



# **Technical Specification for Partner Integrations**

## DOCUMENT DATA

Name	Type of Document
Technical Specification for Partner Integrations	Technical Specification

Creation Date	Author	Release Date	Approver
27/06/2015	Henrique Forero		Leandro Macedo

## HISTORY

Version	Date	Author	Description
0	27/06/2015	Henrique Forero	Initial Version
1.1	02/07/2015	Márcio Goulart	Change Payment Response
1.2	03/08/2015	Márcio Goulart	Change notification
1.3	05/08/2015	Maria Hiramí	New document structure
1.4	06/08/2015	Maria Hiramí	Document structure
1.5	07/08/2015	Márcio Goulart	Additional Information
1.6	10/08/2015	Maria Hiramí	Adjustments, additional information
1.7	12/08/2015	Márcio Goulart	Additional Interface QueryStatus
1.8	13/08/2015	Maria Hiramí	Adjustments
1.9	16/09/2015	Márcio Goulart	Additional parameter request SMS
1.10	16/09/2015	Márcio Goulart	Interface Migration
1.11	18/09/2015	Márcio Goulart	Change URL Migration
1.12	06/11/2015	Paulo Costa	Removed note in Migration section

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## 1 INTRODUCTION

### 1.1 OBJECTIVE

This documentation describes all the technical details of the services that the partners have to consume/expose from/to the OCSG platform.

### 1.2 TERMS AND ABBREVIATIONS

For a correct understanding of this documentation, see the following terms and abbreviations:

Term	Definition
OCSG	Oracle Communication Service Gatekeeper
SMS	Short Message

## 2 OCSG TO PARTNER SERVICES

### 2.1 DESCRIPTION

This section presents all service requests that the partner can receive from OCSG. For each type of request there must be a corresponding service developed and exposed by the partner. The partner must provide all endpoint URLs before the integration.

### 2.2 SUBSCRIPTION/UNSUBSCRIPTION NOTIFICATION

When OCSG registers a subscription to a service (regardless of channel, it could be a subscription from the Smart message channel, the SMS channel, etc.), the partner responsible for that service will receive a subscription notification. To activate the subscription, OCSG expects a response from the partner acknowledging the notification receipt (the partner will not be able to use the payment interface or send messages to the subscriber through OCSG while the subscription is inactive).

After acknowledging the notification, the partner is supposed to register the subscription on his own database and OCSG activates the subscription, allowing the partner to charge and send messages (i.e. Welcome message, service content, charging notifications, etc.) to the customer through OCSG's services.

When a customer is unsubscribed from a service in OCSG, the partner responsible for that service will receive an unsubscription notification. Since the customer is no longer subscribed to the service in OCSG, the partner is not allowed to charge or send messages to the customer referring that service (this means that if a customer is subscribed to two services administered by the same partner and he/she unsubscribes from one of them, OCSG will block the requests for the cancelled subscription but the partner can make requests referring the other service with no problem).

In some specific situations (e.g. unsubscription requested by the customer using the SMS channel), the partner is supposed to send messages to a customer that may not be a subscriber. OCSG includes a code (client correlator, used to identify the transaction) in the request, enabling the partner to use it to request the delivery of one SMS (Goodbye message) to the customer through OCSG. If the code is not informed by OCSG in the request, the partner is not supposed to send a Goodbye Message to the customer.

#### 2.2.1 REST REQUEST

##### 2.2.1.1 ENDPOINT

URL: <http://IP:PORT/register>

##### 2.2.1.2 PARAMETERS

Method: POST

Header parameters:

Parameter	Requirement	Description
clientCorrelator	Optional	Token provided by OCSG that allows the partner to send a SMS (Goodbye message) through OCSG to a customer that is not

		subscribed to the service.
--	--	----------------------------

JSON parameters:

