GSMA Roaming Database
IR.21 Data

RAEX IR.21 Information

Creation date:	2023-07-28
Creation time:	09:53:08+02:00
File type:	IR.21
Sender TADIG:	TWNPC
Publish Comment:	Update SMSC GT
TADIG-GEN schema version:	2.4
RAEX-IR.21 schema version:	16.0

ORGANISATION INFORMATION

Section ID: 1 (Mandatory)

Organisation name:	Taiwan Mobile Co.Ltd
Country initials:	TWN

TADIG summary

TADIG Code	MCC	MNC	VPMN / HPMN	Network type
TWNPC	466	97	HPMN	Terrestrial

History of changes

TADIG Code	Section ID	Section	Date	Description
TWNPC	13	Network Elements Information	2023-07-28	Edit
TWNPC	13	Network Elements Information	2023-07-28	delet MME
TWNPC	16	Packet Data Service Information	2023-07-28	Edit
TWNPC	16	Packet Data Service Information	2023-07-28	edit
TWNPC	16	Packet Data Service Information	2023-07-28	edit
TWNPC	17	GRX/IPX routing for data roaming	2023-07-28	Edit DNS name
TWNPC	17	GRX/IPX routing for data roaming	2023-07-28	Edit ASN
TWNPC	17	GRX/IPX routing for data roaming	2023-07-28	Edit DNS name
TWNPC	20	LTE Roaming Information	2023-07-28	Edit FQDN
TWNPC	20	LTE Roaming Information	2023-07-28	edit
TWNPC	26	VoLTE Roaming Information Section	2023-07-28	edit
TWNPC	13	Network Elements Information	2023-07-14	Update SMSC GT
TWNPC	13	Network Elements Information	2023-07-14	Update SMSC GT
TWNPC	17	GRX/IPX routing for data roaming	2022-07-13	IP Address Range Update
TWNPC	26	VoLTE Roaming Information Section	2020-12-16	VoLTE service update
TWNPC	20	LTE Roaming Information	2020-12-14	5G NSA service update
TWNPC	20	LTE Roaming Information	2020-12-14	5G service update
TWNPC	5	International SCCP Gateway	2020-06-23	SCCP Information updated
TWNPC	17	GRX/IPX routing for data roaming	2020-06-23	IP Address ranges and ASN upated
TWNPC	13	Network Elements Information	2018-12-26	Node Type Update
TWNPC	16	Packet Data Service Information	2018-12-26	APN Type update
TWNPC	21	Contact Information	2018-12-26	Contacts Update
TWNPC	21	Contact Information	2018-12-26	Contacts update
TWNPC	4	Routing Information	2018-11-06	MSRN Number Range Update
TWNPC	13	Network Elements Information	2018-11-06	Network Elements Information Update
TWNPC	4	Routing Information	2017-10-26	Update on the MSRN
TWNPC	4	Routing Information	2017-10-26	update on numbering range
TWNPC	4	Routing Information	2017-10-26	Addition information update
TWNPC	8	Subscriber Identity Authentication	2017-10-26	Subscriber identity Authentication GSM update
TWNPC	16	Packet Data Service Information	2017-10-26	List of data Service supported - delete of 2G service
TWNPC	4	Routing Information	2017-10-17	Update number range
TWNPC	5	International SCCP Gateway	2017-10-17	Remove old TADIG CODE
TWNPC	9	Test Numbers Information	2017-10-17	update ACC Number
TWNPC	13	Network Elements Information	2017-10-17	Update Network Elements
TWNPC	21	Contact Information	2017-08-09	change contact window
TWNPC	21	Contact Information	2017-08-09	update contact window
TWNPC	4	Routing Information	2017-04-28	TWNPC E.212 466970/466971/466972 are using 2G service, and will terminate on 30th, June 2017.
TWNPC	4	Routing Information	2017-04-28	TWNTA 46699 service will terminate on 30th, June 2017.
TWNPC	4	Routing Information	2017-04-28	TWNTM 46693 service will terminate on 30th, June 2017.
TWNPC	4	Routing Information	2017-03-08	Update MSISDN Number (add NDC 9010,9011,9012,9013,9014)
TWNPC	21	Contact Information	2016-12-22	Change Contact Windows
TWNPC	21	Contact Information	2016-12-22	Change Contact Windows
TWNPC	20	LTE Roaming Information	2016-10-17	No Change
TWNPC	20	LTE Roaming Information	2016-10-17	No Change
TWNPC	21	Contact Information	2016-08-19	Change contact window of Troubleshooting
TWNPC	13	Network Elements Information	2016-05-18	Add New SMSC

