THAWN

Section ID: 5 (Optional)

Effective date of change: 2021-08-01

International SCCP carrier list	
<b>SCCP carrier name:</b>	SCCP Carrier
<b>Connectivity information:</b>	Primary
<b>MNO TADIG code list:</b>	
<b>DPC info:</b>	
Signature:	TATA Communications
Type:	SCCP/STP
International DPC:	3.4.1
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway
<b>DPC info:</b>	
Signature:	TATA Communications
Type:	SCCP/STP
International DPC:	4.8.1
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway
<b>DPC info:</b>	
Signature:	TATA Communications
Type:	SCCP/STP
International DPC:	3.10.7
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway
<b>DPC info:</b>	
Signature:	CAT Telecom
Type:	SCCP/STP
International DPC:	5.40.5
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway
<b>DPC info:</b>	
Signature:	CAT Telecom
Type:	SCCP/STP
International DPC:	5.40.6
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway
<b>DPC info:</b>	
Signature:	BICS
Type:	SCCP/STP
International DPC:	2.56.6
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway
<b>DPC info:</b>	
Signature:	BICS
Type:	SCCP/STP
International DPC:	2.56.7
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway

<b>DPC info:</b>	
Signature:	iBASIS
Type:	ASD STP2
International DPC:	2.9.0
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway

<b>DPC info:</b>	
Signature:	iBASIS
Type:	RT STP2
International DPC:	2.9.1
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway

<b>DPC info:</b>	
Signature:	CITIC
Type:	SCCP/STP
International DPC:	4.176.4
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway

<b>DPC info:</b>	
Signature:	CITIC
Type:	SCCP/STP
International DPC:	4.179.0
Comments:	Please configure all of DPC for sharing Load Balance SCCP Gateway

#### History of changes

Date	Description
2021-08-01	Delete Orange and Add iBASIS
2019-11-01	Add new international SCCP gateway CITIC
2018-11-01	International SCCP gateway

**SCCP Protocol available at PMN for connection for International SS7 Roaming**

TADIG code: THAWN

Section ID: 7 (Optional)

Effective date of change: 2018-11-01

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

**History of changes**

Date	Description
2018-11-01	SCCP Information

**SUBSCRIBER IDENTITY AUTHENTICATION**

TADIG code: THAWN

Section ID: 8 (Optional)

Effective date of change: 2018-11-01

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
2018-11-01	Subscriber Identity Authentication

**MOBILE APPLICATION PART (MAP)**

TADIG code: THAWN

Section ID: 10 (Optional)

Effective date of change: 2018-11-01

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	MAPv3	MAPv3	-	
shortMsgMT-Relay (called shortMsgRelay in v1)	MAPv3	MAPv3	-	
shortMsgMO-Relay (called shortMsgRelay in v1)	MAPv3	MAPv3	-	
ss-InvocationNotification	MAPv3	N/A	-	
subscriberInfoEnquiry	MAPv3	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	MAPv3	N/A	-	
service Termination	MAPv3	N/A	-	
locationSvcGateway	N/A	N/A	-	
mm-EventReporting	MAPv3	N/A	-	
authenticationFailureReport	MAPv3	MAPv3	-	
imsiRetrieval	MAPv3	N/A	-	
gprsNotifyContext	N/A	-	-	
gprsLocationInfoRetrieval	N/A	-	-	
faillureReport	N/A	-	-	
secureTransportHandling	MAPv3	-	-	

**History of changes**

Date	Description
2018-11-01	MAP Information

**MAP Optimal Routing Section**

TADIG code: THAWN

Section ID: 11 (Optional)

Effective date of change: 2018-11-01

**MAP Optimal Routing of mobile - to - mobile calls**

Application Context Name	Current version in			Comments
	MSC	GMSC	HLR	
CallControlTransfer	MAPv3	-	N/A	
LocationInfoRetrieval	N/A	-	-	

**History of changes**

Date	Description
2018-11-01	MAP optimal routing



**MAP Inter Operator SMS Enhancement**

TADIG code: THAWN

Section ID: 12 (Optional)

