

## GSMA Roaming Database IR.21 Data



### RAEX IR.21 Information

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TADIG-GEN schema version:	2.4
RAEX-IR.21 schema version:	13.1



**ORGANISATION INFORMATION**

Section ID: 1 (Mandatory)

<b>Organisation name:</b>	Telecom Cook Islands Limited
<b>Country initials:</b>	COK

## History of changes

TADIG Code	Section ID	Section	Date	Description
COKTC	16	Packet Data Service Information	2020-01-03	Validate info on APN
COKTC	20	LTE Roaming Information	2020-01-03	validated epc.mnc.mcc.3gppnetwork.org
COKTC	16	Packet Data Service Information	2019-12-24	APN
COKTC	20	LTE Roaming Information	2019-12-24	apn
COKTC	21	Contact Information	2019-12-24	contacts
COKTC	13	Network Elements Information	2018-05-31	invalid entry
COKTC	17	IP Roaming/Networking Information	2018-05-08	Backbone IP subnet added
COKTC	17	IP Roaming/Networking Information	2018-05-07	update IP backbone
COKTC	17	IP Roaming/Networking Information	2018-05-07	update Backbone IP Address
COKTC	20	LTE Roaming Information	2018-05-04	updated
COKTC	4	Routing Information	2018-05-03	May18 update
COKTC	5	International SCCP Gateway	2018-05-03	update
COKTC	5	International SCCP Gateway	2018-05-03	update
COKTC	5	International SCCP Gateway	2018-05-03	up
COKTC	5	International SCCP Gateway	2018-05-03	up
COKTC	5	International SCCP Gateway	2018-05-03	up
COKTC	8	Subscriber Identity Authentication	2018-05-03	up
COKTC	10	MAP	2018-05-03	up
COKTC	11	MAP Optional Routing	2018-05-03	up
COKTC	13	Network Elements Information	2018-05-03	up
COKTC	15	CAMEL Information	2018-05-03	up
COKTC	16	Packet Data Service Information	2018-05-03	up
COKTC	17	IP Roaming/Networking Information	2018-05-03	up
COKTC	20	LTE Roaming Information	2018-05-03	up
COKTC	20	LTE Roaming Information	2018-05-03	up
COKTC	21	Contact Information	2018-05-03	up
COKTC	21	Contact Information	2018-05-03	up
COKTC	21	Contact Information	2018-05-03	up
COKTC	21	Contact Information	2018-05-03	up

**NETWORK**

TADIG code: COKTC

Section ID: 2 (Mandatory, Repeating)

<b>TADIG code:</b>	COKTC
<b>Network name:</b>	Telecom Cook Islands t/a Vodafone
<b>Network type:</b>	Terrestrial
<b>Technology:</b>	<b>Frequency list:</b>
<b>2G-GSM frequencies:</b>	GSM 900
<b>3G-UTRA/FDD frequencies:</b>	8 - 900 MHz
<b>3G-UTRA/TDD frequencies:</b>	Unsupported
<b>4G-E-UTRAN frequencies:</b>	44 - 700 MHz APAC, 3 - DCS 1800
<b>4G-E-UTRAN-MIoT-LTE-M frequencies:</b>	Unsupported
<b>4G-E-UTRAN-MIoT-NB-IoT frequencies:</b>	Unsupported
<b>MIoT-NB-IoT deployment modes:</b>	Unsupported
<b>Presentation of country initials and MNN:</b>	COKTC
<b>Abbreviated MNN:</b>	CK

## NETWORK INFORMATION

TADIG code: COKTC

Section ID: 3 (Mandatory)

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

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**ROUTING INFORMATION**

TADIG code: COKTC

Section ID: 4 (Mandatory)

Effective date of change: 2018-05-03

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>								
	682	5						
	682	7						
	682	8						

