

# Interactive SMS

## Plain HTTP Connection (MT DLR)

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v1.1



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## Scope

This document has been designed for ACTEL's clients.

The ACTEL SMS Gateway can return Delivery Reports for each message sent through the SMS Gateway. These reports provide feedback regarding the delivery status of each SMS message.

## Introduction

This document explains how Delivery reports provide feedback to applications concerning the delivery of MT messages. This information can include:

- Confirmation of successful billing for premium messages
- Confirmation of successful delivery to the handset (where this is supported by the network)
- Details of errors which prevented successful delivery

## Description

Connectivity to mobile messaging clients will be established by using Actel's Carrier grade messaging gateway. The clients will provide Actel with access to their system so that MT DLR may be exchanged. The following diagram describes how the connection flow is arranged:

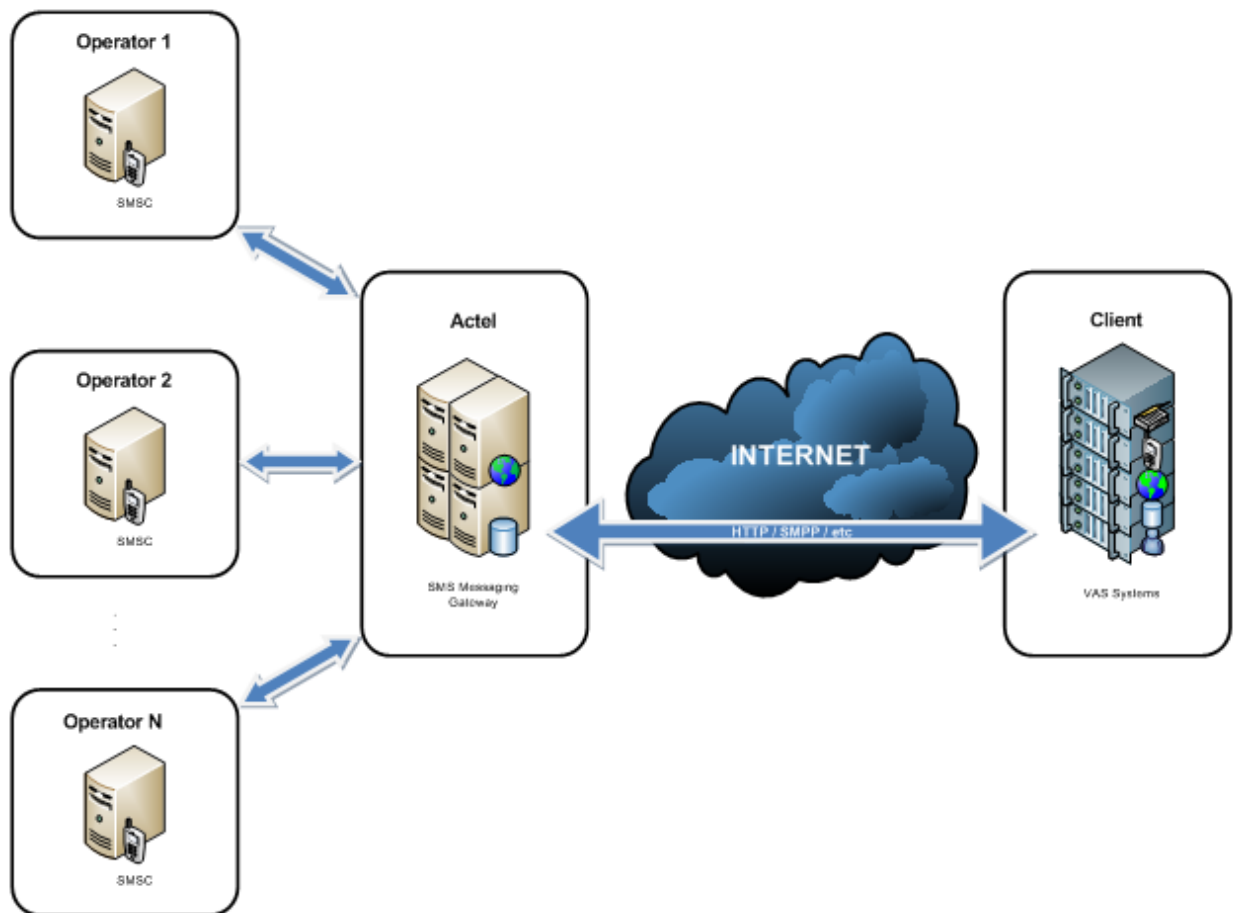


Figure 1 - Connection flow between Actel & the Client

## Message Delivery

The connection between a client and Actel will be established over the Internet. The two entities will communicate using a single protocol.