Parameter	Requirement	Description
subscriptionNotification		
subscriptionId	Mandatory	OCSG's subscription identification. The partner must keep this information for future interactions with the platform. Example: In the payment interface, the subscription ID works as an OAuth authentication token.
applicationName	Mandatory	Application identification defined by TIM (Appld). The partner receives this information from TIM before the integration.
subscriberAddress	Mandatory	Subscribed customer's MSISDN. Expected format: tel:<MSISDN with country code and area code>
operation	Mandatory	Subscription operation. Values: <ul style="list-style-type: none"><li>"Subscribe" for subscription notifications.</li><li>"UnSubscribe" for unsubscription notifications.</li></ul>

### 2.2.1.3 EXAMPLES

Example of subscription notification:

```
POST /register HTTP/1.1
Accept: application/json
Content-Type: application/json
Content-Length: 180
Host: 10.0.2.15:8089
Connection: Keep-Alive

{"subscriptionNotification":{"subscriptionId":"ed912333-5728-46d1-aed5-2490eabc3f3a",
"applicationName":"11241","subscriberAddress":"tel:5511981421940","operation":"Subscribe"}}
```

Example of unsubscription notification with code for Goodbye Message:

```
POST /register HTTP/1.1
Accept: application/json
clientCorrelator: X9KSGB2V6Q0S5XEZSHRY
Content-Type: application/json
Content-Length: 180
Host: 10.0.2.15:8089
Connection: Keep-Alive

{"subscriptionNotification":{"subscriptionId":"ed912333-5728-46d1-aed5-2490eabc3f3a",
"applicationName":"11241","subscriberAddress":"tel:5511981421940",
"operation":"UnSubscribe",}}
```

Example of unsubscription notification without code for Goodbye Message:

```
POST /register HTTP/1.1
Accept: application/json
```

Content-Type: application/json  
Content-Length: 180  
Host: 10.0.2.15:8089  
Connection: Keep-Alive

```
{"subscriptionNotification":{"subscriptionId":"ed912333-5728-46d1-aed5-2490eabc3f3a",  
"applicationName":"11241","subscriberAddress":"tel:5511981421940",  
"operation":"UnSubscribe",}}
```

## 2.2.2 REST RESPONSE

### 2.2.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	Values: <ul style="list-style-type: none"><li><b>200 – OK:</b> Success</li><li><b>400 – Bad Request:</b> Error</li></ul>

JSON parameters:

Parameter	Requirement	Description
status	Mandatory	Values: <ul style="list-style-type: none"><li><b>"OK"</b>: Success</li><li><b>"NOK"</b>: Error</li></ul>
message	Optional	The partner should use this parameter to help troubleshooting when returning an error response.

### 2.2.2.2 EXAMPLES

Example of success response:

```
HTTP/1.1 200 OK  
Content-Type: application/json  
Date: Sat, 27 Jun 2015 16:02:09 GMT  
Transfer-Encoding: chunked  
  
{"status":"OK"}
```

Example of error response:

```
HTTP/1.1 400 Bad Request  
Content-Type: application/json  
Date: Sat, 27 Jun 2015 16:02:09 GMT  
Transfer-Encoding: chunked  
  
{"status":"NOK","message":"Invalid application"}
```

## 2.3 HELP REQUEST NOTIFICATION

When OCSG intercepts a help request from a customer, the partner responsible for the services in that short number receives a help request notification. The partner is expected to send instructions concerning the services related to that short number using the code (client correlator, used to identify the transaction) included by OCSG in the notification request.

### 2.3.1 REST REQUEST

#### 2.3.1.1 ENDPOINT

URL: `http://VPN_IP:PORT/help`

#### 2.3.1.2 PARAMETERS

Method: POST

Header parameters:

Parameter	Requirement	Description
clientCorrelator	Optional	Token provided by OCSG that allows the partner to send a SMS (help instructions) through OCSG to a customer that may not be subscribed to the service.

JSON parameters:

Parameter	Requirement	Description
helpNotification		
subscriber	Mandatory	Subscribed customer's MSISDN. Expected format: tel:<MSISDN with country code and area code>
subscriberMessage	Mandatory	The command sent by the customer.
shortCode	Mandatory	Short number used by the customer.

