

# **TECHNICAL SPECIFICATION OF PUSH SMS CONNECTIVITY API**

**Version 3.0.0**



**SSL WIRELESS®**

**93 B New Eskaton Road  
Dhaka 1000, Bangladesh  
Phone: +880 9612222020  
Fax: +880 2 913 2172  
E-mail: [service.operation@sslwireless.com](mailto:service.operation@sslwireless.com)  
[www.sslwireless.com](http://www.sslwireless.com)**

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| Date            | Ver.  | Description    | Prepared By  | Checked By                        | Approved By                                 |
|-----------------|-------|----------------|--|-----------------------------------|---|
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# 1 Purpose of This Document

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This document is for companies/clients, who wish to integrate with SSL's Push SMS gateway hereafter referred to as Push Gateway. This document contains detailed information about the methods for integrating this gateway over HTTP/HTTPS protocol using GET/POST method. As a GET/POST client over HTTP/HTTPS protocol can be implemented by using various programming languages, this document is designed both as a getting started guide for the technical staff/developer and a reference document throughout the project implementation.

The client system would require sending SMS messages via GET/POST of parameters as per specified in this document from SSL's Push SMS Gateway. The gateway will access the parameters sent from the client system and send the SMS message(s) to the recipient(s) accordingly. This specification is under active development, any updates to the API specifications may not be notified.

A detailed description of the API parameters is available in this document. However, in order to send the SMS messages via this Gateway, you are required to have the following:

- ✓ a client application to send the required parameters
- ✓ a registered account with SSL Wireless

**Note:** The client application or server need not be limited to any platforms/languages. In this document we have provided typical examples for connecting to our gateway using multiple language in order to get you started.

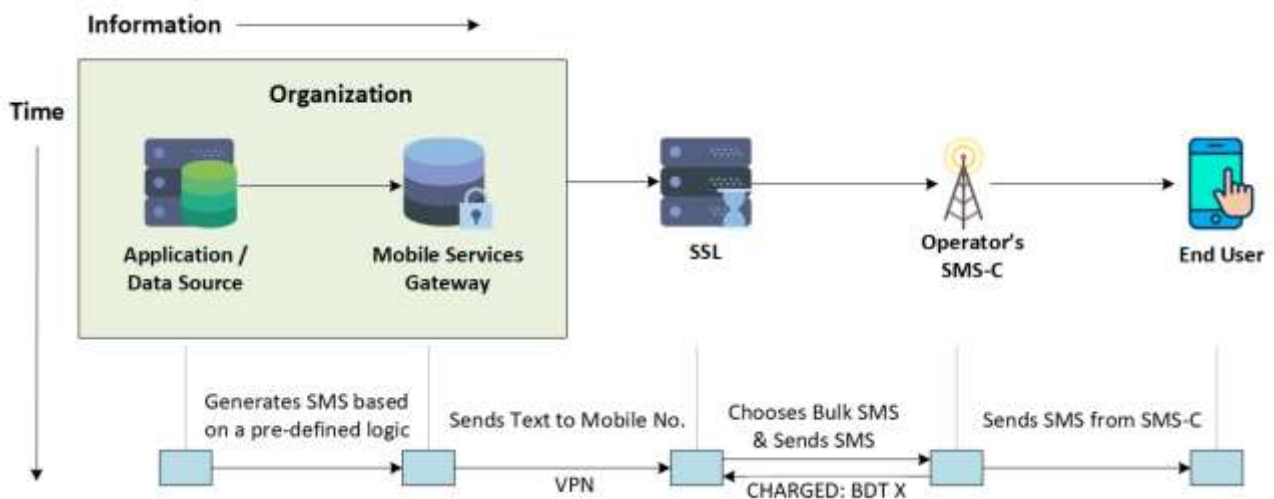
For more details or examples not included in this specification, please contact us through email at **[service.operation@sslwireless.com](mailto:service.operation@sslwireless.com)**.

## 2 SMS Gateway Functionality

SSL's Push SMS Gateway offers standard method for connecting any client application through SSL-enabled system to the client application for sending SMS messages to mobile subscribers in Bangladesh and abroad. You can identify mobile phone number and SMS Message Body according to these specifications and, also integrate to the gateway via widely used web technology - HTTP.

This API makes it easy to integrate your applications to the Push SMS Gateway.