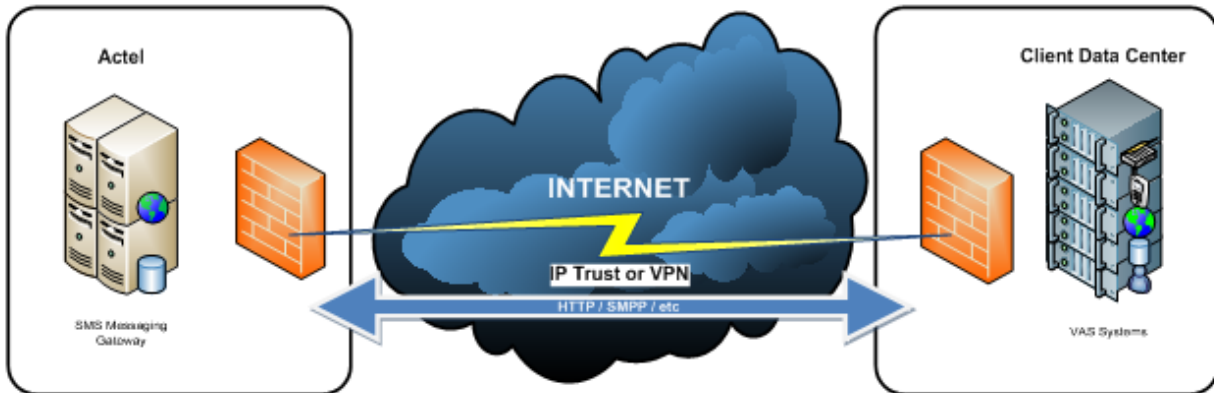


Figure 2 - Connection flow between Actel & the Client

Actel has defined a HTTP protocol that it recommends clients to use. Details may be found in the Annex 2 of this document. Actel is able to support tailored HTTP, SMPP messaging protocols if required but there may be an extra deployment cost involved.

## Enabling receipt of delivery reports

In order to receive delivery reports, two steps are necessary. Firstly, delivery reports must be requested when activating any short code with Actel SMS Gateway:

- HTTP interface: via the `report` parameter.

Secondly, delivery reports must be routed to an HTTP URL of your choosing or via your SMPP connection. This routing is configured on a per-account basis.

## Interpreting delivery reports

A delivery report contains the following:

- The SMS ID of the MT message. This is a positive 64 bit integer used to uniquely identify an SMS message as it passes through the SMS Gateway. As well as when sending delivery reports, the SMS Gateway will pass on this ID in the response back to a submitted SMS message and when delivering Mobile Originated SMS messages.
- A delivery report type code giving an overview of the delivery status of the message.

Protocol	HTTP
URL	<a href="http://IP/GetDLR.aspx">http://IP/GetDLR.aspx</a>

HTTP Parameters		Type
<b>smsid</b>	Unique ID of the main MT Request.	Alphanumeric String
<b>status</b>	Message end status flag <b>refer to the Annex 1</b>	String

## Return values

Returned Values	Description	Type
Invalid SMSID	SMS ID is missing	Alphabetic String
Invalid Request duplicates	duplicate (for a second duplicate request)	Alphabetic String
Invalid Status	Status is missing	Alphabetic String
Ok	Request is received Successfully	Alphabetic String

## Sample

Below are the acceptable request formats/structures including all valid HTTP parameters:

- 1) Valid format including all HTTP parameters for a Text request:

<b>Text Request</b>	<a href="http://IP/GetDLR.aspx?smsid=9542BDD6-277B-442E-A981-7CE0515B52A3&amp;status=delivered">http://IP/GetDLR.aspx?smsid=9542BDD6-277B-442E-A981-7CE0515B52A3&amp;status=delivered</a>
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# ANNEXES



## Annex 1 - Types of delivery report

Type	Description
REJECTED	If a message or billing request is not accepted by the network, the SMS Gateway may make several more attempts to submit the message, according to a retry strategy. If the message still has not been accepted once the retry strategy is complete (or immediately, in the case of permanent errors such as invalid destination), a REJECTED report is returned.
BUFFERED	Buffered means that the message has reached a particular stage in its processing. It is not final confirmation of delivery OR failure (although they are sometimes used to confirm billing has been successful).
FAILED	Failed means that the message has been failed after it was submitted to the network for delivery.
DELIVERED	Delivered means that the message has been successfully delivered to the handset, including billing the subscriber where this is separate.
TRANSMITTED	Message successfully transmitted to the message handler, e.g. to the SMSC server.

**Aggregators/mobile messaging aggregators:** Entities that provide access to mobile operators. Often referred to as service providers, an aggregator connects to the mobile operators and through one connection to its clients, aggregates access to multiple operators.

**Gateway/messaging gateway:** This is a system that handles receiving and sending messages between other messaging entities. They provide the single point of access and implement the notions of queuing, retry failed messages and implementation of required communication protocols.

**Large scale competition:** Large scale competitions, often referred to as super promotions, are services that Actel specializes in. Large scale competitions are by definition services accessible by a large user base and generate big amounts of traffic.

**VAS Promotion Systems:** The system that implement the large scale competitions. VAS (Value Added Service) Promotion Systems refers to the application layer that Actel implements.

**MO:** Mobile Originating messages are messages sent by the user.

**MT:** Mobile Terminating messages are messages sent by Actel to the user.

**Dialogue/MO-MT Dialogue:** Represents a text based SMS dialogue that Actel's Systems holds with a user. A user sends an MO, Actel answers with an MT triggering the user to send another MO, thus establishing a dialogue with the user.

**Base Bulk:** Broadcasts to subscribers of the operators who have not yet joined the promotion.

**Teaser Bulks:** Broadcasts to subscribers who have joined the promotion and are being invited to play some more.

**MO Inbound:** The MO traffic that is sent to ACTEL by any peer.

**MO Outbound:** The MO Traffic that is sent from ACTEL to any other peer.

**MT Inbound:** The MT Traffic that is received by ACTEL from any peer.

**MT Outbound:** The MT traffic that is sent by ACTEL to any peer.

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**Submission, Hit, Transmission:** These terms designate a single HTTP PDU sent from or to ACTEL