# Sonali Bank Limited

## Sonali Payment Gateway (SPG)

(Payment Collection)

**Ver 3.0.1**

*Prepared by*

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## Disclaimer

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## 1. Introduction

This document provides the specifications of the Connector that link the Sonali Payment Gateway (SPG) and Service Portal. The purpose is to assist Service Portal in preparing their infrastructure for integration with the Sonali Payment Gateway (SPG) in order to perform real time transaction verification against relevant services.

## 2. Protocol and Call Flow

Service Portal will initiate the connect request to Sonali Payment Gateway (SPG) connector. This can be achieved by Service Portal sending request to specific address at Sonali Payment Gateway with User Information and Payment Information as input parameter.



SPG API Integration Diagram
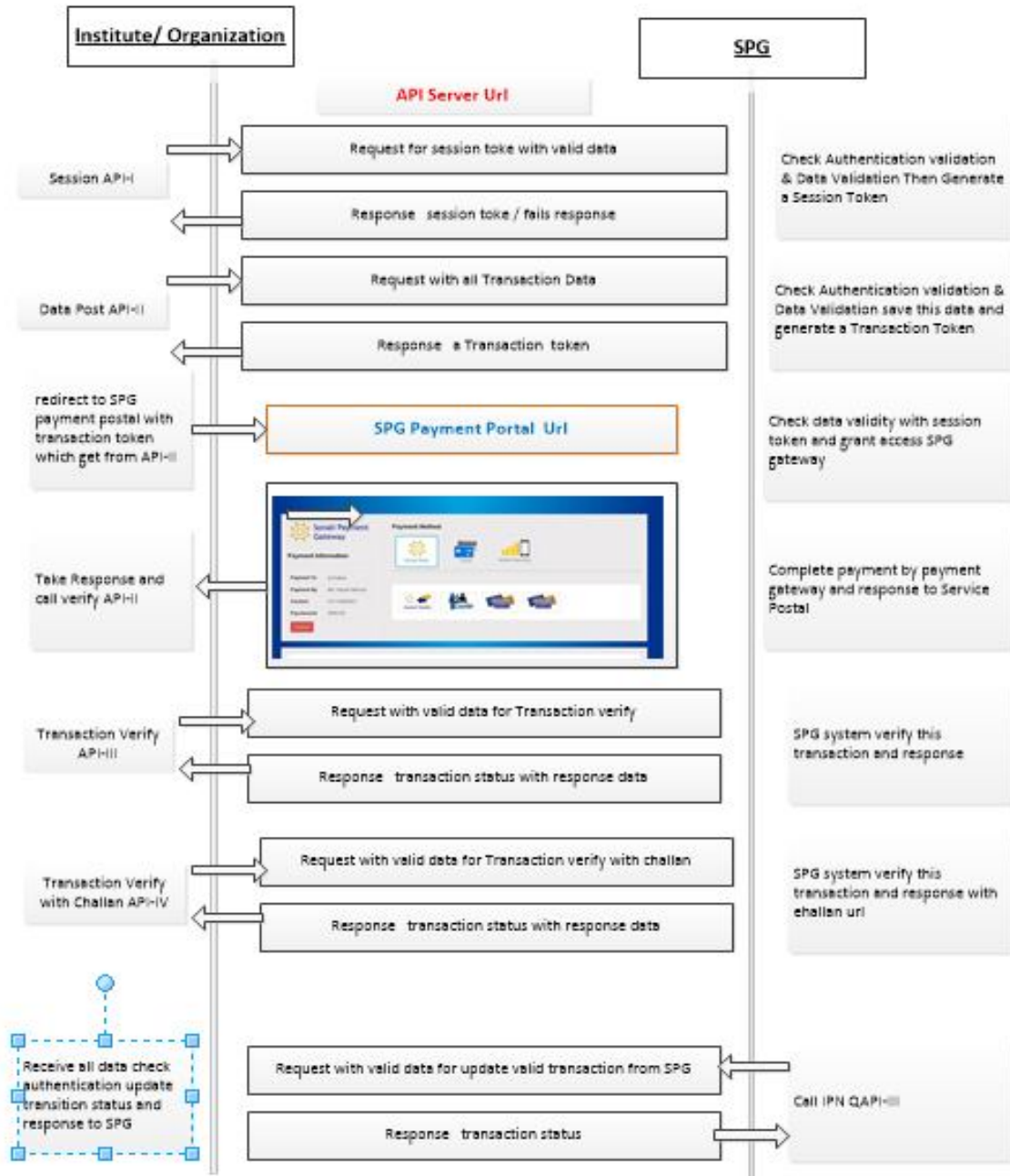
## 3. Integration Procedure (Operational)

- **Step 1:** The Applicant access **Service portal** (like. eChallan ) of and give Payment information like Applicant Name, Contact No. etc.
- **Step 2:** Call SPG Session **API-I** for session key, if session key get successful then go next steps.

