



Global SMS Server

System Overview

PROTEI Global SMS Server provides the unique opportunity to access SMS VAS using a single international number available from any GSM network.

The service makes it possible to receive messages that were sent to the global SMS international number from any GSM network (from SMSCs of these networks) and to transfer them to a service provider.

Global SMS Server uses short message service technology and service numbers in the international format (ITU-T E.164).

The service will be available to subscribers of any GSM networks who have an SMS-exchange agreement with the operator to whom the Global SMS service provider is connected.

Using Global SMS technology, an operator or service-provider can dramatically increase the number of SMS VAS customers by making services available to a new market:

- For inbound roamers;
- In cases when the mobile service provider (MSP) prefers to work via a single GSM-operator for technical and administrative reasons (e.g. for m-banking applications);
- When global service providers (e.g. satellite TV-channels) use SMS technology to provide interactive services, and traditional direct connection to each GSM-operator in each country is practically impossible or would be extremely complicated.

Using SMS global numbers as short dial codes, any company that operates across multiple countries can build better awareness in the mobile consumer space and use marketing investments more effectively to acquire and retain customers because this technology allows the wireless messaging medium to be branded.

Functionality

- Receipt of alphanumeric or binary messages sent from mobile networks to the MSISDN number from the range of numbers assigned for the Global SMS server and transfer to external applications;
- Sending of alphanumeric or binary SMS messages from external applications to GSM subscribers;
- SMS forwarding to another GT based on analysis of recipient address;
- Fully functional interconnection with service applications via SMPP (Short Message Peer to Peer Protocol) v3.4;
- Flexible routing management and policy management for each individual application;
- High throughput and efficient scaling
- Flexible SS7 configuration.

Additional Options

- Supports alternative directions for SMS-traffic routing in case main SMPP connection fails
- Supports SCCP-routing for interconnection with several MSCs;
- Configuration management and system monitoring using standard remote access technologies;
- Alarm logging and SNMP for remote alarm monitoring;
- All send and receive transactions for processed messages are logged in CDR files.

Connection with MSC

Global SMS server is connected to the GSM network operator's MSC via E1 trunks with SS7 (MTP/SCCP/TCAP/MAP) signaling in compliance with GSM 09.02.

Supports MAP versions 1-3. SCCP class 0 is used.

Supports up to 16 links in one linkset. One server can support up to 32 links in up to 32 linksets.

Interaction with External Applications (ESME)

PROTEI Global SMS server supports SMPP (Short Message Peer-to-Peer Protocol) v 3.4 over TCP/IP for exchanging messages with external applications.

Store-and-Forward and Transaction algorithms are supported using transmitter, receiver or transceiver binding.

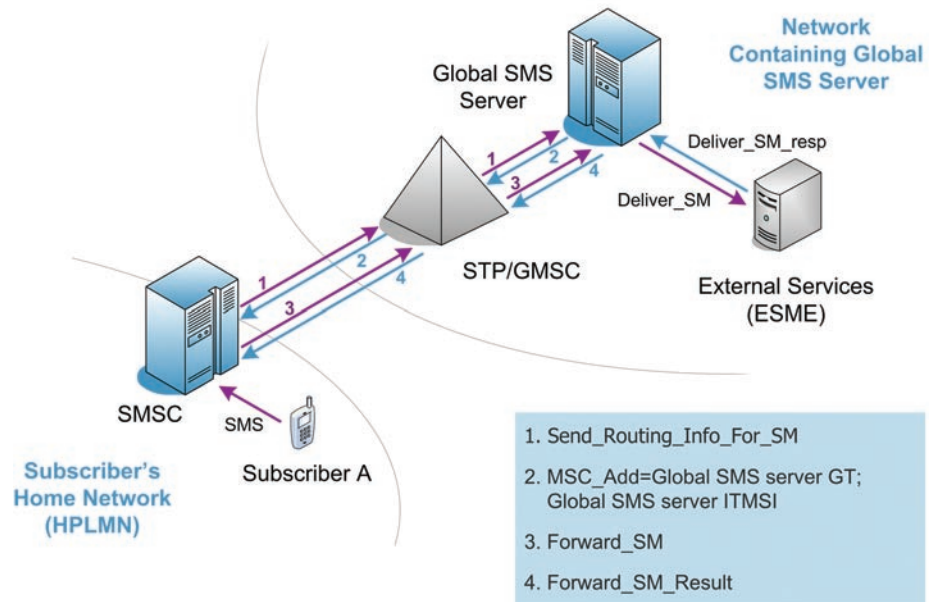
For each SMPP connection the following parameters can be configured by the system administrator:

- Connection name;
- Connection type;
- Protocol type;
- Store-and-Forward/Transaction mode;
- Binding type (Rx/Tx/TRx);
- ESME login;
- ESME password;
- ESME IP address;
- Routing rules for message routing to this destination;
- Number of clients that can be simultaneously connected using this connection;
- Bandwidth limit for this connection.



Message Flow Diagram

Note: Message routing to the Global SMS server should be provided by STP/GMSC of the network to which the Global SMS Server is connected on the base of addressed service Global SMS Number (MSISDN).



Regional Sales Offices

Europe and North Africa

Na Piskach 65
 Praha 6, CZ-160 00
 Czech Republic
 Tel.: +420 2 333 21 808
 www.mobitel.cz
 E-mail: mobitel@mobitel.cz

Russia, ex-USSR, MEA

60A B.Sampsonievsky
 Business Center "Telecom SPb"
 St.Petersburg, 194044, Russia
 Tel.: +7 812 449 47 27
 www.protei.com
 E-mail: info@protei.com

R&D Center

60A B.Sampsonievsky
 Business Center "Telecom SPb"
 St.Petersburg, 194044, Russia
 Tel.: +7 812 449 47 27
 www.protei.com
 E-mail: info@protei.com