#### 2.3.1.3 EXAMPLES

Example:

```
POST /help HTTP/1.1
Accept: application/json
clientCorrelator: X9KSGB2V6Q0S5XEZSHRY
Content-Type: application/json
Content-Length: 180
Host: 10.0.2.15:8089
Connection: Keep-Alive

{"helpNotification":{"subscriber":"tel:5511948835896","subscriberMessage":"Ajuda",
"shortCode":"325"}}
```



## 2.3.2 REST RESPONSE

### 2.3.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	Values: <ul style="list-style-type: none"><li>• <b>200 – OK:</b> Success</li><li>• <b>400 – Bad Request:</b> Error</li></ul>

JSON parameters:

Parameter	Requirement	Description
status	Mandatory	Values: <ul style="list-style-type: none"><li>• "OK": Success</li><li>• "NOK" : Error</li></ul>
message	Optional	The partner should use this parameter to help troubleshooting when returning an error response.

### 2.3.2.2 EXAMPLES

Example of success response:

```
HTTP/1.1 200 OK
Content-Type: application/json
Date: Sat, 27 Jun 2015 16:02:09 GMT
Transfer-Encoding: chunked

{"status":"OK"}
```

Example of error response:

```
HTTP/1.1 400 Bad Request
Content-Type: application/json
Date: Sat, 27 Jun 2015 16:02:09 GMT
Transfer-Encoding: chunked

{"status":"NOK","message":"Invalid short number"}
```

### 3 PARTNER TO OCSG SERVICES

#### 3.1 DESCRIPTION

This section presents all services exposed by OCSG to the partners.

#### 3.2 UNSUBSCRIPTION REQUEST

When the partner needs to unsubscribe a customer (in situations like the end of the life cycle or upgrade/downgrade), the partner must request the unsubscription to OCSG using a REST interface. Note that the subscription Id is a required parameter on the URL.

##### 3.2.1 REST REQUEST

###### 3.2.1.1 ENDPOINT

URL: [https://VPN\\_IP:PORT/subscription/SUBSCRIPTIONID](https://VPN_IP:PORT/subscription/SUBSCRIPTIONID)

###### 3.2.1.2 PARAMETERS

Method: DELETE

Header parameters:

Parameter	Requirement	Description
Authorization	Mandatory	The authorization method used in this service is OAuth. Value: "Bearer " concatenated with the subscription ID (OCSG's subscription identification).

URL parameters:

Parameter	Requirement	Description
SUBSCRIPTIONID	Mandatory	Subscription identification on OCSG. It is informed by OCSG when the service is subscribed.

###### 3.2.1.3 EXAMPLES

Example:

```
DELETE https://127.0.1.1:8001/subscription/1ac045da-1405-4e78-ab99-3d108efd7f34 HTTP/1.1
Accept-Encoding: gzip,deflate
Accept: application/json
Host: 127.0.1.1:8001
Connection: Keep-Alive
User-Agent: Apache-HttpClient/4.1.1 (java 1.5)
Authorization: Bearer 1ac045da-1405-4e78-ab99-3d108efd7f34
```

## 3.2.2 REST RESPONSE

### 3.2.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	Values: <ul style="list-style-type: none"><li>• <b>204 – No Content:</b> Success</li><li>• <b>401 – Unauthorized:</b> Invalid token or customer not subscribed</li></ul>

### 3.2.2.2 EXAMPLES

Example of success response:

```
HTTP/1.1 204 No Content
Date: Sat, 27 Jun 2015 17:06:44 GMT
Content-Type: application/json
```

Example of error response – invalid token or customer not subscribed:

```
HTTP/1.1 401 Unauthorized
Date: Sat, 27 Jun 2015 17:03:46 GMT
Content-Length: 0
WWW-Authenticate: Bearer error="invalid_token" error_description="no such token"
```

## 3.3 SEND SMS

There are two possible ways of sending SMS messages using OCSG's service.

When the partner needs to send a message to a subscribed customer (to deliver a content or Welcome message, for example), the partner must request the SMS delivery to OCSG using a REST interface. Note that the senderAddress parameter must be placed on both URL and request message body. The authorization method for this situation is OAuth. This type of request is called "Type A" in this document.

