

GSMA Roaming Database IR.21 Data



RAEX IR.21 Information

Creation date:	2020-10-27
Creation time:	14:07:51+01:00
File type:	IR.21
Sender TADIG:	CANBM
Publish Comment:	Added new DNS local caching IPs 69.158.242.85 and 69.158.244.70Update IP Interworking backbone section with 69.158.242.80/28 and 69.158.244.64/28Updated LTE FQDN Information
TADIG-GEN schema version:	2.4
RAEX-IR.21 schema version:	13.1



ORGANISATION INFORMATION

Section ID: 1 (Mandatory)

Organisation name:	Bell Mobility Inc.
Country initials:	CAN

History of changes

TADIG Code	Section ID	Section	Date	Description
CANBM	17	IP Roaming/Networking Information	2020-10-26	Add IP ranges 69.158.242.80/28 and 69.158.244.64/28
CANBM	17	IP Roaming/Networking Information	2020-10-26	Added two new local cache DNS IPs 69.158.244.70 and 69.158.242.85
CANBM	20	LTE Roaming Information	2020-10-26	Updated FQDN Information
CANBM	20	LTE Roaming Information	2020-10-26	Updated FQDN Information
CANBM	20	LTE Roaming Information	2020-10-26	Updated FQDN Information
CANMM	17	IP Roaming/Networking Information	2020-10-26	Added 69.158.242.80/28 and 69.158.244.64/28 to IP Interworking section
CANMM	20	LTE Roaming Information	2020-10-26	Updated FQDN Information
CANMM	20	LTE Roaming Information	2020-10-26	Updated FQDN Information for 302690
CANBM	17	IP Roaming/Networking Information	2020-10-20	Updated IP Roaming DNS servers for Inbound traffic Vancouver/Calgary
CANBM	20	LTE Roaming Information	2020-10-20	Updated Diameter Primary FQDN
CANMM	17	IP Roaming/Networking Information	2020-10-20	Update CANMM DNS servers
CANMM	17	IP Roaming/Networking Information	2020-10-20	Update CANMM DNS Servers
CANMM	20	LTE Roaming Information	2020-10-20	Updated LTE FQDN table for PLMN CANMM
CANBM	17	IP Roaming/Networking Information	2020-09-09	Add new IP Range 184.151.0.32/29
CANBM	21	Contact Information	2020-09-09	Updated Contacts
CANBM	17	IP Roaming/Networking Information	2020-08-11	Cosmetic changes completed
CANBM	23	M2M Roaming Information	2020-08-11	Included example 302690 EPC
CANBM	13	Network Elements Information	2020-04-16	Updated Element names and removed 14382762012 and 16473842012
CANBM	17	IP Roaming/Networking Information	2020-04-16	Added DRA Host Ranges 69.158.233.16/29; 69.158.233.24/29; 184.151.183.224/29; 184.151.183.232/29
CANBM	23	M2M Roaming Information	2020-04-16	Added M2M info for OB only Roaming with 302690 CANMM
CANBM	20	LTE Roaming Information	2020-02-25	Added Two new Diameter Agents pairs for Primary and secondary. 69.158.233.20/69.158.233.28 and 184.151.183.228/184.151.183.236
CANMM	17	IP Roaming/Networking Information	2020-02-25	Changed IP 184.151.174.0 from /27 to /25. Also added 207.236.238.32/27
CANMM	17	IP Roaming/Networking Information	2020-02-25	Reversed changes to IP 184.151.174.0/27 and 207.236.238.32/27 as these should not be here.
CANMM	20	LTE Roaming Information	2020-02-25	Two new primary and secondary Diameter agents 69.158.233.20/69.158.233.8 and 184.151.183.228/184.151.183.236
CANBM	17	IP Roaming/Networking Information	2020-02-24	Updated with new IP backbone Ranges 69.158.209.32/38 and 69.128.238.112/28 for two new DNS servers for both IB and OB traffic support
CANMM	10	MAP	2020-02-24	Corrected MAP section as PLMN 302690 is outbound only
CANMM	17	IP Roaming/Networking Information	2020-02-24	Added new Effective March 16 Authoritative DNS Servers 69.158.209.35 and 69.128.235.115
CANMM	17	IP Roaming/Networking Information	2020-02-24	Added DNS server Names for 69.158.209.35 and 69.128.235.115
CANBM	17	IP Roaming/Networking Information	2020-02-21	Adding new DNS (Auth) server IP's within these two ranges 69.158.209.32/28 and 69.128.235.112/28
CANBM	17	IP Roaming/Networking Information	2020-02-21	Correction only added two new Authoritative DNS server IP's 69.158.209.35 and 69.128.235.115
CANBM	13	Network Elements Information	2020-02-07	Addition of new HLR GT's 16473840089, 16473840090, 16473840091 effective March 3rd
CANBM	21	Contact Information	2020-02-07	Updated Network IREG Contact Primes
CANBM	26	VoLTE Roaming Information Section	2020-02-07	VoLTE info updated for Emergency Calling support both via IMS and CS Fallback
CANBM	26	VoLTE Roaming Information Section	2020-01-31	Adding VoLTE

TADIG Code	Section ID	Section	Date	Description
CANBM	26	VoLTE Roaming Information Section	2020-01-31	Updating VoLTE information
CANBM	13	Network Elements Information	2019-11-25	Corrected Vendor name
CANBM	17	IP Roaming/Networking Information	2019-11-25	Added some SGW Subnet Ranges 207.236.238.32/27, 184.151.174.98/32 and 184.151.174.101/32
CANBM	21	Contact Information	2019-11-25	Updated our other contacts sections
CANBM	13	Network Elements Information	2019-07-11	Added new HLR nodes to be active Aug 28 (16473840087 and 16473840088)
CANBM	17	IP Roaming/Networking Information	2019-06-21	Removal of no longer used IP's from Backbone 184.151.172.96/27; 184.151.173.0/27; 184.151.173.96/27
CANBM	21	Contact Information	2019-06-21	Updated contact primes
CANBM	21	Contact Information	2019-06-21	Updated Contact info
CANBM	4	Routing Information	2019-05-08	Updated MOCN Routing information
CANBM	13	Network Elements Information	2019-04-03	Updated UTC Time Offset
CANBM	4	Routing Information	2019-03-13	Updated E.164 number ranges for number portability
CANMM	17	IP Roaming/Networking Information	2019-03-06	added PGW IP 184.151.229.128/27
CANMM	20	LTE Roaming Information	2019-03-05	Updating with additional EPC Realm of our core network 302610
CANMM	20	LTE Roaming Information	2019-02-22	Enabled Diameter for Roaming Interconnection and updated FQDN MNC690.mcc.3gppnetwork.org
CANBM	20	LTE Roaming Information	2019-01-21	Modified LTE EPC realm info
CANBM	20	LTE Roaming Information	2019-01-21	Modified LTE EPC Realm
CANMM	4	Routing Information	2019-01-21	Added new MSISDN ranges 1367, 1672, 1825
CANBM	4	Routing Information	2019-01-17	Added new MSISDN ranges 1 367, 1 672, 1 825
CANBM	13	Network Elements Information	2019-01-17	updated SGSN IP range
CANBM	16	Packet Data Service Information	2019-01-17	Updated APN with H-APN status
CANBM	17	IP Roaming/Networking Information	2019-01-17	added IP 131.166.145.0/24
CANMM	16	Packet Data Service Information	2018-08-22	Corrected APN to show Home Routed
CANMM	17	IP Roaming/Networking Information	2018-08-22	Added IP Ranges 207.236.223.16/29, 184.151.126.48/29 and 184.151.126.248/29
CANMM	20	LTE Roaming Information	2018-08-22	added 302690 EPC
CANBM	13	Network Elements Information	2018-05-04	Added HLR GT 16473840074
CANBM	13	Network Elements Information	2018-04-23	Added two new IPSM node GT's 16473832017 and 14382762017
CANBM	17	IP Roaming/Networking Information	2018-04-23	Addition of new IP backbone ranges Effective May 1st. (184.151.229.128/27, 184.151.228.0/25, 184.151.228.128/25)
CANBM	17	IP Roaming/Networking Information	2018-04-23	Corrected the IP backbone list as a discrepancy with 184.151.174.0/27
CANMM	4	Routing Information	2018-01-29	Updated MSISDN Number Ranges available
CANMM	13	Network Elements Information	2018-01-29	Added GT's for IOT purposes 14382762055-56 and 16473842055-56
CANBM	21	Contact Information	2017-11-09	Corrected Work schedule
CANBM	21	Contact Information	2017-11-09	Corrected Contact info and Work day time
CANMM	21	Contact Information	2017-11-09	Corrected the 24/7 section
CANBM	4	Routing Information	2017-10-31	Did correction to NDC for 1-548 previously entered in error as 1-584
CANBM	13	Network Elements Information	2017-10-19	Added new GT's for Enhanced Services 16473842030-38, 2050-52
CANMM	13	Network Elements Information	2017-10-19	Added new GT's
CANBM	17	IP Roaming/Networking Information	2017-10-17	Added 184.151.174.0/27 and 184.151.174.32.27
CANBM	21	Contact Information	2017-10-17	Updated Team info
CANMM	17	IP Roaming/Networking Information	2017-10-17	Added IP 184.151.174.0/27
CANMM	21	Contact Information	2017-10-17	Updated Contact info
CANBM	4	Routing Information	2017-09-25	Added 1 584 to MSISDN Range Table