TADIG Code	Section ID	Section	Date	Description
TWNPC	13	Network Elements Information	2016-05-18	New MME
TWNPC	17	GRX/IPX routing for data roaming	2016-05-18	Add Aicent on GRX
TWNPC	13	Network Elements Information	2016-03-17	New MME
TWNPC	13	Network Elements Information	2015-11-13	Add New SMSC
TWNPC	13	Network Elements Information	2015-09-24	Modify VLR GT
TWNPC	20	LTE Roaming Information	2015-09-16	Draft Version
TWNPC	5	International SCCP Gateway	2015-07-31	Darft Version
TWNPC	9	Test Numbers Information	2015-07-31	Draft Version
TWNPC	15	CAMEL Information	2015-07-31	Draft Version
TWNPC	16	Packet Data Service Information	2015-07-31	Draft Verson
TWNPC	18	MMS Interworking Information	2015-07-31	Draft Version
TWNPC	21	Contact Information	2015-07-31	Draft Version
TWNPC	4	Routing Information	2015-07-13	Initial version
TWNPC	8	Subscriber Identity Authentication	2015-07-13	Draft Version
TWNPC	10	MAP	2015-07-13	Draft Version
TWNPC	14	USSD Information	2015-07-13	Draft Version
TWNPC	12	MAP Inter Operator SMS Enhancement	2015-07-06	Draft Version
TWNPC	7	SCCP Protocol	2015-01-21	No change

NETWORK

Section ID: 2 (Mandatory, Repeating)
Section is applicable for the following TADIG code: TWNPC

TADIG code:	TWNPC
Network name:	Taiwan Mobile

Technology:	Frequency list:	Coverage:
2G-GSM	Unsupported	
3G-UTRA/FDD	1 - IMT 2.1 GHz	
3G-UTRA/TDD	Unsupported	
4G-E-UTRAN	3 - DCS 1800, 28 - 700 MHz APAC, 1 - IMT 2.1 GHz	
4G-E-UTRAN-MIoT-LTE-M	Unsupported	
4G-E-UTRAN-MIoT-NB-IoT	Unsupported	
MIoT-NB-IoT deployment mode	Unsupported	
5G NR	Unsupported	

Service status and planned closure			
	Support	**Planned partial closure**	**Planned full closure**
2G	Unsupported		
3G	Unsupported		
4G	Unsupported		
MIoT-LTE-M	Unsupported		
MIoT-NB-IOT	Unsupported		
VoLTE	Unsupported		
5G-NG	Unsupported		

ROUTING INFORMATION

Section ID: 4 (Mandatory)
Section is applicable for the following TADIG code: TWNPC
Effective date of change: 2018-11-06

CCITT E.164 Number series	Country Code (CC)	National Destination Code (NDC)	SN Range Start	SN Range Stop	Primary International DPC	Secondary International DPC	Network owner	Location
MSISDN number ranges (s)								
	886	909					MNO	
	886	918					MNO	
	886	920					MNO	
	886	922					MNO	
	886	923					MNO	
	886	929					MNO	
	886	935					MNO	
	886	939					MNO	
	886	952					MNO	
	886	953					MNO	
	886	956					MNO	
	886	958					MNO	
	886	983					MNO	
	886	987					MNO	
	886	9010					MNO	
	886	9011					MNO	
	886	9012					MNO	
	886	9013					MNO	
	886	9014					MNO	
	886	9140					MNO	
	886	9141					MNO	
	886	9142					MNO	
	886	9240					MNO	
	886	9241					MNO	
	886	9314					MNO	
	886	9315					MNO	
	886	9316					MNO	
	886	9317					MNO	
	886	9318					MNO	
	886	9319					MNO	
	886	9600					MNO	
	886	9601					MNO	
	886	9602					MNO	
	886	9603					MNO	
	886	9604					MNO	
	886	9610					MNO	
	886	9611					MNO	
	886	9612					MNO	
	886	9613					MNO	
	886	9614					MNO	
	886	9615					MNO	