<b>Network Nodes Global Title Number Range(s)</b>								
	682	5						

<b>MSRN Number Range(s)</b>								
	682	59	000	999				

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	548	01

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	682	5

Does Number Portability apply ?	No
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Is 15 Digit MSISDN Supported ?	No
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E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	682	2		
	682	3		
	682	4		
	682	5		
	682	7		
	682	8		

**History of changes**

Date	Description
2018-05-03	May18 update

**INTERNATIONAL SCCP GATEWAY**

TADIG code: COKTC

Section ID: 5 (Optional)

Effective date of change: 2018-05-03

International SCCP carrier list	
<b>SCCP carrier name:</b>	Comfone
<b>Connectivity information:</b>	Primary
<b>MNO TADIG code list:</b>	
<b>DPC info:</b>	
Signature:	Lausanne-Savoie CSP1/LSS
Type:	Standalone STP
International DPC:	2.61.6
Comments:	
<b>DPC info:</b>	
Signature:	Bern-Baumgarten CSP2/BAU
Type:	Standalone STP
International DPC:	2.61.7
Comments:	
<b>DPC info:</b>	
Signature:	Bern-Baumgarten CP1
Type:	Standalone STP
International DPC:	2.57.6
Comments:	
<b>SCCP carrier name:</b>	TNZi
<b>Connectivity information:</b>	Primary
<b>MNO TADIG code list:</b>	
<b>DPC info:</b>	
Signature:	AC5
Type:	Standalone STP
International DPC:	5.60.0
Comments:	
<b>DPC info:</b>	
Signature:	AC6
Type:	Standalone STP
International DPC:	5.60.1
Comments:	
<b>SCCP carrier name:</b>	BSCK
<b>Connectivity information:</b>	Primary
<b>MNO TADIG code list:</b>	
<b>DPC info:</b>	
Signature:	AVR MSS
Type:	Standalone STP
International DPC:	5.96.0
Comments:	

DPC info:	
Signature:	ARO MSS
Type:	Standalone STP
International DPC:	5.98.0
Comments:	

**History of changes**

Date	Description
2018-05-03	update
2018-05-03	update
2018-05-03	up
2018-05-03	up
2018-05-03	up



**SUBSCRIBER IDENTITY AUTHENTICATION**

TADIG code: COKTC

Section ID: 8 (Optional)

Effective date of change: 2018-05-03

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	N/A
A5 Cipher Algorithm version in use	

**History of changes**

Date	Description
2018-05-03	up

**MOBILE APPLICATION PART (MAP)**

TADIG code: COKTC

Section ID: 10 (Optional)

Effective date of change: 2018-05-03

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

**History of changes**

Date	Description
2018-05-03	up

**MAP Optimal Routing Section**

TADIG code: COKTC

Section ID: 11 (Optional)

Effective date of change: 2018-05-03

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

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

**History of changes**

Date	Description
2018-05-03	up

**NETWORK ELEMENTS INFORMATION**

TADIG code: COKTC

Section ID: 13 (Optional)

Effective date of change: 2018-05-31

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
MSC-2G+3G		682 59001			AgrandTec	v9.01.09	-10:00
VLR		682 59002			Agrandtec	v9.01.09	-10:00
HLR		682 59003			Agrandtec	v9.01.09	-10:00
SMSC		682 59004			Agrandtec	v9.01.09	-10:00
SCP		682 59013			Agrandtec	v9.01.09	-10:00
SCP		682 59010			Agrandtec	v9.01.09	-10:00
MSC-2G+3G		682 59013			Huawei	V200R011	-10:00
VLR		682 59032			Huawei	V900R009	-10:00
HLR		682 59033			Huawei	V900R009	-10:00
SCP		682 59036			Huawei		-10:00
SCP		682 59030			Huawei		-10:00
SGSN-2G+3G		682 59035			Huawei	V900R013	-10:00
SGSN-2G		682 59005			Aricent	v4.2.4.4.37	-10:00
SCP		682 59014			Agrandtec	v9.01.09	-10:00
GGSN					Huawei	V900R015	-10:00
GGSN					Aricent	v6.0.1.4.6	-10:00