TADIG Code	Section ID	Section	Date	Description
CANBM	17	IP Roaming/Networking Information	2017-09-25	Added IP ranges 184.151.172.96/27 and 184.151.173.96/27 to IP Backbone list
CANMM	4	Routing Information	2017-09-05	adding network attributes
CANMM	4	Routing Information	2017-09-05	Updated Routing info
CANMM	5	International SCCP Gateway	2017-09-05	Adding SCCP info
CANMM	5	International SCCP Gateway	2017-09-05	updated
CANMM	7	SCCP Protocol	2017-09-05	adding info
CANMM	8	Subscriber Identity Authentication	2017-09-05	Updated info
CANMM	10	MAP	2017-09-05	added info
CANMM	13	Network Elements Information	2017-09-05	Added Network Elements
CANMM	16	Packet Data Service Information	2017-09-05	updated info
CANMM	17	IP Roaming/Networking Information	2017-09-05	Updated IP info
CANMM	20	LTE Roaming Information	2017-09-05	Updated LTE Info
CANMM	20	LTE Roaming Information	2017-09-05	updated
CANMM	21	Contact Information	2017-09-05	Updated distribution info
CANMM	21	Contact Information	2017-09-05	Updated Contact info
CANMM	21	Contact Information	2017-09-05	Updated Contact info
CANMM	21	Contact Information	2017-09-05	Updated Contact info
CANBM	17	IP Roaming/Networking Information	2017-05-17	Added IP Range 184.151.173.0/27 to IP Backbone list
CANBM	5	International SCCP Gateway	2017-02-09	Adding a second SCCP connection point
CANBM	5	International SCCP Gateway	2017-02-09	Updated SCCP vendor list
CANBM	5	International SCCP Gateway	2017-02-09	Edited SCCP info
CANBM	20	LTE Roaming Information	2017-02-09	Added a Second IPX connection point (BICS)
CANBM	13	Network Elements Information	2017-01-20	Added new HLR nodes 16473842016-2018
CANBM	17	IP Roaming/Networking Information	2016-12-01	Added an IP Range for PGW use 184.151.172.0/27
CANBM	13	Network Elements Information	2016-10-28	Added new 7 MSC and 7 SGSN GT Nodes
CANBM	17	IP Roaming/Networking Information	2016-10-28	Removed no longer used IP's 131.166.254.8/29 and 131.166.254.16/29
CANBM	13	Network Elements Information	2016-09-28	Adjusted UTC time to -05:00
CANBM	13	Network Elements Information	2016-09-27	Addition of HLR EIR GT's 16473840062-0066, 16473840071, 14382760061-0066
CANBM	20	LTE Roaming Information	2016-09-27	Updated LTE Info sheet
CANBM	13	Network Elements Information	2016-09-12	Added SGSN 16473831004
CANBM	20	LTE Roaming Information	2016-08-25	Updated primary and secondary IP addresses for DEA FQDN
CANBM	17	IP Roaming/Networking Information	2016-05-13	Removed, unused IP ranges 184.151.126.112/29, 207.236.223.8/29, 207.236.105.8/29, 207.236.105.232/29
CANBM	4	Routing Information	2016-05-12	Removed now inactive MSRN ranges 16043483000-5999 and 16473843000-5999
CANBM	13	Network Elements Information	2016-05-12	Added 14382760003, removed 16473840001 and 16043480001
CANBM	21	Contact Information	2016-05-12	Troubleshooting contacts updated
CANBM	21	Contact Information	2016-05-12	Distribution Updated
CANBM	21	Contact Information	2016-05-12	Updating contacts
CANBM	21	Contact Information	2016-05-12	Updated Escalation Contact
CANBM	13	Network Elements Information	2016-01-15	Addition of new SMSC GT 14382762040
CANBM	4	Routing Information	2015-12-04	Removed old inactive MSRN ranges 1902718, 1403408 and 1438276 all with range 3000-5999
CANBM	13	Network Elements Information	2015-12-04	Removal of no longer active MSC GT's 14382760001 and 14034080001 effective immediately
CANBM	13	Network Elements Information	2015-12-04	Update Software loads
CANBM	13	Network Elements Information	2015-11-11	+19027180001 GT was removed from our network Aug 31

TADIG Code	Section ID	Section	Date	Description
CANBM	13	Network Elements Information	2015-11-04	Added Four new HLR GT's 16473840059, 0060, 14382760059 and 0060
CANBM	20	LTE Roaming Information	2015-11-04	Updated VPMN 3GLTE Service supporting Scenario 2..keep in mind Bell Canada VPMN SGSN will not support gateway selection using UE-Capability.
CANBM	13	Network Elements Information	2015-08-27	Removed GT 19027180001 no longer in use in Halifax
CANBM	20	LTE Roaming Information	2015-08-27	Updated EPC Realm table to include epc in front of REALM
CANBM	9	Test Numbers Information	2015-06-16	corrected some AAC test numbers from 3999 to 9999
CANBM	13	Network Elements Information	2015-06-16	Removed no longer active GT's 16473830001, 16473832002-2003, 16473832005-2008
CANBM	20	LTE Roaming Information	2015-06-01	Updated FQDN and EPC Realm...removing leading EPC
CANBM	4	Routing Information	2015-04-24	Added new active MSRN ranges for new MSS's
CANBM	9	Test Numbers Information	2015-04-24	Added new AAC numbers for our new active MSS's effective Apr 24th
CANBM	16	Packet Data Service Information	2015-04-24	Modified Packet Data Service info IPV4-V6 and Mult PDP support
CANBM	17	IP Roaming/Networking Information	2015-04-24	Added 184.151.177.0/29 to Backbone IP ranges effective April 24th
CANBM	20	LTE Roaming Information	2015-04-24	Updated LTE info with EPC and FQDN
CANBM	13	Network Elements Information	2015-02-06	Added new IPSMGW nodes 16473842012, 14382762012 and 14382762013
CANBM	17	IP Roaming/Networking Information	2015-02-06	Added new IP range to backbone 184.151.62.240/29
CANBM	20	LTE Roaming Information	2015-01-13	Updated LTE Info area of support
CANBM	20	LTE Roaming Information	2014-11-28	Added a list of additional Diameter Peers for each MME Hostnames (Cards 1-12)
CANBM	17	IP Roaming/Networking Information	2014-10-15	S Gateway expansion in Calgary 207.236.105.136/29 effective immediately
CANBM	17	IP Roaming/Networking Information	2014-08-19	Corrected duplicate ip 207.236.105.232/29 in the list that will be effective Aug. 28 2014
CANBM	17	IP Roaming/Networking Information	2014-08-08	Corrected IP range from 207.236.105.236/29 to 207.236.105.232/29
CANBM	17	IP Roaming/Networking Information	2014-08-07	S Gateway Expansion with 207.236.105.236/29 and additional ASN 22870
CANBM	17	IP Roaming/Networking Information	2014-06-03	S Gateway Expansion added IP range 207.236.105.0/29
CANBM	21	Contact Information	2014-06-03	Corrected contact info in address book
CANBM	21	Contact Information	2014-06-03	Contact info correction
CANBM	21	Contact Information	2014-06-03	Corrected Contact info
CANBM	21	Contact Information	2014-06-03	Corrected contact info
CANBM	17	IP Roaming/Networking Information	2014-05-14	Added two new IP's to backbone 131.166.142.0/28 and 131.166.142.16/28
CANBM	13	Network Elements Information	2014-03-12	Added 6 GT's for New NSN MSS'S (14382760002, 19027180002, 16473840002, 16473830002, 14034080002, 16043480002)
CANBM	20	LTE Roaming Information	2014-03-12	Added a list of additional Diameter Peers for each MME (Cards 03-12)
CANBM	13	Network Elements Information	2014-01-09	Corrected since our SMSC GT 14382762000 was missing from list
CANBM	17	IP Roaming/Networking Information	2014-01-03	Corrected IP range as advertised removed 131.166.254.8/28 and added 131.166.254.8/29; 131.166.254.16
CANBM	17	IP Roaming/Networking Information	2014-01-03	Corrected IP range as advertised removed 131.166.254.8/28 and added 131.166.254.8/29
CANBM	4	Routing Information	2013-12-13	Added MSISDN ranges 1-226 and 1-416 that were discarded in error
CANBM	5	International SCCP Gateway	2013-12-13	Modified entry for Primary SCCP
CANBM	16	Packet Data Service Information	2013-12-13	Added ARPQOS value 3
CANBM	16	Packet Data Service Information	2013-12-13	Edited ARPQOS list
CANBM	16	Packet Data Service Information	2013-12-13	Edited 2G/3GQOS profile

