



vodafone

mChoice™ Cloud TAP API Guide

for Vodafone Fiji

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Change Control

Version	Date	Description	Author
0.0.1	12/07/2013	Updated API guide of mChoice™ Cloud TAP for Vodafone Fiji	Kalpanie Ratnyake
0.2.0	12/07/2013	Reviewed document.	Roshni Hewamallika
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About this document

The purpose of this document is to provide developing information on m Choice Cloud Tap API for SMS, USSD and CAAS services.

The intended audience for this document is the Application Developers.

The document is divided into the following chapters:

Chapter	Description
1 Overview	This chapter gives a brief description of document content.
2 HTTP Rest	This chapter gives a brief description of involvement of HTTP REST in the context.
3 SMS	This chapter gives a brief description of SMS REST Service.
4 USSD	This chapter gives a brief description of USSD Service.
5 CAAS	This chapter gives a brief description of CAAS Service.

1 Overview

This chapter describes how the Service Providers can use the HTTP-based Interfaces from mChoice™ Cloud TAP for SMS, USSD and CAAS services. For more details on each service please refer the relevant chapter.

1.1 SMS Service

The SMS Interface allows applications to send and receive SMS messages using a HTTP-based API. Supported services are as follows:

- **Send Service** – An application wishing to initiate an MT (Mobile Terminated) SMS message should use this operation type.
- **Receive Service** – This retrieves the SMS sent to the application.
- **Status Report Service** – If an application when performing a **Send service** Operation had requested for a status report from mChoice Cloud Tap, then the **Cloud TAP** will initiate the **status report** service to hand over the status report to the application.

1.2 USSD

The USSD Interface allows applications to initiate USSD sessions using a HTTP-based API. Supported services are as follows:

- **Send Service** – An application wishing to send response to MO USSD session should call this method.
- **Deliver Service** – Deliver Service can be either a user initiated session or a response to an existing USSD session.

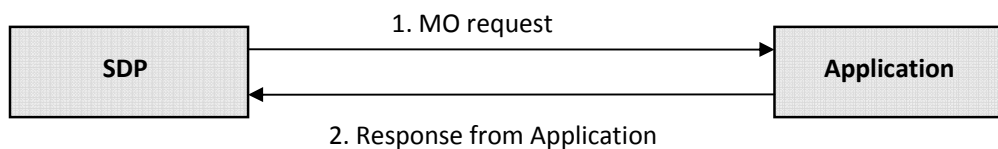
1.3 CAAS

Applications have CAAS NCS access if charging as a service requests are required by the application.

- **Query Balance** – This service retrieves the account balance and other related information of a given subscriber MSISDN.
- **Direct Debit** – This service charges a specific amount from a subscriber's account.
- **Get Payment Instrument List** - Get Payment Instrument List is to get a list of all the available payment instruments for a particular subscriber.

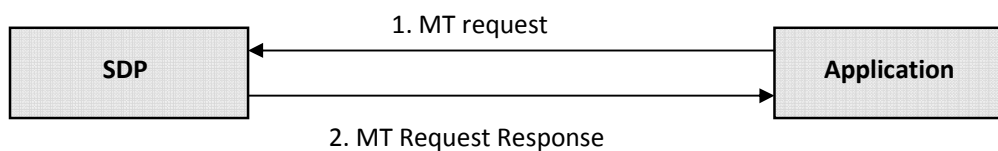
MO (Mobile Originated) flow:

In MO, first the MO request will be sent to application from the SDP. There will be a response sent from the application to SDP subsequently.



MT (Mobile Terminated) flow:

In MT, a MT request is sent from application to the SDP. The MT request response will be from the SDP to application subsequently.



2 HTTP REST

In this context, both requests/responses used to exchange information are with content type "application/json".

2.1 JSON Objects

JSON objects are used as content type to communicate between application and mChoice Cloud Tap. JSON is an open, text-based data exchange format; it is human-readable, platform independent, and supports a wide availability of implementations.

3 SMS

The SMS REST Service provides operations for sending SMS to mChoice Cloud Tap and to receive the SMS.

