



**GLOBAL MOBILE MESSAGING**

## **Technical Specification**

### **SMPP INTERFACE 1.0 TO THE QUIOS MESSAGING PLATFORM**

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[custsupport@quios.net](mailto:custsupport@quios.net)

# Table of Contents

<b>1</b>	<b>INTRODUCTION.....</b>	<b>2</b>
<b>2</b>	<b>QUIOS IMPLEMENTATION OF SMPP .....</b>	<b>2</b>
2.1	CONNECTING THROUGH SMPP .....	2
2.2	PDUS SUPPORTED BY QUIOS.....	2
2.3	RECOMMENDED VALUES FOR SMPP <code>SUBMIT_SM</code> PARAMETER SET.....	3
2.4	EXAMPLE SMPP <code>SUBMIT_SM</code> PARAMETER SET .....	4
2.5	QUIOS RESPONSES .....	4

# 1 Introduction

Authorized users of the Quios Messaging Platform can programmatically submit messages for delivery to handsets worldwide through a standard SMPP stream. Quios is ideal for sending large numbers of SMSs directly from a database or other content provider application.

The SMPP Interface to the Quios Messaging Platform conforms to the SMPP Protocol Specification v3.4, except as noted in Section 2.2. Refer to that specification for details on constructing a calling application to access Quios via SMPP.

The sender receives standard SMPP responses indicating the success or failure of the messages.

## 2 Quios implementation of SMPP

### 2.1 Connecting through SMPP

The Quios Messaging Platform can act as an SMPP SMSC. The Calling Application can send requests directly using SMPP v3.4 to:

```
smpp.ewingz.com port 5555
```

### 2.2 PDUs supported by Quios

Quios supports the PDUs listed in Table 2-1.

**Table 2-1 PDUs supported by Quios**

PDU	Response
bind_transmitter	bind_transmitter_resp
bind_receiver	bind_receiver_resp
bind_transceiver	bind_transceiver_resp
submit_sm	submit_sm_resp
query_sm	query_sm_resp
deliver_sm	deliver_sm_resp
enquire_link	enquire_link_resp

If the Calling Application is bound as a receiver or transceiver, then Quios supports `deliver_sm`. In `submit_sm`, in the registered delivery field, only a registered delivery value of 1 or 0 is valid. Quios will generate a response to `enquire_link`. Use your Quios account username and password for `system_id` and `password`.

Quios sends two types of `deliver_sm` transmissions: delivery receipts and MO messages.

Quios adheres to the SMPP spec except in the following case: if the Calling Application sends an illegal PDU (i.e. one not listed in Table 4-1), then Quios returns a NACK (`generic_nack`) instead of returning the same response with an error code. Quios returns a NACK when the PDU is illegal for the current connection type (e.g. `submit_sm` when bound as a receiver), and when a PDU is generated at the wrong time (e.g. `submit_sm` sent before bind).

These situations should occur only during development; such errors are not expected for production Calling Applications.

## 2.3 Recommended values for SMPP `submit_sm` parameter set

Quios uses a variety of downstream providers for message delivery, choosing the provider based on each message's requirements for cost, coverage, and features. Quios passes the submission to its downstream providers without translating or altering the contents. Each provider supports a different subset of the SMPP functionality. The commonly-used parameters will usually work as described in the SMPP specification, but the more unusual parameters can have unexpected consequences on some providers. Table 2-2 lists the mandatory and optional values required for successful message delivery. Deviation from the values listed in Table 2-2 can cause unpredictable results.

If you need to use values not listed in Table 2-2, contact Quios customer support to discuss your routing needs.

See section 2.4 for an example of basic `submit_sm` parameters.

**Table 2-2 Recommended `submit_sm` parameter values**

Parameter	Mandatory value	Optional values and meaning	
<code>service_type</code>	"		
<code>source_addr_ton</code>	n/a	International	1
		National	2
		Alphanumeric	5
<code>source_addr_npi</code>	0x01		
<code>destination_addr</code>	n/a		
<code>dest_addr_npi</code>	0x01		
<code>esm_class</code>		Text, reply path off	0
		Text, reply path on	128
		UDHI indicator, reply path off	64
		UDHI indicator, reply path on	192
<code>protocol_id</code>	0x00		
<code>priority_flag</code>	0x03		
<code>scheduled_delivery_time</code>	"		
<code>validity_period</code>	"		
<code>registered_delivery</code>	n/a	On	29
		Off	16
<code>replace_if_present_flag</code>	0x00		
<code>data_coding</code>		GSM0338, Flash	240
		GSM 0338, Memory	241
		Binary	4
		UCS2	8
<code>sm_default_msg_id</code>	0x00		
<code>short_message</code>	n/a		
<code>sm_length</code>	n/a		

## 2.4 Example SMPP `submit_sm` parameter set

```
service_type           => 0,  
source_addr           => '14155556666',  
source_addr_ton       => 0,  
source_addr_npi       => 0,  
destination_addr      => '14155556666',  
dest_addr_ton         => 0,  
dest_addr_npi         => 0,  
esm_class              => 0x00,  
protocol_id           => 0x00,  
priority_flag         => 0x00,  
schedule_delivery_time => '',  
validity_period       => '',  
registered_delivery   => 0x10,  
replace_if_present_flag => 0x00,  
data_coding           => 0xf1,  
sm_default_msg_id     => 0x00,  
short_message         => 'test message',  
sm_length             => 12
```

## 2.5 Qios responses

The SMPP response returns the Qios response codes. These codes are listed in the document *Qios Response Codes*, available from Qios technical support.