TADIG Code	Section ID	Section	Date	Description
CANBM	16	Packet Data Service Information	2013-12-13	Edited QOS Profile
CANBM	17	IP Roaming/Networking Information	2013-12-13	Corrected IP Range for OB Data Roaming effective Dec 2 131.166.254.8/28 Removed these IP's from IP list 131.166.254.0/27, 131.166.254.152/29, 131.166.254.168/29, 207.236.105.224/29, 207.236.105.0/29, 184.151.62.64/27, 207.236.105.160/27, 207.236.105.32/27
CANBM	20	LTE Roaming Information	2013-12-13	LTE QOS profile updated
CANBM	4	Routing Information	2013-08-13	Updated NPA table list with 249, 236, 343, 365, 431, 437, 579, 639, 782, 873
CANBM	13	Network Elements Information	2013-08-13	Added New ESP Roamware GT's 14382762030-2036 Effective Aug 30th.
CANBM	17	IP Roaming/Networking Information	2013-08-13	Added new IP Ranges and ASN for Bell OB Data Support Effective Aug 16
CANBM	13	Network Elements Information	2013-06-07	Added new HLR GT's 16473840057, 16473840058, 16473840086, 14382760057 & 14382760058. Removed SGSN GT's 16473831001, 16473831002, 14034081001, 14034081002, 14034081003, 16473841001, 16473841002, 14382761001, 14382761002. Node SW versions updated.
CANBM	16	Packet Data Service Information	2013-06-07	Updated APN Web List
CANBM	17	IP Roaming/Networking Information	2013-06-07	DNS Server & Caching Updates
CANBM	4	Routing Information	2012-10-10	Change to International SMS Routing effect Oct 29 2012 for all MO and MT messages
CANBM	4	Routing Information	2012-10-10	Modifiy E.164 Number Series available in Canada which are accessible to Wireless Number Portability
CANBM	17	IP Roaming/Networking Information	2012-10-10	Changed IP
CANBM	4	Routing Information	2012-10-02	E164 Updated.
CANBM	13	Network Elements Information	2012-07-17	Deleted GTs: 420 608 005 621, 420 608 005 622, 420 608 005 623, 420 608 005 624, 420 608 005 678, 420 608 005 679, 420 608 005 694, 420 608 005 695, 420 608 005 696, 420 608 005 697, 420 608 005 629, 420 608 005 640
CANBM	13	Network Elements Information	2012-07-01	Added GTs: 420 608 005 640, 420 608 005 634, 420 608 005 635
CANBM	4	Routing Information	2012-05-03	Added Steering instructions for inbound roaming on Bell (Please forward to Outbound Steering Prime) * See Additional Information.
CANBM	16	Packet Data Service Information	2012-05-03	Removed IP range 67.69.81.0/26 from Backbone list since it overlapped specific /29 and /28 ranges. Also updated the DNS table for Inbound Roaming resolution with appropriate list of specific 12 IP's.
CANBM	16	Packet Data Service Information	2012-05-03	Added another IP range to backbone (207.236.223.16/29).
CANBM	21	Contact Information	2012-05-03	Updated Contact info.
CANBM	16	Packet Data Service Information	2012-03-08	Added New IP backbone ranges effective immediately.
CANBM	4	Routing Information	2012-01-11	Added New HLR GT addresses (Go live Feb 20th)
CANBM	16	Packet Data Service Information	2012-01-11	Added IP backbone ranges effective immediately.

NETWORK

TADIG code: CANBM

Section ID: 2 (Mandatory, Repeating)

TADIG code:	CANBM
Network name:	Bell Mobility Canada
Network type:	Terrestrial
Technology:	Frequency list:
2G-GSM frequencies:	PCS 1900, GSM 850
3G-UTRA/FDD frequencies:	4 - AWS, 2 - PCS 1900, 5 - 850 MHz, 7 - 2.6 GHz, 13 - 700 MHz Upper
3G-UTRA/TDD frequencies:	Unsupported
4G-E-UTRAN frequencies:	Unsupported
4G-E-UTRAN-MIoT-LTE-M frequencies:	Unsupported
4G-E-UTRAN-MIoT-NB-IoT frequencies:	Unsupported
MIoT-NB-IoT deployment modes:	Unsupported
Presentation of country initials and MNN:	CANBM
Abbreviated MNN:	CANBM

NETWORK INFORMATION

TADIG code: CANBM

Section ID: 3 (Mandatory)

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

ROUTING INFORMATION

TADIG code: CANBM

Section ID: 4 (Mandatory)

Effective date of change: 2019-05-08

CCITT E.164 Number series	Country Code (CC)	National Destination Code (NDC)	SN Range Start	SN Range Stop	Primary International DPC	Secondary International DPC	MVNO Number	Location
MSISDN number ranges (s)								
	1	204	0000	9999				
	1	226	0000	9999				
	1	236	0000	9999				
	1	249	0000	9999				
	1	250	0000	9999				
	1	289	0000	9999				
	1	306	0000	9999				
	1	343	0000	9999				
	1	365	0000	9999				
	1	367	0000	9999				
	1	403	0000	9999				
	1	416	0000	9999				
	1	418	0000	9999				
	1	431	0000	9999				
	1	437	0000	9999				
	1	438	0000	9999				
	1	450	0000	9999				
	1	506	0000	9999				
	1	514	0000	9999				
	1	519	0000	9999				
	1	548	0000	9999				
	1	579	0000	9999				
	1	581	0000	9999				
	1	587	0000	9999				
	1	604	0000	9999				
	1	613	0000	9999				
	1	639	0000	9999				
	1	647	0000	9999				
	1	672	0000	9999				
	1	705	0000	9999				
	1	709	0000	9999				
	1	778	0000	9999				
	1	780	0000	9999				
	1	782	0000	9999				
	1	807	0000	9999				
	1	819	0000	9999				
	1	825	0000	9999				
	1	867	0000	9999				
	1	873	0000	9999				
	1	902	0000	9999				
	1	905	0000	9999				

Network Nodes Global Title Number Range(s)								
	1	403408						
	1	647383						
	1	647384						
	1	438276						
	1	604348						
	1	902718						

MSRN Number Range(s)								
	1	647516	1000	3999				
	1	902359	1000	3999				
	1	587831	1000	3999				
	1	647392	1000	3999				
	1	438301	1000	3999				
	1	778904	1000	3999				

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	302	610

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	1	90561

Does Number Portability apply ?	Yes
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Is 15 Digit MSISDN Supported ?	Yes
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USIM SIM Header	NA
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E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	1	204	0000	9999
	1	226	0000	9999
	1	236	0000	9999
	1	249	0000	9999
	1	250	0000	9999
	1	289	0000	9999
	1	306	0000	9999
	1	343	0000	9999
	1	365	0000	9999
	1	367	0000	9999
	1	403	0000	9999
	1	416	0000	9999
	1	418	0000	9999
	1	431	0000	9999
	1	437	0000	9999
	1	438	0000	9999
	1	450	0000	9999
	1	506	0000	9999
	1	514	0000	9999
	1	519	0000	9999
	1	548	0000	9999
	1	579	0000	9999
	1	581	0000	9999
	1	587	0000	9999
	1	604	0000	9999
	1	613	0000	9999
	1	639	0000	9999
	1	647	0000	9999
	1	672	0000	9999
	1	705	0000	9999
	1	709	0000	9999
	1	778	0000	9999
	1	780	0000	9999

E. 164 Number Ranges due to Number Portability	CC	NDC	SN Range Start	SN Range Stop
	1	782	0000	9999
	1	807	0000	9999
	1	819	0000	9999
	1	825	0000	9999
	1	867	0000	9999
	1	873	0000	9999
	1	902	0000	9999
	1	905	0000	9999

Additional Information
ROAMING PARTNER STEERING METHOD TO BELL/TELUS COMMON NETWORK:
OTA Steering - Populate 302 610 (Bell PLMN), 302 220 (TELUS) & 302 880 (Common PLMN). If you can send only one PLMN, populate 302 880
SS7 Steering - Allow registration on Bell Network GT Ranges: 1 403408, 1 647383, 1 647384, 1 438276, 1 604348, 1 902718.
Allow registrations on TELUS Network GT Ranges 1 647580, 1 6472137, 16472138, 1 6472139, 1438580, 1 587580, 1587588, 1778580, 1647850
Hybrid Steering (OTA & SS7) - Populate 302 610 (Bell PLMN) 302 220 (TELUS PLMN) & 302 880 (Common PLMN)
- TRAFFIC STEERING TOWARDS BELL/TELUS COMMON NETWORK -
Bell, TELUS and Sasktel operates a common Radio Access Network (RAN) based on Multi-Operator Core Network (MOCN) as defined in 3GPP TS 23.251.
Network Technology/Frequencies 3G/HSPA+= 850/1900 LTE and LTE Advance = Bands 2 (1900), 4 (1700/2100), 5 (850) , 7 (2600) , 12/13/29 (700), 25 (1900)
The network broadcasts The common PLMN (302 880), Bell private PLMN (302 610), TELUS private PLMN (302 220), and Sasktel PLMN 302780
- Non-MOCN capable devices will only register on the common PLMN (302 880)
- MOCN capable devices will register on either Bell or TELUS private PLMN (302 610 & 302 220)
Roaming partners must populate PLMNs 302 610, 302 220 & 302 880 in their preferred PLMN list in the USIM.
All TAP records on Bell core will be produced using Bell TADIG (CANBM) regardless of whether the device registered on the common network (302 880) or Bell private network (302 610). TAP records on TELUS core will be produced using TELUS TADIG (CANTS).
A more detailed steering document is available upon request. Please contact RoamingPerformance@bell.ca to request a copy.
Change to International SMS for MO and MT. All messages to be routed to Bell Mobility via Syniverse Technologies effective Oct 29 2012