When the partner receives a notification from OCSG and needs to send a message to a customer that may not be subscribed to the service (to deliver help instructions or a Goodbye message, for example), the partner must request the SMS delivery to OCSG using a REST interface. In this case, the partner will need the token (clientCorrelator) sent by OCSG in the notification. Note that the senderAddress parameter must be placed on both URL and request message body. The authorization method for this situation is Basic Authentication. This type of request is called "Type B" in this document.

### 3.3.1 REST REQUEST

### 3.3.1.1 ENDPOINT

URL: `https://VPN_IP:PORT/oneapi/1/smsmessaging/outbound/SENDERADDRESS/requests`

### 3.3.1.2 PARAMETERS

Method: POST

Header parameters:

Parameter	Requirement	Description
Authorization	Mandatory	The authorization method used in this service is OAuth (for Type A requests) or Basic (for Type B requests). Value: <ul style="list-style-type: none"><li>For Type A requests: "Bearer " concatenated with the subscription ID (OCSG's subscription identification).</li><li>For Type B requests: "Basic " concatenated with the id and password provided by TIM (encoded with base64).</li></ul>

URL parameters:

Parameter	Requirement	Description
SENDERADDRESS	Mandatory	Sender number (displayed to the customer when the message is delivered). Expected format: tel%3A<sender number>

JSON parameters:

Parameter	Requirement	Description
outboundSMSMessageRequest		
address	Mandatory	Subscribed customer's MSISDN. Expected format: tel:<MSISDN with country code and area code>
senderAddress	Mandatory	Sender number (displayed to the customer when the message is delivered). Expected format: "tel:<sender number>"
clientCorrelator	Optional	Token provided in the notification sent by OCSG. This parameter is necessary when dealing with customers that are not subscribed to the service (Type B requests).
outboundSMSTextMessage		
message	Mandatory	Text message that will be delivered to the customer. The use of accents and special characters is not recommended.

### 3.3.1.3 EXAMPLES

Example of Type A request:

```
POST /oneapi/1/smsmessaging/outbound/tel%3A4000/requests HTTP/1.1
Accept-Encoding: gzip,deflate
Accept: application/json
Content-Type: application/json
Authorization: Bearer 1ac045da-1405-4e78-ab99-3d108efd7f34
```

```
Content-Length: 139
Host: ocsg:8001
Connection: Keep-Alive

{"outboundSMSMessageRequest":{
  "address":["tel:5511987675431"],
  "senderAddress":"tel:4000",
  "outboundSMSTextMessage":{"message":"Para acessar seu conteudo utilize a URL http://tim.com.br"}}
}
```

Example of Type B request:

```
POST /oneapi/1/smsmessaging/outbound/tel%3A4000/requests HTTP/1.1
Accept-Encoding: gzip,deflate
Accept: application/json
Content-Type: application/json
Authorization: Basic dGVzdE9hdXRoOnRlc3RPyXV0aA==
Content-Length: 139
Host: ocsg:8001
Connection: Keep-Alive

{"outboundSMSMessageRequest":{
  "address":["tel:5511987675431"],
  "senderAddress":"tel:4000",
  "clientCorrelator":"YHMSBMJ453334",
  "outboundSMSTextMessage":{"message":"Voce cancelou o servico Tim A."}}
}
```

### 3.3.2 REST RESPONSE

#### 3.3.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	Values: <ul style="list-style-type: none"><li>• <b>201 – Created:</b> Success</li><li>• <b>401 – Unauthorized:</b> customer not subscribed to the service</li></ul>

JSON parameters:

Parameter	Requirement	Description
resourceReference		
resourceURL	Mandatory	URL containing transactionId returned in success case (for reference only). It is not necessary to keep this information.