E.g., A user sending a text message to a mobile phone from an application and receiving SMS from a mobile phone to an application.

3.1 Send Service

This service lets the user send SMS to one or more terminals (phones or any SMS-enabled device) from their application.

Send service supports only POST HTTP requests. This is used when sending SMS to a mobile phone from an application.

An application wishing to initiate an MT SMS message should use this operation type.

3.1.1 Request

Following is a sample request of send service.

```
{
  "password": "c609a16c0b01aac11396cea484f8e535",
  "message": "Test Message",
  "destinationAddresses": ["tel:6799945651"],
  "applicationId": "APP_000006"
}
```

Following are the Request parameters of Send service.

Parameter Name	Description	Type	Mandatory / Optional
applicationId	Application ID as given when provisioned	String	Mandatory
password	Password given when provisioned	String	Mandatory

version	API version shall be numbered as 1.0, 2.0 etc	String	Optional If not specified shall be validated against the latest version
destinationAddresses	List of destination addresses should be telephone numbers tel - for MSISDN tel:6799912451, tel:6799912452 Address can also have the value - tel: all which will in turn be a message to the subscribed base of the application Note : tel might be a masked number depending on the type of application	String	at least one need to be specified
message	The message that need to be sent, Messages over the limit shall be broken up by the platform and messaged	String	Mandatory
sourceAddress	The sender address to be shown - can be one of the provisioned values in alias list	String	Optional
deliveryStatusRequest	To indicate the need of Delivery Status Report for the message.	Enumerator 0 - Delivery Report not required 1 - Delivery Report Required	Optional If not specified shall be assumed to be a request without the need for Delivery Report

encoding	Encoding scheme used in the message	Enumerated 0 - Text 240 - Flash SMS 245 - Binary SMS	Optional If not specified taken as Text If the encoding type is "Binary" then the message content will be represented as hex encoded.
binaryHeader	For advanced type messages where the binary header shall be sent from the application	Hexadecimal String	Optional ('Binary Header' is Mandatory if message 'encoding' is 'Flash' or 'Binary')

Comprehensive sample request:

```
{
  "password":"c609a16c0b01aac11396cea484f8e535",
  "message":"Sample Message",
  "destinationAddresses":["tel:6799945651"],
  "applicationId":"APP_000006",
  "deliveryStatusRequest":0,
  "version":1.0,
  "sourceAddress":5555,
  "encoding":0,
  "binary-header":7663697479,
}
```

3.1.2 Response

Following is a sample response of send service.

```
{
  "statusCode": "S1000",
  "requestId": "101307311109540017",
  "statusDetail": "Request was successfully processed",
  "destinationResponses": [{"statusCode": "S1000",
    "timeStamp": "20130731110954",
    "address": "tel:6799945651",
    "statusDetail": "Request was successfully processed",
    "messageId": "101307311109540017"}],
  "version": "1.0"
}
```

Following are the Response parameters of Send service.

Parameter Name	Description	Type	Mandatory / Optional
version	API version shall be numbered as 1.0, 2.0 etc If version was specified in request, same version must be sent in response. If version was not specified in request, then latest version will be specified in response.	String	Mandatory
requestId	requestId to uniquely Identify the request within the Cloud TAP	String	Mandatory
statusCode	The status code for the entire request	String	Mandatory
statusDetail	The status detail for the entire request	String	Mandatory

destinationResponses	<p>The list of responses for the full list of addresses</p> <p>It will be a collection with individual entry for each element in the address list of the request.</p> <p>Address</p> <ul style="list-style-type: none"> - timeStamp - Processed Time stamp - messageId - Message Identifier - statusCode - Status Code - statusDetail – Status detail <p>E.g., given below</p>	String	Mandatory
----------------------	--	--------	-----------

Sample Destination Response:

```
"destinationResponses":[{"statusCode":"S1000",
"timeStamp":"20130731114407",
"address":"tel:6799945651",
"statusDetail":"Request was successfully processed",
"messageId":"101307311144070043"}],
```

Comprehensive sample response:

```
{
"statusCode":"S1000",
"requestId":"101307311144070043",
"statusDetail":"Request was successfully processed",
"destinationResponses":[{"statusCode":"S1000",
"timeStamp":"20130731114407",
"address":"tel:6799945651",
"statusDetail":"Request was successfully processed",
"messageId":"101307311144070043"}],
"version":"1.0"}
```

3.2 Receive Service

This retrieves the SMS sent to the web application. Receive service returns only a list of SMS messages received since the previous invocation of the method to receive SMSs.