Effective date of change: 2018-11-01

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

**History of changes**

Date	Description
2018-11-01	MAP Information

## NETWORK ELEMENTS INFORMATION

TADIG code: THAWN

Section ID: 13 (Optional)

Effective date of change: 2021-08-01

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
RNC					Huawei	RAN14/ BSC6900 & BSC6910	+07:00
RNC					ZTE	UR11.2/ ZXUR9000 (V4)	+07:00
RNC					NSN	RU30 EP2/mc- RNC	+07:00
NodeB					Huawei	RAN14/ DBS3900	+07:00
NodeB					ZTE	UR11.2/ ZXSDR	+07:00
NodeB					NSN	RU30 EP2/ Flexi	+07:00
HSS		66 923011563			Huawei		+07:00
HSS		66 923011564			Huawei		+07:00
HSS		66 923011504			Huawei		+07:00
HSS		66 923011505			Huawei		+07:00
HSS		66 923012503			ZTE		+07:00
HSS		66 923012523			ZTE		+07:00
HSS		66 923013502			ZTE		+07:00
HSS		66 923013522			ZTE		+07:00
HSS		66 923014502			ZTE		+07:00
HSS		66 923014522			ZTE		+07:00
HSS		66 923015503			ZTE		+07:00
HSS		66 923015504			ZTE		+07:00
HSS		66 923015523			ZTE		+07:00
HSS		66 923015524			ZTE		+07:00
HSS		66 923016503			ZTE		+07:00
HSS		66 923016521			ZTE		+07:00
HSS		66 923011565			Huawei		+07:00
HSS		66 923011506			Huawei		+07:00
HLR		66 923011521			Huawei		+07:00
HLR		66 923011541			Huawei		+07:00
HLR		66 923010092			Ericsson		+07:00
HLR		66 923010093			Ericsson		+07:00
HLR		66 923010094			Ericsson		+07:00
MSC/VLR		66 923010095					+07:00
MSC/VLR		66 923010098					+07:00
MSC/VLR		66 923010099					+07:00
MSC/VLR		66 923010398					+07:00
MSC/VLR		66 923010399					+07:00
MSC/VLR		66 923010501					+07:00
MSC/VLR		66 923011098					+07:00
MSC/VLR		66 923011099					+07:00
MSC/VLR		66 923011101					+07:00
MSC/VLR		66 923011104					+07:00
MSC/VLR		66 923011121					+07:00
MSC/VLR		66 923011141					+07:00
MSC/VLR		66 923011161					+07:00
MSC/VLR		66 923011163					+07:00
MSC/VLR		66 923011398					+07:00
MSC/VLR		66 923011399					+07:00
MSC/VLR		66 923011873					+07:00
MSC/VLR		66 923011880					+07:00
MSC/VLR		66 923011881					+07:00
MSC/VLR		66 923011882					+07:00
MSC/VLR		66 923011883					+07:00
MSC/VLR		66 923011884					+07:00
MSC/VLR		66 923011885					+07:00
MSC/VLR		66 923011886					+07:00
MSC/VLR		66 923011887					+07:00
MSC/VLR		66 923011888					+07:00