- **Step 3:** Call API **API-II** for Post Transactional Data to SPG, if data & authentication. Data save and generate a transaction token for redirect to SPG.

- **Step 4:** redirect to service portal with transaction token. and customer view a Payment portal page.

- **Step 5:** Sonali Payment Gateway (SPG) verify authenticity of data & source and store all request information then return the payment UI to The Service Applicant chooses the payment option.

- **Step 6:** If the payment channel successfully done and response POST to return url of service portal

- **Step 7:** Service Portal receive this response and call Transaction verify API-II and confirm transaction before service available to customer.

**Poratal url: https://spg.sblesheba.com:6313/SpgLanding/SpgLanding/{session_token}**
**Rest API url: https://spgapi.sblesheba.com:6314/**

## 4. Sample of All Data Format

### 4.1: Session Token (API -I)

POST /api/v2/SpgService/GetAccessToken
Host: https://spgapi.sblesheba.com:6314
Content-Type: application/json
Authorization: Basic ZHVVc2VyMjAxNDpkdVVzZXJQYXltZW50MjAxNA==

**Request:**

```json
{
"AccessUser":{
        "userName":"duUser2014",
        "password":"duUserPayment2014"
},
"invoiceNo":"INV155422121443",
"amount":"400",
"invoiceDate":"2019-02-26",
"accounts": [
     {
  "crAccount": "0002634313655",
  "crAmount": 200
   } ,
    {
  "crAccount": "0002634313651",
  "crAmount": 200
   }
  ]
 }
```

**Response :**

```json
Response:
{
   "status": "200",
   "msg": "success",
   "access_token":
   "QaAu8rkDr1gcR3XwWXCs9nb7ASymYwfxf6er81DlHjb0tIFINc7WkS/mXWGcjRpnfOfWVXP8GsD9JHpnRPdM0bp
   YXmcPCIvU0r64mippoqBpTzoKSJJzRQ=="
}
```

### 4.2: **Post Transactional Data (API -II)**
According to Request **Parameter Table 5**

```
POST /api/v2/SpgService/CreatePaymentRequest
Host: spgapi.sblesheba.com:6314
Content-Type: application/json
Authorization: Basic ZHVVc2VyMjAxNDpkdVVzZXJQYXltZW50MjAxNA==
```

**Request:**

```
{
"authentication":{
  "apiAccessUserId": "duUser2014",
  "apiAccessToken":
"QaAu8rkDr1gcR3XwWXCs9nb7ASymYwfxf6er81DlHjb0tIFlNc7WkS/mXWGcjRpnfOf
WVXP8GsD9JHpnRPdM0bpYXmcPCIvU0r64mippoqBpTzoKSJJzRQ=="
},
 "referenceInfo": {
 "InvoiceNo": "INV155422121443",
 "invoiceDate": "2019-02-26",
 "returnUrl": "http://localhot",
 "totalAmount": "400",
 "applicentName": "Md. Hasan Monsur",
 "applicentContactNo": "01710563521",
 "extraRefNo": "2132"
 },
 "creditInformations": [
 {
  "slno": "1",
  "crAccount": "0002634313655",
  "crAmount": "200",
  "tranMode": "TRN"
 },
 {
  "slno": "2",
```

```
      "crAccount": "0002634313651",

      "crAmount": "200",

      "tranMode": "TRN"

     }

   ]

 }
```

**Response :**
```
{
   "status": "200",
   "session_token": "8217fe3de07b00e50186209059f91dfb09ff6b9c",
   "message": "success"
}
```

## 4.3: Post Redirect Operation TO SPG (POST & Redirect)

```
<html><head></head>
<body onload='document.forms[0].submit()'><form name='PostForm' method='GET'
  action='https://spg.sblesheba.com:6313/SpgLanding/SpgLanding/{session_token}' />
</textarea></form></body></html>
```

## 4.4: Post Redirect Response from SPG (POST & Redirect)
**According to Response Parameter Table 6**
```
<html><head></head>
<body onload='document.forms[0].submit()'><form name='PostForm' method='GET' action='
{returnUrl}/?session_token={session_tocken}&status={StatusCode}'
         />
</textarea></form></body></html>
```

