

GSM Interworker

A service for non GSM mobile carriers.



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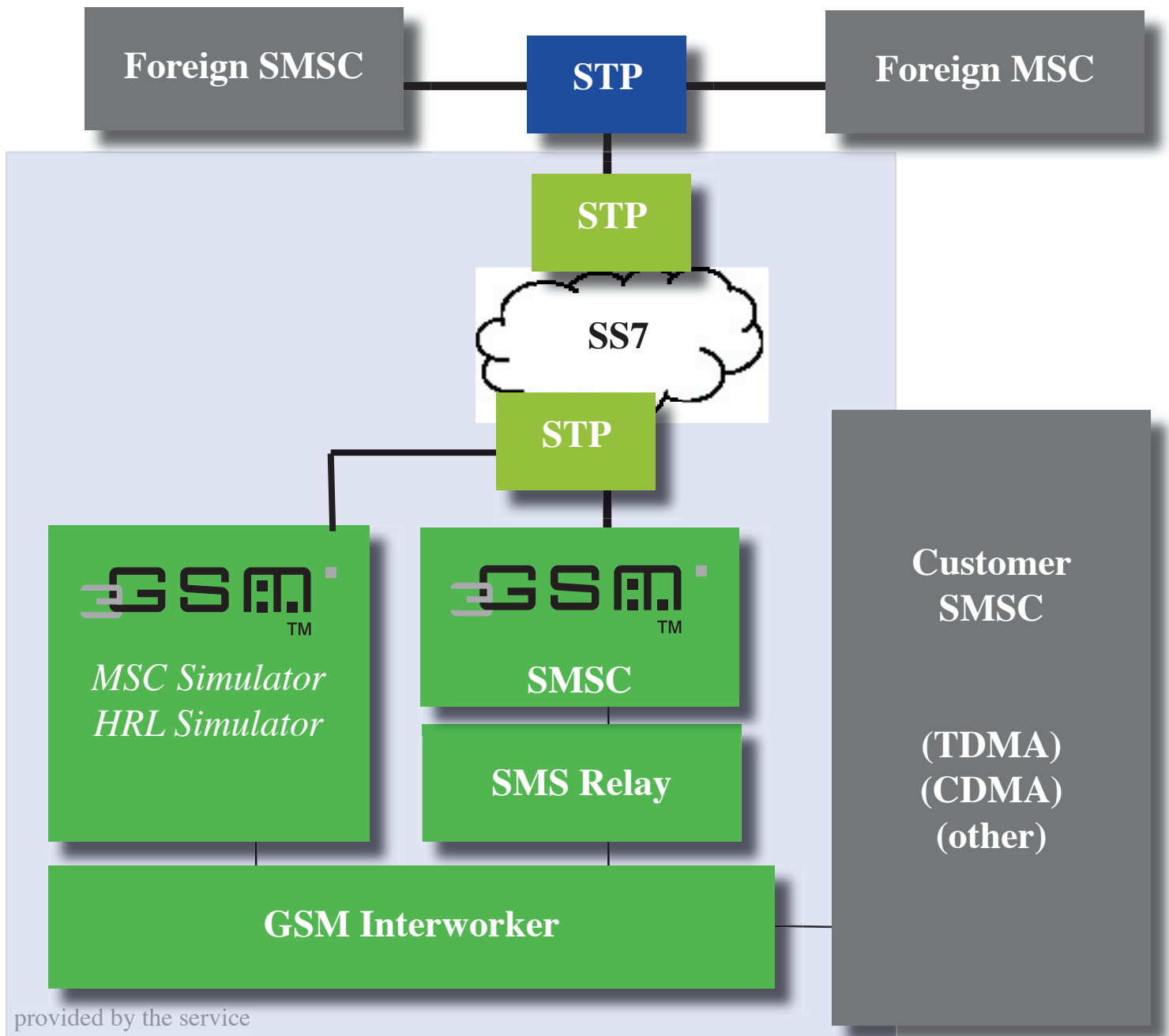
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What is SMS Interworking?

SMS Interworking is the process of exchanging mobile text messages (SMS) between mobile carriers so customers of both carriers can send text messages to each other. SMS Interworking in the GSM world is usually established by roaming contracts between two GSM carriers. Recent developments in SMS volumes has resulted in GSM carriers starting to charge each other for terminated SMS which is a big problem for carriers who don't have a lot of roaming agreements or who are not able to quickly establish the additional SMS interworking contracts.

How does the GSM Interworker service help the operator doing more business?

The GSM Interworker service allows you to send SMS from your customers to GSM networks you currently cant reach. It thus allows you to bill more successful delivered SMS to your subscribers than before. GSM Interworker Sevice does pick up SMS from your SMSC and routes them to the GSM world for termination on the destination networks. For incoming messages a GSM network is emulated, incoming messages are captured on the MSC emulator and forwarded by the GSM Interworker to the SMSC for internal delivery.



What's required and what does it cost?

1. The customer has to interconnect his SMSC to GSM Interworker over some network. This can be the internet, private networks on leased lines, VPN, X.25 or other depending on the support of the SMSC:

GSM interworker currently does support the following SMSC protocols:

EMI/UCP	(CMG)
CIMD	(Nokia)
SMPP	(Various)

for the connectivity an IP based solution is strongly preferred

2. The customer has to subscribe to the GSM Interworker service which translates messages so they can be requeued on to the SMSRelay service for outgoing messages

This involves the setup and installation of SS7 signalling hardware on site and international links to interconnect either private links or the public internet. Encryption of the link is a possible option.

Costs associated with this service are based on a monthly running cost and a cost per SS7 signalling packet (MSU).

3. The outgoing delivery occurs over SMSRelay.

4. GSM Parameters

Because we will make your network look like a GSM network, corresponding GSM network parameters must be used. Those are mobile network codes (MCC and MNC) as well as a block of IMSI numbers. Incoming SMS is up to the discretion of the sending carrier and his willingness to implement your number ranges. Usually the setup is done while roaming agreement is being placed.

What features are supported?

Supported features:

- Delivery to over 300 mobile carriers around the globe
- Reception from over 300 mobile carriers if they are willing to implement your numbers
- Text messages
- Binary messages
- Over the air configuration messages
- Message waiting indicators
- Numeric originators
- Alphanumeric originators

Not supported:

- Delivery reports (SMS will be considered delivered once arrived on the MSC emulator)
- Some destination networks might not support the full feature set. Pager networks rarely support binary messages.

How fast is it?

Our standard service does perform up to 15'000 global title translations per second and message termination speeds in excess of 200msg/sec. On input we recommend to allocate one 64kbps link per every 40 msg/sec of speed you require. Setup time is minimal as all hardware components are in Stock or available within a week or two. The service is built on industry standard unix based servers with full redundancy and security.

What are the options?

Encryption:

This will make sure messages in transit are encrypted with 3DES standard to make sure no one can wiretap the communication going over the internet.

Direct Link:

Instead of using the internet a international leased line can be used.