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
MSC/VLR		66 923011889					+07:00
MSC/VLR		66 923011890					+07:00
MSC/VLR		66 923011891					+07:00
MSC/VLR		66 923011892					+07:00
MSC/VLR		66 923011893					+07:00
MSC/VLR		66 923011894					+07:00
MSC/VLR		66 923011895					+07:00
MSC/VLR		66 923011896					+07:00
MSC/VLR		66 923011897					+07:00
MSC/VLR		66 923011898					+07:00
MSC/VLR		66 923011899					+07:00
MSC/VLR		66 923012098					+07:00
MSC/VLR		66 923012099					+07:00
MSC/VLR		66 923012101					+07:00
MSC/VLR		66 923012103					+07:00
MSC/VLR		66 923012121					+07:00
MSC/VLR		66 923012123					+07:00
MSC/VLR		66 923012298					+07:00
MSC/VLR		66 923012299					+07:00
MSC/VLR		66 923012398					+07:00
MSC/VLR		66 923012399					+07:00
MSC/VLR		66 923013098					+07:00
MSC/VLR		66 923013099					+07:00
MSC/VLR		66 923013101					+07:00
MSC/VLR		66 923013121					+07:00
MSC/VLR		66 923013398					+07:00
MSC/VLR		66 923013399					+07:00
MSC/VLR		66 923014098					+07:00
MSC/VLR		66 923014099					+07:00
MSC/VLR		66 923014101					+07:00
MSC/VLR		66 923014121					+07:00
MSC/VLR		66 923014298					+07:00
MSC/VLR		66 923014299					+07:00
MSC/VLR		66 923014398					+07:00
MSC/VLR		66 923014399					+07:00
MSC/VLR		66 923015098					+07:00
MSC/VLR		66 923015099					+07:00
MSC/VLR		66 923015101					+07:00
MSC/VLR		66 923015103					+07:00
MSC/VLR		66 923015106					+07:00
MSC/VLR		66 923015121					+07:00
MSC/VLR		66 923015123					+07:00
MSC/VLR		66 923015126					+07:00
MSC/VLR		66 923015298					+07:00
MSC/VLR		66 923015299					+07:00
MSC/VLR		66 923015398					+07:00
MSC/VLR		66 923015399					+07:00
MSC/VLR		66 923016098					+07:00
MSC/VLR		66 923016099					+07:00
MSC/VLR		66 923016101					+07:00
MSC/VLR		66 923016103					+07:00
MSC/VLR		66 923016121					+07:00
MSC/VLR		66 923016122					+07:00
MSC/VLR		66 923016298					+07:00
MSC/VLR		66 923016299					+07:00
MSC/VLR		66 923016398					+07:00
MSC/VLR		66 923016399					+07:00
MSC/VLR		66 923014104					+07:00
MSC/VLR		66 923014124					+07:00
MSC/VLR		66 923015105					+07:00
MSC/VLR		66 923015125					+07:00
MSC/VLR		66 923012104					+07:00
MSC/VLR		66 923012105					+07:00
MSC/VLR		66 923012124					+07:00
MSC/VLR		66 923012125					+07:00

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
MSC/VLR		66 923011095					+07:00
SMSC		66 923010900					+07:00
SMSC		66 923010910					+07:00
SMSC		66 923010920					+07:00
SMSC		66 923010930					+07:00
SMSC		66 923011301					+07:00
SMSC		66 923011700					+07:00
SMSC		66 923011721					+07:00
SMSC		66 923011722					+07:00
SMSC		66 923011723					+07:00
SMSC		66 923011725					+07:00
SMSC		66 923011729					+07:00
SMSC		66 923011730					+07:00
SMSC		66 923011731					+07:00
SMSC		66 923011741					+07:00
SMSC		66 923011742					+07:00
SMSC		66 923011744					+07:00
SMSC		66 923011745					+07:00
SMSC		66 923011746					+07:00
SMSC		66 923011747					+07:00
SMSC		66 923011750					+07:00
SMSC		66 923011760					+07:00
SMSC		66 923011761					+07:00
SMSC		66 923011849					+07:00
SMSC		66 923011762					+07:00
SMSC		66 923011752					+07:00
SMSC		66 923012740					+07:00
SMSC		66 923012741					+07:00
SMSC		66 923012743					+07:00
SMSC		66 923012720					+07:00
SMSC		66 923012721					+07:00
SMSC		66 923012723					+07:00
SMSC		66 923012742					+07:00
SMSC		66 923012722					+07:00
SMSC		66 923012745					+07:00
SMSC		66 923012724					+07:00
SMSC		66 923012746					+07:00
SMSC		66 923012725					+07:00
SMSC		66 923011763					+07:00
SMSC		66 923011764					+07:00
SMSC		66 923011765					+07:00
SMSC		66 923011766					+07:00
SMSC		66 923011767					+07:00
SGSN		66 923010509	110.49.184.0/24		Huawei		+07:00
SGSN		66 923011201	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011202	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011221	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011222	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011241	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011242	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011261	119.31.127.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923011263	119.31.127.0/24		Huawei		+07:00
SGSN		66 923012221	110.49.184.0/24		Huawei		+07:00
SGSN		66 923012201	110.49.184.0/24		Huawei		+07:00