CCITT E.164 Number series	Country Code (CC)	National Destination Code (NDC)	SN Range Start	SN Range Stop	Primary International DPC	Secondary International DPC	Network owner	Location
MSISDN number ranges (s)								
	886	9660					MNO	
	886	9661					MNO	
	886	9662					MNO	
	886	9663					MNO	
	886	970					MNO	
	886	9710					MNO	
	886	9711					MNO	
	886	9744					MNO	
	886	9745					MNO	
	886	979					MNO	
	886	9844					MNO	
	886	9845					MNO	
Network Nodes Global Title Number Range(s)								
	886	935					MNO	
	886	939					MNO	
MSRN Number Range(s)								
	886	914252						
	886	914253						
	886	9528460						
	886	9528461						
	886	9528462						
	886	9528463						
	886	9528464						
	886	9527460						
	886	9527461						
	886	9527462						
	886	9527463						
	886	9527464						
	886	9527445						
	886	9527446						
	886	9527447						
	886	9527448						
	886	9527449						
	886	961344						
	886	961347						
	886	922044						
	886	918745						
	886	918845						
	886	918945						
	886	952145						
	886	952245						
	886	983414						
	886	983434						
	886	983444						

MSRN Number Range(s)

	886	987884						
	886	987984						
	886	9184440						
	886	9184441						
	886	9184442						
	886	9184443						
	886	9184444						
	886	9185440						
	886	9185441						
	886	9185442						
	886	9185443						
	886	9185444						
	886	9522445						
	886	9522446						
	886	9522447						
	886	9522448						
	886	9522449						
	886	9522460						
	886	9522461						
	886	9522462						
	886	9522463						
	886	9522464						
	886	9528445						
	886	9528446						
	886	9528447						
	886	9528448						
	886	9528449						
	886	983544						
	886	983744						
	886	935444						
	886	939344						
	886	961204						
	886	935844						
	886	939144						
	886	970484						
	886	970447						
	886	9189458						
	886	9189459						
	886	920444						
	886	920644						
	886	922474						
	886	935044						
	886	935344						
	886	935644						
	886	939444						
	886	939544						
	886	939644						

MSRN Number Range(s)

	886	939844						
	886	918145						
	886	918245						
	886	918445						
	886	918545						
	886	918645						

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	466	97

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	886	935

Does Number Portability apply ?	Yes

Is 15 Digit MSISDN Supported ?	No

Additional Information

TWNPC E.212 466970/466971/466972 were used for TWM's legacy 2G service, and have been terminated since 30th, June 2017. TWNTA 46699 service was terminated on 30th, June 2017. TWNTM 46693 service was terminated on 30th, June 2017.

History of changes

Date	Description
2018-11-06	MSRN Number Range Update
2017-10-26	Update on the MSRN
2017-10-26	update on numbering range
2017-10-26	Addition information update
2017-10-17	Update number range
2017-04-28	TWNPC E.212 466970/466971/466972 are using 2G service, and will terminate on 30th, June 2017.
2017-04-28	TWNTA 46699 service will terminate on 30th, June 2017.
2017-04-28	TWNTM 46693 service will terminate on 30th, June 2017.
2017-03-08	Update MSISDN Number (add NDC 9010,9011,9012,9013,9014)
2015-07-13	Initial version

INTERNATIONAL SCCP GATEWAY

Section ID: 5 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2020-06-23

International SCCP carrier list	
SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary

DPC info:	
Signature:	CHTI *TPE/STP2
Type:	SCCP
International DPC:	4.172.3
Comments:	9571

DPC info:	
Signature:	CHTI *KAO/STP2
Type:	SCCP
International DPC:	4.172.4
Comments:	9572

SCCP carrier name:	SCCP Carrier
Connectivity information:	Backup

DPC info:	
Signature:	CITP5
Type:	SCCP
International DPC:	4.177.1
Comments:	*Only HK & CMCC(China) & Roaming Hub Comfone signaling bilateral transfer via CITIC1616 International and those informed operators. DPC: 4-170-1, 4-170-2 do not provide service anymore.

