

# SMSC HLR HTTP Interface Specification

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## 1 Introduction

Using a single HTTP POST operation, the external application can get HLR related parameters like current IMSI, MCC and MNC, by submitting MSISDN to SMSC platform.

The SMSC is HTTP version 1.1 compliant. All parameters in a POST request should be url-encoded. A HTTP GET Request may also be used, but is of limited use since a GET operation cannot hold more than 255 characters.

## 2 HTTP URL

Example URL:

Xml

[http://smc.txtnation.com:5002/checkHLR?msisdn={INSERT}&username={INSERT}&password={INSERT}\\*output=xml](http://smc.txtnation.com:5002/checkHLR?msisdn={INSERT}&username={INSERT}&password={INSERT}*output=xml)

Json

[http://smc.txtnation.com:5002/checkHLR?msisdn={INSERT}&username={INSERT}&password={INSERT}\\*output=json](http://smc.txtnation.com:5002/checkHLR?msisdn={INSERT}&username={INSERT}&password={INSERT}*output=json)

Use port 5004 for HTTPS

e.g.

[http://smc.txtnation.com:5004/checkHLR?msisdn={INSERT}&username={INSERT}&password={INSERT}\\*output=xml](http://smc.txtnation.com:5004/checkHLR?msisdn={INSERT}&username={INSERT}&password={INSERT}*output=xml)

[http://< host>:<port>/<path>](http://<host>:<port>/<path>) Descriptions as follows:

**2.1** <host>

HTTP server host

**2.2** <port>

TCP port is

**2.3** <path>

Application path

Values to include:

Parameter	Value
Host	smsc.txtnation.com
Port	5002
Path	checkHLR

### 3 HTTP Post/Get Parameters

**3.1** <msisdn>

Msisdn which is need to check HLR parameters.

**3.2** <username>

Account username.

**3.3** <password>

Account password

**3.4** <output>

Format of response. Valid values are “xml” and “json”

Values to include:

Parameter	Values
msisdn	As required
username	As provided
password	As provided
output	xml or json

## 4 REQUEST

### 4.1 POST

A valid submission format of a message:

POST <post\_url> HTTP/1.1

Host: <sms\_hub host>

Content-Type: application/x-www-form-urlencoded

msisdn=<msisdn>&username=<username>&password=<password>&output=<xml/json>

Example:

POST /checkHLR HTTP/1.1

Host: smsc.txtnation.com

Content-Length: 63

Content-Type: application/x-www-form-urlencoded

msisdn=4479xxxxxxx&username=abcdefg&password=\*\*\*\*\*&output=xml

## 4.2 GET

HTTP GET Request as follows:

`http://<host>:<port>/<path>?msisdn=<Msisdn>&username=<UserName>&password=<Password>&output=<xml or json>`

Example:

[http://smsc.txtnation.com.com:5002/checkHLR?msisdn=4479xxxxxxx&username=abcdefg&password=\\*\\*\\*\\*\\*&output=xml](http://smsc.txtnation.com.com:5002/checkHLR?msisdn=4479xxxxxxx&username=abcdefg&password=*****&output=xml)

## 5 RESPONSE

The following response is valid for the above request:

Response Code: OK  
Content-Length: xx  
Content-Type: text/xml  
Date: Fri, 03 Oct 2014 18:37:16 GMT  
Server: MochiWeb/1.0

<XML/JSON Output>

### 5.1 Return Success with XML output

```
<hlr result="ok">
<msisdn> </msisdn>
<imsi> </imsi>
<msc> </msc>
<gt> </gt>
<mcc> </mcc>
<mnc> </mnc>
```

</hlr>

Example:

Response Code: OK  
Content-Length: 275  
Content-Type: text/xml  
Date: Fri, 03 Oct 2014 18:37:16 GMT  
Server: MochiWeb/1.0

```
<hlr result="ok">
<msisdn>4474xxxxxxxx</msisdn>
<imsi>23420xxxxxxxx</imsi>
<msc>44778xxxxxxxx</msc>
<gt>44778xxxxxxxx</gt>
<mcc>234</mcc>
<mnc>20</mnc>
</hlr>
```

## 5.2 Return Success with JSON output

```
{
  "result": "ok",
  "msisdn": "xxxxxxxx",
  "msc": "xxxxxxxx",
  "imsi": "xxxxxxxx",
  "gt": "xxxxxxxx",
  "mcc": "xxx",
  "mnc": "x"
}
```

Example:

Response Code: OK  
Content-Length: 196  
Content-Type: text/plain  
Date: Fri, 03 Oct 2014 18:13:20 GMT  
Server: MochiWeb/1.0

```
{"result":"ok","msisdn":"94123xxxxx","msc":"9412000xxxx","imsi":"51320000028092","gt":"9412000xxxx","mcc":"513","mnc":"2"}
```

### 5.3 Return Error with XML output

```
<hlr result ="error">  
<error> Error Code </error>  
</hlr>
```

Example:

Response Code: OK  
Content-Length: 43  
Content-Type: text/xml  
Date: Fri, 03 Oct 2014 18:36:59 GMT  
Server: MochiWeb/1.0

```
<hlr result ="error"><error>6</error></hlr>
```

### 5.4 Return Error with JSON output

```
{"result":"error","errorcode":"Error Code"}
```



Example:

Response Code: OK  
 Content-Length: 32  
 Content-Type: text/plain  
 Date: Fri, 03 Oct 2014 18:38:34 GMT  
 Server: MochiWeb/1.0

```
{"result":"error","errorcode":6}
```

## 5.5 Error Codes

Error Code	Description
1	Unknown Subscriber
6	Absent Subscriber SM
9	Illegal Subscriber
11	Tele Service Not Provisioned
13	Call Barred
21	Facility Not Supported
24	Network Failure
27	Absent Subscriber
30	SRI Timeout
31	TCAP Abort
34	System Failure

35	Data Missing
36	Unexpected Data Value
100	HTTP Error
101	Invalid Path
102	MSISDN Missing
103	Username Missing
104	Password Missing
105	Authentication Failed
106	HTTP Server Timeout
107	Unknown Response
108	SRI Server Timeout
109	SRI Server Error
110	Insufficient Credit

Should you require any assistance log a ticket at <http://clients.txtnation.com>.