



RAEX IR.21 Document

Organisation Name	MTN Sudan
Creation Date	2025-04-2012:34:55+02:00
Sender TADIG Code	SDNBT
Publish Comment	GRX & IPX Provider Update

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History of Changes

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Date	TADIG Code	Section	Description
2025-04-20	SDNBT	17 GRX/IPX Routing for Data Roaming	GRX & IPX Provider updated
2025-04-08	SDNBT	17 GRX/IPX Routing for Data Roaming	iP Rnage Updated
2025-03-20	SDNBT	17 GRX/IPX Routing for Data Roaming	IP Update
2025-03-13	SDNBT	17 GRX/IPX Routing for Data Roaming	Update DNS Name
2025-03-11	SDNBT	13 Network Elements	Network Elements Update
2025-03-11	SDNBT	16 Packet Data Services	Update the WAP & MMS Status
2025-03-11	SDNBT	17 GRX/IPX Routing for Data Roaming	New IP Ranges & Remove Old eDNS
2025-03-11	SDNBT	17 GRX/IPX Routing for Data Roaming	IP List Updated
2025-03-11	SDNBT	17 GRX/IPX Routing for Data Roaming	Update GRX ASN
2025-03-11	SDNBT	20 LTE Roaming	Update Daimater
2025-03-09	SDNBT	4 Routing	New MSRN Ranges for new PSD MSC VLR
2025-03-09	SDNBT	4 Routing	MNP Service temporary disabled.
2025-03-09	SDNBT	17 GRX/IPX Routing for Data Roaming	Update DNS list
2025-03-09	SDNBT	21 Contacts	Update Contacts
2025-03-06	SDNBT	4 Routing	The old ones wereused with Old MSC. We have new one Added PSD mAGCF
2023-02-13	SDNBT	13 Network Elements	Add new SMSC GTs
2022-06-12	SDNBT	13 Network Elements	Added Network Elements
2022-06-12	SDNBT	17 GRX/IPX Routing for Data Roaming	New IP range added
2022-04-24	SDNBT	5 International SCCP Gateway	Change SCCP Carrier from BICS to Global Connect
2022-04-13	SDNBT	5 International SCCP Gateway	Change SCCP Carrier from BICS to Global connect
2021-11-07	SDNBT	13 Network Elements	Adding New Global Titles
2021-10-13	SDNBT	5 International SCCP Gateway	Revert BICS as Carrier SCCP
2021-10-12	SDNBT	5 International SCCP Gateway	Change SCCP Carrier from BICS to Global Connect
2019-12-01	SDNBT	17 GRX/IPX Routing for Data Roaming	Update IP Romaing and Inter-working
2019-05-08	SDNBT	17 GRX/IPX Routing for Data Roaming	New IP range added
2019-05-05	SDNBT	13 Network Elements	Update Network Elements
2019-05-05	SDNBT	13 Network Elements	Updated after errors1
2019-05-05	SDNBT	17 GRX/IPX Routing for Data Roaming	Updated
2019-05-05	SDNBT	17 GRX/IPX Routing for Data Roaming	Update IP Roaming and Inter-working