DPC info:	
Signature:	CITP6
Type:	SCCP
International DPC:	4.178.3
Comments:	*Only HK & CMCC(China) & Roaming Hub Comfone signaling bilateral transfer via CITIC1616 International and those informed operators. DPC: 4-170-1, 4-170-2 do not provide service anymore.

SCCP carrier name:	SCCP Carrier
Connectivity information:	Primary

DPC info:	
Signature:	Syniverse ITU
Type:	SCCP/S TP
International DPC:	3.30.5
Comments:	* Only US T-Mobile signaling bilateral via Syniverse and those informed operators.

History of changes

Date	Description
2020-06-23	SCCP Information updated
2017-10-17	Remove old TADIG CODE

Date	Description
2015-07-31	Darft Version

SCCP Protocol available at PMN for connection for International SS7 Roaming

Section ID: 7 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2015-01-21

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

History of changes

Date	Description
2015-01-21	No change

SUBSCRIBER IDENTITY AUTHENTICATION

Section ID: 8 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2017-10-26

Authentications	Performed (Yes / No)
Authentication performed for Roaming subscribers at the commencement of GSM service	No
Authentication performed for roaming subscribers in case of GPRS	Yes

A5 Cipher Algorithm version in use	

History of changes

Date	Description
2017-10-26	Subscriber identity Authentication GSM update
2015-07-13	Draft Version

Test Numbers Information

Section ID: 9 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2017-10-17

Number Type	Test Number	Location	Comments
AAC	886901074444		
AAC	886901174444		
AAC	886901274444		
AAC	886901374444		
AAC	886901474444		

History of changes

Date	Description
2017-10-17	update ACC Number
2015-07-31	Draft Version

MOBILE APPLICATION PART (MAP)

Section ID: 10 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2015-07-13

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	MAPv3	MAPv3	MAPv3	
shortMsgMT-Relay (called shortMsgRelay in v1)	MAPv1	MAPv3	MAPv2	
shortMsgMO-Relay (called shortMsgRelay in v1)	MAPv1	MAPv3	MAPv2	
ss-InvocationNotification	MAPv3	N/A	MAPv3	
subscriberInfoEnquiry	MAPv3	MAPv3	MAPv3	
gprsLocationUpdate	N/A	MAPv3	MAPv3	
locationCancellation	MAPv3	MAPv3	MAPv3	
msPurging	MAPv3	MAPv3	MAPv3	
reset	MAPv3	MAPv2	MAPv3	
networksUnstructuredSs	MAPv2	N/A	MAPv3	
reporting	MAPv3	N/A	MAPv3	
callCompletion	MAPv3	N/A	MAPv3	
istAlerting	-	N/A	-	
service Termination	-	N/A	-	
locationSvcGateway	N/A	N/A	-	
mm-EventReporting	MAPv3	N/A	MAPv3	
authenticationFaillureReport	MAPv3	MAPv3	MAPv3	
imsiRetrieval	-	N/A	MAPv2	
gprsNotifyContext	N/A	-	-	
gprsLocationInfoRetrieval	N/A	-	-	
faillureReport	N/A	-	-	
secureTransportHandling	-	-	-	