The following is a sample architecture reflecting the relationship between customer or user or subscriber, your application, SSL's Push SMS Gateway and the telecom operators.



**Figure 1: SSL's Push SMS Gateway**

The following steps exhibit the procedure of a customer receiving a SMS text from your application through SSL's Push SMS gateway and the telecom operator's SMS-C.

1. The client application submits the Push SMS information to the SSL's Push SMS Gateway via the given API parameters.
2. The Push SMS Gateway sends the message to the respective telecom operator.
3. The telecom operator sends the messages to the recipient mobile phone number.

### 3 List of Status Code

There are two types of status code for Push SMS:

#### 1. API Status Code

#### 2. SMS Status Code

#### 3.1 API Status Code

The API status codes for push SMS are given below:

| Status         | Code | Status Meaning                   | Description   |
|----------------|------|----------------------------------|---|
| <b>SUCCESS</b> | 200  | SUCCESS                          | Successful  |
| <b>FAILED</b>  | 4001 | Unauthorized                     | Invalid API token   |
|                | 4002 | SID/Stakeholder is not permitted | Stakeholder/SID is not permitted to send SMS.                           |
|                | 4003 | IP Blacklisted                   | Client IP is backlisted in SSL API gateway.                             |
|                | 4004 | End point Not Found              | Invalid API URL.  |
|                | 4005 | Invalid request format           | Invalid content type or is not valid json.                              |
|                | 4020 | Invalid CSMS ID                  | CSMS ID is not valid.   |
|                | 4022 | Required Parameter Missing       | When any mandatory field has not been filled in the request parameters. |
|                | 4023 | Duplicate CMS ID                 | CSMS ID is duplicate in the same day.                                   |
|                | 4025 | Invalid MSISDN                   | MSISDN is invalid.  |
|                | 4026 | Blocked MSISDN                   | MSISDN is blocked.  |
|                | 4027 | Message length exceeded          | Maximum message length exceeded.  |
|                | 4028 | Invalid message data             | No SMS is success on bulk or dynamic request.                           |
|                | 4029 | Too many requests                | API Request limit exceeded  |
|                | 4030 | Limit Exceed                     | Max msisdn exceed for one request                                       |
|                | 4031 | TPS Exceeded                     | The limit of TPS exceeds  |
|                | 5000 | Unknown Error                    | Error for undefined reason  |

#### 3.2 SMS Status Code

The SMS status codes for push SMS are given below:

| Status           | Message                 | Description                              |
|------------------|-------------------------|--|
| <b>SUCCESS</b>   | SUCCESS                 | Successful                               |
| <b>INVALID</b>   | Invalid MSISDN          | Provided MSISDN is Invalid               |
|                  | Message length exceeded | Maximum message length exceeded          |
|                  | Invalid CSMS ID         | CSMS ID is Invalid                       |
| <b>DUPLICATE</b> | Duplicate CMS ID        | CSMS ID is duplicate on the same day.    |
|                  | Duplicate MSISDN        | MSISDN is duplicate on the same request. |

## 4 API Specification

There are three types of API for Push SMS:

1. Single SMS
2. Bulk SMS
3. Dynamic SMS

### 4.1 Single SMS

This API is used for sending a single SMS. If the client wants to send an SMS to one MSISDN only, then this API will be used.

- **URL:** <domain>/api/v3/send-sms
- **Request Method:** GET or POST
- **Request Content Type:** JSON
- **Response Type:** JSON

#### 4.1.1 Request Parameters

Request parameters for sending single SMS are given below:

| Name      | Mandatory | Type         | Length | Description  |
|-----------|-----------|--------------|--------|--|
| api_token | Yes       | Alphanumeric | 50     | It will be provided by SSL for authentication.   |
| sid       | Yes       | Alphanumeric | 20     | This is a unique id for the specific brand/masking name for the client, provide by SSL                         |
| msisdn    | Yes       | Numeric      | 16     | This is the mobile number of SMS recipient.  |
| sms       | Yes       | Alphanumeric | 1000   | This is the SMS body to be received by the recipient. SMS length will be different for Unicode SMS.            |
| csms_id   | Yes       | Alphanumeric | 20     | For each SMS there will be a unique reference ID from Client. The csms_id will be unique for the same day only |