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2018-10-02 SDNBT	Date	TADIG Code	Section	Description
2018-10-02 SDNBT 13 Network Elements Add Nodes IPs 2018-09-25 SDNBT 16 Packer Data Services update 2018-09-25 SDNBT 17 GRX/IPX Routing for Data Roaming Update - Inter-PLM IP Ranges 2018-09-25 SDNBT 16 Packer Data Services Update 3G Data service 2018-09-20 SDNBT 17 GRX/IPX Routing for Data Roaming update on Retwork Elements Information 2018-03-19 SDNBT 13 Network Elements Update on Network Elements Information 2018-03-19 SDNBT 16 Packet Data Services Update on Interworking Information 2018-03-19 SDNBT 17 GRX/IPX Routing for Data Roaming Update on Interworking Information 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 21 Contacts Updated 2017-08-09 SDNBT 21 Contacts Update Contacts 2017-08-09 SDNBT 21 Contacts Update the Contacts <td></td> <td></td> <td></td> <td></td>				
2018-09-25 SDNBT 16 Packet Data Services update 2018-09-26 SDNBT 17 GRX/IPX Routing for Data Roaming Update 3G Data service 2018-03-29 SDNBT 16 Packet Data Services Update GRX provider 2018-03-29 SDNBT 17 GRX/IPX Routing for Data Roaming Update on Network Elements Information 2018-03-19 SDNBT 13 Network Elements Update on Network Elements Information 2018-03-19 SDNBT 16 Packet Data Services Update on Intervorking Information 2018-03-19 SDNBT 17 GRX/IPX Routing for Data Roaming Update on Intervorking Information 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 21 Contacts Updated 2017-08-09 SDNBT 21 Contacts Update contacts 2017-08-09 SDNBT 21 Contacts Update the Contacts 2017-08-09 SDNBT 21 Contacts Update the C				
2018-09-25 SDNBT 17 GRX/IPX Routing for Data Roaming Update - Inter-PLM IP Ranges 2018-03-20 SDNBT 16 Packet Data Services Update 3G Data service 2018-03-20 SDNBT 17 GRX/IPX Routing for Data Roaming update GRX provider 2018-03-31 SDNBT 13 Network Elements Update on Network Elements Information 2018-03-19 SDNBT 16 Packet Data Services Update on Packet Data Services Information 2018-03-19 SDNBT 17 GRX/IPX Routing for Data Roaming Update on Interworking Information 2018-03-19 SDNBT 17 GRX/IPX Routing for Data Roaming Updated LTE information 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2 2018-03-19 SDNBT 21 Contacts Update contacts 2017-08-09 SDNBT 21 Contacts Update contacts 2017-08-09	2018-10-02	SDNBT	13 Network Elements	Add Nodes IPs
2018-03-20 SDNBT 16 Packet Data Services Update 3G Data service 2018-03-20 SDNBT 17 GRX/IPX Routing for Data Roaming update GRX provider 2018-03-20 SDNBT 13 Network Elements Update on Network Elements Information 2018-03-19 SDNBT 16 Packet Data Services Update on Packet Data Services Information 2018-03-19 SDNBT 17 GRX/IPX Routing for Data Roaming Update on Interworking Information 2018-03-19 SDNBT 17 GRX/IPX Routing for Data Roaming Update LTE information 2018-03-19 SDNBT 20 LTE Roaming Updated LTE information 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 20 LTE Roaming Updated 2018-03-19 SDNBT 21 Contacts Update demontacts 2017-08-09 SDNBT 21 Contacts Update the Contacts 2017-08-09 SDNBT 21 Contacts Update the Location 2017-08-09 SDNBT 21 Contacts Update the Office Hours	2018-09-25	SDNBT	16 Packet Data Services	update
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2014-09-01 SDNBT 4 Routing New NDC Range 2014-09-01 SDNBT 13 Network Elements New 3rd SGSN 2014-08-01 SDNBT 13 Network Elements New 3 MSC-VLR Blade Clusters	2015-08-09	SDNBT	16 Packet Data Services	Inserted
2014-09-01 SDNBT 13 Network Elements New 3rd SGSN 2014-08-01 SDNBT 13 Network Elements New 3 MSC-VLR Blade Clusters	2015-08-09	SDNBT	17 GRX/IPX Routing for Data Roaming	New Inter PLMN GSN Backbone IP address range
2014-08-01 SDNBT 13 Network Elements New 3 MSC-VLR Blade Clusters	2014-09-01	SDNBT	4 Routing	New NDC Range
	2014-09-01	SDNBT	13 Network Elements	New 3rd SGSN
2014-04-01 SDNBT 17 GRX/IPX Routing for Data Roaming New Inter PLMN GSN Backbone IP address range	2014-08-01	SDNBT	13 Network Elements	New 3 MSC-VLR Blade Clusters
	2014-04-01	SDNBT	17 GRX/IPX Routing for Data Roaming	New Inter PLMN GSN Backbone IP address range