History of changes

Date	Description
2015-07-13	Draft Version

MAP Inter Operator SMS Enhancement

Section ID: 12 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2015-07-06

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

History of changes

Date	Description
2015-07-06	Draft Version

NETWORK ELEMENTS INFORMATION

Section ID: 13 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2023-07-28

Node type	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	UTC offset
SGSN-3G	886 935 420516 / 420516				+08:00
SGSN-3G	886 935 420517 / 420517				+08:00
SGSN-3G	886 935 420518 / 420518				+08:00
SGSN-3G	886 935 420519 / 420519				+08:00
MSC/VLR	886 935 420374 / 420374				+08:00
MSC/VLR	886 935 420375 / 420375				+08:00
MSC/VLR	886 935 420431 / 420431				+08:00
MSC/VLR	886 935 420434 / 420434				+08:00
SMSC	886 935 074443 / 074443				+08:00
SMSC	886 935 574440 / 574440				+08:00
SMSC	886 935 574441 / 574441				+08:00
SMSC	886 935 574442 / 574442				+08:00
SMSC	886 935 574443 / 574443				+08:00
SMSC	886 935 874374 / 874374				+08:00
SMSC	886 935 420355 / 420355				+08:00
SMSC	886 935 420411 / 420411				+08:00
SMSC	886 935 874309 / 874309				+08:00
SMSC	886 935 874311 / 874311				+08:00
SMSC	886 935 874308 / 874308				+08:00
SMSC	886 935 420691 / 420691				+08:00
SMSC	886 935 420692 / 420692				+08:00
SMSC	886 935 874443 / 874443				+08:00
SMSC	886 935 420709 / 420709				+08:00
SMSC	886 935 420426 / 420426				+08:00
SMSC	886 935 420498 / 420498				+08:00
SMSC	886 935 420553 / 420553				+08:00
SMSC	886 935 420557 / 420557				+08:00
HLR	886 935 420607 / 420608				+08:00
HLR	886 935 420617 / 420618				+08:00
MSC/VLR	886 935 420590 / 420590				+08:00
MSC/VLR	886 935 420601 / 420601				+08:00
MSC/VLR	886 935 420602 / 420602				+08:00
MSC/VLR	886 935 420603 / 420603				+08:00
MSC/VLR	886 935 420604 / 420604				+08:00
MSC/VLR	886 935 474488 / 474488				+08:00

History of changes

Date	Description
2023-07-28	Edit
2023-07-28	delet MME
2023-07-14	Update SMSC GT
2023-07-14	Update SMSC GT
2018-12-26	Node Type Update
2018-11-06	Network Elements Information Update
2017-10-17	Update Network Elements
2016-05-18	Add New SMSC
2016-05-18	New MME
2016-03-17	New MME
2015-11-13	Add New SMSC
2015-09-24	Modify VLR GT

USSD Information

Section ID: 14 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2015-07-13

USSD capability available	Yes
Supported phase	Phase 2

History of changes

Date	Description
2015-07-13	Draft Version

CAMEL INFO

Section ID: 15 (Conditional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2015-07-31

gsmSSF/MSC	
CAP Version supported (Inbound)	**CAP Version supported (Outbound)**
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
2015-07-31	Draft Version

Packet Data Services Information

Section ID: 16 (Conditional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2023-07-28

List of APN Operator Identifiers		
APN Operator Identifier	**Description**	**Example**
mnc097.mcc466.gprs		

List of APN's available for testing and troubleshooting

APN WEB List

APN Credential			APN Type	ISP DNS IP address	ISP DNS IP address	Required PDU Session Type	Required PDN Type	Required PDP Type
APN	**Username**	**Password**	**(primary)**		**(secondary)**			
Internet			H-APN			IPv4	IPv4	IPv4
twm			H-APN	61.31.1.1	61.31.233.1	IPv4	IPv4	IPv4

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**			
mms			H-APN	10.1.1.2	http://mms/		

APN MMS List

APN Credential			WAP Gateway IP address for MMS	Messaging Server URL
APN	**Username**	**Password**		
mms			10.1.1.2	http://mms/

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

VPMN Support of Local Breakout	
PDU Session Type / PDN Type / PDP Type	
IPv4	
IPv6	
IPv4v6	
Ethernet	
Unstructured	
Non-IP	
PPP	

List of 2G/3G QOS profiles

GTP Version	
SGSN	GTPv1
GGSN	GTPv1

List of Data Service supported

2G Data Services	Multislot Class Capability
-	-

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

Multiple PDP Context Support	
Number of Primary PDP Context	4

History of changes

Date	Description
2023-07-28	Edit
2023-07-28	edit
2023-07-28	edit
2018-12-26	APN Type update
2017-10-26	List of data Service supported - delete of 2G service
2015-07-31	Draft Verson

