



## HSL Short Message Peer-to-Peer (SMPP) Interfaces

Abbreviated SMPP Protocol Implementation Conformance Statement (PICS)

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## Introduction

This document describes the SMPP implementation used in the HSL service operated by Hay Systems Ltd (HSL).

## Operations Supported

Item	Functional Unit/Description	SMPP REF.	Supported YES / NO
PDU-OUTBIND	Is the <i>outbind</i> PDU supported?	4.1.7	NO
PDU-BIND-TRANSMITTER	Is the <i>bind transmitter</i> PDU supported?	4.1.1 4.1.2	YES
PDU-BIND-RECEIVER	Is the <i>bind receiver</i> PDU supported?	4.1.3 4.1.4	YES
PDU-BIND-TRANSCIEVER	Is the <i>bind transceiver</i> PDU supported?	4.1.5 4.1.6	YES
PDU-UNBIND	Is the <i>unbind</i> PDU supported?	4.2.1 4.2.2	YES
PDU-ESME-GENERIC-NACK	Is the <i>generic_nack</i> PDU initiated by the EMSE supported?	4.3.1	YES
PDU-SMSC-GENERIC-NACK	Is the <i>generic_nack</i> PDU initiated by the SMSC supported?	4.3.1	YES
PDU-SUBMIT-SM	Is the <i>submit_sm</i> PDU supported?	4.4.1 4.4.2	YES
PDU-SUBMIT-MULTI	Is the <i>submit_multi</i> PDU supported?	4.5.1 4.5.2	NO
PDU-DELIVER-SM	Is the <i>deliver_sm</i> PDU supported?	4.6.1 4.6.2	YES
PDU-ESME-DATA	Is the <i>data_sm</i> PDU initiated by the EMSE supported?	4.7.1	YES
PDU-SMSC-DATA	Is the <i>data_sm</i> PDU initiated by the SMSC supported?	4.7.1	YES
PDU-QUERY	Is the <i>query_sm</i> PDU supported?	4.8.1 4.8.2	YES
PDU-CANCEL	Is the <i>cancel_sm</i> PDU supported?	4.9.1 4.9.2	YES
PDU-REPLACE	Is the <i>replace_sm</i> PDU supported?	4.10.1 4.10.2	NO
PDU-ESME-ENQUIRE-LINK	Is the <i>enquire_link</i> PDU initiated by the EMSE supported?	4.11.1 4.11.2	YES
PDU-SMSC-ENQUIRE-LINK	Is the <i>enquire_link</i> PDU initiated by the SMSC supported?	4.11.1 4.11.2	YES
PDU-ALERT	Is the <i>alert_notification</i> PDU supported?	4.12.1	NO

## **BIND PDU**

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
BIND-1	Is <i>sc_interface_version</i> field supported in a response to the operation?	4.1.2, 4.1.4 4.1.6	<b>YES</b>
BIND-2	Is the <i>interface_version</i> field supported in the <i>bind_transceiver</i> operation?	Errata, 4.1.5	<b>YES</b>

## **SUBMIT\_SM PDU**

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
SUBMIT-1	Is the use of different values in the <i>service_type</i> field allowed?	5.2.11	<b>YES</b>
SUBMIT-2	Is the use of default values in the <i>source_addr</i> fields supported?	5.2.8	<b>YES</b>
SUBMIT-3	Is <i>scheduled_delivery</i> supported?	5.2.15	<b>YES</b>
SUBMIT-4	Is the <i>replace_if_present</i> functionality supported?	5.2.18	<b>YES</b>
SUBMIT-5	Are pre-defined short messages supported?	5.2.23	NO
SUBMIT-6	Is the use of the <i>validity_period</i> field supported?	5.2.16	<b>YES</b>
SUBMIT-7	Is the <i>user_message_reference</i> field supported?	5.3.2.17	<b>YES</b>
SUBMIT-8	Is the <i>source_port</i> field supported?	5.3.2.20	NO
SUBMIT-9	Is the <i>destination_port</i> field supported?	5.3.2.21	NO
SUBMIT-10-1	Is the <i>sar_msg_ref_num</i> , field supported?	5.3.2.22	NO
SUBMIT-10-2	Is the <i>sar_total_segments</i> field supported?	5.3.2.23	NO
SUBMIT-10-3	Is the <i>sar_segment_seqnum</i> field supported?	5.3.2.24	NO
SUBMIT-11	Is the <i>more_messages_to_send</i> field supported?	5.3.2.34	NO
SUBMIT-12	Is the <i>message_payload</i> field supported?	5.3.2.32	NO
SUBMIT-13	Is the <i>privacy_indicator</i> field supported?	5.3.2.14	NO
SUBMIT-15	Is the <i>source_subaddress</i> field supported?	5.3.2.15	NO
SUBMIT-16	Is the <i>dest_subaddress</i> field supported?	5.3.2.16	NO
SUBMIT-20	Is the <i>ms_validity</i> field supported?	5.3.2.27	NO
SUBMIT-21	Is the <i>number_of_messages</i> field supported?	5.3.2.39	NO