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Date	TADIG Code	Section	Description
2012-09-01	SDNBT	13 Network Elements	New SGSN,GGSN
2012-07-01	SDNBT	13 Network Elements	New HLR
2011-08-01	SDNBT	13 Network Elements	New SGSN,GGSN
2011-08-01	SDNBT	17 GRX/IPX Routing for Data Roaming	New Inter PLMN GSN Backbone IP address range
2011-06-01	SDNBT	13 Network Elements	New SMSC
2010-09-01	SDNBT	4 Routing	New NDC 99
2010-07-01	SDNBT	5 International SCCP Gateway	New International SCCP Gateway
2010-06-01	SDNBT	13 Network Elements	New MSC/VLR's,GT,SGSN GT,OCS GT SMSC GT's
2010-06-01	SDNBT	15 CAMEL	CAMEL Version 3
2010-06-01	SDNBT	16 Packet Data Services	New APN
2009-06-01	SDNBT	21 Contacts	New Contacts Added
2008-11-11	SDNBT	13 Network Elements	New MMSC,SGSN (2G),GGSN and MSC's added
2008-11-11	SDNBT	16 Packet Data Services	GPRS IP address changes
2008-08-31	SDNBT	13 Network Elements	New HLR,VLR,MSC and SMSC added
2008-08-31	SDNBT	16 Packet Data Services	GPRS IP address and New WAPGW
2008-08-01	SDNBT	21 Contacts	New Contacts Added

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1 Organisation

Organisation Name	MTN Sudan
Country Initials	SDN

TADIG Summary

TADIG Code	MCC	MNC	VPMN / HPMN	Network type
SDNBT	634	02	HPMN	Terrestrial

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2 Network

This section is applicable for **SDNBT**

Service Status - Planned Closure and Availability (Radio Network)

Roaming Service Supported as VPMN	Status	Planned Closure	Planned Availability
2G	Supported		
3G	Supported		
4G	Supported		
MIoT-LTE-M	Unsupported		
MIoT-NB-IoT	Unsupported		
5G NR	Unsupported		

Service Status - Planned Closure and Availability (Core Network)

Roaming Service Supported as VPMN	Status	Planned Closure	Planned Availability
CS	Supported		
PS	Supported		
EPC	Supported		
VoIMS	Unsupported		
5G SA	Unsupported		

Technologies and Frequencies

Technology	Frequencies	Coverage
2G-GSM	GSM 900, DCS 1800	Nationwide
3G-UTRA/FDD	1 - IMT 2.1 GHz	Nationwide
3G-UTRA/TDD	Unsupported	
4G-E-UTRA	3 - DCS 1800	Nationwide
4G-E-UTRA-MIoT-LTE-M	Unsupported	
4G-E-UTRA-MIoT-NB-IoT	Unsupported	
4G-MIoT-NB-IoT Deployment Mode	Unsupported	
5G-NR	Unsupported	

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4 Routing

This section is applicable for **SDNBT** and is effective on **2025-03-09**

MSISDN Number Ranges

CC	NDC	SN Range Start	SN Range Stop	Prim. Intl. DPC	Sec. Intl. DPC	Network Owner	Location
249	92					MNO	
249	99					MNO	
249	93					MNO	

Network Nodes Global Title Number Ranges

CC	NDC	SN Range Start	SN Range Stop	Prim. Intl. DPC	Sec. Intl. DPC	Network Owner	Leas. Details
249	92					MNO	

MSRN Number Ranges

CC	NDC	SN Range Start	SN Range Stop	Location
249	92	1830000	1839999	PSD
249	92	1840000	1849999	PSD
249	92	1850000	1859999	PSD
249	92	1800000	1809999	KHT-MANSHIA
249	92	1810000	1819999	KHT-GARDENCITY
249	92	1820000	1829999	KHT_OMD

E.212 Number Series

Mobile Country Code (MCC)	Mobile Network Code (MNC)
634	02

E.214 Mobile Global Title (MGT)

Country Code of MGT (CC)	Network Code of MGT (NC)
249	92
Doos Number Portability Apply?	No.