#### 3.3.2.2 EXAMPLES

Example of success response:

HTTP/1.1 201 Created  
Date: Sat, 27 Jun 2015 17:13:54 GMT  
Content-Length: 145  
Content-Type: application/json

```
{"resourceReference":{"resourceURL":"http://127.0.1.1:8001/oneapi/1/smsmessaging/outbound/tel%3A1234/requests/-49409727900490796353-2051273256"}}
```

Example of error response - customer not subscribed to the service:

HTTP/1.1 401 Unauthorized  
Date: Sat, 27 Jun 2015 17:14:30 GMT  
Content-Length: 0  
WWW-Authenticate: Bearer error="invalid\_token" error\_description="no such token"

Example of error response – token is invalid:

HTTP/1.1 400 Bad Request  
Date: Sat, 27 Jun 2015 17:14:30 GMT  
Content-Length: 0  
  
{"requestError": {"policyException": {"messageId": "POL0001", "text": "A policy error occurred. Error code is %1", "variables": ["3001"]}}}

Example of error response – token id does not belong to MSISDN:

HTTP/1.1 400 Bad Request  
Date: Sat, 27 Jun 2015 17:14:30 GMT  
Content-Length: 0  
  
{"requestError": {"policyException": {"messageId": "POL0001", "text": "A policy error occurred. Error code is %1", "variables": ["3003"]}}}

## 3.4 PAYMENT SERVICES

### 3.4.1 DIRECT DEBIT

This service is responsible for charging a customer for a service. Note that the MSISDN (end user id) informed in the URL and in the request body must be the same.

#### 3.4.1.1 REST REQUEST

##### 3.4.1.1.1 ENDPOINT

URL: [https://VPN\\_IP:PORT/oneapi/1/payment/ENDUSERID/transactions/amount](https://VPN_IP:PORT/oneapi/1/payment/ENDUSERID/transactions/amount)

##### 3.4.1.1.2 PARAMETERS

Method: POST

Header parameters:

Parameter	Requirement	Description
Authorization	Mandatory	The authorization method used in this service is OAuth. Value: "Bearer " concatenated with the subscription ID (OCSG's subscription identification).

URL parameters:

Parameter	Requirement	Description
ENDUSERID	Mandatory	Customer's MSISDN. Expected format: tel%3A<MSISDN with country code and area code>

JSON parameters:

Parameter	Requirement	Description
amount	Mandatory	(decimal) Value to be multiplied by service price. Default value = "1.0".
code	Mandatory	(string) Application identification defined by TIM (Appld). The partner receives this information from TIM before the integration.
description	Optional	(string) Description text to be used for information and billing text.
endUserId	Mandatory	(string) Customer's MSISDN. Expected format: tel:<MSISDN with country code and area code>
mandateId	Mandatory	(string) Operation. Value: "1" for Direct Debit
productID	Mandatory	(string) Contract ID (tripleta).
referenceCode	Mandatory	(string) Service provider identification on OCSG (CSPid on OCSG). The partner receives this information from TIM before the integration.
serviceID	Mandatory	(string) Service provider identification defined by TIM (CSPid on backend). The partner receives this information from TIM before the integration.
taxAmount	Mandatory	(decimal) Parameter to be used in future features. Value: "0"
transactionOperationStatus	Mandatory	(string) Specifies the payment operation required. Value: "Charged"

#### 3.4.1.1.3 EXAMPLES

Example:

```
POST https://example.com/payment/1/tel%3A5511988776602/transactions/amount
HTTP/1.1
Accept: application/json
Host: example.com:80
Content-Type: application/json
Content-Length: 12345
```

Date: Thu, 04 Jun 2009 02:51:59 GMT

```
{
  "amountTransaction":{
    "endUserId":"tel:5511988776602",
    "paymentAmount":{
      "chargingInformation":{
        "description":"chargeAmount",
        "amount":"1.0",
        "code":"11241"
      },
      "chargingMetaData":{
        "taxAmount":"0",
        "mandateId":"1",
        "serviceId":"558",
        "productId":"0080000300001"
      }
    },
    "transactionOperationStatus":"Charged",
    "referenceCode":"558"
  }
}
```