MCC/MNC used for multi-operator core network (MOCN)	MCC	MNC
	302	880

History of changes

Date	Description
2019-05-08	Updated MOCN Routing information
2019-03-13	Updated E.164 number ranges for number portability
2019-01-17	Added new MSISDN ranges 1 367, 1 672, 1 825
2017-10-31	Did correction to NDC for 1-548 previously entered in error as 1-584
2017-09-25	Added 1 584 to MSISDN Range Table
2016-05-12	Removed now inactive MSRN ranges 16043483000-5999 and 16473843000-5999
2015-12-04	Removed old inactive MSRN ranges 1902718, 1403408 and 1438276 all with range 3000-5999
2015-04-24	Added new active MSRN ranges for new MSS's
2013-12-13	Added MSISDN ranges 1-226 and 1-416 that were discarded in error
2013-08-13	Updated NPA table list with 249, 236, 343, 365, 431, 437, 579, 639, 782, 873
2012-10-10	Change to International SMS Routing effect Oct 29 2012 for all MO and MT messages
2012-10-10	Modify E.164 Number Series available in Canada which are accessible to Wireless Number Portability
2012-10-02	E164 Updated.
2012-05-03	Added Steering instructions for inbound roaming on Bell (Please forward to Outbound Steering Prime) * See Additional Information.
2012-01-11	Added New HLR GT addresses (Go live Feb 20th)

INTERNATIONAL SCCP GATEWAY

TADIG code: CANBM

Section ID: 5 (Optional)

Effective date of change: 2017-02-09

International SCCP carrier list	
SCCP carrier name:	Syniverse
Connectivity information:	Primary
MNO TADIG code list:	
DPC info:	
Signature:	Syniverse ITU
Type:	SCCP, STP
International DPC:	3.30.5
Comments:	
DPC info:	
Signature:	Syniverse ANSI
Type:	SCCP, STP
International DPC:	235.250.0
Comments:	
SCCP carrier name:	Belgacom International Carrier Services (BICS)
Connectivity information:	Backup
MNO TADIG code list:	
DPC info:	
Signature:	Brussels
Type:	Standalone ISTP
International DPC:	2.181.0
Comments:	ANSI
DPC info:	
Signature:	USA (Preferred Ashburn)
Type:	Standalone ISTP
International DPC:	2.181.10
Comments:	ANSI
DPC info:	
Signature:	USA (Preferred New York)
Type:	Standalone ISTP
International DPC:	2.181.11
Comments:	ANSI

History of changes

Date	Description
2017-02-09	Adding a second SCCP connection point
2017-02-09	Updated SCCP vendor list
2017-02-09	Edited SCCP info
2013-12-13	Modified entry for Primary SCCP

SCCP Protocol available at PMN for connection for International SS7 Roaming

TADIG code: CANBM

Section ID: 7 (Optional)

Effective date of change: 2012-06-14

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

History of changes

SUBSCRIBER IDENTITY AUTHENTICATION

TADIG code: CANBM

Section ID: 8 (Optional)

Effective date of change: 2012-06-14

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	Milenage, A5/1

History of changes

Test Numbers Information

TADIG code: CANBM

Section ID: 9 (Optional)

Effective date of change: 2015-06-16

Number Type	Test Number	Location	Comments
AAC	+16473839999	Toronto ON	
AAC	+16473849999	Toronto ON	
AAC	+14034089999	Calgary AB	
AAC	+14382769999	Montreal QC	
AAC	+16043489999	Vancouver BC	
AAC	+19027189999	Halifax NS	
AAC	+16473929999	Toronto ON	
AAC	+16475169999	Toronto ON	
AAC	+14383019999	Montreal QC	
AAC	+15878319999	Calgary AB	
AAC	+17789049999	Vancouver BC	
AAC	+19023599999	Halifax NS	

History of changes

Date	Description
2015-06-16	corrected some AAC test numbers from 3999 to 9999
2015-04-24	Added new AAC numbers for our new active MSS's effective Apr 24th

MOBILE APPLICATION PART (MAP)

TADIG code: CANBM

Section ID: 10 (Optional)

Effective date of change: 2012-06-14

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

History of changes

MAP Optimal Routing Section

TADIG code: CANBM

Section ID: 11 (Optional)

Effective date of change: 2012-06-14

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	-	-	

History of changes

MAP Inter Operator SMS Enhancement

TADIG code: CANBM

Section ID: 12 (Optional)

Effective date of change: 2012-06-14

Inter - Operator SMS Enhancement

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

History of changes

NETWORK ELEMENTS INFORMATION

TADIG code: CANBM

Section ID: 13 (Optional)

Effective date of change: 2020-04-16

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
HLR	Front_End	1 438276 0051 / 0060			NSN	19.0	-05:00
HLR	HLR/EIR	1 438276 0061 / 0066			Nokia	19.0	-05:00
HLR	Front_End	1 647383 2011 / 2011			NSN	19.0	-05:00
HLR	Front_End	1 647384 0050 / 0060			NSN	19.0	-05:00
HLR	HLR/EIR	1 647384 0062 / 0066			Nokia	19.0	-05:00
HLR	HLR/EIR	1 647384 0071 / 0071			Nokia	19.0	-05:00
HLR	Staging	1 647384 0074 / 0074					-04:00
HLR	Back_End	1 647384 0081 / 0091			NSN	19.0 NDS	-05:00
HLR	HLR/EIR	1 647384 2016 / 2018					-04:00
Other	Staging IPSM	1 438276 2013 / 2013			Airwide		-05:00
IP-SMGW	IPSM	1 438276 2017 / 2017			Airwide		-04:00
IP-SMGW	IPSM	1 647383 2017 / 2017			Airwide		-04:00
MSC/VLR-3G	MSC_1	1 403408 0002 / 0002			NSNATCA	16.2	-06:00
MSC/VLR-3G	MSC_2	1 403408 0009 / 0009			ATCA- NSN	16.2	-06:00
MSC/VLR-3G	MSC_1	1 438276 0002 / 0003			NSNATCA	16.2	-04:00
MSC/VLR-3G	MSC_3	1 438276 0008 / 0009			ATCA- NSN	16.2	-04:00
MSC/VLR-3G	MSC_1	1 604348 0002 / 0002			NSN	16.2	-07:00
MSC/VLR-3G	MSC_2	1 604348 0009 / 0009			ATCA-NSN	16.2	-07:00
MSC/VLR-3G	MSC_1	1 647383 0002 / 0002			NSNATCA	16.2	-04:00
MSC/VLR-3G	MSC_3	1 647383 0009 / 0009			ATCA NSN	16.2	-04:00
MSC/VLR-3G	MSC	1 647383 2010 / 2010			NSN	16.2	-05:00
MSC/VLR-3G	MSC_1	1 647384 0002 / 0002			NSN	16.2	-05:00
MSC/VLR-3G	MSC_3	1 647384 0009 / 0009			ATCA NSN	16.2	-04:00
MSC/VLR-3G	MSC_1	1 902718 0002 / 0002			NSNATCA	16.2	-04:00
MSC/VLR-3G	MSC_2	1 902718 0009 / 0009			ATCA- NSN	16.2	-03:00
Other	LBS	1 438276 2007 / 2007			HP		-04:00
Other	SMS_anti_Spam	1 438276 2020 / 2021			Airwide		-04:00
Other	Enhanced_Service	1 438276 2030 / 2036			Roamware		-04:00
Other	Enhanced_Service	1 647383 2004 / 2004			Roamware		-04:00
Other	Enhanced_Service	1 647383 2012 / 2012					-04:00
Other	SMS_anti_Spam	1 647383 2020 / 2021			Airwide		-04:00
Other	Enhanced_Service	1 647383 2999 / 2999					-04:00
Other	Enhanced_Service	1 647384 2030 / 2038			Mobileum		-04:00
Other	Enhanced_Service	1 647384 2050 / 2052			Mobileum		-04:00
SGSN-3G	BSGC_1	1 403408 1004 / 1004	184.151.126.248/29		Cisco	17.5	-06:00
SGSN-3G	BSGA_1	1 403408 1009 / 1009	184.151.126.248/29		Cisco	17.5	-06:00
SGSN-3G	BSGT_1	1 438276 1003 / 1003	184.151.126.200/29		Cisco	17.5	-04:00
SGSN-3G	BSGA_1	1 438276 1007 / 1007	184.151.126.200/29		Cisco	17.5	-04:00
SGSN-3G	BSGA_1	1 438276 1009 / 1010	184.151.126.216/29		Cisco	17.5	-04:00
SGSN-3G	BSGV_1	1 604348 1001 / 1001	184.151.126.232/29		Cisco	17.5	-07:00
SGSN-3G	BSGA_1	1 604348 1009 / 1009	184.151.126.232/29		Cisco	17.5	-07:00
SGSN-3G	BSGQ_1	1 647383 1003 / 1004	184.151.62.104/29		Cisco	19.4	-04:00
SGSN-3G	BSGA_1	1 647383 1008 / 1009	184.151.62.104/29		Cisco	17.5	-04:00
SGSN-3G	BSGP_1	1 647384 1003 / 1003	207.236.105.24/29		Cisco	17.5	-04:00
SGSN-3G	BSGA_1	1 647384 1009 / 1009	207.236.105.24/29		Cisco	17.5	-04:00
SMSC	Router	1 438276 2000 / 2002			Airwide		-04:00
SMSC	Router_3	1 438276 2005 / 2005			Airwide		-04:00
SMSC	HATA	1 438276 2040 / 2040			Airwide		-04:00
SMSC	Router_3	1 647383 2000 / 2000			Airwide		-04:00
SMSC	Router_4	1 647383 2013 / 2013			Airwide		-04:00