Does Number Portability Apply?	No
15-Digit MSISDN	Unsupported

E.164 Number Ranges Due to Number Portability

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CC	NDC	SN Range Start	SN Range Stop
249	90		
249	91		
249	96		
249	10		
249	11		
249	12		

History of Changes

Date	Description
2025-03-09	New MSRN Ranges for new PSD MSC VLR
2025-03-09	MNP Service temporary disabled.
2025-03-06	The old ones wereused with Old MSC. We have new one Added PSD mAGCF
2015-08-09	Mobile Number Portability Launching
2014-09-01	New NDC Range
2010-09-01	New NDC 99

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5 International SCCP Gateway

This section is applicable for **SDNBT** and is effective on **2022-04-24**

SCCP Carrier: Global Connect

SCCP Connectivity Primary

Destination Point Codes

Signature	Туре	DPC	Comments
Global Connect	Roaming Hub UK	2.190.1	
Global Connect	Roaming Hub NL	2.2.3	

History of Changes

Date	Description
2022-04-24	Change SCCP Carrier from BICS to Global Connect
2022-04-13	Change SCCP Carrier from BICS to Global connect
2021-10-13	Revert BICS as Carrier SCCP
2021-10-12	Change SCCP Carrier from BICS to Global Connect
2010-07-01	New International SCCP Gateway

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8 Subscriber Identity Authentication

This section is applicable for **SDNBT** and is effective on **2015-08-09**

Authentication	Performed
Authentication Performed for Roaming Subscribers at the Commencement of GSM Service	Yes
Authentication Performed for Roaming Subscribers in Case of GPRS	Yes

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10 Mobile Application Part

This section is applicable for **SDNBT** and is effective on **2015-08-05**

Supported MAP Versions in Roaming

Application Context	Inbound (MSC/VLR)	Inbound (SGSN)	Outbound	Comments
networkLocUp	MAPv3	N/A	-	
roamingNumberEnquiry	MAPv3	N/A	-	
infoRetrieval	MAPv3	MAPv3	-	
subscriberDataMngt	MAPv3	MAPv3	-	
networkFunctionalSs	MAPv3	N/A	-	
mwdMngt	MAPv2	-	-	
shortMsgMT-Relay	MAPv2	-	-	
shortMsgMO-Relay	MAPv2	-	-	
ss-InvocationNotification	MAPv3	N/A	-	
subscriberInfoEnquiry	MAPv3	MAPv3	-	
gprsLocationUpdate	N/A	MAPv3	-	
locationCancellation	MAPv2	MAPv2	-	
msPurging	MAPv2	MAPv2	-	
reset	MAPv1	MAPv1	-	
networkUnstructuredSs	MAPv2	N/A	-	
reporting	MAPv1	N/A	-	
callCompletion	-	N/A	-	
istAlerting	-	N/A	-	
serviceTermination	-	N/A	-	
locationSvcGateway	N/A	N/A	-	
mm-EventReporting	-	N/A	-	
authenticationFailureReport	MAPv2	MAPv2	-	
imsiRetrieval	-	N/A	-	
gprsNotifyContext	N/A	MAPv3	-	
gprsLocationInfoRetrieval	N/A	MAPv3	-	
failureReport	N/A	-	-	
secureTransportHandling	-	-	-	

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12 MAP Inter-Operator SMS Enhancement

This section is applicable for ${\color{red}{\textbf{SDNBT}}}$ and is effective on ${\color{red}{\textbf{2015-08-05}}}$

Application Context	SMS Interworking MSC	SMS Gateway MSC	HLR	Comments
shortMsgGateway	N/A	MAPv2	MAPv2	
shortMsgAlert	-	N/A	-	

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13 Network Elements

This section is applicable for ${\color{red}{\textbf{SDNBT}}}$ and is effective on ${\color{red}{\textbf{2025-03-11}}}$

Node Type	GT Address (Range)	IPv4 Address (Range)	IPv6 Address (Range)	Vendor	UTC Offset
GGSN		102.181.221.206/31		Huawei UGW	+02:00
HSS	249 92 1999920–1999920	102.181.221.224/31		Huawei UDM	+02:00
HSS	249 921999901	41.223.160.16/29		Huawei	+02:00
HSS	249 921999902	41.223.160.24/29		Huawei	+02:00
MME	249 92 1999911–1999911	41.223.161.226/31		Huawei	+02:00
MME	249 92 1999912–1999912	102.181.221.202/31		Huawei USN	+02:00
MME	249 921999908	41.223.160.224/30			+02:00
MSC/VLR	249 92 1999972–1999972			Huawei E9000H	+02:00
MSC/VLR	249 921999905			Huawei	+02:00
MSC/VLR	249 921999906			Huawei	+02:00
MSC/VLR	249 921999907			Huawei	+02:00
Other	249 921999903			Huawei	+02:00
Other	249 921999904			Huawei	+02:00
Other	249 921999937				+02:00
Other	249 921999947				+02:00
PGW		102.181.221.204/32		Huawei UGW	+02:00
SGSN-2G +3G	249 92 1999911–1999911	41.223.161.224/31		Huawei	+02:00
SGSN-2G +3G	249 92 1999912–1999912	102.181.221.200/31		Huawei USN	+02:00
SGSN-2G +3G	249 921999908	41.223.160.228/30			+02:00
SMSC	249 92 1999140–1999143				+02:00
SMSC	249 921999975			Comviva	+02:00
SMSC	249 921999976			Comviva	+02:00
SMSC	249 921999999			Comviva	+02:00