3.2.1 Request

Following is a sample request of receive service.

```
{
  "message": "Test Message",
  "requestId": "51307311302350037",
  "applicationId": "APP_000006",
  "sourceAddress": "tel:6799945654",
  "version": 1.0,
  "encoding": 0,
}
```

Following are the Request parameters of receive service.

Parameter Name	Description	Type	Mandatory / Optional
version	API version shall be numbered as 1.0, 2.0 etc	String	Mandatory
applicationId	Application ID as given when provisioned	String	Mandatory
sourceAddress	source address sourceAddress: tel: 6799912451	String	at least one will be specified
message	Message as sent from the user	String	Mandatory
requestId	Request Identifier in the Cloud TAP	String	Mandatory

encoding	<p>Encoding scheme used in the message</p> <p>If the encoding type is “Binary” then the message content will be represented as hex encoded.</p>	<p>Enumerated</p> <p>0 - Text</p> <p>240 - Flash SMS</p> <p>245 - Binary SMS</p>	Mandatory
----------	---	--	-----------

3.2.2 Response

Following is a sample response of receive service.

```
{
  "statusCode": "S1000",
  "statusDetail": "Success"
}
```

Following are the Response parameters of receive service.

Parameter Name	Description	Type	Mandatory / Optional
statusCode	The error code for the entire request	String	Mandatory
statusDetail	The error detail for the entire request	String	Mandatory

Comprehensive sample response:

```
{
  "statusCode": "S1000",
  "statusDetail": "Success"
}
```


3.3 Delivery Status Report

When performing a **SendSms** Operation if an application had requested for a Delivery Response message from the Message Centre, then the **Idea Mart** will initiate the Delivery Report service to hand over the Delivery Response message to the application. The **messageId** should be used to match the MT response with the Delivery Report.

3.3.1 Request

Following is a sample request of delivery status report service.

```
{
  "destinationAddress": "tel: 6799912451",
  "timeStamp": "20120113082110",
  "requestId": "51307311302350037",
  "deliveryStatus": "DELIVERED"
}
```

Following are the request parameters of status report service.

Parameter Name	Description	Type	Mandatory / Optional
destinationAddress	Address of the subscriber E.g., tel: 6799912451	String	Mandatory
timeStamp	The timestamp sent from the SMS "yyMMddHHmm" yy – last two digits of the year (00-99) MM – month (01-12) dd – day (01-31) HH – hour (00-23) mm- minute (00-59)	String	Mandatory
requestId	requestId to uniquely Identify the request within the Cloud TAP	String	Mandatory

deliveryStatus	Enum From SMPP Gateway : DELIVRD, EXPIRED, DELETED, UNDELIV, ACCEPTD, UNKNOWN, REJECTD Enum from Cloud TAP to Application: DELIVERED, EXPIRED, DELETED, UNDELIVERABLE, ACCEPTED, UNKNOWN, REJECTED		Mandatory
----------------	--	--	-----------

Comprehensive sample request:

```
{
  "destinationAddress": "tel: 6799912451",
  "timeStamp": "20120113082110",
  "requestId": "51307311302350037",
  "deliveryStatus": "DELIVERED"
}
```

3.3.2 Response

Following is a sample request of delivery status report service.

```
{
  "statusCode": "S1000",
  "statusDetail": "Success"
}
```

Following are the response parameters of status report service.