History of changes

Date	Description
2020-04-16	Updated Element names and removed 14382762012 and 16473842012
2020-02-07	Addition of new HLR GT's 16473840089, 16473840090, 16473840091 effective March 3rd
2019-11-25	Corrected Vendor name
2019-07-11	Added new HLR nodes to be active Aug 28 (16473840087 and 16473840088)

Date	Description
2019-04-03	Updated UTC Time Offset
2019-01-17	updated SGSN IP range
2018-05-04	Added HLR GT 16473840074
2018-04-23	Added two new IPSM node GT's 16473832017 and 14382762017
2017-10-19	Added new GT's for Enhanced Services 16473842030-38, 2050-52
2017-01-20	Added new HLR nodes 16473842016-2018
2016-10-28	Added new 7 MSC and 7 SGSN GT Nodes
2016-09-28	Adjusted UTC time to -05:00
2016-09-27	Addition of HLR EIR GT's 16473840062-0066, 16473840071, 14382760061-0066
2016-09-12	Added SGSN 16473831004
2016-05-12	Added 14382760003, removed 16473840001 and 16043480001
2016-01-15	Addition of new SMSC GT 14382762040
2015-12-04	Removal of no longer active MSC GT's 14382760001 and 14034080001 effective immediately
2015-12-04	Update Software loads
2015-11-11	+19027180001 GT was removed from our network Aug 31
2015-11-04	Added Four new HLR GT's 16473840059, 0060, 14382760059 and 0060
2015-08-27	Removed GT 19027180001 no longer in use in Halifax
2015-06-16	Removed no longer active GT's 16473830001, 16473832002-2003, 16473832005-2008
2015-02-06	Added new IPSMGW nodes 16473842012, 14382762012 and 14382762013
2014-03-12	Added 6 GT's for New NSN MSS'S (14382760002, 19027180002, 16473840002, 16473830002, 14034080002, 16043480002)
2014-01-09	Corrected since our SMSC GT 14382762000 was missing from list
2013-08-13	Added New ESP Roamware GT's 14382762030-2036 Effective Aug 30th.
2013-06-07	Added new HLR GT's 16473840057, 16473840058, 16473840086, 14382760057 & 14382760058. Removed SGSN GT's 16473831001, 16473831002, 14034081001, 14034081002, 14034081003, 16473841001, 16473841002, 14382761001, 14382761002. Node SW versions updated.
2012-07-17	Deleted GTs: 420 608 005 621, 420 608 005 622, 420 608 005 623, 420 608 005 624, 420 608 005 678, 420 608 005 679, 420 608 005 694, 420 608 005 695, 420 608 005 696, 420 608 005 697, 420 608 005 629, 420 608 005 640
2012-07-01	Added GTs: 420 608 005 640, 420 608 005 634, 420 608 005 635

USSD Information

TADIG code: CANBM

Section ID: 14 (Optional)

Effective date of change: 2012-06-14

USSD capability available	Yes
Supported phase	Phase 2

History of changes

CAMEL INFO

TADIG code: CANBM

Section ID: 15 (Conditional)

Effective date of change: 2012-06-14

gsmSSF/MSC

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

CAMEL Functionality Information

Service(s) Name	SK	CAP Version	SCP GT addresses
Prepaid	22	CAPv2	16473832001 14382762003
Hotline services	NA	CAPv1	00000000000
Roamware Enhanced Services Platform	NA	CAPv1	16473832002 SSN 146

CAPv4 Partial Implementations

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

History of changes

Packet Data Services Information

TADIG code: CANBM

Section ID: 16 (Conditional)

Effective date of change: 2019-01-17

List of APN Operator Identifiers

APN Operator Identifier	Description	Example
mnc610.mcc302.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			
inet.bell.ca	N/A	N/A	H-APN		
blackberry.net	N/A	N/A	V-APN		
corp.bell.ca	User Specific	User Specific	H-APN		
static.bell.ca	User Specific	User Specific	H-APN		
proxy.bell.ca	N/A	N/A	H-APN		
pda.bell.ca	N/A	N/A	H-APN		
pda2.bell.ca	N/A	N/A	H-APN		

APN WAP List

APN Credential			APN Type	WAP Gateway IP address	WAP Server URL	WAP Port ver 1	WAP Port ver 2
APN	Username	Password					
proxy.bell.ca	N/A	N/A	H-APN	204.101.237.163	http://bell.mobi	80 8080	
proxy.bell.ca	N/A	N/A	H-APN	206.47.201.84	http://bell.mobi	80 8080	
pda.bell.ca	N/A	N/A	H-APN	204.101.237.163	http://bell.mobi	80 8080	
pda.bell.ca	N/A	N/A	H-APN	206.47.201.84	http://bell.mobi	80 8080	
inet.bell.ca	N/A	N/A	H-APN	204.101.237.163	http://bell.mobi	80 8080	
inet.bell.ca	N/A	N/A	H-APN	206.47.201.84	http://bell.mobi	80 8080	
pda2.bell.ca	N/A	N/A	H-APN	204.101.237.163	http://bell.mobi	80 8080	
pda2.bell.ca	N/A	N/A	H-APN	206.47.201.84	http://bell.mobi	80 8080	

APN MMS List

APN	APN Credential		WAP Gateway IP address for MMS	Messaging Server URL
	Username	Password		
inet.bell.ca	N/A	N/A	204.101.237.163	http://mms.bell.ca/mms/wapenc
inet.bell.ca	N/A	N/A	206.47.201.84	http://mms.bell.ca/mms/wapenc
proxy.bell.ca	N/A	N/A	204.101.237.163	http://mms.bell.ca/mms/wapenc
proxy.bell.ca	N/A	N/A	206.47.201.84	http://mms.bell.ca/mms/wapenc
pda.bell.ca	N/A	N/A	204.101.237.163	http://mms.bell.ca/mms/wapenc
pda.bell.ca	N/A	N/A	206.47.201.84	http://mms.bell.ca/mms/wapenc
pda2.bell.ca	N/A	N/A	204.101.237.163	http://mms.bell.ca/mms/wapenc
pda2.bell.ca	N/A	N/A	206.47.201.84	http://mms.bell.ca/mms/wapenc

IPv6 Connectivity Information

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

List of 2G/3G QOS profiles

Profile name:	2G/3GQOS
Traffic class:	Interactive
ARP:	3
Evolved ARP support:	Yes
Evolved ARP priority level:	1
Evolved APR preemption vulnerability list:	
Evolved APR preemption capability list:	
Delivery of erroneous SDU:	Yes

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
3GPP	
HSDPA	
HSUPA	

Multiple PDP Context Support

Number of Primary PDP Context	5
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History of changes

Date	Description
2019-01-17	Updated APN with H-APN status
2015-04-24	Modified Packet Data Service info IPV4-V6 and Mult PDP support
2013-12-13	Added ARPQOS value 3
2013-12-13	Edited ARPQOS list
2013-12-13	Edited 2G/3GQOS profile
2013-12-13	Edited QOS Profile
2013-06-07	Updated APN Web List
2012-05-03	Removed IP range 67.69.81.0/26 from Backbone list since it overlapped specific /29 and /28 ranges. Also updated the DNS table for Inbound Roaming resolution with appropriate list of specific 12 IP's.
2012-05-03	Added another IP range to backbone (207.236.223.16/29).
2012-03-08	Added New IP backbone ranges effective immediately.
2012-01-11	Added IP backbone ranges effective immediately.