History of Changes

Date	Description
2025-03-11	Network Elements Update

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Date	Description
2023-02-13	Add new SMSC GTs
2022-06-12	Added Network Elements
2021-11-07	Adding New Global Titles
2019-05-05	Update Network Elements
2019-05-05	Updated after errors1
2018-10-02	Network Node names, SW versions & Global Titles Audit
2018-10-02	Add Nodes IPs
2018-03-19	Update on Network Elements Information
2015-08-09	New Huawei Core: MSC,GMSC,HLR/HSS,SGSN and GGSN
2014-09-01	New 3rd SGSN
2014-08-01	New 3 MSC-VLR Blade Clusters
2012-09-01	New SGSN,GGSN
2012-07-01	New HLR
2011-08-01	New SGSN,GGSN
2011-06-01	New SMSC
2010-06-01	New MSC/VLR's,GT,SGSN GT,OCS GT SMSC GT's
2008-11-11	New MMSC,SGSN (2G),GGSN and MSC's added
2008-08-31	New HLR,VLR,MSC and SMSC added

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15 CAMEL

This section is applicable for **SDNBT** and is effective on **2015-08-06**

Supported CAP Versions (gsmSSF/MSC)

Inbound	Outbound
CAPv2 CAPv3	CAPv2 CAPv3

History of Changes

Date	Description
2010-06-01	CAMEL Version 3

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16 Packet Data Services

This section is applicable for **SDNBT** and is effective on **2025-03-11**

APN Operator Identifiers

APN Operator Identifier	Description	Example
mnc002.mcc634.gprs	2G&3G	
APN.EPC.MNC002.MCC634.3GPPNETWORK.OR46		

WEB APNs Available for Testing and Troubleshooting

APN: internet

APN Type	H-APN
Required PDU Session Type	IPv4
Required PDN Type	IPv4
Required PDP Type	IPv4

APN: internet1

APN Type	H-APN
Required PDU Session Type	IPv4
Required PDN Type	IPv4
Required PDP Type	IPv4

IPv6 Connectivity

	IPv6 PDP	IPv4v6 PDP
SGSN	Unsupported	Unsupported
GGSN	Unsupported	Unsupported

GTP Versions

SGSN	GTPv1
GGSN	GTPv1

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Supported Data Services

2G Data Service	Multislot Class Capability
GPRS	
EDGE	

3G Data Service	UE 3G Category
3GPS	
HSUPA	

Multiple PDP Context Support

Number of Primary PDP Contexts Unsupported

History of Changes

Date	Description
2025-03-11	Update the WAP & MMS Status
2018-09-25	update
2018-03-20	Update 3G Data service
2018-03-19	Update on Packet Data Services Information
2015-08-09	Inserted
2010-06-01	New APN
2008-11-11	GPRS IP address changes
2008-08-31	GPRS IP address and New WAPGW

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17 GRX/IPX Routing for Data Roaming

This section is applicable for **SDNBT** and is effective on **2025-04-20**

Connection to Inter-PMN IPv4 Backbone

IP Address (Range)	IPX VLAN	Network Owner
41.223.160.224/30	Control-Roaming	MNO
41.223.160.228/30	Data-Roaming	MNO
41.223.160.232/29	Data-Roaming	MNO
41.223.160.72/30	Control-Roaming	MNO
41.223.161.224/28	Data-Roaming	MNO
102.181.221.200/31	Data-Roaming	MNO
102.181.221.202/31	Control-Roaming	MNO
102.181.221.206/31	Data-Roaming	MNO
102.181.221.204/32	Data-Roaming	MNO
41.223.160.24/29	Control-Roaming	MNO
102.181.221.224/31	Control-Roaming	MNO
41.223.160.16/29	Control-Roaming	MNO
102.181.221.205/32	Data-Roaming	MNO