#### 4.1.2 Sample Request

```
{
  "api_token": "1279-98d2bb25-3f7e-49bf-a1e2-5d1a6c6c588f",
  "sid": "ENGINEERING",
  "msisdn": "88019XXXXXXXX",
  "sms": "Message Body",
  "csms_id": "4473433434pZ684333392"
}
```

### 4.1.3 Sample Response

```
{
  "status": "SUCCESS",
  "status_code": 200,
  "error_message": "",
  "smsinfo": [
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88019XXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "4473433434pZ684333392",
      "reference_id": "5da2f0b5ba3a2248110"
    }
  ]
}
```

### 4.1.4 Response Parameters

Response parameters for single SMS are given below:

| Parameter             | Description   |
|-----------------------|---|
| <b>status</b>         | It informs the status whether it is SUCCESS or FAIL   |
| <b>status_code</b>    | Check API status code list in 3.1   |
| <b>error_message</b>  | If status failed it will return an error message otherwise return empty.  |
| <b>smsinfo</b>        | List of SMS details object. One object for each SMS.  |
| <b>sms_status</b>     | It's indicated SMS is a success or invalid or duplicate. Check SMS status in 3.2                                  |
| <b>status_message</b> | Check SMS status in 3.2   |
| <b>msisdn</b>         | Client provided msisdn will be here.  |
| <b>sms_type</b>       | If provided SMS type is Unicode then SMS type will return as <b>BN</b> , otherwise, it will return as <b>EN</b> . |
| <b>sms_body</b>       | Client provided SMS text will be here.  |
| <b>csms_id</b>        | Client provided reference ID will be here   |
| <b>reference_id</b>   | For each SMS, SSL will provide a reference ID   |



## 4.2 Bulk SMS

This API is used for sending bulk SMS. If the client wants to send SMS with a common SMS body to multiple MSISDN, then this API will be used.

- **URL:** <domain>/api/v3/send-sms/bulk
- **Request Method:** POST
- **Request Content Type:** JSON
- **Response Type:** JSON
- **MSISDN Limit per Request:** 100

### 4.2.1 Request Parameters

Request parameters for sending bulk SMS are given below:

| Name          | Mandatory | Type         | Length | Description   |
|---------------|-----------|--------------|--------|---|
| api_token     | Yes       | Alphanumeric | 50     | It will be provided by SSL for authentication.  |
| sid           | Yes       | Alphanumeric | 20     | This is a unique id for the specific brand/masking name for the client, provide by SSL              |
| msisdn        | Yes       | Numeric      | 16     | This is the mobile number of the recipients. It must be an array.                                   |
| sms           | Yes       | Alphanumeric | 1000   | This is the SMS body to be received by the recipient. SMS length will be different for Unicode SMS. |
| batch_csms_id | Yes       | Alphanumeric | 20     | For each bulk request there will be a unique reference ID for the Client                            |

### 4.2.2 Sample Request

```
{
  "api_token": "1279-98d2bb25-3f7e-49bf-a1e2-5d1a6c6c588f",
  "sid": "ENGINEERING",
  "msisdn": [
    "019XXXXXXXX",
    "017XXXXXXXX",
    "018XXXXXXXX"
  ],
  "sms": "Message Body",
  "batch_csms_id": "4437343343P3Z684333392"
}
```

### 4.2.3 Sample Response

---

```
{
  "status": "SUCCESS",
  "status_code": 200,
  "error_message": "",
  "smsinfo": [
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88019XXXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "4437343343P3Z684333392",
      "reference_id": "5da2f0b5ba3a2248110"
    },
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88017XXXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "4437343343P3Z684333392",
      "reference_id": "5da2f0b5ba3a2248111"
    },
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88018XXXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "4437343343P3Z684333392",
      "reference_id": "5da2f0b5ba3a2248112"
    }
  ]
}
```