Parameter Name	Description	Type	Mandatory / Optional
statusCode	The status code for the entire request	String	Mandatory
statusDetail	The status detail for the entire request	String	Mandatory

Comprehensive sample response:

```
{  
  "statusCode": "S1000",  
  "statusDetail": "Success"  
}
```

Note: sample status and error codes are listed in the Appendix A

4 USSD

USSD (Unstructured Supplementary Service Data) is a capability built into SMS-based mobile devices. USSD information is directly sent from the sender's device to an application which is with USSD platform. A USSD service can be invoked either by the mobile user or by a USSD platform.

4.1 Send Service

This service lets the user send USSD to one or more terminals from the application.

Send service supports only POST HTTP requests. This is used when sending USSD messages to a mobile phone from an application.

4.1.1 Request

Following is a sample request for send service.

```
{
  "applicationId": "APP_003117",
  "password": "18b834673a1eed3913ce72fec6d91df4",
  "message": "1. Press One
             2. Press two
             3. Press three
             4. Exit",
  "sessionId": "1330929317043",
  "ussdOperation": "mt-cont",
  "destinationAddress": "tel: 6799912451"
}
```

Following are the Request parameters of send service.

Parameter Name	Description	Type	M / O
applicationId	Application ID as given when provisioned	String	M
password	Password given when provisioned	String	M

version	API version (shall be numbered as 1.0 etc) If not specified shall be validated against the latest version		O
sessionId	Unique number that USSD Gateway assigns to the application for the duration of the session. This number will be maintained in all messages throughout a single session.	String	M
ussdOperation	USSD operation mt-init: App to assign when a USSD session is initiated by an application mt-cont: App to assign for any USSD message originated from application, that comes after a init mt-fin: App to assign when session ends in final message	Enumerator Data type will be string where the operation name itself will be used in the parameter value.	M
destinationAddress	Destination address should be a telephone number tel - for MSISDN tel: 6799912451 Note : tel might be a masked number depending on the type of application	String	M
encoding	Encoding scheme used in the message 440 - Plain ASCII characters	Enumerated	O
message	Message as sent to the user	String	M

Comprehensive sample request:

```
{
  "applicationId": "APP_000001",
  "password": "18b834673a1eed3913ce72fec6d91df4",
  "message": "1. Press One
            2. Press two
            3. Press three
            4. Exit",
  "sessionId": "1330929317043",
  "ussdOperation": "mt-cont",
  "destinationAddress": "tel:6799912451",
  "version":1.0,
  "encoding":0,
}
```

4.1.2 Response

USSD-Send-Response is a response from the **Cloud TAP** to the application, which will be sent as a response to the USSD-Send-Request message.

Following are the response parameters of send service.

Parameter Name	Description	Type	M / O
version	API version (shall be numbered as 1.0 etc)	String	M
requestId	requestId to uniquely Identify the request within the m Choice Cloud Tap	String	M
statusCode	The status code for the entire request	String	M
statusDetail	The status detail for the entire request	String	M

Comprehensive sample response:

```
{
  "statusCode": "S1000",
  "requestId": "101308060614220956",
  "statusDetail": "Success",
  "version": "1.0"
}
```

4.2 Receive Service

The **ReceiveUssd** service allows **Cloud TAP** to deliver MO messages to the application using HTTP – based API. The flow of messages is initiated by a MO request sent to an application, the **m Choice Cloud Tap** will deliver the message to the application as an acknowledgement. Hence it could be either request-response exchange or a request-exception exchange.

Receive USSD request is a MO message which will be sent to the application through the M Choice Cloud Tap as a delivery request.

4.2.1 Request

Following is a sample request for receive service.

```
{
  "message": "010",
  "ussdOperation": "mo-init",
  "requestId": "071308060343170263",
  "sessionId": "1209992331266121",
  "encoding": "0",
  "applicationId": "APP_003117",
  "sourceAddress": "tel:6799934543",
  "version": "1.0"
}
```

Following are the request parameters of deliver service.

