

EXTERNAL DOCUMENT

# Waseet Integration Document

29.08.2024 #42S.W.SEEC.002



## TABLE OF CONTENT

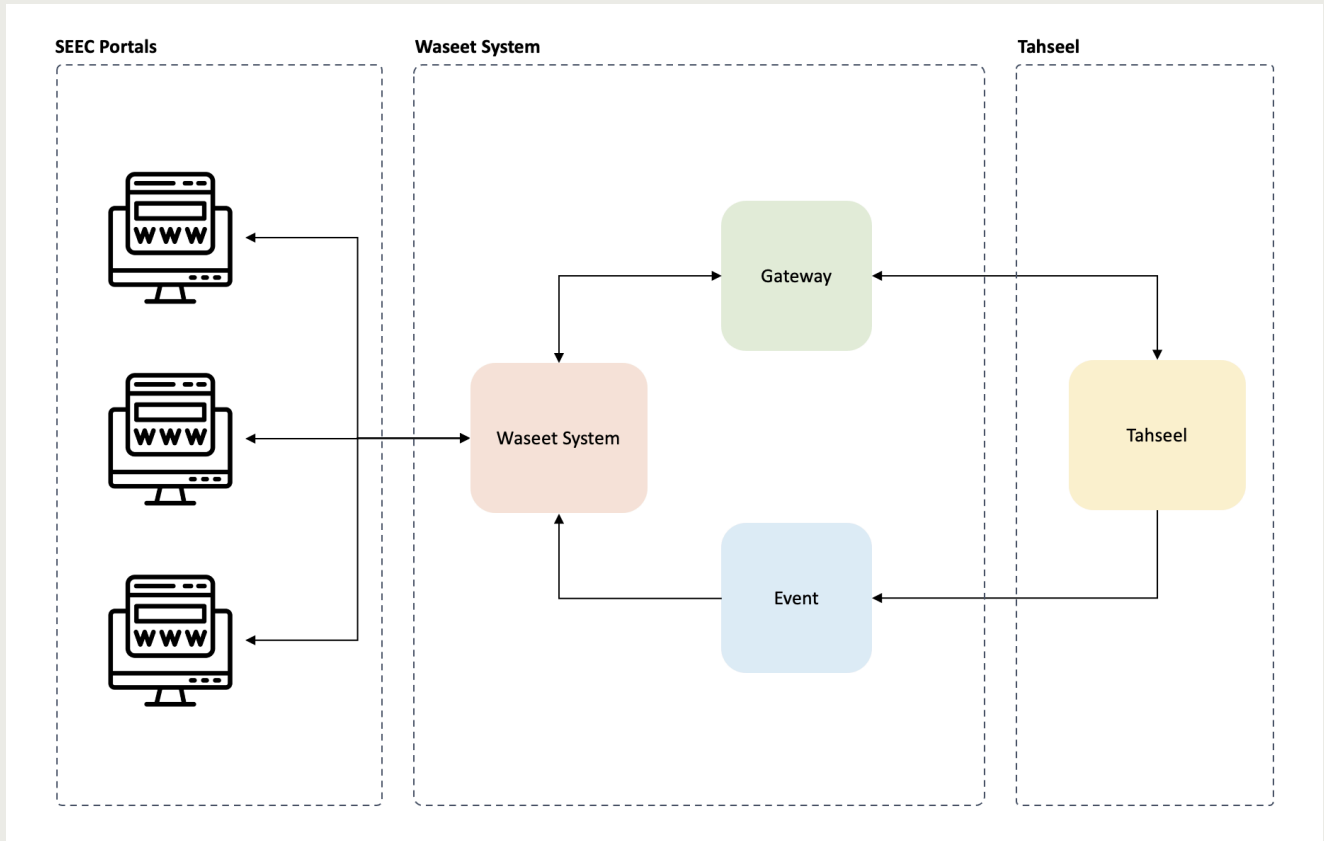
1. INTRODUCTION	3
1.1. Purpose	3
2. HIGH LEVEL ARCHITECTURE	4
3. ENVIRONMENTS	6
3.1. Staging	6
3.2. Production	6
4. INTEGRATION GUIDE	7
4.1. Authentication	7
4.2. Bill Generation	9
4.3. Get Bill	12
4.4. Refund Generation	15
4.5. Notify Portals	18

## 1. INTRODUCTION

### 1.1. Purpose

The purpose of this document is to provide a comprehensive understanding of the **Waseet system** and how to integrate with it. By delving into the intricacies of Waseet, users can gain valuable insights into its functionalities, features, and underlying architecture. This documentation serves as a comprehensive guide, offering step-by-step instructions and best practices for a seamless integration process. Whether you are a developer aiming to incorporate Waseet into your applications or an administrator seeking a deeper understanding of the system's capabilities, this document aims to cater to your informational needs.