## 4.4: Transaction Verification (API-III)

POST /api/v2/SpgService/TransactionVerificationWithToken
Host: https://spgapi.sblesheba.com:6314
Content-Type: application/json
Authorization: Basic ZHVVc2VyMjAxNDpkVVzZXJQYXltZW50MjAxNA==

**Request:**

```
{
  "session_Token": "8217fe3de07b00e50186209059f91dfb09ff6b9c"
}
```

**Response:**

```
{
    "status": "200",
    "msg": "Success",
    "transactionId": "1902269000000000",
    "transactionDate": "2022-02-10 00:00:00",
    "InvoiceNo": "INV155422121443",
    "invoiceDate": "2019-02-26",
    "brCode": "Later",
    "applicentName": "Md. Hasan Monsur",
    "applicentContactNo": "01710563521",
    "totalAmount": "400",
    "paymentStatus": "200",
    "payMode": "ANY",
    "payAmount": "400",
    "vat": "0",
    "commission": "0",
    "scrollNo": ""
}
```

4.6: Webhook Transaction Update {IPN} (API-V) this API provide by Service Institute

Post:
url: { **service portal url** }/api/DataUpdate
Content-Type: application-json

**Request Body:**

```
{
"Credentials": {
    "userName":"duUser2014",
    "password":"duUserPayment2014"
},
"data": {
    "session_Token": "8217fe3de07b00e50186209059f91dfb09ff6b9c" ,
    "TransactionId": "1902269000000000",
    "TransactionDate": "2022-02-10 00:00:00",
    "InvoiceNo": "INV155422121443",
    "InvoiceDate": "2019-02-26",
    "BrCode": "Later",
    "ApplicantName": "Md. Hasan Monsur",
    "ApplicantContactNo": "01710563521",
    "TotalAmount": "400",
    "PaymentStatus": "200",
    "PayMode": "ANY",
    "PayAmount": "400",
    "Vat": "0",
    "Commission": "0",
    "ScrollNo": ""
    }
}
```

**Response :**
```
{
    "status": "200",-------201
    "msg": "Success",  -----fail
    "session_Token": "8217fe3de07b00e50186209059f91dfb09ff6b9c"
}
```

## 5. Request Parameter Table

| Parameter | Mandatory | Data Format | Description | Sample Value |
|---|---|---|---|---|
| apiAccessUserId | Yes | String(50) | This Access Id provided by Sonali Bank | userId |
| apiAccessToken | Yes | String(max) | This Key get from GetAccessToken | Hruasdadasd44YqOviHuE |
| session_token | Yes | String(50) | Session Token of each transaction | |
| brCode | | String(5) | sonali bank branch code | |
| transactionId | | string(16) | sonali bank TRxID for each Transaction | |
| transactionDate | | string(20) | Transaction Date of SPG | |
| invoiceNo | Yes | String (80) | Invoice Number with Unique EIN/ other identification of you | 100000001 |
| invoiceDate | Yes | Date String | Invoice Date | **2017-10-08** |
| totalAmount | Yes | String(20,2) | Transaction Amount | 500.00 |
| applicentName | Yes | String(200) | Individual Applicant Name | Md. Rabiul Alam |
| applicentContactNo | Yes | String(11) | Individual Applicant Mobile No. | 01706355722 |
| extraRefNo | No | String(20) | If Business Have any Extra Ref # | |
| returnUrl | Yes | String(200) | to redirect to service portal | https://yourportaldomain.com |
| slno | Yes | String(2) | list sequence number | |
| crAccount | Yes | String(13) | credit account number | |
| crAmount | Yes | String(20,2) | amount of Pay without charge | |
| paymentStatus | Yes | String(4) | Transaction Status of each Tran. | |
| payMode | | string(5) | transaction payment channel | |
| payAmount | | string(20,2) | total paid by customer | |
| tranMode | Yes | String(5) | Purpose short code | Purpose: CHL=Challan/ TRAN=Fee Transaction/ VAT=vat/ COM=Commission |
| brCode | | | | |

## 6. Transaction StatusCodes

| Code | Message | Interpretation |
|---|---|---|
| 200 | Success | Success Transaction |
| 201 | Unpaid | Transaction Unpaid |
| 400 | Cancel | Cancel By Client |
| 5017 | Counter Select,Unpaid | Counter Payment Transation Waiting for Paymemt |
| 5555 | Error data not Proces | System Error/ Cancel Payment |

## 6. Operation Status List

| Code | Message | Interpretation |
|------|---------|----------------|
| 200 | OK. | Success Operation |
| 404 | Fails | Fail Operation |

# THANK'S