### 3.4.1.2 REST RESPONSE

#### 3.4.1.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	Values: <ul style="list-style-type: none"> <li><b>200 – OK:</b> Successful GET Query Status or List Transactions request.</li> <li><b>201 – Created:</b> The charging or refund transaction was successful.</li> <li><b>202 – Processing:</b> The server cannot immediately answer if the charging or refund transaction was successful, please query the status later.</li> <li><b>400 – Bad request:</b> Check the error message and correct the request syntax.</li> <li><b>401 – Authentication failure:</b> Check your OneAPI provider's authentication requirements.</li> <li><b>403 – Forbidden:</b> Please provide authentication credentials.</li> <li><b>404 – Not found:</b> Mistake in the host or path of the service URI.</li> <li><b>405 – Method not supported:</b> In OneAPI Location v1 only GET is supported.</li> <li><b>503 – Server busy and service unavailable:</b> Please retry the request.</li> </ul>
Location	Mandatory	Provides the URI of the created resource. The final part of this URI ("10.171.135.35%3B1434572700%3B18-1435855573378" in the example) is the transactionId that uniquely identifies this payment transaction. The



		transactionId will be needed if the partner uses the QueryStatus service.
X-Plugin-Param-Values	Mandatory	AVP_LIST. The parameter <Service-Parameter-Value Flags="64"> in the AVP list indicates if the MSISDN is pre-paid or post-paid. Values: <ul style="list-style-type: none"> <li>0: Pre-paid MSISDN;</li> <li>1: Post-paid MSISDN.</li> </ul>

JSON parameters:

In addition to the original request parameters (sent by the partner in the request), the following response parameters are returned:

Parameter	Requirement	Description
"transactionOperationStatus": "Charged"	Mandatory	Confirms that the resource state is "Charged" – the customer's account has been charged.
amount	Mandatory	Indicates the amount that the developer asked to charge in the request (either as an amount or as a code that references an amount).
resourceURL	Mandatory	Corresponds to the same value of the "Location" header parameter.

#### 3.4.1.2.1.1 ERROR RESPONSES

When the transaction is not successful, an error response is returned with a Service Exception or Policy Exception (JSON objects returned in the response body). These objects are presented in the following format:

```
{
  "requestError": {
    "serviceException": {
      "messageID": "System Generated ID",
      "text": "error message",
      "variables": ["relevant string"]
    }
  }
}

{
  "requestError": {
    "policyException": {
      "messageID": "System Generated ID",
      "text": "error message",
      "variables": ["relevant string"]
    }
  }
}
```

The following table lists the generic errors that may occur in the service exposure platform (these codes are returned in the "messageId" and "variables" parameters):

Code	Description	Type
DIAMETER3002	Connection Error	Temporary

<b>DIAMETER3007</b>	Unsupported Operation	Permanent
<b>DIAMETER4001</b>	providerID is not present or is null	Permanent
<b>DIAMETER5006</b>	Insufficient funds	Permanent
<b>DIAMETER3004</b>	Time-out	Temporary
<b>DIAMETER3001</b>	Other error	Permanent
<b>DIAMETER5007</b>	Post-paid blacklist status	Permanent
<b>DIAMETER5008</b>	MSISDN Blocked (M2M & Corporate plans)	Permanent
<b>DIAMETER5009</b>	MSISDN Blocked for VAS Content	Permanent
<b>SVC0270</b>	Charging operation failed, the charge was not applied	Permanent
<b>POL0001</b>	Appld and subscriptionId in the request are not related	Permanent

