



**GTX Mobile Messaging SMS Gateway Interface
SMPP API Manual**

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Introduction

The Mobile Messaging SMS Gateway provides a SMPP interface for standardized connectivity. It is based on the protocol version 3.4 as described in the official specification:

https://www.gtx-messaging.com/fileadmin/files/SMPP_v3_4_Issue1_2.pdf

If you have trouble downloading this document please ask us for a copy.

This manual will answer some common questions regarding the connection and message submission. If you have further questions regarding this interface, please contact your account manager or file a trouble ticket to support@gtx-messaging.com.

Connectivity Settings

Target

The SMPP interface is reachable under the following address:

```
smpp.gtx-messaging.net
```

Your account manager will announce the target port upon account creation.

System Type

Please use the system type „WMA“.

Enquire Link Interval

To keep the connection alive, please send an `enquire_link` command every 60 seconds. If the SMPP gateway doesn't receive any message within 120 seconds it will close the connection by sending an `unbind` command.

Bind Mode

We recommend binding as a transceiver to be able to both send and receive messages.

Unbind Command

Please be aware that the SMPP gateway may send an `unbind` command to your client. You may reconnect automatically after a few seconds.

Throughput

By default your account is set up with a maximum throughput of 5 SMS per second. In case you want to increase this limitation please talk to your account manager.

TON / NPI Settings

This part explains the TON (Type Of Number) and NPI (Numbering Plan Indicator) settings that should be used with the Gateway. For further information please refer to the SMPP specification, sections 5.2.5 and 5.2.6.

Bind TON / NPI

When binding both TON and NPI should be set to NULL.

Source Address TON / NPI

When submitting messages please set the TON and NPI accordingly:

TON	NPI	Description
1	1	International numeric originator
2	1	Local / national originator, either shortcode or numeric
5	0	Alphanumeric originator

Destination Address TON / NPI

The destination address should always be submitted using TON = 1 and NPI = 1. The SMPP gateway always expects an international number format.

Delivery Reports (DLR)

Depending on the chosen product the underlying routing may or may not support DLRs. Please ask your account manager about DLR support on your product.

Reason Codes

The following DLR reason codes will be returned:

Errorcode (HEX)	Reason Description
0000	Success, No Error
0001	unknownSubscriber
0002	unknownBaseStation
0003	unknownMSC
0005	unidentifiedSubscriber
0006	absentsubscriberSM
0007	unknownEquipment
0008	roamingNotAllowed
0009	illegalSubscriber
000a	bearerServiceNotProvisioned
000b	teleserviceNotProvisioned
000c	illegalEquipment
000d	callBarred
000e	forwardingViolation
000f	cug-Reject
0010	illegalSS-Operation
0011	ss-ErrorStatus
0012	ss-NotAvailable
0013	ss-SubscriptionViolation
0014	ss-Incompatibility

Errorcode (HEX)	Reason Description
0015	facilityNotSupported
0017	invalidTargetBaseStation
0018	noRadioResourceAvailable
0019	noHandoverNumberAvailable
001a	subsequentHandoverFailure
001b	absentSubscriber
001c	incompatibleTerminal
001d	shortTermDenial
001e	longTermDenial
001f	subscriberBusyForMT-SMS
0020	sm-DeliveryFailure
0021	messageWaitingListFull
0022	systemFailure
0023	dataMissing
0024	unexpectedDataValue
0025	pw-RegistrationFailure
0026	negativePW-Check
0027	noRoamingNumberAvailable
0028	tracingBufferFull
002b	numberOfPW-AttemptsViolation
002c	numberChanged
002d	busySubscriber
002e	noSubscriberReply
002f	forwardingFailed
0030	or-NotAllowed
0031	ati-NotAllowed
0032	noGroupCallNumberAvailable
0033	resourceLimitation
0034	unauthorizedRequestingNetwork
0035	unauthorizedLCSCClient
0036	positionMethodFailure
003a	unknownOrUnreachableLCSCClient
0047	unknownAlphabet
0048	ussd-Busy
0056	subscriberLocationReport
2100	Unrecognized component
2101	Mistyped component
2102	Badly structured component
2200	Duplicate invoke ID
2201	Unrecognized operation
2202	Mistyped parameter
2203	Resource limitation
2204	Initiating release
2205	Unrecognized linked ID
2206	Linked response unexpected
2207	Unexpected linked operation

Errorcode (HEX)	Reason Description
2300	Unrecognized invoke ID
2301	Return Result unexpected
2302	Mistyped parameter
2400	Unrecognized invoke ID
2401	Return Error unexpected
2402	Unrecognized error
2403	Unexpected error
2404	Mistyped parameter
6000	memoryCapacityExceeded
6001	equipmentProtocolError
6002	equipmentNotSM-Equipped
6003	unknownServiceCentre
6004	sc-Congestion
6005	invalidSME-Address
6006	subscriberNotSC-Subscriber
8000	Unrecognized message type
8001	Unrecognized transaction ID
8002	Badly formatted transaction portion
8003	Incorrect transaction portion
8004	Resource limitation
800b	Dialogue collision
8010	Node not reachable
81xx	Incorrect message length
82xx	Missing mandatory IE
83xx	Incorrect IE length
84xx	Bad parameter value
85xx	No free dialogues
86xx	Invalid dialogue ID
87xx	Exceeded maximum length
88xx	Invalid parameter
89xx	Inappropriate transport message
8axx	Agent not registered
8bxx	Dialogue collision
8cxx	TC User not bound
c001	sc-AddressNotIncluded
c002	mnrf-Set
c004	mcef-Set
c008	mnrq-Set
e001	The dialogue has received a MAP-DELIMITER unexpectedly.
e002	The dialogue has received a MAP-SERVICE-REQUEST unexpectedly.
e010	Could not decode an ASN.1 encoded parameter.
e011	Could not ASN.1 encode a parameter.
e020	Dialogue queue size exceeded.
e040	Dialogue timed out, i.e. the far side did not respond or there is a network problem.
e080	Invalid delivery outcome (< 0 or > 2 on any MAP level, or 1 on MAP 1)
e081	Invalid destination address

Errorcode (HEX)	Reason Description
e1xx	Could not open MAP dialogue the lowest 8 bits contain the code returned by TDAPI
ff00	(GTX) Internal error
ff01	(GTX) Destination temporarily not available
ff02	(GTX) Networklookup temporarily failed
ff03	(GTX) Rejected by MNO
ff04	(GTX) Unknown/Unmappable MNO errorcode
ff05	(GTX) Expired
ff06	(GTX) Blacklisted MSISDN
ff07	(GTX) MNP not supported
ff08	(GTX) Insufficient Credit
ff81	Incorrect message length
ff82	Missing mandatory IE
ff83	Incorrect IE length
ff84	Bad parameter value
ff85	No free dialogues
ff86	Invalid dialogue ID
ff87	Exceeded maximum length
ff88	Invalid parameter
ff89	Inappropriate transport message
ff8a	Agent not registered
ff8b	Dialogue collision
ff8c	TC User not bound
ffe1	Could not open MAP dialogue

Note

SMS rejected by errorcodes "ff00", "ff01", "ff02" and "ff08" will not be charged.

DLR Example

```
id:abcdef12-3456-7890-abcd-ef123456789 sub:001
dlvrd:001 submit date:1105011200
done date:1105011200
stat:DELIVRD err:0000 text:
```