IP - Roaming and IP - Interworking Information

TADIG code: CANBM

Section ID: 17 (Conditional)

Effective date of change: 2020-10-26

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	184.151.126.80/29
	184.151.126.144/29
	184.151.126.176/29
	184.151.126.48/29
	184.151.126.16/29
	184.151.62.208/29
	184.151.62.104/29
	184.151.126.232/29
	184.151.126.248/29
	184.151.126.200/29
	184.151.126.216/29
	207.236.105.24/29
	207.236.223.0/29
	216.208.105.0/29
	216.208.105.8/29
	207.236.223.16/29
	67.69.81.0/29
	67.69.81.8/29
	67.69.81.16/29
	67.69.81.24/29
	67.69.81.32/28
	67.69.81.48/28
	131.166.142.0/28
	131.166.142.16/28
	207.236.105.0/29
	207.236.105.136/29
	184.151.62.240/29
	184.151.177.0/29
	184.151.172.0/27
	184.151.174.32/27
	184.151.228.128/25
	184.151.228.0/25
	184.151.229.128/27
	184.151.174.0/27
	131.166.145.0/24
	184.151.174.98/32
	184.151.174.101/32
	207.236.238.32/27
	69.158.209.32/28
	69.128.235.112/28
	184.151.183.224/29
	184.151.183.232/29
	69.158.233.16/29
	69.158.233.24/29
	184.151.0.32/29
	69.158.242.80/28
	69.158.244.64/28

List of Autonomous System Number (ASN):	ASN
	36522
	577
	3321
	22870

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

67.69.81.38		W0110CnBDNQ2.mnc610.mcc302.gprs W0110CnBDNQ2.mnc610.mcc302.3gppnetwork.org
67.69.81.54		E0100CnBDNT2.mnc610.mcc302.gprs E0100CnBDNT2.mnc610.mcc302.3gppnetwork.org
67.69.81.20		W0575CnBDNP1.mnc610.mcc302.gprs W0575CnBDNP1.mnc610.mcc302.3gppnetwork.org
69.158.209.35		w0569cnbvdnrs.mnc610.mcc302.3gppnetwork.org
69.128.235.115		f1252cnbvdnrb.mnc610.mcc302.3gppnetwork.org

List of PMN local caching DNS server IP addresses and names

IP address	IPv6 address	DNS Name
67.69.81.4		N/A
67.69.81.5		N/A
67.69.81.12		N/A
67.69.81.13		N/A
67.69.81.20		N/A
67.69.81.21		N/A
67.69.81.28		N/A
67.69.81.29		N/A
67.69.81.37		N/A
67.69.81.38		N/A
67.69.81.53		N/A
67.69.81.54		N/A
69.158.209.35		w0569cnbvdnrs.mnc610.mcc302.3gppnetwork.org
69.128.235.115		f1252cnbvdnrb.mnc610.mcc302.3gppnetwork.org
69.158.244.70		b0033cnbvdnrv.mnc610.mcc302.3gppnetwork.org
69.158.242.85		a0040cnbvdnrc.mnc610.mcc302.3gppnetwork.org

List of GRX Providers	GRX Provider
	Syniverse

History of changes

Date	Description
2020-10-26	Add IP ranges 69.158.242.80/28 and 69.158.244.64/28
2020-10-26	Added two new local cache DNS IPs 69.158.244.70 and 69.158.242.85
2020-10-20	Updated IP Roaming DNS servers for Inbound traffic Vancouver/Calgary
2020-09-09	Add new IP Range 184.151.0.32/29
2020-08-11	Cosmetic changes completed
2020-04-16	Added DRA Host Ranges 69.158.233.16/29; 69.158.233.24/29; 184.151.183.224/29; 184.151.183.232/29
2020-02-24	Updated with new IP backbone Ranges 69.158.209.32/38 and 69.128.238.112/28 for two new DNS servers for both IB and OB traffic support
2020-02-21	Adding new DNS (Auth) server IP's within these two ranges 69.158.209.32/28 and 69.128.235.112/28
2020-02-21	Correction only added two new Authoritative DNS server IP's 69.158.209.35 and 69.128.235.115
2019-11-25	Added some SGW Subnet Ranges 207.236.238.32/27, 184.151.174.98/32 and 184.151.174.101/32
2019-06-21	Removal of no longer used IP's from Backbone 184.151.172.96/27; 184.151.173.0/27; 184.151.173.96/27
2019-01-17	added IP 131.166.145.0/24
2018-04-23	Addition of new IP backbone ranges Effective May 1st. (184.151.229.128/27, 184.151.228.0/25, 184.151.228.128/25)
2018-04-23	Corrected the IP backbone list as a discrepancy with 184.151.174.0/27
2017-10-17	Added 184.151.174.0/27 and 184.151.174.32/27
2017-09-25	Added IP ranges 184.151.172.96/27 and 184.151.173.96/27 to IP Backbone list
2017-05-17	Added IP Range 184.151.173.0/27 to IP Backbone list
2016-12-01	Added an IP Range for PGW use 184.151.172.0/27
2016-10-28	Removed no longer used IP's 131.166.254.8/29 and 131.166.254.16/29
2016-05-13	Removed, unused IP ranges 184.151.126.112/29, 207.236.223.8/29, 207.236.105.8/29, 207.236.105.232/29
2015-04-24	Added 184.151.177.0/29 to Backbone IP ranges effective April 24th
2015-02-06	Added new IP range to backbone 184.151.62.240/29

Date	Description
2014-10-15	S Gateway expansion in Calgary 207.236.105.136/29 effective immediately
2014-08-19	Corrected duplicate ip 207.236.105.232/29 in the list that will be effective Aug. 28 2014
2014-08-08	Corrected IP range from 207.236.105.236/29 to 207.236.105.232/29
2014-08-07	S Gateway Expansion with 207.236.105.236/29 and additional ASN 22870
2014-06-03	S Gateway Expansion added IP range 207.236.105.0/29
2014-05-14	Added two new IP's to backbone 131.166.142.0/28 and 131.166.142.16/28
2014-01-03	Corrected IP range as advertised removed 131.166.254.8/28 and added 131.166.254.8/29; 131.166.254.16
2014-01-03	Corrected IP range as advertised removed 131.166.254.8/28 and added 131.166.254.8/29
2013-12-13	Corrected IP Range for OB Data Roaming effective Dec 2 131.166.254.8/28 Removed these IP's from IP list 131.166.254.0/27, 131.166.254.152/29, 131.166.254.168/29, 207.236.105.224/29, 207.236.105.0/29, 184.151.62.64/27, 207.236.105.160/27, 207.236.105.32/27
2013-08-13	Added new IP Ranges and ASN for Bell OB Data Support Effective Aug 16
2013-06-07	DNS Server & Caching Updates
2012-10-10	Changed IP

LTE Roaming Information

TADIG code: CANBM

Section ID: 20 (Optional)

Effective date of change: 2020-10-26

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Syniverse		Option5
Primary IP address of DA	Secondary IP address of DA	
IPX Provider Name	IPX DA Realm Used	Diameter Architecture
BICS	dra.bics.3gppnetwork.org	
Primary IP address of DA	Secondary IP address of DA	
94.102.166.168	94.102.166.184	
94.102.166.199	94.102.166.215	

Roaming Interconnection

EPC Realms For Roaming
epc.mnc610.mcc302.3gppnetwork.org

FQDN Diameter Edge Agent

FQDN	Primary IP Address DEA FQDN	Secondary IP Address DEA FQDN
epc.mnc610.mcc302.3gppnetwork.org	69.158.233.20 184.151.183.228	69.158.233.28 184.151.183.236

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 NAS
false	true

Voice ITW

CSFB

Roaming CS Fallback

Roaming Retry (MTTR)

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

List of LTE QOS profiles

Profile name:	4GQOS
QCI Value List:	8
QOS ARP List:	11
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	No	No

History of changes

Date	Description
2020-10-26	Updated FQDN Information
2020-10-26	Updated FQDN Information
2020-10-26	Updated FQDN Information
2020-10-20	Updated Diameter Primary FQDN
2020-02-25	Added Two new Diameter Agents pairs for Primary and secondary. 69.158.233.20/69.158.233.28 and 184.151.183.228/184.151.183.236
2019-01-21	Modified LTE EPC realm info
2019-01-21	Modified LTE EPC Realm
2017-02-09	Added a Second IPX connection point (BICS)
2016-09-27	Updated LTE Info sheet
2016-08-25	Updated primary and secondary IP addresses for DEA FQDN
2015-11-04	Updated VPMN 3GLTE Service supporting Scenario 2..keep in mind Bell Canada VPMN SGSN will not support gateway selection using UE-Capability.
2015-08-27	Updated EPC Realm table to include epc in front of REALM
2015-06-01	Updated FQDN and EPC Realm...removing leading EPC
2015-04-24	Updated LTE info with EPC and FQDN
2015-01-13	Updated LTE Info area of support
2014-11-28	Added a list of additional Diameter Peers for each MME Hostnames (Cards 1-12)
2014-03-12	Added a list of additional Diameter Peers for each MME (Cards 03-12)
2013-12-13	LTE QOS profile updated

M2M Roaming Information

TADIG code: CANBM

Section ID: 23 (Conditional)

Section is also applicable for the following TADIG codes:

CANMM

Effective date of change: 2020-08-11

<i>List of Sub Range IMSI</i>	Subrange IMSI	Description	Example
	302690	OB only for M2M/IOT Roaming	epc.mnc690.mcc302.3gppnetwork.org

<i>APN M2M List</i>	APN	Username	Password	ISP DNS Primary IP Address	ISP DNS Secondary IP Address
	mnet.bell.ca.ioe	not used	not used		
	inet.bell.ca.m2m	not used	not used		