### 3.4.1.2.2 EXAMPLES

Example of success response:

```
HTTP/1.1 201 Created
Date: Thu, 02 Jul 2015 16:46:13 GMT
Location:
http://10.171.135.31:8080/oneapi/1/payment/tel%3A5511988776601/transactions/amount/10.171.135.35%3B1434572700%3B18-1435855573378
Content-Length: 512
Content-Type: application/json
X-Plugin-Param-Keys: session-id
X-Plugin-Param-Values: 10<Avp-List>
  <Session-Id Flags="64">10.171.135.32;1426866124;257</Session-Id>
  <Result-Code Flags="64">2001</Result-Code>
  <Origin-Host Flags="64">10.171.29.173</Origin-Host>
  <Origin-Realm Flags="64">internal.timbrasil.com.br</Origin-Realm>
  <Auth-Application-Id Flags="64">4</Auth-Application-Id>
  <CC-Request-Type Flags="64">4</CC-Request-Type>
  <CC-Request-Number Flags="64">0</CC-Request-Number>
  <Service-Parameter-Info>
    <Service-Parameter-Type Flags="64">501</Service-Parameter-Type>
    <Service-Parameter-Value Flags="64">1</Service-Parameter-Value>
  </Service-Parameter-Info>
</Avp-List>,10.171.135.32;1426866124;257

{
  "amountTransaction":{
    "endUserId":"tel:5511988776601",
    "paymentAmount":{
      "chargingInformation":{
        "description":[
          "chargeAmount"
        ],
        "amount":1.0,
        "code":"11241"
      },
      "chargingMetaData":{
        "taxAmount":0,
        "mandateId":"1",
        "serviceId":"558",
        "productId":"0080000300001"
      }
    },
    "transactionOperationStatus":"Charged",
    "referenceCode":"558",
    "resourceURL":"http://10.171.135.31:8080/oneapi/1/payment/tel%3A5511988776601/transactions/amount/10.171.135.35%3B1434572700%3B18-1435855573378"
```

```
}  
}
```

Example of error response – DIAMETER error:

```
HTTP/1.1 400 Bad Request  
Date: Fri, 07 Aug 2015 14:17:05 GMT  
Content-Length: 139  
Content-Type: application/json  
  
{  
  "requestError": {  
    "serviceException": {  
      "messageId": "SVC0270",  
      "text": "Request  
denied by credit control server",  
      "variables": ["DIAMETER3001"]  
    }  
  }  
}
```

Example of error response - POL0001 error:

```
HTTP/1.1 400 Bad Request  
Date: Fri, 07 Aug 2015 14:20:49 GMT  
Content-Length: 132  
Content-Type: application/json  
  
{  
  "requestError": {  
    "policyException": {  
      "messageId": "POL0001",  
      "text": "A policy  
error occurred. Error code is %1",  
      "variables": ["3004"]  
    }  
  }  
}
```

### 3.4.2 QUERY STATUS

This interface allows the partner to check the payment request status (if it was successful or not). The partner can use this service when there was a communication issue with OCSG or an internal error on the partner's side, for example.

#### 3.4.2.1 REST REQUEST

##### 3.4.2.1.1 ENDPOINT

URL: [https://VPN\\_IP:PORT/oneapi/1/payment/ENDUSERID/transactions/amount/TRANSACTIONID](https://VPN_IP:PORT/oneapi/1/payment/ENDUSERID/transactions/amount/TRANSACTIONID)

##### 3.4.2.1.2 PARAMETERS

Method: GET

URL parameters:

Parameter	Requirement	Description
ENDUSERID	Mandatory	Customer's MSISDN. Expected format: tel%3A<MSISDN with country code and area code>
TRANSACTIONID	Mandatory	TransactionId that uniquely identifies this payment transaction. It is provided in the "Location" or "resourceURL" response parameter.

#### 3.4.2.2 REST RESPONSE

##### 3.4.2.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	<p>Values:</p> <ul style="list-style-type: none"> <li><b>200 – OK:</b> Successful GET Query Status or List Transactions request.</li> <li><b>400 – Bad request:</b> Check the error message and correct the request syntax.</li> <li><b>401 – Authentication failure:</b> Check your OneAPI provider's authentication requirements.</li> <li><b>403 – Forbidden:</b> Please provide authentication credentials.</li> <li><b>404 – Not found:</b> Mistake in the host or path of the service URI.</li> <li><b>405 – Method not supported:</b> In OneAPI Location v1 only GET is supported.</li> <li><b>503 – Server busy and service unavailable:</b> Please retry the request.</li> </ul>

Body Response:

Parameter	Requirement	Description
"transactionOperationStatus": "Charged"	Mandatory	Confirms that the resource state is "Charged" – the customer's account has been charged.
amount	Mandatory	Indicates the amount that the developer asked to charge in the request (either as an amount or as a code that references an amount).
endUserId	Mandatory	Customer's MSISDN. Expected format: tel%3A<MSISDN with country code and area code>
description	Mandatory	(string) Description text to be used for information and billing text.
code	Mandatory	(string) Application identification defined by TIM (Appld). The partner receives this information from TIM before the integration.
totalAmountCharged	Mandatory	(decimal) Value to be multiplied by service price. Default value = "1".
taxAmount	Mandatory	(decimal) Parameter to be used in future features. Value: "0"
mandateId	Mandatory	(string) Operation. Value: "1" (Direct Debit)
productId	Mandatory	(string) Contract ID (triplea).
referenceCode	Mandatory	(string) Service provider identification on OCSG (CSPid on OCSG). The partner receives this information from TIM before the integration.
resourceURL	Mandatory	Provides the URI of the created resource. The final part of this URI

		("10.114.200.60%3B1439304297%3B0-1439322538332" in the example) is the transactionId that uniquely identifies this payment transaction.
--	--	---

### 3.4.2.2.2 EXAMPLES

Example of success response:

```
{
  "amountTransaction": {
    "endUserId": "tel:5511985236652",
    "paymentAmount": {
      "chargingInformation": {
        "description": ["chargeAmount"],
        "amount": 1,
        "code": "11336"
      },
      "totalAmountCharged": 1,
      "chargingMetaData": {
        "taxAmount": 0,
        "mandateId": "1",
        "productId": "0000000900005"
      }
    },
    "transactionOperationStatus": "Charged",
    "referenceCode": "558",
    "resourceURL":
      "http://10.114.200.57:8080/oneapi/1/payment/tel%3A5511985236652/transactions/amount/10.114.200.60%3B1439304297%3B0-1439322538332"
  }
}
```

Example of error response – cannot find transaction:

```
{
  "requestError": {
    "serviceException": {
      "messageId": "SVC0001",
      "text": "can't find transaction:10.114.200.60;1439304297;0-1439322538333"
    }
  }
}
```

## 3.5 MIGRATION SERVICES

### 3.5.1 MIGRATION

This service allows partners migrate their customers to the new sdg platform.

#### 3.5.1.1 REST REQUEST

##### 3.5.1.1.1 ENDPOINT

URL: [https://VPN\\_IP:PORT/daf/Migration/1/migration](https://VPN_IP:PORT/daf/Migration/1/migration)

##### 3.5.1.1.2 PARAMETERS

Method: POST

Header parameters:

Parameter	Requirement	Description
Authorization	Mandatory	The authorization method used in this service is Basic

JSON parameters:

Parameter	Requirement	Description
msisdn	Mandatory	(string) Customer's MSISDN.
applicationId	Mandatory	(string) Application identification defined by TIM (ApplId). The partner receives this information from TIM before the integration.

### 3.5.1.1.3 EXAMPLES

Example:

```
POST https://10.171.135.31:8088/daf/Migration/1/migration HTTP/1.1
Content-Type: application/json
Host: 10.171.135.31:8088
Authorization: Basic dGltc2RwOnExdzJlMw==

{"subscription":{"msisdn":"5511948835896","applicationId":"11263"}}
```

### 3.5.1.2 REST RESPONSE

#### 3.5.1.2.1 PARAMETERS

Header parameters:

Parameter	Requirement	Description
HTTP code	Mandatory	Values: <ul style="list-style-type: none"><li>• <b>200 – OK:</b> Successful POST Transactions request.</li><li>• <b>400 – Bad request:</b> Check the error message and</li><li>• <b>404 – Not found:</b> Mistake in the host or path of the service URI.</li></ul>

#### 3.5.1.2.2 EXAMPLES

Example of success response:

```
HTTP/1.1 201 Created
Date: Thu, 02 Jul 2015 16:46:13 GMT
HTTP/1.1 200 OK
Server: Apache-Coyote/1.1
```



---

Strict-Transport-Security: max-age=31536000 ; includeSubDomains  
Content-Length: 0  
Date: Wed, 16 Sep 2015 18:53:19 GMT