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
SGSN		66 923013201	110.49.184.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923013221	110.49.184.0/24		Huawei	SGSN9810 V900R011C01/ ATCA	+07:00
SGSN		66 923014201	119.31.127.0/24		Huawei		+07:00
SGSN		66 923014221	119.31.127.0/24		Huawei		+07:00
SGSN		66 923015201	110.49.184.0/24		Huawei		+07:00
SGSN		66 923015221	110.49.184.0/24		Huawei		+07:00
SGSN		66 923016201	119.31.127.0/24		Huawei		+07:00
SGSN		66 923016221	119.31.127.0/24				+07:00
IN		66 923011850			Huawei		+07:00
IN		66 923011991			Huawei		+07:00
IN		66 923011992			Huawei		+07:00
IN		66 923011993			Huawei		+07:00
IN		66 923011994			Huawei		+07:00
IN		66 923011999			Huawei		+07:00
IN		66 923011693					+07:00
HSS		66 923010071					+07:00
HSS		66 923010072					+07:00
SMSC		66 923010073					+07:00
MSC/VLR		66 923015128					+07:00
MSC/VLR		66 923015129					+07:00
MSC/VLR		66 923015130					+07:00
MSC/VLR		66 923015131					+07:00
MSC/VLR		66 923010090					+07:00
MSC/VLR		66 923010091					+07:00
MSC/VLR		66 923011068					+07:00
MSC/VLR		66 923011069					+07:00
MSC/VLR		66 923011075					+07:00
MSC/VLR		66 923011076					+07:00
MSC/VLR		66 923011077					+07:00
MSC/VLR		66 923011078					+07:00
MSC/VLR		66 923011085					+07:00
MSC/VLR		66 923011086					+07:00
MSC/VLR		66 923011087					+07:00
MSC/VLR		66 923011088					+07:00
MSC/VLR		66 923012094					+07:00
MSC/VLR		66 923012095					+07:00
MSC/VLR		66 923013094					+07:00
MSC/VLR		66 923013095					+07:00
MSC/VLR		66 923014094					+07:00
MSC/VLR		66 923014095					+07:00
MSC/VLR		66 923015094					+07:00
MSC/VLR		66 923015095					+07:00
MSC/VLR		66 923016094					+07:00
MSC/VLR		66 923016095					+07:00
SMSC		66 923013026					+07:00
SMSC		66 923013027					+07:00
SMSC		66 923013028					+07:00
SMSC		66 923013029					+07:00
SMSC		66 923013030					+07:00
SMSC		66 923013031					+07:00
SMSC		66 923013032					+07:00
SMSC		66 923013033					+07:00
SMSC		66 923013034					+07:00
SMSC		66 923013035					+07:00
SMSC		66 923013036					+07:00
SMSC		66 923013037					+07:00
SMSC		66 923013038					+07:00
SMSC		66 923013039					+07:00
SMSC		66 923013040					+07:00
SMSC		66 923013041					+07:00
SMSC		66 923013042					+07:00
SMSC		66 923013043					+07:00

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
SMSC		66 923013044					+07:00
SMSC		66 923013045					+07:00
SMSC		66 923013046					+07:00
SMSC		66 923013047					+07:00
SMSC		66 923013048					+07:00
SMSC		66 923013049					+07:00
SMSC		66 923013050					+07:00
IN		66 923012693					+07:00
IN		66 923011671					+07:00
IN		66 923011672					+07:00
IN		66 923011673					+07:00
IN		66 923011674					+07:00
IN		66 923011675					+07:00
IN		66 923011676					+07:00
IN		66 923011677					+07:00
IN		66 923011678					+07:00
SMSC		66 923013001					+07:00
SMSC		66 923013002					+07:00
SMSC		66 923013003					+07:00
SMSC		66 923013004					+07:00
SMSC		66 923013005					+07:00
SMSC		66 923013006					+07:00
SMSC		66 923013007					+07:00
SMSC		66 923013008					+07:00
SMSC		66 923013009					+07:00
SMSC		66 923013010					+07:00
SMSC		66 923013011					+07:00
SMSC		66 923013012					+07:00
SMSC		66 923013013					+07:00
SMSC		66 923013014					+07:00
SMSC		66 923013015					+07:00
SMSC		66 923013016					+07:00
SMSC		66 923013017					+07:00
SMSC		66 923013018					+07:00
SMSC		66 923013019					+07:00
SMSC		66 923013020					+07:00
SMSC		66 923013021					+07:00
SMSC		66 923013022					+07:00
SMSC		66 923013023					+07:00
SMSC		66 923013024					+07:00
SMSC		66 923013025					+07:00
HSS		66 923010074					+07:00
HSS		66 923010075					+07:00
HSS		66 923010076					+07:00
HSS		66 923010077					+07:00
IN		66 923011950					+07:00
IN		66 923011679					+07:00
IN		66 923011680					+07:00

