Table of Contents

1. Introduction .......................................................................................................................... 5
2. API Interface .......................................................................................................................... 5
3. List of e-Way Bill API Services / Methods ........................................................................... 10
4. Authentication API ............................................................................................................... 12
5. Service Request API ............................................................................................................. Error! Bookmark not defined.
6. API Overview ....................................................................................................................... 13
7. API Supporting Documents .................................................................................................. 13
## List of Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
</tr>
</thead>
<tbody>
<tr>
<td>GSTIN</td>
<td>Goods and Services Tax Identification No</td>
</tr>
<tr>
<td>API</td>
<td>Application Program Interface</td>
</tr>
<tr>
<td>EBN No</td>
<td>e-way bill Number</td>
</tr>
<tr>
<td>EWB</td>
<td>e-way bill</td>
</tr>
</tbody>
</table>
1. Introduction

1.1 Background

Introduction of Goods and Services Tax (GST) across India with effect from 1st of July 2017 is a very significant step in the field of indirect tax reforms in India. For quick and easy movement of goods across India without any hindrance, all the check posts across the country are abolished. The GST system provides a provision of e-Way Bill, a document to be carried by the person in charge of conveyance, generated electronically from the common portal. To implement the e-Way Bill system, ICT based solution is required. Hence, as approved by the Goods and Services Tax (GST) Council, a web based solution has been designed and developed by National Informatics Centre and it is being rolled out for the use of taxpayers and transporters. The API interface based mechanism is also enabled for the taxpayers to generate the e-way bills directly linking their system with e-way bill system.

1.2 Purpose and Intended Audience

This document aims to explain the operational procedure on how to use API based interface can be used for generation of e-Way Bill. Also it explains the features and sample method of using this system.

This document is intended for big registered tax payers under GST and transporters, who are the main stakeholders of e-Way Bill system under GST.

1.3 Scope

The scope of this document covers:

- Benefits of the API interface
- Methods of API interface.
- API specification and process.
- List of APIs and purpose of them
- How to get further documents.

1.4 URL or Web site address

http://ewaybill.nic.in
2. API Interface

E-Way Bill team is happy to provide the API interface with E-Way Bill (EWB) system. The tax payers or transporters, who have automated their systems, can use this API to generate the e-way bill online from system to system. This API interface facilitates the tax payers or transporters to enable their automated system to call the EWB system to generate, update and pull the data related to their e-way bills.

2.1 Benefits

These APIs can be used by the Tax Payers or Transporters or GST Suvidha Providers. The tax payers or transporters can have the following benefits by having API interface with their systems:

- Duplicate or double entry of invoice can be avoided. Generally, the employees of the tax payers enter the sales details in their computerised system and generate the invoice. After that they will come to e-way bill system and generate the e-way bill.
- Mistakes while generating e-way bill can be avoided. In a hurry to generate the e-way bill, the employee may do a mistake in data entry of e-way bill form, resulting in generation of incorrect e-way bill.
- Two prints of invoice and e-way bill can be avoided. That is, transporter or driver of the vehicle can be given invoice print only and on that invoice print, the e-way bill number can be written.
- In manual process, the tax payer cannot link the e-way bill with invoice number in his system. Once, the tax payer uses the API interface, he can write the e-way bill number along with the invoice details in his system automatically.

2.2 Pre-requisites

To use the API interface, the tax payer has to meet the following conditions:

- The tax payer or transporter should have automated his invoice generation process.
- Tax payer or transporter should generate at least 1000 e-way bills per day or update vehicle numbers per day on the e-way bill system.
2.3 On-boarding process

- Read the API related documents
- After logging into the e-way bill system, the tax payer or transporter has to select the ‘For API’ option under ‘Registration’ menu.
- Enter the request details – domain name, static IP, etc.
- After due verification by the concerned officer, the request will be approved.
- On approval, the EWB system generates the Client_Id, Client_Secret, UserName and Password and displays to the tax payer.
- Using this, IT team of the tax payer will change or modify their automated system.
- The tax payer will test modified system from his pre-production system with EWB pre-production system
- After thorough testing by the tax payer with all types of activities, at least 2000 activities, he will be enabled to move to production.

2.4 Interfacing examples

2.4.1 API Interface for Tax Payer system – One of the ways of interfacing

Note: This is one sample method/process of interfacing the EWB API into tax payer system. However, the tax payer can decide his process/method as per his business needs. No need to follow this only.

- The Tax payer enters invoice details in his automated system
- On submit of the invoice generation, the tax payer stores and generates the invoice number on his system
• Now, Tax payer system calls EWB API with relevant information for generation of e-way bill.

• EWB API after authentication and verification of information generates e-way bill and returns EBN No.

• The Tax payer system gets this EBN No. and saves to his database the EBN No. with related invoice record.

• The tax payer system prepares the invoice print, which will have the EBN No at the bottom and the tax payer prints the invoice and gives it to the transporter / driver for movement of goods.

2.4.2 API Interface for Transporter system - One of the ways of interfacing

Note: This is one sample method/process of interfacing the EWB API into tax payer system. However, the tax payer can decide his process/method as per his business needs. No need to follow this only.

• On hourly basis, Transporter system pulls all the e-waybills assigned to him using EWB API and stores into his system.

• Before movement of goods, transporter enters vehicle no. for his LR and saves in his system.

• Now, Transporter system calls EWB system with EBN No. and other details requesting to update Part B of particular e-way bill.

• EWB system after authentication and verification of details, updates vehicle details and gives ACK.

• Transporter system updates this ACK in his system and prints the Trip sheet or manifesto.

