SMS FORUM

SMPP v3.4 Protocol Implementation guide for GSM / UMTS

Version 1.0

SMPP v3.4 Protocol Implementation guide for GSM / UMTS
May 30th 2002 Version 1.0

©2001 SMS Forum

SMS FORUM

Table of Contents

1 Introduction

1.1 Overview

The Short Message Peer To Peer (SMPP) protocol is an open, industry standard protocol designed to provide a flexible data communication interface for transfer of short message data between a Message Centre and a SMS application system. A Bearer Message Centre can be a Short Message Service Centre (SMSC), a GSM Unstructured Supplementary Services Data (USSD) Server, a Broadcast Message Service Centre or another type of Message Centre.

This document provides guidelines for getting an application based on the SMPP protocol version 3.4 specification working in a SMSC/GSM/UMTS network environment.

1.2 Scope

This document provides practical information for developers building ESME applications that communicate with a SMSC working in a GSM environment, using SMPP protocol version 3.4. SMPP features common to all network types or not specifically SMSC related will not be discussed.

The information about the subjects discussed in this document is retrieved from related official specification documents, like the SMPP protocol version 3.4 specification, the GSM 23.038/23.040 and UCS2 specifications.
In order to keep the document a practical reference manual, the document will not contain specific in-depth information that is available in those specifications, but will include them as reference.

For maximising the reading efficiency, it is advisable to download the referenced specifications prior to reading this document.

1.3 Glossary

EMS   Enhanced Messaging Service

ESME   External Short Message Entity

GSM   Global System for Mobile Communications

MS   Mobile Station

SM   Short message

SMPP   Short Message Peer To Peer

SMSC   Short Message Service Centre

UCS   Universal Character Set

UDH   User Data Header

UMTS   Universal Mobile Telecommunications System

1.4 References

At the time of writing the latest versions of below stated documents were used, but for most cases other versions of these documents are also applicable as reference for this implementation guide.

Ref.	Document Title	Document Number	Version Number
[SMPP34]	SMPP protocol specifications v3.4	SMPP Forum http://www.smpp.org	Issue 1.2
[GSM23038]	Alphabets and language-specific information	3GPP TS 23.038 http://www.3gpp.org	v4.2.0 (release 4)
[GSM23040]	Technical realization of the Short Message Service (SMS)	3GPP TS 23.040 http://www.3gpp.org	v5.0.0 (release 5)
[UCS2]	UCS-2. ISO/IEC 10646 encoding form: Universal Character Set coded in 2 octets	http://www.unicode.org	

Table 1-1: References

DOCKET ALARM

Explore Litigation Insights

Docket Alarm provides insights to develop a more informed litigation strategy and the peace of mind of knowing you're on top of things.

Real-Time Litigation Alerts

Keep your litigation team up-to-date with **real-time alerts** and advanced team management tools built for the enterprise, all while greatly reducing PACER spend.

Our comprehensive service means we can handle Federal, State, and Administrative courts across the country.

Advanced Docket Research

With over 230 million records, Docket Alarm's cloud-native docket research platform finds what other services can't. Coverage includes Federal, State, plus PTAB, TTAB, ITC and NLRB decisions, all in one place.

Identify arguments that have been successful in the past with full text, pinpoint searching. Link to case law cited within any court document via Fastcase.

Analytics At Your Fingertips

Learn what happened the last time a particular judge, opposing counsel or company faced cases similar to yours.

Advanced out-of-the-box PTAB and TTAB analytics are always at your fingertips.

API

Docket Alarm offers a powerful API (application programming interface) to developers that want to integrate case filings into their apps.

LAW FIRMS
Build custom dashboards for your attorneys and clients with live data direct from the court.

Automate many repetitive legal tasks like conflict checks, document management, and marketing.

FINANCIAL INSTITUTIONS
Litigation and bankruptcy checks for companies and debtors.

E-DISCOVERY AND LEGAL VENDORS
Sync your system to PACER to automate legal marketing.