## History of changes

Date	Description
2021-08-01	Add new IN GT address 66923011679, 66923011680
2021-07-01	Add new IN GT address 66923011950
2021-04-20	Delete 19 HLR and 100 MSC/VLR
2020-07-01	Add new SMSC GT 66923013001 - 66923013025
2020-07-01	Add new HSS GT 66923010074 - 66923010077
2020-05-15	Delete IN node
2020-04-16	Add new IN node
2019-09-01	Add new IN 66923012693
2019-06-24	Update New MSC/VLR & New SMSC

Date	Description
2019-02-20	new IN node

**USSD Information**

TADIG code: THAWN

Section ID: 14 (Optional)

Effective date of change: 2018-11-01

<b>USSD capability available</b>	Yes
<b>Supported phase</b>	Phase 2

**History of changes**

Date	Description
2018-11-01	USSD Information



**CAMEL INFO**

TADIG code: THAWN

Section ID: 15 (Conditional)

Effective date of change: 2021-08-01

**gsmSSF/MSC**

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

**CAMEL Functionality Information**

Service(s) Name	SK	CAP Version	SCP GT addresses
Postpaid VPN	153	CAPv2	66923011999
Prepaid VPN	53	CAPv2	66923011999
Postpaid BOS	201	CAPv2	66923011693
Prepaid BOS	211	CAPv2	66923011693 66923012693
Prepaid CBS	71	CAPv2	66923011670 66923011671 66923011672 66923011673 66923011674 66923011675 66923011676 66923011677 66923011678 66923011679 66923011680
PPS SIM2Fly CBS	75	CAPv2	66923011670 66923011671 66923011672 66923011673 66923011674 66923011675 66923011676 66923011677 66923011678 66923011679 66923011680
Postpaid BOS	202	CAPv2	66923011693 66923012693
Postpaid CBS	70	CAPv2	66923011671 66923011672 66923011673 66923011674 66923011675 66923011676 66923011677 66923011678 66923011679 66923011680
Postpaid CBS	151	CAPv2	66923011671 66923011672 66923011673 66923011674 66923011675 66923011676 66923011677 66923011678 66923011679 66923011680
Postpaid LWBSS	181	CAPv2	66923011950
Prepaid LWBSS	81	CAPv2	66923011950
Prepaid LWBSS SIM2Fly	85	CAPv2	66923011950
Postpaid LWBSS Hybrid	182	CAPv2	66923011950
Prepaid LWBSS Hybrid	82	CAPv2	66923011950

**CAPv4 Partial Implementations**

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

**History of changes**

<b>Date</b>	<b>Description</b>
2021-08-01	Add new GT 66923011679 & 66923011680 for Prepaid CBS(SK=71), PPS SIM2Fly CBS(SK=75), Postpaid CBS(SK=70,151)
2021-07-01	Add new CAMEL functionality 5 groups
2021-01-15	Delete Postpaid RTBS SK 151 ( GT 66923011991, 66923011992 )
2020-08-01	Add new Camel functionality Postpaid CBS SK151
2020-05-15	Delete Prepaid RTBS, Postpaid BOS, Prepaid BOS, PPS SIM2Fly RTBS, PPS SIM2Fly BOS
2020-04-16	Add new CAMEL Postpaid CBS
2019-09-01	Add Prepaid BOS SCP 66923012693 & Postpaid BOS SCP 66923012693
2019-02-20	new SCP for Prepaid RTBS & PPS Sim2fly RTBS

