# SMSC SMPP User Guide

Modified: 2020-08-28
Version: 1.4
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# 1 Index



# 2 Change history

| Rev | Date | By | Changes from previous release |
|---|---|---|---|
| 1.0 | 2010-03-16 | KCN | Created |
| 1.1 | 2019-06-11 | TPE | Updated LINK logos |
| 1.2 | 2019-09-27 | PNI | Added reference to SMPP 3.4 specification |
| 1.3 | 2019-10-31 | EP | Observation about the *validity_period* tag |
| 1.4 | 2020-08-28 | KCN | Added information regarding supported TLS versions |

# 3 Introduction

LINK Mobility has been a SMS distributor since 2001 and has much experience in working with both operators and connection aggregators. This platform is designed to handle large traffic volumes, maintain a high availability and make it easy to route traffic via multiple connections.

This is document describes the SMPP interface to the SMSC-platform and which parameters and commands that are required and which parameters are supported.

This document will not handle specific use cases as concatenated messages, WAP-push, Flash SMS, etc. More information about those cases can be provided by contacting support.

# 4 Supported commands

LINK Mobility's server should be treated as SMPP 3.4. The official specification can be found at https://smpp.org/SMPP_v3_4_Issue1_2.pdf.
All methods are not supported, and all differences are specified below.

## 4.1 Bind

The following bind commands are supported.

- Transmitter
- Transciever
- Receiver

Required parameters:

- system_id – obtained from support
- password – obtained from support

Optional parameters:

- addr_ton – default value if TON is set to Unknown during submit.
- addr_npi – default value if NPI is set to Unknown during submit.

Unsupported parameters:

- address_range

## 4.2 Unbind

The unbind command is supported.

## 4.3 Enquire link

The enquire link command is supported and should be called every 60 seconds.

## 4.4 Submit

The submit method should be used for delivering messages.

Required parameters:

- source_addr_ton
- source_addr_npi
- source_addr
- dest_addr_ton
- dest_addr_npi
- dest_addr
- esm_class
- data_coding
- sm_length
- short_message

Unsupported parameters:

- service_type
- protocol_id
- priority_flag
- schedule_delivery_time
- replace_if_present_flag
- sm_default_msg_id

Note that the payload tag is not supported and only one SMS may be delivered per call and it is recommended that the *validity_period* tag has a value of 15 minutes long at least.

### 4.4.1 Recommended TON and NPI

The following TON and NPI should be used when sending messages using submit command.

#### 4.4.1.1 Source

The following TON and NPI combinations are supported for source address. All other combinations will be treated as invalid. The default TON from bind command will be used if TON is set to Unknown (0). The default NPI from bind command will be used if NPI is set to Unknown (0).

| TON | NPI | Description |
|---|---|---|
| Alphanumeric (5) | Unknown (0)<br>ISDN (1) | Will be treated as Alphanumeric sender text |
| International (1) | Unknown (0)<br>ISDN (1) | Will be treated as MSISDN |
| National (2)<br>Network specific (3)<br>Subscriber number (4)<br>Abbreviated (6) | Unknown (0)<br>ISDN (1)<br>National (8) | Will be treated as country specific short number. |

#### 4.4.1.2 Destination

The following TON and NPI combinations are supported for destination address. All other combinations will be treated as invalid. The default TON from bind command will be used if TON is set to Unknown (0). The default NPI from bind command will be used if NPI is set to Unknown (0).

| TON | NPI | Description |
|---|---|---|
| International (1) | Unknown (0)<br>ISDN (1) | Will be treated as MSISDN |

### 4.4.2 Supported encodings

The following encodings are supported. X may contain any value.

| DCS | Encoding |
|---|---|
| 0xX0 | Default GSM Alphabet with extension |
| 0xX2 | 8-bit binary |

| | |
|---|---|
| 0xX8 | UCS2 (ISO-10646-UCS-2) |

# 5 Delivery report

Only none or final delivery with successful/failure result are supported.

Format on delivery report:

```
id: xxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxxx done date: yyMMddHHmm stat: <status>
```

Available values in status:

- DELIVRD
- EXPIRED
- REJECTD
- UNDELIV
- DELETED

# 6 Supported TLS versions

From 2020-11-15 will TLS 1.2 or higher be required for all TLS connections.

Support for TLS 1.0 and 1.1 will be discontinued. Versions 1.0 and 1.1 of TLS are older protocols that have been deprecated and are considered as security risks in the Internet community.

LINK strongly recommend to use TLS if unencrypted connections are being used today. HTTP is deprecated as of 2020-09-01 by LINK, and will be removed in the future. Date for HTTP removal is not yet decided.

Connections towards the SMPP server for TLS is at port 3601 instead of unencrypted at port 3600.

You may still use TLS even if your SMPP implementation doesn't support TLS using stunnel, see https://www.stunnel.org/