## 2. HIGH LEVEL ARCHITECTURE



As illustrated in the diagram above, this integration comprises three primary components:

1. **SEEC Portals:** These refer to the websites where integration with the Waseet system for payments.
2. **Waseet System:** This integral system acts as the communication hub with Tahseel, and it consists of three key components:
  - a. **Gateway:** Responsible for initiating the transmission of bill and refund generation requests. The gateway serves as the interface through which data is exchanged between the Waseet system and Tahseel.
  - b. **Event:** This component receives notifications from Tahseel, conveying information about refund/bill confirmation and reconciliation. It plays a crucial role in ensuring updates and responses within the integrated system.
  - c. **Waseet System:** It serves as an intermediary between Tahseel and any portal undergoing integration, facilitating communication and interaction.
3. **Tahseel:** As the designated payment gateway integrated into the system, Tahseel handles the actual processing of payments. It serves as the intermediary for transactions, connecting the SEEC portals and Waseet system seamlessly.

This collaborative setup ensures a synchronized flow of information and actions between SEEC portals, the Waseet system, and the Tahseel payment gateway, facilitating a robust and efficient payment integration process.

## 3. ENVIRONMENTS

### 3.1. Staging

URL: tahseel-test.seec.gov.sa

### 3.2. Production

URL: tahseel.seec.gov.sa



	<pre>"permissionId": "", "permissionModules": {} }</pre>
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### Service Fields:

Field	Data Type	Description	Constraint
userName	string	portal username from waseet	N/A
password	string	portal password from waseet	N/A

## 4.2. Bill Generation

This API is employed to initiate bill generation in Tahseel through the Waseet API. Here are the specific details for the bill generation API:

### Service Details:

<b>Method</b>	POST
<b>Path</b>	/api/bill/generate
<b>Headers</b>	Content-Type: application/json Authorization: Bearer {token from response body of Authentication service}
<b>Sample Request body</b>	<pre>{   "billAccount": "112211221",   "billCycle": null,   "amount": 900,   "dueTo": "2023-10-06T08:49:52.832Z",   "expiryDate": "2023-10-06T08:49:52.832Z",   "referenceInfo": "112211221",   "titleAr": "إصدار شهادة مدقق الطاقة",   "titleEn": "Issue energy auditor certificate",   "description": "Full certificate",   "paymentOptions": null,   "revenueTypeEntries": [     {       "beneficiaryAgencyId": "123",       "gfsCode": "1422112",       "amount": 900     }   ],   "billSummaries": [     {       "amount": 900,       "amountCode": 0     }   ],   "customerName": "string",</pre>

	<pre>"customerEmail": "string" }</pre>
<b>Sample Response body</b>	<pre>{   "isSuccess": true,   "message": "Bill Generated Successfully",   "processId": null,   "entityId": 444,   "errorField": null }</pre>

## Service Fields:

Field	Data Type	Description	Constraint
billAccount	string	Will be used to pay the bill at the bank	must be a nine-digit, non-repeating numeric string
billCycled	string	N/A	always send it as null
amount	decimal	The cost of the service	N/A
dueTo	DateTime	Payments submitted after this date are considered late	N/A
expiryDate	DateTime	Bill expire date	N/A
referenceInfo	string	N/A	same value of billAccount
titleAr	string	The Arabic title of the bill	N/A
titleEn	string	the English title of the bill	N/A

description	string	The description of the bill	N/A
paymentOptions	N/A	N/A	always send it as null
revenueTypeEntries/beneficiaryAgencyId	string	static value from Tahseel	always send "123"
revenueTypeEntries/gfsCode	string	static value from Tahseel	always send "1422112"
revenueTypeEntries/amount	decimal	The cost of the service	same value of amount
billSummaries/amount	decimal	The cost of the service	same value of amount
billSummaries/amountCode	integer	N/A	always send 0
customerName	string	This value will be used as a reference at Waset.	N/A
customerEmail	string	This value will be used as a reference at Waset.	N/A

It's important to highlight that once the bill is generated, Tahseel will send notifications to Waset containing data such as "eCollectionPmtId" and "eCollectionPmtMethod." Given that Waset stores this information in its database, you'll need to utilize the following APIs – /api/bill/get-bill/{id} to retrieve more comprehensive details about this particular bill.

## 4.3. Get Bill

This API is employed to get bill details from Waseet.