SUBMIT-22	Is the <i>alert_on_msg_delivery</i> field supported?	5.3.2.41	NO
SUMBIT-26	What is the maximum length of <i>message_payload</i> data supported?	5.3.2.32	N/A
SUMBIT-27	Is the <i>payload_type</i> field supported?	5.3.2.10	NO
SUMBIT-28	Is the <i>source_addr_subunit</i> field supported?	5.3.2.2	NO
SUMBIT-29	Is the <i>dest_addr_subunit</i> field supported?	5.3.2.1	NO
SUMBIT-30	Is the <i>ms_msg_wait_facilities</i> field supported?	5.3.2.13	NO

## ***DELIVER\_SM PDU***

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
DELIVER-1	Is the use of different values in the <i>service_type</i> field allowed?	5.2.11	<b>YES</b>
DELIVER-2	Is the <i>user_message_reference</i> field supported?	5.3.2.17	<b>YES</b>
DELIVER-3	Is the <i>source_port</i> field supported?	5.3.2.20	<b>YES</b>
DELIVER-4	Is the <i>destination_port</i> field supported?	5.3.2.21	<b>YES</b>
DELIVER-5-1	Is the <i>sar_msg_ref_num</i> field supported?	5.3.2.22	<b>YES</b>
DELIVER-5-2	Is the <i>sar_total_segments</i> field supported?	5.3.2.23	<b>YES</b>
DELIVER-5-3	Is the <i>sar_segment_seqnum</i> fields supported?	5.3.2.24	<b>YES</b>
DELIVER-6	Is the <i>user_response_code</i> field supported?	5.3.2.18	NO
DELIVER-7	Is the <i>privacy_indicator</i> field supported?	5.3.2.14	NO
DELIVER-8	Is the <i>message_payload</i> field supported?	5.3.2.32	<b>YES</b>
DELIVER-9	Is the <i>callback_num</i> field supported?	5.3.2.38	NO
DELIVER-10	Is the <i>source_subaddress</i> field supported?	5.3.2.15	NO
DELIVER-11	Is the <i>dest_subaddress</i> field supported?	5.3.2.16	NO
DELIVER-12	Is the <i>network_error_code</i> field supported?	5.3.2.31	<b>YES</b>
DELIVER-13	Is the <i>its_session_info</i> field supported?	5.3.2.43	NO
DELIVER-15	Is the <i>message_state</i> field supported?	5.3.2.35	<b>YES</b>
DELIVER-16	What is the maximum length of <i>message_payload</i> data supported?	5.3.2.32	<b>160</b>
DELIVER-17	Is the <i>payload_type</i> field supported?	5.3.2.10	NO

DELIVER-18	Is the <i>receipted_message_id</i> field supported?	5.3.2.12	<b>YES</b>
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### **QUERY\_SM PDU**

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
QUERY-1	Is the use of default values in the <i>source_addr</i> fields supported?	4.8	<b>YES</b>

### **CANCEL\_SM PDU**

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
CANCEL-1	Is the use of default values in the <i>source_addr</i> fields supported?	4.1.9	<b>YES</b>
CANCEL-2	Is the <i>message_id</i> of NULL, and thus cancelling a group of messages supported?	4.1.9	NO

## Functional Items

### ***Forward Compatibility Issues***

ITEM	Functional Unit/Description	SMPP REF.	Support YES / NO
FORWARD-1	If the application receives an unknown PDU does it return a <i>generic_nack</i> ?	3.3	YES
FORWARD-2	Are unsupported and unrecognised optional fields ignored?	3.3	YES
FORWARD-3	Are all 'reserved' values in parameters interpreted as the default value ?	3.3	NO
FORWARD-4	Are unrecognised values in parameter value fields treated as an error ?	3.3	YES
FORWARD-5	Is an inconsistent Optional parameter combinations counted as an error?	3.3	NO
FORWARD-6	Do invalid parameter lengths cause the PDU to be rejected?	3.3	YES

### ***Backward Compatibility Issues***

ITEM	Functional Unit/Description	SMPP REF.	Support YES / NO
BACK-1	Is it possible to make this implementation only support the v3.3 and not use any v3.4 features?	3.4	YES

### ***Implementation Issues***

ITEM	Functional Unit/Description	SMPP REF.	Support YES / NO
IMP-1	What is the maximum value for the PDU header field <i>command_length</i> which is supported by the implementation?	3.2.1	2048
IMP-2	Are all the optional parameters processed in an order independent manner?	3.2.4	YES

### ***Overall Message Types Supported***

ITEM	Functional Unit/Description	SMPP REF.	Support
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			<b>YES / NO</b>
TYPE-1	Are normal data messages transmitted?	2.11	YES
TYPE-2	Can SMSC Delivery Receipts be requested and obeyed?	2.11	YES
TYPE-3	Are intermediate notifications supported?	2.11	NO
TYPE-4	Are SME Delivery acknowledgements (Read receipts) supported?	2.11	N/A
TYPE-5	Are SME Manual/User acknowledgements supported?	2.11	NO
TYPE-6	Are Conversational Aborts supported?	2.11	NO