Autonomous System Numbers (ASN)

ASN	Network Owner
36972	MNO

Authoritative DNS Servers

IPv4 Address	IPv6 Address	DNS Name	Priority	Network Owner
41.223.160.74		edns01.mnc002.mcc634.gprs		MNO

GRX/IPX Providers

Provider	ASN	Network Owner
Bayobab	16637	MNO

History of Changes

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Date	Description
2025-04-20	GRX & IPX Provider updated
2025-04-08	iP Rnage Updated
2025-03-20	IP Update
2025-03-13	Update DNS Name
2025-03-11	New IP Ranges & Remove Old eDNS
2025-03-11	IP List Updated
2025-03-11	Update GRX ASN
2025-03-09	Update DNS list
2022-06-12	New IP range added
2019-12-01	Update IP Romaing and Inter-working
2019-05-08	New IP range added
2019-05-05	Updated
2019-05-05	Update IP Roaming and Inter-working
2018-09-25	Update - Inter-PLM IP Ranges
2018-03-20	update GRX provider
2018-03-19	Update on Interworking Information
2018-03-19	Update in Interworking Information
2015-08-09	New Inter PLMN GSN Backbone IP address range
2014-04-01	New Inter PLMN GSN Backbone IP address range
2011-08-01	New Inter PLMN GSN Backbone IP address range

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20 LTE Roaming

This section is applicable for **SDNBT** and is effective on **2025-03-11**

IPX Interconnection

IPX Provider: BICS

IPX DA Realm Used	Primary DA IP	Secondary DA IP	Diameter Arch.	Launch Date	Closure Date
dra.bics.3gppnetwork .org	94.102.167.137	94.102.167.153			

Roaming EPC Realms

epc.mnc002.mcc634.3gppnetwork.org	
epc.mnc002.mcc634.3gppnetwork.org	

FQDN Diameter Edge Agents

FQDN	Primary IP Addresses	Secondary IP Addresses
dra01b11.dra.bics.3gppnetwork.org	94.102.167.137	94.102.167.153
dra01b22.dra.bics.3gppnetwork.org	94.102.167.169	94.102.167.185

Interface Information

S6a Without Interworking Function (IWF)	Supported
S6a MAP IWF to HSS	Unsupported
S6a MAP IWF supported to MME	Unsupported
S6d Used for Legacy SGSN	No
S9 Used for PCC	No

Voice Interworking and Roaming CS Fallback

Voice Interworking	CSFB
Roaming CS Fallback	Roaming Retry (MTRR)

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Agreement Information

Agreement	HPMN	VPMN
LTE-Only Roaming	Unsupported	Unsupported
2G/3G-Only Roaming Scenario 2	Unsupported	Unsupported
2G/3G-Only Roaming Scenario 3	Unsupported	Unsupported
2G/3G and LTE Scenario 1	Unsupported	Unsupported
2G/3G and LTE Scenario 2	Unsupported	Unsupported
2G/3G and LTE Scenario 3	Unsupported	Unsupported
2G/3G and LTE Scenario 4	Supported	Supported
2G/3G and LTE Scenario 5	Unsupported	Unsupported
2G/3G and LTE Scenario 6	Unsupported	Unsupported

LTE QoS Profiles

Profile: Ite

QCI Values	8
QOS ARP Priority Levels	1, 2
Evolved ARP Preemption Vulnerability	Enabled
Evolved ARP Preemption Capability	Enabled
Maximum Bitrate Uplink	25012 kbps
Maximum Bitrate Downlink	75000 kbps
Guaranteed Bitrate Uplink	0 kbps
Guaranteed Bitrate Downlink	0 kbps

IPv6 Connectivity

	IPv6 PDP	IPv4v6 PDP
MME	Unsupported	Unsupported
SGW	Unsupported	Unsupported
PG	Unsupported	Unsupported