**History of changes**

Date	Description
2018-05-31	invalid entry
2018-05-03	up

**USSD Information**

TADIG code: COKTC

Section ID: 14 (Optional)

Effective date of change: 2018-05-31

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

**History of changes**

**CAMEL INFO**

TADIG code: COKTC

Section ID: 15 (Conditional)

Effective date of change: 2018-05-03

**gsmSSF/MSC**

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

**CAMEL Functionality Information**

Service(s) Name	SK	CAP Version	SCP GT addresses
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**GPRS SSF SGSN**

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

**CAPv4 Partial Implementations**

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

**History of changes**

Date	Description
2018-05-03	up

**Packet Data Services Information**

TADIG code: COKTC

Section ID: 16 (Conditional)

Effective date of change: 2020-01-03

**List of APN Operator Identifiers**

APN Operator Identifier	Description	Example
mnc001.mcc548.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			
kotaa			H-APN		
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	APN Credential		WAP Gateway IP address for MMS	Messaging Server URL
	Username	Password		

**IPv6 Connectivity Information**

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

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

SGSN	GTPv1
GGSN	GTPv1

**List of Data Service supported**

2G Data Services	Multislot Class Capability
GPRS	1
EDGE	1

**3G Data Services**

	UE 3G Category
3GPP	1
HSUPA	1
HSDPA	1

**Multiple PDP Context Support**

Number of Primary PDP Context	Not supported
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**History of changes**

Date	Description
2020-01-03	Validate info on APN
2019-12-24	APN
2018-05-03	up

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

TADIG code: COKTC

Section ID: 17 (Conditional)

Effective date of change: 2018-05-07

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	202.65.42.16/28
	202.65.42.80/29

RAI Additional MCC/MNC List	MCC	MNC
	548	01

List of Autonomous System Number (ASN):	ASN
	65054

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
202.65.42.28		Primary
202.65.42.18		Secondary

List of GRX Providers	GRX Provider
	Comfone

**History of changes**

Date	Description
2018-05-08	Backbone IP subnet added
2018-05-07	update IP backbone
2018-05-07	update Backbone IP Address
2018-05-03	up



**LTE Roaming Information**

TADIG code: COKTC

Section ID: 20 (Optional)

Effective date of change: 2020-01-03

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Comfone	draus01.comfone.com	
Primary IP address of DA	Secondary IP address of DA	
91.221.82.106	195.211.12.106	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Comfone	dranl01.comfone.com	
Primary IP address of DA	Secondary IP address of DA	

**Roaming Interconnection**

EPC Realms For Roaming
epc.mnc001.mcc548.3gppnetwork.org

**FQDN Diameter Edge Agent**

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
mnc001.mcc548.3gppnetwork.org	91.221.82.106	195.211.12.106

S6a Supported without IWF	S6a MAP IWF supported to HSS	S6a MAP IWF supported to MME
true	true	true
S6d used for legacy SGSN	S9 used for PCC	
false	false	

**SMS ITW**

SMS delivery over IP	SMS delivery over NAS
false	true

**Voice ITW**

CSFB

**Roaming CS Fallback**

Roaming Forward (MTRF)

LTE Roaming Agreement Only	LTE Only Roaming Supported	HPMN	VPMN
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	No	Yes
	Scenario 3 Supported	Yes	No
	Scenario 4 Supported	No	Yes
	Scenario 5 Supported	No	No
	Scenario 6 Supported	No	No

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

**History of changes**

Date	Description
2020-01-03	validated epc.mnc.mcc.3gppnetwork.org
2019-12-24	apn
2018-05-04	updated
2018-05-03	up
2018-05-03	up

**CONTACT INFORMATION**

TADIG code: COKTC

Section ID: 21 (Optional, Repeating)