• Now, Transporter moves the goods along with this trip sheet or manifesto.
### 3. List of E-Way Bill API Services/Methods

<table>
<thead>
<tr>
<th>SI No.</th>
<th>API Service</th>
<th>API Description</th>
<th>Response (data)</th>
<th>Applicable To</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Authenticate</td>
<td>Authenticate with the credential to access the APIs</td>
<td>Token</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>2</td>
<td>Get e-Way Bill</td>
<td>Get the e-Way Bill details based on EWB Number</td>
<td>EWB Object, Vehicle details</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>3</td>
<td>Get Consolidated E-Way Bill</td>
<td>Get the Consolidated e-Way Bill details based on EWB Number</td>
<td>CEWB Object, Vehicle Details</td>
<td>Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>4</td>
<td>Get E-Way bill generated by others</td>
<td>Get the list of e-Way Bills generated by other party for my name based on generated date</td>
<td>List of EWBs (EWB_No, Date, Gen_GSTIN, Oth_party_GSTIN, TRN_Type, Sub_TRN_Type, Doc_no, Doc_date, Tot_value)</td>
<td>Tax Payer, Suvidha Provider</td>
</tr>
<tr>
<td>5</td>
<td>Get assigned E-Way Bills of my state</td>
<td>Get the list of e-Way Bills assigned to me for transportation in my state</td>
<td>List of EWBs (EWB_No, EWB_Date, Gen_GSTIN, TRANS_Doc_No, TRANS_Doc_Date, DEL_PIN_CODE, DEL_State)</td>
<td>Transporter</td>
</tr>
<tr>
<td>6</td>
<td>Get assigned E-Way Bill by GSTIN</td>
<td>Get the list of e-Way Bills assigned to me for transportation by particular GSTIN</td>
<td>List of EWBs (EWB_No, EWB_Date, Gen_GSTIN, TRANS_Doc_No, TRANS_Doc_Date, DEL_PIN_CODE, DEL_State)</td>
<td>Transporter</td>
</tr>
<tr>
<td>7</td>
<td>Generate E-Way Bill</td>
<td>Generate e-Way Bill</td>
<td>EWB_No, Date</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>8</td>
<td>Update Vehicle Number to E-Way Bill</td>
<td>Update new vehicle number for the e-way Bill</td>
<td>EWB_No, Date, Ref_Uniq_No</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>9</td>
<td>Cancel E-Way Bill</td>
<td>Cancel the e-Way Bill</td>
<td>EWB_No, Date, Ref_Uniq_No</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>Sl No.</td>
<td>API Service</td>
<td>API Description</td>
<td>Response (data)</td>
<td>Applicable To</td>
</tr>
<tr>
<td>-------</td>
<td>-------------------------------------------------</td>
<td>-----------------------------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------------</td>
</tr>
<tr>
<td>10</td>
<td>Reject E-Way Bill</td>
<td>Reject the e-Way Bill</td>
<td>EWB_No, Date, Ref_Uniq_No</td>
<td>Tax Payer, Suvidha Provider</td>
</tr>
<tr>
<td>11</td>
<td>Generate Consolidate E-Way Bill</td>
<td>Generate Consolidated e-Way Bill</td>
<td>CEWB_No, Date</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>12</td>
<td>Update Vehicle Number for Consolidated E-Way Bill</td>
<td>Update new vehicle number for the Consolidated e-way Bill</td>
<td>CEWB_No, Date, Ref_Uniq_No</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>13</td>
<td>Get HSN Master Codes</td>
<td>Get the HSN master codes</td>
<td>List of HSNs (HSN_Code, HSn_Descr)</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>14</td>
<td>Get State Master Codes</td>
<td>Get the State master codes</td>
<td>List of States (State_code, State_name)</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>15</td>
<td>Get UQC Master Codes</td>
<td>Get the Unit Quantity master codes</td>
<td>List of States (Uqc_code, Uqc_name)</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>16</td>
<td>Get Error Codes</td>
<td>Get the Error master codes</td>
<td>List of States (err_type, err_code, err_name)</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>17</td>
<td>Get New latest version APIs</td>
<td>Get the list of latest API version and release date</td>
<td>List of APIs (API_Name, Ver_No, Rel_Date)</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>18</td>
<td>Get Alerts</td>
<td>Get alerts</td>
<td>List of Alerts (Date, Alert_type, Alert_message)</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>19</td>
<td>Get GSTIN details</td>
<td>Get the GST tax payer details</td>
<td>GSTIN Object</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
<tr>
<td>20</td>
<td>Get TRANSIN details</td>
<td>Get the Transporter details</td>
<td>TRANSIN Object</td>
<td>Tax Payer, Transporter, Suvidha Provider</td>
</tr>
</tbody>
</table>
4. Authentication API

To access the API, application should first authenticate using the credentials shared and get the access token issued. Same access token to be used to access subsequent APIs. Access token will be configured to expire after 360 minutes. On expiry, same authentication API needs to be invoked to get new Access Token issued.

The API header information is used for authentication and authorization purpose.
5. Service Request API

To access the service requests like generate e-way bill, update vehicle, cancel e-way bill, the user application should have the valid authentication token. With the authentication token he has to send the request for the services with the relevant parameters to get the response or result.
6. API Overview

The EWAYBILL APIs are used to communicate between Tax Payers and Transporters of e-way Bill System. This section describes standards and formats which will be used to define API exposed by EWAYBILL systems. EWAYBILL APIs will be implemented as RESTful Web services.

- EWAYBILL APIs will be published as RESTful web service over HTTPS.
- HTTP Methods for API – GET to fetch data from EWAYBILL and POST to submit data to EWAYBILL
- Content Type is JSON file
7. **API supporting Documents**

The following documents are shared online, once the tax payer registers for API.

- API Specification details
- API field details
- Master Codes
- Error Codes
- Sample JSON Data format
- DSC for encryption