### Service Details:

<b>Method</b>	GET
<b>Path</b>	/api/bill/get-bill?billId={billId}
<b>Headers</b>	Content-Type: application/json Authorization: Bearer {token from response body of Authentication service}
<b>Sample Request body</b>	N\A
<b>Sample Response body</b>	{ "success": true, "message": null, "billVm": { "billId": 10, "agencyId": "1", "billAccount": "490432792", "actionReason": null, "billCategory": "SEECHCD", "billCycle": null, "amount": 500, "dueTo": "2024-08-12T17:59:55.9847261", "expiryDate": "2024-09-11T17:59:55.9847261", "referenceInfo": "490432792", "titleAr": "فاتورة اصدار رخصة مدقق طاقة", "titleEn": "Generating Energy Auditor Certificate Bill", "description": "فاتورة اصدار رخصة مدقق طاقة", "poiNum": null, "poiType": 0, "beneficiaryName": null, "portalId": 2, "billerPaymentId": null, "agencyPaymentId": null, "eCollectionPaymentId": null, }

	<pre>"billNum": null, "paymentMethod": 0, "eCollectionPaymentMethodType": 0, "paymentCollectDt": null, "paymentMethodSpecified": false, "eCollectionPaymentMethodSpecified": false, "eCollectionPaymentMethodReconDt": null, "paymentStatusCodeSpecified": false, "billState": "Submitted", "paymentOptions": null, "eCollectionPaymentMethod": null, "revenueTypeEntries": [   {     "beneficiaryAgencyId": "123",     "gfsCode": "1422112",     "amount": 500   } ], "billSummaries": [   {     "amount": 500,     "amountCode": 0   } ], "customerName": "ahmad abduallah", "customerEmail": ahmad@example.com, "createDate": "2024-08-12T14:59:43.4566185+00:00", "billStatusObject": {   "key": "Draft",   "titleAr": "مسودة",   "titleEn": "" }, "refundStatusObject": null, "refundActionReason": null } }</pre>
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## Service Fields:

Field	Data Type	Description	Constraint
billId	int	billId is the entityId in Bill Generation response API	N/A

#### 4.4. Refund Generation

Here are the specifics for generating a refund request for a bill:

##### Service Details:

<b>Method</b>	POST
<b>Path</b>	/api/refund/generate
<b>Headers</b>	Content-Type: application/json Authorization: Bearer {token from response body of Authentication service}
<b>Sample Request body</b>	<pre>{   "billId": 21,   "refundId": "123456780025",   "eCollectionRefundId": "SEEC2023100312470900006097682",   "items":["SEEC2023100312470900006097682"],   "itemsElementName": [2],   "refundAmt": 300,   "refundDt": "2023-10-29",   "eCollectionRefundMethod": null,   "refundRefInfo": "SEEC2023100312470900006097682",   "actionReason":"The terms do not apply to individual",   "revenueEntryList": [     {       "benAgencyId": "110000000000000000",       "gfsCode": "1422112",       "amt": 300     }   ] }</pre>
<b>Sample Response body</b>	<pre>{   "isSuccess": true,   "message": "Refund Requested",   "processId": null,   "entityId": 0,   "errorField": null }</pre>

## Service Fields:

Field	Data Type	Description	Constraint
billId	int	is the entityId in Bill Generation response API	N/A
refundId	string	Will be used at Tahseel	must be a non-repeating numeric string
eCollectionRefund Id	string	N\A	Retrieve the eCollectionPaymentId from the data obtained through the get bill API.
items	array of string	N\A	value of string always same as eCollectionRefund Id
itemsElementName	array of ineger	N\A	always send [2]
refundAmt	decimal	The amount to be refunded	can be either the full amount or a partial amount of the total bill.
refundDt	string	today date	yyy-mm-dd
eCollectionRefund Method	N\A	N\A	always send it as null
refundRefInfo	string	N\A	always same as eCollectionRefund Id

actionReason	string	A brief explanation of the refund reason.	N\A
revenueEntryList/b enAgencyId	string		
revenueEntryList/g fsCode	string	static value from Tahseel	always send "1422112"
revenueEntryList/a mt	decimal	The cost of the service	N\A

## 4.5. Notify Portals

This service enables portals to receive notifications from Waset, which in turn receives notifications from Tahseel regarding refunds, bill confirmations, and reconciliation.

Waset will call the URL provided by the Portal Admin in the Waset Dashboard and send the below details.

### Service Details:

<b>Method</b>	POST
<b>Path</b>	Portal path in Waset Dashborad
<b>Headers</b>	Content-Type: application/json
<b>Sample Request body</b>	<pre>{   "bill": {     "billId": 0,     "billAccount": "string",     "portalId": 0,     "billNum": "string",     "paymentMethod": 0,     "eCollectionPaymentMethodType": 0,     "billState": "string",     "customerName": "string",     "customerEmail": "string",     "createDate": "2024-08-17T22:15:34.481Z",     "dueTo": "2023-10-06T08:49:52.832Z",   } }</pre>
<b>Sample Response body</b>	N/A

If the first notification fails for any reason, Waset will automatically retry sending the update every 5 minutes.

## Statues we have for a bill:

- Submitted = sent to Tahseel successfully
- Failed
- Refunded
- Draft = not sent to Tahseel
- Paid = the user paid
- Agency Reconciled = the payment is reconciled
- Agency Refund Reconciled = the refund is reconciled
- Expired = the bill is expired