**Packet Data Services Information**

TADIG code: THAWN

Section ID: 16 (Conditional)

Effective date of change: 2018-11-01

**List of APN Operator Identifiers**

APN Operator Identifier	Description	Example
mnc003.mcc520.gprs		

**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			
internet	-	-	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		
multimedia	-	-	203.170.229.34	http://mms.awn.co.th

**IPv6 Connectivity Information**

	IPv6 PDP Supported	IPv4v6 PDP Supported
SGSN Support	Yes	Yes
GGSN Support	Yes	Yes

**List of 2G/3G QOS profiles**

Profile name:	Internet
Traffic class:	Interactive
ARP:	3
Evolved ARP support:	Yes
Evolved ARP priority level:	12
Evolved APR preemption vulnerability list:	
Evolved APR preemption capability list:	
Delivery order:	No
Maximum SDU size:	1500

**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	11
-------------------------------	----

**History of changes**

Date	Description
2018-11-01	Packet-switched data

**IP - Roaming and IP - Interworking Information**

TADIG code: THAWN

Section ID: 17 (Conditional)

Effective date of change: 2021-04-20

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	110.49.194.0/24
	119.31.127.0/24
	202.149.28.0/24
	202.149.29.0/24
	110.49.184.0/24
	110.49.195.0/24
	119.31.96.128/26
	110.49.177.0/24
	110.49.179.0/24
	110.49.180.0/24
	110.49.178.0/24
	110.49.194.248/29
	119.31.126.0/24
	110.49.179.0/26
	110.49.180.0/26
	110.49.178.0/26
	110.49.187.240/29
	110.49.187.248/29
	110.49.187.240/28
	110.49.181.0/25
	110.49.182.0/25
	110.49.181.128/25
	110.49.182.128/25
	110.49.187.233/32
	110.49.187.234/32

List of Autonomous System Number (ASN):	ASN
	64652

List of Autonomous System Number (ASN4B):	ASN4B
	132681

List of PMN authoritative DNS server IP addresses and names		
IP address	IPv6 address	DNS Name
110.49.194.156		DNS3GCWDC2.MNC003.mcc520.gprs.
110.49.194.172		DNS3GSUK2.MNC003.mcc520.gprs.
110.49.179.30		4DNSCWD1H.EPC.MNC003.MCC520.3gppnetwork.org.
110.49.179.62		4DNSTWA1H.EPC.MNC003.MCC520.3gppnetwork.org.

List of PMN local caching DNS server IP addresses and names		
IP address	IPv6 address	DNS Name
110.49.194.148		3DNSCWDC1.MNC003.mcc520.gprs.
110.49.194.164		3DNSSUK1.MNC003.mcc520.gprs.
110.49.194.122		3DNSPSTWA1N.MNC003.mcc520.gprs.
110.49.194.123		3DNSPSBPL1N.MNC003.mcc520.gprs.
110.49.179.2		4DNSCWD21H.EPC.MNC003.MCC520.3gppnetwork.org.
110.49.179.6		4DNSTWA2H.EPC.MNC003.MCC520.3gppnetwork.org.
202.149.29.28		gprsdns.gprsdns.gprs.
202.149.28.190		dnssch1aa.dnssch1aa.gprs.

List of GRX Providers	GRX Provider
	Syniverse BICS TATA Orange (France Telecom LTD) Telia Sonera CMI iBasis

**History of changes**

Date	Description
2021-04-20	Add new IP range 110.49.187.233/32, 110.49.187.234/32
2020-07-03	Delete IP 110.49.181.0/24, 110.49.182.0/24 Add IP 110.49.181.0/25, 110.49.181.128/25, 110.49.182.0/25, 110.49.182.128/25
2020-07-01	Add new IP 110.49.181.0/24, 110.49.182.0/24 and Delete old IP 110.49.181.128/25, 110.49.182.128/25
2019-09-16	Add new IP backbone 110.49.181.128/25 and 110.49.182.128/25
2019-09-01	Add new GRX provider
2019-09-01	Add DNS name
2018-11-01	IP roaming and inter-working