Effective date of change: 2019-12-24

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

<b>Location</b>		Rarotonga	
<b>Office Time Zone in UTC</b>		-10:00	
<b>Office Hours</b>	<b>Week Day (s)</b>	<b>Start Time</b>	<b>End Time</b>
	Mon Tue Wed Thu Fri	08:00:00	16:30:00

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

Team Name	Tel.	Mobile	Fax	Email
Mobile Engineering	+68229680			ck.gsmtechs@vodafone.co.ck

**Escalation Contact for Troubleshooting**

Person Name	Tel.	Mobile	Fax	Email
Mr Don S Munro	+68229680	+68255124		dmunro@vodafone.co.ck

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

Team Name	Tel.	Mobile	Fax	Email
Roaming Cook Islands	+68229680			ck.roaming@vodafone.co.ck

**Roaming Troubleshooting Contact Information**

<b>Location</b>		Rarotonga	
<b>Office Time Zone in UTC</b>		-10:00	
<b>Office Hours</b>	<b>Week Day (s)</b>	<b>Start Time</b>	<b>End Time</b>
	all week days	08:00:00	18:30:00
	Mon Tue Wed Thu Fri	08:00:00	16:30:00

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

Team Name	Tel.	Mobile	Fax	Email
Roaming Cook Islands	+68229680			ck.roaming@vodafone.co.ck

**Escalation Contact for Troubleshooting**

Person Name	Tel.	Mobile	Fax	Email
Ms Mata N Eliaba	+68229680	+68255628		meliaba@vodafone.co.ck

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

Team Name	Tel.	Mobile	Fax	Email
Roaming Cook Islands	+68229680			ck.roaming@vodafone.co.ck

**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 Don S Munro	+68229680	+68255124	
JobTitle		Email	
PS, CS, SS7 and Connectivity		dmunro@vodafone.co.ck	

**Roaming Coordinator**

Person Name	Tel.	Mobile	Fax
Ms Mata N Eliaba	+68229680	+68255628	
JobTitle		Email	
Manager Settlement/Roaming		meliaba@vodafone.co.ck	

**IREG Tests**

Person Name	Tel.	Mobile	Fax
Mr Lucky Noorooa	+68229680	+68258961	
JobTitle		Email	
IREG Testing		lnoorooa@vodafone.co.ck	

**TADIG Tests**

Person Name	Tel.	Mobile	Fax
Ms Teinakore Noopii	+68229680	+68277454	
JobTitle		Email	
TADIG Testing		tnoopii@vodafone.co.ck	

**CAMEL Tests**

Person Name	Tel.	Mobile	Fax
Mr Don S Munro	+68229680	+68255124	
JobTitle		Email	
PS, CS, SS7 and Connectivity		dmunro@vodafone.co.ck	

**GPRS Tests**

Person Name	Tel.	Mobile	Fax
Mr Don S Munro	+68229680	+68255124	
JobTitle		Email	
PS, CS, SS7 and Connectivity		dmunro@vodafone.co.ck	

**Contact Person(s) in PMN for GRX connectivity**

Person Name	Tel.	Mobile	Fax
Mr Don S Munro	+68229680	+68255124	
JobTitle		Email	
PS, CS, SS7 and Connectivity		dmunro@vodafone.co.ck	

**Contact Person(s) in PMN for GRX Provider**

Person Name	Tel.	Mobile	Fax
Mr Don S Munro	+68229680	+68255124	
JobTitle		Email	
PS, CS, SS7 and Connectivity		dmunro@vodafone.co.ck	

**Other contact(s)**

Person Name	Tel.	Mobile	Fax
Ms Mata N Eliaba	+68229680	+68255628	
JobTitle		Email	
Manager Settlement/Roaming		meliaba@vodafone.co.ck	

IR21 Distribution Email Address	Email
	dmunro@vodafone.co.ck

**History of changes**

Date	Description
2019-12-24	contacts
2018-05-03	up
2018-05-03	up
2018-05-03	up
2018-05-03	up

**SECTIONS NOT IN USE**

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