History of changes

Date	Description
2020-08-11	Included example 302690 EPC
2020-04-16	Added M2M info for OB only Roaming with 302690 CANMM

VoLTE Roaming Information Section

TADIG code: CANBM

Section ID: 26 (Conditional)

Effective date of change: 2020-02-07

VoLTE roaming architectures		
Architecture	VPMN	HPMN
LBO HR	Unsupported	Unsupported
LBO VR	Unsupported	Unsupported
S8HR	Supported	Supported

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

S8HR roaming constraints	
VPLMN technology Strategy for EC	IMS, CS Fallback
Lawful Interception	Yes
EPS QoS to be enforced	4GQOS

Local emergency numbers in use at the VPMN	
Number	Service
911	Ambulance, Fire and Police
112	Ambulance, Fire and Police

History of changes

Date	Description
2020-02-07	VoLTE info updated for Emergency Calling support both via IMS and CS Fallback
2020-01-31	Adding VoLTE
2020-01-31	Updating VoLTE information

CONTACT INFORMATION

TADIG code: CANBM

Section ID: 21 (Optional, Repeating)

Effective date of change: 2020-09-09

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

Location		Mississauga, Ontario, Canada	
Office Time Zone in UTC		-05:00	
Office Hours	Week Day (s)	Start Time	End Time
	Mon Tue Wed Thu Fri	08:30:00	17:00:00

Main Contact for Troubleshooting (Office Hours)

Team Name	Tel.	Mobile	Fax	Email
Roaming Faults	+19056143480			roamingfaults@bell.ca

Escalation Contact for Troubleshooting

Person Name	Tel.	Mobile	Fax	Email
Mr Terry Rolston				terry.rolston@bell.ca

24 x 7 Troubleshooting (contact out of Office Hours)

Team Name	Tel.	Mobile	Fax	Email
No After Hours				

Roaming Troubleshooting Ticketing System Information**Ticket system web address**<https://www.tac.bell.ca>**Ticket system email address**

roamingfaults@bell.ca

Additional Contacts**SCCP Inquires and ordering of SS7 Routes**

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

Roaming Coordinator

Person Name	Tel.	Mobile	Fax
Natalie Schwarze	+19052822188		
JobTitle	Email		
Roaming Coordinator	roaming@bell.ca		

IREG Tests

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

TADIG Tests

Person Name	Tel.	Mobile	Fax
Darcy Hunter	9056147459		
JobTitle	Email		
Tadig Support	tadig@bell.ca		
Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

CAMEL Tests

Person Name	Tel.	Mobile	Fax
Natalie Schwarze	+19052822188		
JobTitle	Email		
Roaming Coordinator	roaming@bell.ca		

GPRS Tests

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

Contact Person(s) in PMN for GRX connectivity

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

Contact Person(s) in PMN for GRX Provider

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

Contact person(s) for IW MMS

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

Contact Person(s) for WLAN

Person Name	Tel.	Mobile	Fax
William Pezza	+19056143774 +19056143480		
JobTitle	Email		
IREG Coordinator	IREG@bell.ca		

Other contact(s)

Person Name	Tel.	Mobile	Fax
Gord Tait	+19056143983		
JobTitle	Email		
IREG Advisor	roamingperformance@bell.ca		
Person Name	Tel.	Mobile	Fax
Mr Terry Rolston			
JobTitle	Email		
Network Roaming Manager	terry.rolston@bell.ca		

IR21 Distribution Email Address

Email
IREG@bell.ca roaming@bell.ca roamingfaults@bell.ca

History of changes

Date	Description
2020-09-09	Updated Contacts
2020-02-07	Updated Network IREG Contact Primes
2019-11-25	Updated our other contacts sections
2019-06-21	Updated contact primes
2019-06-21	Updated Contact info
2017-11-09	Corrected Work schedule
2017-11-09	Corrected Contact info and Work day time
2017-10-17	Updated Team info
2016-05-12	Troubleshooting contacts updated
2016-05-12	Distribution Updated
2016-05-12	Updating contacts
2016-05-12	Updated Escalation Contact
2014-06-03	Corrected contact info in address book
2014-06-03	Contact info correction
2014-06-03	Corrected Contact info
2014-06-03	Corrected contact info

Date	Description
2012-05-03	Updated Contact info.

SECTIONS NOT IN USE

TADIG Code	Section ID	Section Name
CANBM	6	Domestic SCCP Gateway
CANBM	18	MMS Interworking Information
CANBM	19	WLAN Information
CANBM	22	Hosted Networks
CANBM	24	MVNO Information
CANBM	27	LPWA Roaming Information Section

NETWORK

TADIG code: CANMM

Section ID: 2 (Mandatory, Repeating)

TADIG code:	CANMM
Network name:	Bell Mobility Canada
Network type:	Terrestrial
Technology:	Frequency list:
2G-GSM frequencies:	Unsupported
3G-UTRA/FDD frequencies:	2 - PCS 1900, 4 - AWS, 5 - 850 MHz
3G-UTRA/TDD frequencies:	Unsupported
4G-E-UTRAN frequencies:	2 - PCS 1900, 5 - 850 MHz, 4 - AWS
4G-E-UTRAN-MIoT-LTE-M frequencies:	Unsupported
4G-E-UTRAN-MIoT-NB-IoT frequencies:	Unsupported
MIoT-NB-IoT deployment modes:	Unsupported
Presentation of country initials and MNN:	CAN BM
Abbreviated MNN:	CANBM

NETWORK INFORMATION

TADIG code: CANMM

Section ID: 3 (Mandatory)

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

ROUTING INFORMATION

TADIG code: CANMM

Section ID: 4 (Mandatory)

Effective date of change: 2019-01-21

CCITT E.164 Number series	Country Code (CC)	National Destination Code (NDC)	SN Range Start	SN Range Stop	Primary International DPC	Secondary International DPC	MVNO Number	Location
MSISDN number ranges (s)								
	1	204	0000	9999				
	1	226	0000	9999				
	1	236	0000	9999				
	1	249	0000	9999				
	1	250	0000	9999				
	1	289	0000	9999				
	1	306	0000	9999				
	1	343	0000	9999				
	1	365	0000	9999				
	1	367	0000	9999				
	1	403	0000	9999				
	1	416	0000	9999				
	1	418	0000	9999				
	1	431	0000	9999				
	1	437	0000	9999				
	1	438	0000	9999				
	1	450	0000	9999				
	1	506	0000	9999				
	1	514	0000	9999				
	1	519	0000	9999				
	1	548	0000	9999				
	1	579	0000	9999				
	1	581	0000	9999				
	1	587	0000	9999				
	1	604	0000	9999				
	1	613	0000	9999				
	1	639	0000	9999				
	1	647	0000	9999				
	1	672	0000	9999				
	1	705	0000	9999				
	1	709	0000	9999				
	1	778	0000	9999				
	1	780	0000	9999				
	1	782	0000	9999				
	1	807	0000	9999				
	1	819	0000	9999				
	1	825	0000	9999				
	1	867	0000	9999				
	1	873	0000	9999				
	1	902	0000	9999				
	1	905	0000	9999				

Network Nodes Global Title Number Range(s)								
	1	403408	0000	9999				
	1	438276	0000	9999				
	1	604348	0000	9999				
	1	647383	0000	9999				
	1	647384	0000	9999				
	1	902718	0000	9999				

E. 212 Number series	Mobile Country Code (MCC)	Mobile Network Code (MNC)
	302	690

E. 214 Mobile Global Title (MGT)	Country Code of MGT (CC)	Network Code of MGT (NC)
	1	90271

Does Number Portability apply ?	Yes
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Is 15 Digit MSISDN Supported ?	Yes
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History of changes

Date	Description
2019-01-21	Added new MSISDN ranges 1367, 1672, 1825
2018-01-29	Updated MSISDN Number Ranges available
2017-09-05	adding network attributes
2017-09-05	Updated Routing info

INTERNATIONAL SCCP GATEWAY

TADIG code: CANMM

Section ID: 5 (Optional)

Effective date of change: 2017-09-05

International SCCP carrier list	
SCCP carrier name:	Syniverse
Connectivity information:	Primary
MNO TADIG code list:	
DPC info:	
Signature:	Syniverse ITU
Type:	SCCP, STP
International DPC:	3.30.5
Comments:	
DPC info:	
Signature:	Syniverse ANSI
Type:	SCCP, STP
International DPC:	235.250.0
Comments:	

History of changes

Date	Description
2017-09-05	Adding SCCP info
2017-09-05	updated

SCCP Protocol available at PMN for connection for International SS7 Roaming

TADIG code: CANMM

Section ID: 7 (Optional)

Effective date of change: 2017-09-05

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

History of changes

Date	Description
2017-09-05	adding info

SUBSCRIBER IDENTITY AUTHENTICATION

TADIG code: CANMM

Section ID: 8 (Optional)

Effective date of change: 2017-09-05

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	Milenage, A5/1

History of changes

Date	Description
2017-09-05	Updated info

MOBILE APPLICATION PART (MAP)

TADIG code: CANMM

Section ID: 10 (Optional)