**MMS Interworking Information**

TADIG code: THAWN

Section ID: 18 (Optional)

Effective date of change: 2018-11-01

**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
mms.awn.co.th	110.49.194.253/30	1000	Yes	Yes	110.49.194.253	110.49.194.254

**List of MMS IW Hub Provider****MMS IW Hub Provider Name****GT address(es)****History of changes**

Date	Description
2018-11-01	MMS Interworking hub provider



**LTE Roaming Information**

TADIG code: THAWN

Section ID: 20 (Optional)

Effective date of change: 2020-02-21

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
BICS		
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	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
TATA		
Primary IP address of DA	Secondary IP address of DA	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Orange (France Telecom LTD)		
Primary IP address of DA	Secondary IP address of DA	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Telia Sonera		
Primary IP address of DA	Secondary IP address of DA	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
CMI		
Primary IP address of DA	Secondary IP address of DA	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
iBasis		
Primary IP address of DA	Secondary IP address of DA	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
CITIC		
Primary IP address of DA	Secondary IP address of DA	

**Roaming Interconnection**

EPC Realms For Roaming	
	epc.mnc003.mcc520.3gppnetwork.org

**FQDN Diameter Edge Agent**

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
3dgwcwd1h.dea.epc.mnc003.mcc520.3gppnetwork.org	110.49.177.2	110.49.177.6
3dgwsuk1h.dea.epc.mnc003.mcc520.3gppnetwork.org	110.49.177.10	110.49.177.14
ideabp1h.dea.epc.mnc003.mcc520.3gppnetwork.org	110.49.177.131	110.49.177.139
ideatwa1h.dea.epc.mnc003.mcc520.3gppnetwork.org	110.49.177.155	110.49.177.163

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
true	true

**Voice ITW**

CSFB

**Roaming CS Fallback**

Not Supported

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

## List of LTE QOS profiles

Profile name:	internet
QCI Value List:	7 8 9
QOS ARP List:	11 12
ARP Preemption Vulnerability List:	1
ARP Preemption Capability List:	0
Profile name:	Support QCI for IMS Service
QCI Value List:	1 2 5
QOS ARP List:	1
ARP Preemption Vulnerability List:	1
ARP Preemption Capability List:	1

## IPv6 Connectivity Information

	IPv6 PDP Supported	IPv4v6 PDP Supported
MME Support	Yes	Yes
SGW Support	Yes	Yes
PGW Support	Yes	Yes

## 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
2020-02-24	Update support SMS over IP
2020-02-24	Add QCI for IMS Service
2020-02-24	Add QCI Internet
2019-09-16	Add new IPX provider CMI, iBasis and CITIC
2019-09-16	Edit FQDN Diameter Edge Agent
2018-11-01	IPX provider

**VoLTE Roaming Information Section**

TADIG code: THAWN

Section ID: 26 (Conditional)

Effective date of change: 2020-02-06

<b>VoLTE roaming architectures</b>		
<b>Architecture</b>	<b>VPMN</b>	<b>HPMN</b>
<b>LBO HR</b>	Unsupported	Unsupported
<b>LBO VR</b>	Unsupported	Unsupported
<b>S8HR</b>	Supported	Supported

<b>Mobility and voice continuity</b>		
<b>Technology</b>	<b>VPMN</b>	<b>HPMN</b>
<b>Single Radio Voice Call Continuity</b>	Not supported	Not supported

<b>S8HR roaming constraints</b>	
<b>VPLMN technology Strategy for EC</b>	IMS
<b>Lawful Interception</b>	No
<b>EPS QoS to be enforced</b>	internet

**History of changes**

<b>Date</b>	<b>Description</b>
2020-02-24	Add VoLTE Information

**CONTACT INFORMATION**

TADIG code: THAWN

Section ID: 21 (Optional, Repeating)