GRX/IPX routing for data roaming

Section ID: 17 (Conditional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2023-07-28

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range	Network owner
	61.30.96.0/24	MNO
	61.30.97.0/24	MNO
	61.31.42.0/24	MNO
	61.31.43.0/24	MNO
	103.2.216.0/24	MNO
	103.2.217.0/24	MNO
	103.2.218.0/24	MNO
	103.2.219.0/24	MNO
	103.2.216.128/25	MNO
	103.2.216.240/29	MNO
	103.2.216.248/29	MNO
	103.2.217.128/25	MNO
	103.2.217.240/29	MNO
	103.2.217.248/29	MNO
	103.2.219.128/25	MNO
	103.2.216.152/29	MNO
	103.2.216.216/29	MNO
	103.2.218.128/25	MNO
	103.2.219.152/29	MNO
	103.2.219.216/29	MNO

List of Autonomous System Number (ASN):	ASN	Network owner
	64686	MNO
	9924	MNO

List of PMN authoritative DNS server IP addresses and names				
IP address	**IPv6 address**	**DNS Name**	**Priority**	**Network owner**
61.30.96.75		MQNDNS1.mnc097.mcc466.gprs		MNO
61.30.96.76		MQNDNS2.mnc097.mcc466.gprs		MNO
61.31.43.37		CHODNS1.mnc097.mcc466.gprs		MNO
61.31.43.38		CHODNS2.mnc097.mcc466.gprs		MNO

IP addresses that respond to ping / traceroute:	61.30.96.75 61.31.43.37

List of GRX/IPX Providers		
Provider name	**ASN/ASN4B**	**Network owner**
Syniverse	22870	MNO

History of changes

Date	Description
2023-07-28	Edit DNS name
2023-07-28	Edit ASN
2023-07-28	Edit DNS name
2022-07-13	IP Address Range Update
2020-06-23	IP Address ranges and ASN upated
2016-05-18	Add Aicent on GRX

MMS Interworking Information

Section ID: 18 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2015-07-31

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.mnc097.mcc466.gprs	61.30.97.123	1024	Yes	Yes	61.30.97.123	61.30.97.120 61.30.97.121

List of MMS IW Hub Provider	MMS IW Hub Provider Name	GT address(es)
	Syniverse	mms.aicent.grx

History of changes

Date	Description
2015-07-31	Draft Version

LTE Roaming Information

Section ID: 20 (Optional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2023-07-28

IPX Provider Name	IPX DA Realm Used	Diameter Architecture	Date of Launch	Date of Closure
Syniverse	dra.ipx.syniverse.3gppnetwork.org	Option5		

Primary IP address of DA	Secondary IP address of DA
173.209.220.115	173.209.220.123
173.209.221.115	173.209.221.123

Roaming Interconnection

EPC Realms For Roaming	
	epc.mnc097.mcc466.3gppnetwork.org

FQDN Diameter Edge Agent

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
hkg-01.dra.ipx.syniverse.3gppnetwork.org	173.209.220.115	173.209.220.123
sng-01.dra.ipx.syniverse.3gppnetwork.org	173.209.221.115	173.209.221.123

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

S6d used for legacy SGSN	S9 used for PCC
false	false

SMS ITW

SMS delivery over IP	SMS over NAS (SGs) via SS7	SMS over NAS (SGd) via Diameter
false	true	false

Voice ITW
CSFB

Roaming CS Fallback
Roaming Retry (MTRR)

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

List of LTE QOS profiles

Profile name:	internet
QCI Value List:	8
QOS ARP List:	8
ARP Preemption Vulnerability List:	1
ARP Preemption Capability List:	0
Maximum bit rate uplink:	60000
Maximum bit rate downlink:	226000
Profile name:	MMS
QCI Value List:	8
QOS ARP List:	8
ARP Preemption Vulnerability List:	1
ARP Preemption Capability List:	0
Maximum bit rate uplink:	128
Maximum bit rate downlink:	128