### **Timers**

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
TIMER-1	Is the SMPP <i>session_init_timer</i> implemented?	7.2	YES (60 secs)
TIMER-2	Is the SMPP <i>enquire_link_timer</i> implemented?	7.2	YES (60 secs)
TIMER-3	Is the SMPP <i>inactivity_timer</i> implemented?	7.2	YES (60 secs)
TIMER-4	Is the SMPP <i>response_timer</i> implemented?	7.2	YES (60 secs)

### **SMSC Specific**

<b>ITEM</b>	<b>Functional Unit/Description</b>	<b>SMPP REF.</b>	<b>Support YES / NO</b>
SMSC-1	Can a Store and Forward method of final delivery be used?	2.10	YES
SMSC-2	Can a Datagram method of final delivery be used?	2.10	NO
SMSC-3	Can a Transaction mode method of final delivery be used?	2.10	NO
SMSC-4	Can this initiate a session by using the outbind operation sequence?	2.2.1	NO
SMSC-5	What is the maximum length of <i>message_id</i> supported in operations?	5.2.23	16

### **Implementation Issues**

## SMSC Issues

ITEM	Functional Unit/Description	SMPP REF.	Support YES / NO
IMP-SMSC-1	Is information in a bind PDU is used for access control?		YES
IMP-SMSC-2	Can the information in the bind PDU be used for routing messages to the ESME?		YES
IMP-SMSC-3	In a cancel_sm received from an ESME, must the <i>service_type</i> field be set to the same value as the original message which is being canceled?	5.2.12	NO
IMP-SMSC-4	In a replace_sm received from an ESME, must the <i>service_type</i> field be set to the same value as the original message which is being replaced?	5.2.12	N/A

## Link Usage

ITEM	Functional Unit/Description	SMPP REF.	Support YES / NO
LINK-1	Is it possible to have multiple links to the same SMSC using the same access control information?		YES
LINK-2	Is it possible to have multiple links to the same SMSC using different access control information?		YES

## Data Fields

### Bind Fields

Item	Issue and question	SMPP REF.	Answer
Bind-Field1	Are there any character or other limitations imposed upon values used in the <i>system_id</i> field?	5.2.1	As provided in account configuration.
Bind-Field2	Are there any character or other limitations imposed upon values used in the <i>system_type</i> field?	5.2.2	As provided in account configuration.
Bind-Field3	Are there any character or other limitations imposed upon values used in the <i>password</i> field?	5.2.3	As provided in account configuration.

### SUBMIT\_SM Fields

SMPP field	Issue and question	SMPP REF.	Answer
Submit-Field1	What, if any restrictions are imposed upon the value used in the <i>service_type</i> field?	5.2.11	Must be null (i.e. empty)
Submit-Field2	What values in the <i>esm_class</i> field are supported, and in what circumstances?	5.2.12	UDHI
Submit-Field3	What values in the <i>protocol_id</i> field are supported, and in what circumstances?	5.2.13	All valid GSM values
Submit-Field4	What values in the <i>priority</i> field are supported, and in what circumstances?	5.2.14	0, 1
Submit-Field5	What, if any restrictions are imposed upon the value used in the <i>schedule_delivery_time</i> field?	5.2.15	None
Submit-Field6	What, if any restrictions are imposed upon the value used in the <i>validity_period</i> field?	5.2.16	None
Submit-Field7	Which values in the <i>registered_delivery</i> field are supported?	5.2.17	0,1
Submit-Field8	Are there any restrictions set upon the values specified in the <i>data_coding</i> field?	5.2.19	No
Submit-Field10	What <i>dest_network_type</i> and <i>source_network_type</i> values are supported?	5.3.2.3 5.3.2.4	N/A
Submit-Field11	What <i>dest_bearer_type</i> , <i>dest_telematics_id</i> , <i>source_bearer_type</i> , <i>source_telematics_id</i> values are supported?	5.3.2.5 5.3.2.6 5.3.2.7 5.3.2.8	N/A
Submit-Field12	What <i>payload_type</i> values are supported?	5.3.2.10	N/A
Submit-Field13	What <i>ms_msg_wait_facilities</i> values are supported?	5.3.2.13	N/A

## DELIVER\_SM Fields

SMPP field	Issue and question	SMPP REF.	Answer
Deliver-Field1	What, if any restrictions are imposed upon the value used in the <i>service_type</i> field.	5.2.11	None
Deliver-Field2	What values in the <i>esm_class</i> field are supported, and in what circumstances?	5.2.12	Default message type SMSC Delivery Receipt UDHI Indicator set
Deliver-Field3	What values in the <i>protocol_id</i> field are supported, and in what circumstances?	5.2.13	All valid GSM values
Deliver-Field4	What values in the <i>priority</i> field are supported, and in what circumstances?	5.2.14	None
Deliver-Field5	Which values in the <i>registered_delivery</i> field are supported?	5.2.17	None
Deliver-Field6	Are there any restrictions set upon the values specified in the <i>data_coding</i> field?	5.2.19	None
Deliver-Field7	What <i>payload_type</i> values are supported?	5.3.2.10	N/A

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