Parameter Name	Description	Type	M / O
version	API version (shall be numbered as 1.0 etc)	String	M
applicationId	Application ID as given when provisioned	String	M
sessionId	Unique number that USSD GW assigns to the application for the duration of the session	String	M
ussdOperation	USSD operation mo-init: m Choice Cloud Tap to assign when a USSD session is initiated by subscriber mo-cont: m Choice Cloud Tap to assign for any USSD message originated from subscriber, that comes after a init	Integer	M
sourceAddress	sender address sourceAddress: tel: 6799912451	String	M
vlrAddress	VLR address of the sender	String	O
message	Message as sent from the user	String	M
encoding	Encoding scheme used in the message 440 - Plain ASCII characters	Enumerated	M
requestId	Request ID to uniquely Identify the request within the Cloud TAP	String	M

Comprehensive sample request:

```
{
  "message": "010",
  "ussdOperation": "mo-init",
  "requestId": "071308060343170263",
  "sessionId": "1209992331266121",
  "encoding": "0",
  "applicationId": "APP_003117",
```



```
"sourceAddress": "tel:6799934543",  
"version": "1.0",  
"vlrAddress": "254710000000"  
}
```

4.2.2 Response

Deliver-USSD-Response should be the response given by the Application to the **Cloud TAP** as an acknowledgement on the receipt of a MO message submitted by **Cloud TAP**.

Following are the response parameters of deliver service.

Parameter Name	Description	Type	M / O
statusCode	The status code for the entire request	String	M
statusDetail	The status detail for the entire request	String	M

Comprehensive sample response:

```
{  
  "statusCode": "S1000",  
  "statusDetail": "Success"  
}
```

5 CAAS

Applications have Caas NCS access if charging as a service requests are required by the application.

5.1 Query Balance

This service retrieves the account balance and other related information of a given subscriber MSISDN. Account information comprises of Account type (Pre paid or Post paid) and Account's status (Activate or Disable).

5.1.1 Request

Following is a sample request for query balance service.

```
{
  "applicationId": "APP_000010",
  "password": "8f57d2e8de06e6f2d6ee5da6107d0a4f",
  "subscriberId": "tel:6799945654"
  "paymentInstrumentName": "Mobile Account"
}
```

Following are the Request parameters of send service.

Parameter Name	Description	Type	M / O
applicationId	Used to identify the application. This is a unique identifier generated while provisioning an application. Only a single value can be sent per request.	String (32)	M
password	Used to authenticate the application originated message against the service providers credentials. Encoded, single value.	String(32)	M

subscriberId	This can be the MSISDN of the subscriber whose account balance is being queried. Note: tel: number might be a masked number depending on the type of the application. Only a single value can be sent per request.	String	M
paymentInstrumentName	The name of the payment instrument. Only a single value can be sent per request.	Enumerator	M
accountId	The account of the payment instrument. Only a single value can be sent per request.	String	O
currency	The currency of the amount. Only a single value can be sent per request. Only 'FJD' is allowed.	String	O

Comprehensive sample request:

```
{
  "applicationId": "APP_000010",
  "password": "8f57d2e8de06e6f2d6ee5da6107d0a4f",
  "subscriberId": "tel:6799945654",
  "currency": "FJD",
  "accountId": "6799945654",
  "paymentInstrumentName": "Mobile Account"
}
```

5.1.2 Response

Following are the response parameters of query balance service.

Parameter Name	Description	Type	M / O
accountType	Account type of the subscriber id. E.g. Prepaid/Post paid for GSM domain. Only a single set of elements can be sent per request.	String	M
accountStatus	Account status of the subscriber ID Only a single set of elements can be sent per request	String	M
statusCode	Status of the operation. Only a single set of elements can be sent per request.	String	M
statusDetail	The textual description of the operation's status. Only a single set of elements can be sent per request.	String	M
chargeableBalance	Available chargeable balance of the subscriber. Refers to either remaining account balance (prepaid user) or the difference between credit limit and outstanding bill (postpaid user). Only a single value can be sent per request.	String (rounded up to two decimal points)	M

Comprehensive sample response:

```
{
  "statusCode": "S1000",
  "chargeableBalance": "100",
  "statusDetail": "Request was successfully processed",
  "accountStatus": "0",
  "accountType": "PREPAID"
}
```

5.2 Get Payment Instrument List

Get Payment Instrument List is to get a list of all the available payment instruments for a particular subscriber. In the request, the payment instrument list can be specified; either asynchronous or synchronous.