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

Information for Diameter certificates exchange	
Certificate of 1st IPsec gateway	No
Certificate of 2nd IPsec gateway	No
Operator roaming sub-CA certificate	No

Diameter end-to-end security support	
Supported DESS phase	DESS function delegated to IPX provider
No support	

5G early drop support		
	As HPMN	AS VPMN
5G NSA (non-standalone access) supported	Yes	Yes
DNS PGW NAPTR includes +nc-nr	Yes	Yes
NSA options for EN-DC		3x
ARD set to support of NR as secondary RAT	Yes	
Restrict NR access if HSS is not set to support NR as secondary RAT		Yes

History of changes

Date	Description
2023-07-28	Edit FQDN
2023-07-28	edit
2020-12-14	5G NSA service update
2020-12-14	5G service update
2016-10-17	No Change
2016-10-17	No Change
2015-09-16	Draft Version

VoLTE Roaming Information Section

Section ID: 26 (Conditional)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2023-07-28

VoLTE roaming architectures		
Architecture	**VPMN**	**HPMN**
S8HR	Supported	Supported

Mobility and voice continuity		
Technology	**VPMN**	**HPMN**
Single Radio Voice Call Continuity	Not supported	Not supported

S8HR roaming constraints	
Lawful Interception	Yes
EPS QoS to be enforced	internet

Emergency Calls	
VPLMN technology Strategy for emergency calls	IMS, CS Fallback
MME announce the emergency number list toward inbound roamer's UE	Yes

History of changes

Date	Description
2023-07-28	edit
2020-12-16	VoLTE service update

CONTACT INFORMATION

Section ID: 21 (Optional, Repeating)
Section is applicable for the following TADIG codes: TWNPC
Effective date of change: 2018-12-26

List of Roaming Troubleshooting Contact Information				
Roaming Troubleshooting Contact Information				
Location		Taipei,Taiwan		
Office Time Zone in UTC		+08:00		
Office Hours	**Week Day (s)**	**Start Time**		**End Time**
	Mon Tue Wed Thu Fri	08:30:00		17:30:00
Main Contact for Troubleshooting (Office Hours)				
Team Name	**Tel.**	**Mobile**	**Fax**	**Email**
Operation Maintenance Centre	+886266063787		+886266001136	OMCduty@taiwanmobile.com
Escalation Contact for Troubleshooting				
Person Name	**Tel.**	**Mobile**	**Fax**	**Email**
TAC MCS			+886266390602	TAC-MCS@taiwanmobile.com
24 x 7 Troubleshooting (contact out of Office Hours)				
Team Name	**Tel.**	**Mobile**	**Fax**	**Email**
Operation Maintenance Centre	+886266063787		+886266001136	OMCduty@taiwanmobile.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**
	TAC MCS			+886266390602
	JobTitle		**Email**	
			TAC-MCS@taiwanmobile.com	

Roaming Coordinator				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Ms. Margaret Chen			
	JobTitle		**Email**	
			Margaretchen@taiwanmobile.com	

IREG Tests				
	Person Name	**Tel.**	**Mobile**	**Fax**
	TAC MCS			+886266390602
	JobTitle		**Email**	
			TAC-MCS@taiwanmobile.com	

TADIG Tests				
	Person Name	**Tel.**	**Mobile**	**Fax**
	Mr Edward Chao	+886436008888		
	JobTitle		**Email**	
			TADIG@taiwanmobile.com	

IR21 Distribution Email Address	**Email**
	chiachilin@taiwanmobile.com

History of changes

Date	Description
2018-12-26	Contacts Update
2018-12-26	Contacts update
2017-08-09	change contact window
2017-08-09	update contact window
2016-12-22	Change Contact Windows
2016-12-22	Change Contact Windows
2016-08-19	Change contact window of Troubleshooting
2015-07-31	Draft Version

SECTIONS NOT IN USE

TADIG Code	Section ID	Section Name
TWNPC	6	Domestic SCCP Gateway
TWNPC	19	WLAN Information
TWNPC	22	Hosted Networks
TWNPC	23	M2M Roaming Information
TWNPC	27	LPWA Roaming Information Section