Effective date of change: 2020-02-24

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

History of changes

Date	Description
2020-02-24	Corrected MAP section as PLMN 302690 is outbound only
2017-09-05	added info

NETWORK ELEMENTS INFORMATION

TADIG code: CANMM

Section ID: 13 (Optional)

Effective date of change: 2018-01-29

Node type	Node ID	GT address / Address range	IP address / Address range	IPv6 address / Address range	Vendor info	SW / HW version	UTC offset
HLR	Front_End	1 902718 0070 / 0075			NSN	9.0 SP2	-03:00
HLR	Front_End	1 902718 0080 / 0081			NSN	9.0 SP2	-03:00
HLR	Front_End	1 902718 0091 / 0091			NSN	9.0 SP2	-03:00
HLR	Back_End	1 647384 0081 / 0086			NSN	9.0 SP2	-05:00
HLR	Front_end	1 647384 0050 / 0060			NSN	9.0 SP2	-05:00
HLR	Front_End	1 647383 2011 / 2011			NSN	9.0 SP2	-05:00
HLR	Front_End	1 438276 0051 / 0060			NSN	9.0 SP2	-05:00
SMSC	Router_1	1 902718 2100 / 2102					-03:00
SMSC	Router_2	1 902718 2111 / 2112					-03:00
SMSC	Router_Alias	1 902718 2120 / 2124					-03:00
SMSC	Router_Alias	1 438276 2040 / 2040					-05:00
Other	Enhanced Service	1 647384 2030 / 2038					-05:00
Other	Enhanced Service	1 647384 2050 / 2052					-05:00
Other	IOT	1 647384 2055 / 2056			Mobileum		-05:00
Other	IOT	1 438276 2055 / 2056			Mobileum		-05:00

History of changes

Date	Description
2018-01-29	Added GT's for IOT purposes 14382762055-56 and 16473842055-56
2017-10-19	Added new GT's
2017-09-05	Added Network Elements

Packet Data Services Information

TADIG code: CANMM

Section ID: 16 (Conditional)

Effective date of change: 2018-08-22

List of APN Operator Identifiers

APN Operator Identifier	Description	Example
mnc690.mcc302.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			
mnet.bell.ca.ioe			H-APN	204.101.237.136	
inet.bell.ca.m2m			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		
proxy.bell.ca			204.101.237.163	http://mms.bell.ca/mms/wapenc

IPv6 Connectivity Information

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

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

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

Multiple PDP Context Support

Number of Primary PDP Context	4
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History of changes

Date	Description
2018-08-22	Corrected APN to show Home Routed
2017-09-05	updated info

IP - Roaming and IP - Interworking Information

TADIG code: CANMM

Section ID: 17 (Conditional)

Effective date of change: 2020-10-26

List of All IP address ranges used by PMN for connection to inter - PMN IP backbone	IP Address Range
	67.69.81.16/29
	67.69.81.32/28
	67.69.81.48/28
	184.151.62.224/29
	184.151.62.232/29
	184.151.172.0/27
	193.181.247.0/24
	193.181.247.0/26
	193.181.247.64/26
	193.181.247.128/29
	193.181.247.144/29
	184.151.174.0/27
	184.151.126.48/29
	184.151.126.248/29
	207.236.223.16/29
	184.151.229.128/27
	69.158.209.32/28
	69.128.235.112/28
	69.158.242.80/28
	69.158.244.64/28

List of Autonomous System Number (ASN):	ASN
	28852

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
67.69.81.38		W0110CnBDNQ2.mnc690.mcc302.gprs W0110CnBDNQ2.mnc690.mcc302.3gppnetwork.org
67.69.81.54		E0100CnBDNT2.mnc690.mcc302.gprs E0100CnBDNT2.mnc690.mcc302.3gppnetwork.org
67.69.81.20		W0575CnBDNP1.mnc690.mcc302.gprs W0575CnBDNP1.mnc690.mcc302.3gppnetwork.org
69.158.209.35		w0569cnbvdnrs.mnc690.mcc302.3gppnetwork.org
69.128.235.115		f1252cnbvdnrb.mnc690.mcc302.3gppnetwork.org

List of GRX Providers	GRX Provider
	Syniverse

History of changes

Date	Description
2020-10-26	Added 69.158.242.80/28 and 69.158.244.64/28 to IP Interworking section
2020-10-20	Update CANMM DNS servers
2020-10-20	Update CANMM DNS Servers
2020-02-25	Changed IP 184.151.174.0 from /27 to /25. Also added 207.236.238.32/27
2020-02-25	Reversed changes to IP 184.151.174.0/27 and 207.236.238.32/27 as these should not be here.
2020-02-24	Added new Effective March 16 Authoritative DNS Servers 69.158.209.35 and 69.128.235.115
2020-02-24	Added DNS server Names for 69.158.209.35 and 69.128.235.115
2019-03-06	added PGW IP 184.151.229.128/27
2018-08-22	Added IP Ranges 207.236.223.16/29, 184.151.126.48/29 and 184.151.126.248/29
2017-10-17	Added IP 184.151.174.0/27

Date	Description
2017-09-05	Updated IP info

LTE Roaming Information

TADIG code: CANMM

Section ID: 20 (Optional)

Effective date of change: 2020-10-26

IPX Provider Name	IPX DA Realm Used	Diameter Architecture
Syniverse		

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

EPC Realms For Roaming	
	epc.mnc690.mcc302.3gppnetwork.org
	epc.mnc610.mcc302.3gppnetwork.org

FQDN Diameter Edge Agent

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

S6d used for legacy SGSN	S9 used for PCC
false	false

SMS ITW

SMS delivery over IP	SMS delivery over NAS
false	true

Voice ITW

CSFB

Roaming CS Fallback

Roaming Retry (MTTR)

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

List of LTE QOS profiles

Profile name:	LTEQOS
QCI Value List:	8
QOS ARP List:	11
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	No	No

History of changes

Date	Description
2020-10-26	Updated FQDN Information
2020-10-26	Updated FQDN Information for 302690
2020-10-20	Updated LTE FQDN table for PLMN CANMM
2020-02-25	Two new primary and secondary Diameter agents 69.158.233.20/69.158.233.8 and 184.151.183.228/184.151.183.236

Date	Description
2019-03-05	Updating with additional EPC Realm of our core network 302610
2019-02-22	Enabled Diameter for Roaming Interconnection and updated FQDN MNC690.mcc.3gppnetwork.org
2018-08-22	added 302690 EPC
2017-09-05	Updated LTE Info
2017-09-05	updated

CONTACT INFORMATION

TADIG code: CANMM

Section ID: 21 (Optional, Repeating)

Effective date of change: 2017-11-09

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

Location		Mississauga, Ontario Canada	
Office Time Zone in UTC		-05:00	
Office Hours	Week Day (s)	Start Time	End Time
	Mon Tue Wed Thu Fri	08:30:00	17:00:00

Main Contact for Troubleshooting (Office Hours)

Team Name	Tel.	Mobile	Fax	Email
Network Roaming	+19056143480			roamingfaults@bell.ca

Escalation Contact for Troubleshooting

Person Name	Tel.	Mobile	Fax	Email
Mr William Pezza	+19056143774	+14162544186		william.pezza@bell.ca

24 x 7 Troubleshooting (contact out of Office Hours)

Team Name	Tel.	Mobile	Fax	Email
No After Hours				

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 William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

Roaming Coordinator

Person Name	Tel.	Mobile	Fax
Mr Derek Kordas	+19052824780		
JobTitle	Email		
Roaming Coordinator	roaming@bell.ca		
Person Name	Tel.	Mobile	Fax
Miss Natalie Schwarze	+19052822188		
JobTitle	Email		
Roaming Coordinator	roaming@bell.ca		

IREG Tests

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

TADIG Tests

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

CAMEL Tests

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

GPRS Tests

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

Contact Person(s) in PMN for GRX connectivity

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

Contact Person(s) in PMN for GRX Provider

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

Contact person(s) for IW MMS

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

Contact Person(s) for WLAN

Person Name	Tel.	Mobile	Fax
Mr William Pezza	+19056143774	+14162544186	
JobTitle	Email		
IREG Coordinator	william.pezza@bell.ca		

IR21 Distribution Email Address

Email
ireg@bell.ca roaming@bell.ca

History of changes

Date	Description
2017-11-09	Corrected the 24/7 section
2017-10-17	Updated Contact info
2017-09-05	Updated distribution info
2017-09-05	Updated Contact info
2017-09-05	Updated Contact info
2017-09-05	Updated Contact info

SECTIONS NOT IN USE

TADIG Code	Section ID	Section Name
CANMM	6	Domestic SCCP Gateway
CANMM	9	Test Numbers Information
CANMM	11	MAP Optimal Routing Section
CANMM	12	MAP Inter Operator SMS Enhancement
CANMM	14	USSD Information
CANMM	15	CAMEL Information
CANMM	18	MMS Interworking Information
CANMM	19	WLAN Information
CANMM	22	Hosted Networks
CANMM	23	M2M Roaming Information
CANMM	24	MVNO Information
CANMM	26	VoLTE Roaming Information Section
CANMM	27	LPWA Roaming Information Section