## 4.2.4 Response Parameters

Response parameters for bulk SMS are given below:

| Parameter             | Description   |
|-----------------------|---|
| <b>status</b>         | It will inform the status whether it is SUCCESS or FAIL   |
| <b>status_code</b>    | Check the API status code list in 3.1   |
| <b>error_message</b>  | If the status is failed then it will return an error message, otherwise, it will return empty.                    |
| <b>smsinfo</b>        | List of SMS details object. One object for each SMS.  |
| <b>sms_status</b>     | It's indicated SMS is a success or invalid or duplicate. Check SMS status in 3.2                                  |
| <b>status_message</b> | Check SMS status in 3.2.  |
| <b>msisdn</b>         | Client provided msisdn will be here.  |
| <b>sms_type</b>       | If provided SMS type is Unicode then SMS type will return as <b>BN</b> , otherwise, it will return as <b>EN</b> . |
| <b>sms_body</b>       | Client provided SMS text will be here.  |
| <b>csms_id</b>        | Client provided reference ID will be here   |
| <b>reference_id</b>   | For each SMS, SSL will provide a reference ID   |

## 4.3 Dynamic SMS

This API is used for sending dynamic SMS. If the client wants to **send SMS to multiple MSISDN each with a unique SMS body**, then this API will be used.

- **URL:** <domain>/api/v3/send-sms/dynamic
- **Request Method:** POST
- **Request Content Type:** JSON
- **Response Type:** JSON
- **SMS Limit per Request:** 100

### 4.3.1 Request Parameters

Request parameters for sending Dynamic SMS are given below:

| Name             | Mandatory | Type         | Length | Description   |
|------------------|-----------|--------------|--------|---|
| <b>api_token</b> | Yes       | Alphanumeric | 50     | It will be provided by SSL for authentication.  |
| <b>sid</b>       | Yes       | Alphanumeric | 20     | This is a unique id for the specific brand/masking name for the client, provide by SSL.                     |
| <b>msisdn</b>    | Yes       | Numeric      | 16     | This is the mobile number of the SMS recipient.   |
| <b>text</b>      | Yes       | Alphanumeric | 1000   | This is the SMS message body to be received by the recipient. SMS length will be different for Unicode SMS. |
| <b>csms_id</b>   | Yes       | Alphanumeric | 20     | For each SMS request there will be a unique reference ID for Client   |

### 4.3.2 Sample Request

---

```
{
  "api_token": "1279-98d2bb25-3f7e-49bf-a1e2-5d1a6c6c588f",
  "sid": "ENGINEERING",
  "sms": [
    {
      "text": "Message Body 1",
      "msisdn": "019XXXXXXXXX",
      "csms_id": "234444343222"
    },
    {
      "text": "Message Body 2",
      "msisdn": "017XXXXXXXXX",
      "csms_id": "222334242244"
    },
    {
      "text": "Message Body 3",
      "msisdn": "018XXXXXXXXX",
      "csms_id": "232352235235"
    }
  ]
}
```

### 4.3.3 Sample Response

---

```
{
  "status": "SUCCESS",
  "status_code": 200,
  "error_message": "",
  "smsinfo": [
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88019XXXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "234444343222",
      "reference_id": "5da2f0b5ba3a2248110"
    },
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88017XXXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "222334242244",
      "reference_id": "5da2f0b5ba3a2248111"
    },
    {
      "sms_status": "SUCCESS",
      "status_message": "Success",
      "msisdn": "88018XXXXXXXX",
      "sms_type": "EN",
      "sms_body": "Message Body",
      "csms_id": "232352235235",
      "reference_id": "5da2f0b5ba3a2248112"
    }
  ]
}
```

#### 4.3.4 Response Parameters

---

Response parameters for dynamic SMS are listed below:

| Parameter             | Description   |
|-----------------------|---|
| <b>status</b>         | It will inform the status whether it is SUCCESS or FAIL   |
| <b>status_code</b>    | Check API status code in 3.1  |
| <b>error_message</b>  | If the status is failed then it will return an error message, otherwise, it will return empty.                    |
| <b>smsinfo</b>        | List of SMS details object. One object for each SMS.  |
| <b>sms_status</b>     | It's indicated SMS is a success or invalid or duplicate. Check API status code list in 3.2                        |
| <b>status_message</b> | Check SMS status in 3.2.  |
| <b>msisdn</b>         | Client's provided MSISDN will be here.  |
| <b>sms_type</b>       | If provided SMS type is Unicode then SMS type will return as <b>BN</b> , otherwise, it will return as <b>EN</b> . |
| <b>sms_body</b>       | Client's provided SMS text will be here.  |
| <b>csms_id</b>        | Client's provided reference ID will be here   |
| <b>reference_id</b>   | For each SMS, SSL will provide a reference ID   |

--- End of document ---