If the payment instrument type is not specified, the entire available payment instrument list will be sent.

5.2.1 Request

Following are the request parameters of Get Payment Instrument List.

Parameter Name	Description	Type	M / O
applicationId	appld of the application	String	M
password	Password of the application	String	M
subscriberId	<p>This can be the MSISDN of the subscriber. This is a unique identifier.</p> <p>Tel: is for MSISDN</p> <p>Subscriber: tel:6799912451</p> <p>Note: tel might be a masked number depending on the type of the application</p>	String	M
type	<p>Payment instrument type</p> <p>Possible values:</p> <ul style="list-style-type: none"> - sync - async - all <p>(by default: all)</p>	Enumerated	O

Comprehensive sample request:

```
{
  "applicationId": "APP_000010",
  "password": "8f57d2e8de06e6f2d6ee5da6107d0a4f",
  "subscriberId": "tel:6799954565",
  "type": "all"
}
```

5.2.2 Response

Following are the response parameters of Get Payment Instrument List.

Parameter Name	Description	Type	M / O
paymentInstrumentList	<p>This is the list of payment instruments configured to the subscriber. It should be as follows.</p> <p>E.g.,</p> <pre>[{ "name": "M-Pesa", "type": "async" }, { "name": "Operator", "type": "sync" },]</pre> <p>- name : payment instrument name - type: payment instrument type</p>	String	<p>M</p> <p>(if the request is successful)</p>
statusCode	Status of the operation	String	M
statusDetail	The textual description of the operation's status	String	M

Comprehensive sample response:

```
{
  "statusCode": "S1000",
  "statusDetail": "Success",
  "paymentInstrumentList": [
    {
      "name": "M-Pesa1",
      "type": "async"
    }
  ]
}
```

5.3 Direct Debit

This service charges a specific amount from a subscriber's account.

5.3.1 Request

Following is a sample request for direct debit service.

```
{
  "externalTrxId": "25609",
  "amount": "5",
  "applicationId": "APP_000010",
  "password": "8f57d2e8de06e6f2d6ee5da6107d0a4f",
  "subscriberId": "tel:6799934543",
  "paymentInstrumentName": "Mobile Account"
}
```

Following are the request parameters of deliver service.

Parameter Name	Description	Type	M / O
applicationId	Used to identify the application. This is a unique identifier generated by the m Choice Cloud Tap when provisioning an application. Only a single value can be sent per request.	String(32)	M
password	Used to authenticate the application originated message against the service providers credentials. Encoded, single value.	String(32)	M
externalTrxId	This is the transaction ID generated by the application to map the request with the response. This is needed to avoid any conflicts when SP inquires about a transaction. Only a single value can be sent per request.	String(32)	M
subscriberId	This can be the MSISDN the subscriber to be charged. This is a unique identifier. Tel: is for MSISDN Subscriber: tel: 6799912451 Note: tel might be a masked number depending on the type of the application Only a single value can be sent per request.	String	M
paymentInstrumentName	The name of the payment instrument. Only a single value can be sent per request.	Enumerator	M
accountId	The account of the payment instrument. Only a single value can be sent per request.	String	O

amount	Amount to be reserved for charging. Only a single value can be sent per request.	String (rounded up to two decimal points)	M
currency	The currency of the amount. Only a single value can be sent per request. Only 'FJD' is allowed.	String	O

Comprehensive sample request:

```
{
  "externalTrxId": "25609",
  "amount": "5",
  "applicationId": "APP_000010",
  "password": "8f57d2e8de06e6f2d6ee5da6107d0a4f",
  "subscriberId": "tel:6799934543",
  "currency": "FJD",
  "accountId": "6799945654",
  "paymentInstrumentName": "Mobile Account"
}
```

5.3.2 Response

Following are the response parameters of deliver service.

