Technical documentation

SMPP specifications

# SMPP

## SMPP specification

The connection between the application and the system’s SMPP server is SMPP version 3.4 (version 3.3 is not supported).

Table 13 SMPP parameters

|  |  |
| --- | --- |
| Name | Description |
| **system\_id** | Provided for each client |
| **password** | Provided for each client |
| **IP address** | Connection point: 107.20.199.106 |
| **port** | 8888 / 8887 (ssl) |
| **timeout** (keep alive or msg) | 30 sec |
| **system\_type** (optional) | <r:route\_code> |

You are allowed to bind as transmitter, receiver or transceiver. In order to receive delivery reports,  
you must bind as transceiver or receiver.

You’ll receive delivery reports only if your route provides delivery reporting. Delivery reports will be sent  
equally over all of your currently available sessions capable of receiving them (transceiver or receiver).

You are allowed to bind with at most 4 sessions.

**PDUs supported:**

bind\_transmitter, bind\_receiver, bind\_transceiver, unbind, submit\_sm, deliver\_sm, enquire\_link

**DR format:**

“id:<message\_id> sub:<message\_sub> dlvrd:<message\_dlvrd>

submit date:<message\_submit\_date> done date:<message\_done\_date>

stat:<message\_stat> err:<message\_err>”

**Delivery statuses (message\_stat):**

DELIVRD, EXPIRED, DELETED, UNDELIV, ACCEPTD, DELIVERY UNKNOWN, REJECTED

**Text encoding**

Please use GSM7 (IA5) as default encoding when sending messages.  
If you are using ISO-8859-1 (Latin1) please let us know so that we can set up your account properly.

**Scheduled delivery**

Scheduled delivery is supported over SMPP protocol using the relative time format. For example, “070605040302100R” would mean that message will be delivered 7 years, 6 months, 5 days, 4 hours, 3 minutes, 2 seconds and 1 tenth of second from now.

**Using different routes**

In case you are allowed to use several different routes, you must use system\_type parameter in the bind request.  
System\_type parameter should be in “R:route\_code” format (example: “R:route\_hq”).  
The route code will be provided by your key account manager.

In case you set system\_type = null (“”), the default routing setup will be used.

## Number Context over SMPP specification

Using SMPP account, it is possible to request Number Context data (IMSI). In order to use Number Context, you can use your default  
system\_id and password, setting system\_type = “HLR” (without quotation marks) in Bind PDU.

SubmitSM PDU is used for submitting the Number Context request, having destAddress parameter set to the required destination address. All other parameters will be ignored (srcAddress, TON/NPI, etc). Number Context subsystem will respond using a regular SubmitSMResp, containing message-id reference.

Once the Number Context request is being finalized on the system, you will receive DeliverSM PDU, containing the IMSI for the required destAddress, or error code in case of failure. DeliverSM will contain short message data with our regular delivery report, together with “IMSI:xxxxxxxxx” part (containing IMSI), serving MSC and a number of optional info fields depending  
on your package.

Table 14 Optional info fields (parameters)

|  |  |  |  |
| --- | --- | --- | --- |
| ***Name*** | ***Type*** | ***Hex*** | ***Decimal*** |
| Original network name | TLVString | 0x1412 | 5138 |
| Original network prefix | TLVString | 0x140B | 5131 |
| Original country | TLVString | 0x1422 | 5154 |
| Original country code | TLVString | 0x1423 | 5155 |
| Original country prefix | TLVString | 0x1424 | 5156 |
| Ported network name | TLVString | 0x1413 | 5139 |
| Ported country prefix | TLVString | 0x1442 | 5186 |
| Ported network prefix | TLVString | 0x143e | 5182 |
| Ported network country name | TLVString | 0x143f | 5183 |
| Is number ported | TLVInt | 0x1421 | 5153 |
| Roaming network name | TLVString | 0x1414 | 5140 |
| Roaming network prefix | TLVString | 0x1419 | 5145 |
| Roaming country name | TLVString | 0x1415 | 5141 |
| Roaming country code | TLVString | 0x1417 | 5143 |
| Roaming country prefix | TLVString | 0x1420 | 5152 |
| MCCMNC | TLVString | 0x1416 | 5142 |
| Price per message[[1]](#footnote-1) | TLVInt | 0x1418 | 5144 |
| Serving HLR | TLVString | 0x1409 | 5129 |
| Is number correct | TLVInt | 0x1425 | 5157 |

Beside DeliverSM.shortMessage, we included IMSI also as an extra-optional parameter:

SMPP\_VENDOR\_SPECIFIC\_IMSI = 0x1403

**Examples**

**In case Number Context request was successful**, DeliverSM will be as follows (IMSI 21910110053751):

addr: 0 0 38591xxxxxxx

addr: 0 0 0000000000

msg: id:40072910491427628 sub:001 dlvrd:001 submit date:1007291049 done date:1007291049 stat:DELIVRD err:000 IMSI:219101100935850 MSC:38591016 HLR:38591xxxxxxx ORN:VipNet PON:VipNet RON:VipNet ROC:HR MCCMNC:21910

opt: (oct: (tlv: 1059) 030000) (byte: (tlv: 1063) 2) (str: (tlv: 30) 40072910491427628) (str: (tlv: 5129) 38591xxxxxxx) (str: (tlv: 5138) VipNet) (str: (tlv: 5139) VipNet) (str: (tlv: 5140) VipNet) (str: (tlv: 5141) Croatia ) (str: (tlv: 5143) HR) (str: (tlv: 5142) 21910) (int: (tlv: 5144) 1) (str: (tlv: 5145) 91) (str: (tlv: 5152) 385) (int: (tlv: 5153) 1) (str: (tlv: 5154) Croatia ) (str: (tlv: 5155) HR) (str: (tlv: 5156) 385) (int: (tlv: 5157) 1) ) (extraopt: (oct: (tlv: 5123) 323139313031313030393335383530) (oct: (tlv: 5126) 3338353931303136) )

**If an error occurred**, DeliverSM will be as follows:

addr: 0 0 385915369423

addr: 0 0 0000000000

msg: id:40072910491419819 sub:001 dlvrd:001 submit date:1007291049 done date:1007291049 stat:UNDELIV err:001 IMSI: MSC: ORN:VipNet MCCMNC:

opt: (oct: (tlv: 1059) 030001) (byte: (tlv: 1063) 5) (str: (tlv: 30) 40072910491419819) (str: (tlv: 5138) VipNet) (str: (tlv: 5142) ) (int: (tlv: 5144) 1) (int: (tlv: 5153) 0) (str: (tlv: 5154) Croatia ) (str: (tlv: 5155) HR) (str: (tlv: 5156) 385) (int: (tlv: 5157) 1) )

## Flash notifications over SMPP specification

You can use your SMPP account to send Flash notifications. Such notifications are immediately displayed on your mobile phone screen upon arrival and aren’t stored in the memory of such device. In order to use Flash notifications, you can use your default system\_id and password, setting system\_type = “NSMS” (without quotation marks) in Bind PDU.

Procedure for submitting Flash notifications is exactly the same as for normal SMS, using SubmitSM PDU. The system will automatically convert your message into Flash notification using message parameters you have submitted.

Delivery reports will be sent to you using DeliverSM PDU.

Please note that long SMS feature is not supported for Flash notifications.

1. For compatibility reasons, price per message is multiplied by 100 [↑](#footnote-ref-1)