Effective date of change: 2021-08-01

**List of Roaming Troubleshooting Contact Information****Roaming Troubleshooting Contact Information**

<b>Location</b>	Bangkok, Thailand		
<b>Office Time Zone in UTC</b>	+07:00		
<b>Office Hours</b>	<b>Week Day (s)</b>	<b>Start Time</b>	<b>End Time</b>
	Mon Tue Wed Thu Fri	08:30:00	17:30:00

**Main Contact for Troubleshooting (Office Hours)**

Team Name	Tel.	Mobile	Fax	Email
Network Faults		+66818231119	+6620296960	inoc@ais.co.th

**Escalation Contact for Troubleshooting**

Person Name	Tel.	Mobile	Fax	Email
Prasert Limcharoenkij	+6620296688	+66922693788	+6620296960	iro@ais.co.th

**24 x 7 Troubleshooting (contact out of Office Hours)**

Team Name	Tel.	Mobile	Fax	Email
INOC	+6620292788	+66819312228	+6620296960	inoc@ais.co.th

**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
GCSC Customer Service -	+15148687875		+15148688996
JobTitle	Email		
	customer.service@tatacommunications.com		
Person Name	Tel.	Mobile	Fax
Mr. Vichien Manont	+6621043545		+6621043946
JobTitle	Email		
	vichien.m@catttelecom.com		
Person Name	Tel.	Mobile	Fax
Customer Care -	+3225485151		
JobTitle	Email		
	customer.care@bics.com		

**Roaming Coordinator**

Person Name	Tel.	Mobile	Fax
Roaming Awn	+6620296647		+6620296025
JobTitle	Email		
	roaming-awn@ais.co.th		

**IREG Tests**

Person Name	Tel.	Mobile	Fax
Prasert Limcharoenkij	+6620296688	+66922693788	+6620296960
JobTitle	Email		
	iro@ais.co.th		
Person Name	Tel.	Mobile	Fax
Pornrawin Pensri	+6620296752	+66631983636	+6620296960
JobTitle	Email		
	iro@ais.co.th		
Person Name	Tel.	Mobile	Fax
Waratchawut Wongpattanakit	+6620298314	+66613852803	+6620296960
JobTitle	Email		
	iro@ais.co.th		

**TADIG Tests**

Person Name	Tel.	Mobile	Fax
Mananya Tangnithithum	+6620296117		+6620296831
JobTitle	Email		
TADIG Testing	mananyat@ais.co.th		
Person Name	Tel.	Mobile	Fax
Arunwan Wiangsong	+6620298393		
JobTitle	Email		
	arunwanw@ais.co.th		
Person Name	Tel.	Mobile	Fax

Methinee Wongkrod	+6620298393		
<b>JobTitle</b>		<b>Email</b>	
		methineu@ais.co.th	

**Other contact(s)**

	<b>Person Name</b>	<b>Tel.</b>	<b>Mobile</b>	<b>Fax</b>
	Thanika Amorndettawin	+6620296778	+66804297956	
	<b>JobTitle</b>		<b>Email</b>	
			thanikaa@ais.co.th	
	<b>Person Name</b>	<b>Tel.</b>	<b>Mobile</b>	<b>Fax</b>
	Yupaporn Jitnukhroh	+6620298909		
	<b>JobTitle</b>		<b>Email</b>	
			yupaporj@ais.co.th	

<b>IR21 Distribution Email Address</b>	<b>Email</b>
	iregteam@ais.co.th

**History of changes**

Date	Description
2021-08-01	Change contact email from fc-iro@ais.co.th to iro@ais.co.th
2021-07-01	Update IREG contact & other contact
2020-08-01	Update new contact
2020-04-16	Remove contact IREG
2020-02-24	Update email contact
2019-09-01	Add new contact Tadig testing
2019-02-20	new contact

**SECTIONS NOT IN USE**

TADIG Code	Section ID	Section Name
THAWN	6	Domestic SCCP Gateway
THAWN	9	Test Numbers Information
THAWN	19	WLAN Information
THAWN	22	Hosted Networks
THAWN	23	M2M Roaming Information
THAWN	24	MVNO Information
THAWN	27	LPWA Roaming Information Section