Parameter Name	Description	Type	M / O
externalTrxId	The transaction ID generated by the application to map the request with the response. Only a single value can be sent per request.	String	M

internalTrxId	Internal Transaction ID generated by the Payment Gateway for the transaction. This is unique per transaction. Only a single value can be sent per request.	String(32)	M
referenceId	Unique number generated by the system for the payment request. This is required to be entered in the external charging system/menu.	8 digits	O
timeStamp	System date and time of success or failed transaction. Only a single value can be sent per request.	Date/Time string in ISO-8601 format e.g. '2011-08-23T16:50:31.418+05:30'	
statusCode	Status of the operation. Only a single set of elements can be sent per request.	String	M
statusDetail	The textual description of the operation's status. Only a single set of elements can be sent per request.	String	M

Comprehensive sample response:

```
{
  "statusCode": "S1000",
  "timeStamp": "2013-08-01T08:43:34.344+05:30",
  "externalTrxId": "25609",
  "statusDetail": "Request was successfully processed",
  "internalTrxId": "913080108430074"
}
```

Appendix A

Status Codes and Error Codes

Status Codes (Non Retry-able)

Code	Description
S1000	Process completed successfully for all the available destination numbers.

Error Codes (Non Retry-able)

Code	Description
E1313	Authentication failed. No such active application with applicationId <application-id>, or no active service provider or the given password in the request is invalid.
E1303	IP address from which this request originated is not provisioned to send request to application <application-id>. Please use a provisioned system to send request or contact system admin to provision the new IP.
E1312	Request is Invalid. <specify_the_reason> Refer the m Choice Cloud Tap NBL API Developer Guide for the mandatory fields and correct format of the request.
E1309	Requested SMS service is not allowed for this Application. Please check the issue with m Choice Cloud Tap system administrator.
E1311	Mobile terminated SMS messages have not enabled. Check your NCS configuration in provisioning.
E1315	Cannot find the requested service SMS or it is not active.
E1317	<MSISDN> in request is invalid or not allowed.

E1328	Charging operation {operation} not allowed. Please check the NCS configuration.
E1341	Request failed. Errors occurred while sending the request for all the destinations.
E1334	SMS sent to <application name> application could not be processed as the message length is too long. Maximum message length allowed is <specify_max_limit>
E1335	SMS sent to <application name> application could not be processed as the advertisement message length is too long. Maximum message length allowed for advertisements is <specify_max_adv_limit>
E1337	Duplicate request.
E1601	System experienced an unexpected error.
E1342	MSISDN is black listed. Not authorized to use the application <application_name>
E1343	MSISDN is not white listed. Only white list numbers are allowed to send messages at this state.
E1325	Format of the address is invalid. Expected format is "tel: 6799912451"
E1331	<sourceAddress> is not allowed. Please use one of the values configured in alias configuration in the SLAs or send the request without <sourceAddress>, so M Choice Cloud Tap will use the default source address to send the message to subscriber.
E1308	Permanent charging error due <specify_reason E.g., Insufficient Balance>.

Error Codes (Retry-able)

Code	Description
E1318	Transaction limit per second has exceeded. Please throttle requests not to exceed the transaction limit. Contact M Choice Cloud Tap admin to increase the traffic limit.
E1319	Transaction limit for today is exceeded. Please try again tomorrow or contact M Choice Cloud Tap admin to increase the transaction per day limit
E1326	Insufficient balance.
E1602	Message delivery failed. Please retry
E1603	Temporary System Error occurred while delivering your request.

Appendix B

What follows is a list of definitions of all terms, acronyms and abbreviations required to properly interpret this document.

NCS – Network Capability Service

SMS –Simple Message Service

HTTP – Hyper Text Transfer Protocol

MO – Mobile Originated

MT – Mobile Terminated

MSISDN – Mobile Station Integrated Services Digital Network

SLA – Service Level Agreement