Diameter End-to-End Security Support

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5G Early Drop Support

	As HPMN (Outbound)	As VPMN (Inbound)
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
2025-03-11	Update Daimater
2018-03-19	Updated LTE information
2018-03-19	Updated LTE information 2
2018-03-19	updated
2018-03-19	Updated

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21 Contacts

This section is applicable for **SDNBT** and is effective on **2025-03-11**

Roaming Troubleshooting Contacts

Location: Sudan

Office Time Zone in UTC +02:00

Office Hours Mon Tue Wed Thu Sun 08:30:00 – 16:30:00

Main Contact for Troubleshooting (Office Hours)

Team Name	Phone	Mobile	Email
IR21 Team			

Escalation Contact for Troubleshooting

Name	Phone	Mobile	Email
Suna Amin International Roaming Manager		+249922902419	samin@mtn.sd

24/7 Troubleshooting Contact (Out of Office Hours)

Team Name	Phone	Mobile	Email
IR21 Team			

Escalation Contact for 24/7 Troubleshooting (Out of Office Hours)

Team Name	Phone	Mobile	Email
IR21 Team			

Additional Contacts

SCCP Inquiries and Ordering of SS7 Routes

Name	Phone	Mobile	Email
Mrs Sahar Abuzaid Roaming Manager		+249922902494	sabuzaid@mtn.sd

Roaming Coordinator

Name	Phone	Mobile	Email
Mrs Sahar Abuzaid Roaming Manager		+249922902494	sabuzaid@mtn.sd

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IREG Tests

Name	Phone	Mobile	Email
Mr Mohamed Sameer BO CS Core TL		+249922902089	mohammeds.khalil@huawei.com
Amr Mohammed NSS Supervisor		+249155184194	amibrahim@huw.mtn.sd

TADIG Tests

Name	Phone	Mobile	Email
MS Marwa Mustafa Senior Billing Administrator		+249922902744	mahmed@mtn.sd
Sahar Eltahir Billing Manager-TADIG		+249922902772	seltahir@mtn.sd

CAMEL Tests

Name	Phone	Mobile	Email
Mrs Sahar Abuzaid Roaming Manager		+249922902494	sabuzaid@mtn.sd

GPRS Tests

Name	Phone	Mobile	Email
Mr Ayman Ghalib Mobile Packet Core & MPBN Engineer		+24993004420	ayman.ghalib.karrar1@huawei.com
Ms Shahd Elhussein Mobile Packet Core & MPBN Engineer		+24992627381	shahd.elhussein.ahmed2@huawei.com

Certificates and Key Management

Name	Phone	Mobile	Email
Mr Ayman Ghalib Mobile Packet Core & MPBN Engineer		+24993004420	ayman.ghalib.karrar1@huawei.com

IR.21 Distribution Emails

sabuzaid@mtn.sd

History of Changes

Date	Description
2025-03-09	Update Contacts
2018-03-19	Update contacts
2017-08-09	Update the Contacts

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Date	Description
2017-08-09	Update the Contacts
2017-08-09	Update the Contacts
2017-08-09	Update the Location
2017-08-09	Update the Office Hours
2017-08-09	Update teh Office Hours
2017-08-09	Modify the Main Contact for Troubleshooting
2015-08-10	CAMEL Contacts Added
2009-06-01	New Contacts Added
2008-08-01	New Contacts Added

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29 SMS Roaming

This section is applicable for **SDNBT** and is effective on **2024-10-01**

SMS Interworking

SMS Delivery Mechanism	As HPLMN	As VPLMN
SMS over IP	Unsupported	Unsupported
SMS over NAS via SS7	Unsupported	Unsupported
SMS over NAS via Diameter	Unsupported	Unsupported
SMS over NAS via HTTPS	Unsupported	Unsupported

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Sections Not in Use

TADIG Code	Section
SDNBT	6 Domestic SCCP Gateway
SDNBT	7 SCCP Protocol Available at PMN
SDNBT	9 Test Numbers
SDNBT	14 USSD
SDNBT	18 MMS Interworking
SDNBT	19 WLAN
SDNBT	22 Hosted Networks
SDNBT	23 M2M Roaming
SDNBT	26 VoIMS Roaming
SDNBT	27 LPWA Roaming
SDNBT	28 5G SA Roaming

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