APIs Related to Multi-vehicle Movement

Introduction:

The new option has been introduced wherein the consignment of one e-way bill has to be moved in multiple vehicles, after moving to transshipment place.

For example, an e-way bill is generated and needs to be moved from A to C. Here, the consignment moves from A to B via Rail or bigger vehicle. Now, it is not possible to move the consignment from B to C in the same mode of transportation due to unavailability of that mode or may be due to hilly region where big vehicles cannot be used. In such cases, the consignment needs to be moved in multiple smaller vehicles.

Steps:

1. First generate the e-way bill with source and destination as per the document/invoice.
2. Carry out the first leg of movement of the consignment up to the transshipment.
3. Using the Initiate Multi Vehicle Movement API, update the e-way bill for multi-vehicle movement. Here, the total quantity of the consignment and movement from and to place for the multiple vehicles requirement has to be passed
4. Now, when the consignment has been loaded to the smaller vehicles, update the 'Part-B' of the e-way bill with the vehicle number, along with the quantity is loaded, and move the consignment using the Add Vehicles details for Multi Vehicle Movement API.
5. Step No 4 may be repeated till total quantity is loaded and moved. The system will not allow the quantity to be shipped in multiple vehicles more than what has been declared while marking the e-way bill for mulit-vehicle.
6. Any change in the vehicle details may be updated using the Change Vehicle details for Multi Vehicle Movement.

1.   Initiate Multi Vehicle Movement

Tax Payer

Header: client-id, client-secret, gstin, authtoken

Request: JSON(action, Encrypt(Base64(Request JSON),sek)

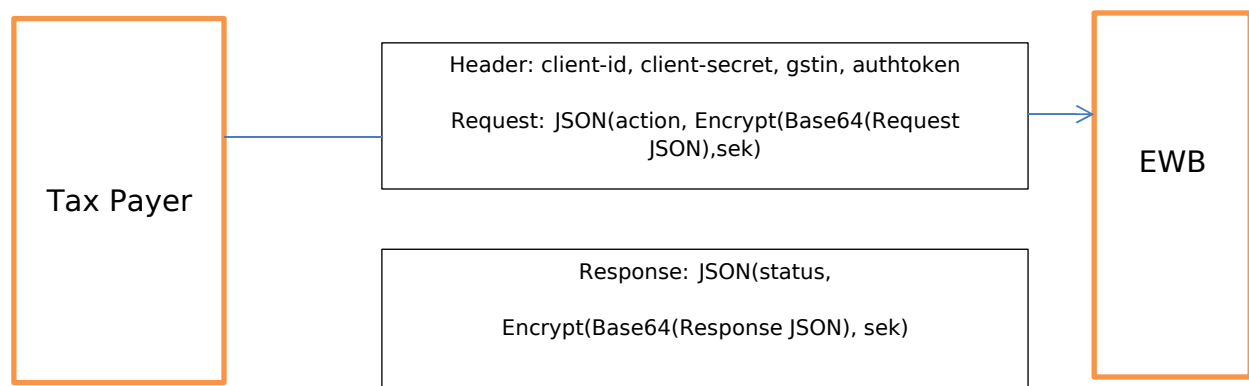Response: JSON(status, Encrypt(Base64(Response JSON), sek)

EWB

Figure 1. Sequence Diagram: Multi Vehicle Initiation API

The format and details of a Multi Vehicle Movement Initiation API request is depicted in following table.

URL	
	http://ewaybill2.nic.in/ewaybillapi/v1.02/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	Client-id to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	Values
action		**MULTIVEHMOVINT**
Encrypt (Base64(Request JSON),sek)	Encrypted Initiate Multi Vehicle JSON string	

Response Payload

Attributes	Description	Value
status	Status of request	0 – for Failure ;1 – for Success
Encrypt(Base64(Response JSON),sek)	Response of Multi Vehicle initiation JSON string, The response will have eway bill number, group no. and initiated date if it is successfully generated. Otherwise the response will have error codes	

Request JSON Format

```
{
 "ewbNo": 131001111287,
"reasonCode": "1",
"reasonRem": "vehicle broke down",
"fromPlace": "BANGALORE",
"fromState": 29,
"toPlace": "Chennai",
"toState": 33,
"transMode": "1",
"totalQuantity": 33,
"unitCode": "NOS"
}
```

Response JSON Format

```
{
"ewbNo":"131001111287",
"groupNo":"1",
"createdDate":"05/06/2018 02:04:00 PM"
}
```

Validations

1. Eway bill should be active and valid
2. Valid reasonCode, state code and unitCode to be sent
3. totalQuantity should not be more than the quantity mentioned in eway bill for the first initiation
4. After one group movement of consignment in multiple vehicles is initiated, requests for next group movement will consider the totalQuantity of previous group.
5. If same JSON is passed without any change, new group will not be created

Schema for Initiate multi vehicle movement

```
{
 "$schema": "http://json-schema.org/draft-04/schema#",
 "type": "object",
 "properties": {
  "ewbNo": {
    "type": "number",
    "maxLength": 12,
    "minLength": 12,
    "description": "Ewaybill Number"
  },
  "reasonCode": {
    "type": "string",
```

```json
      "maxLength": 1,
      "minLength": 1,
      "description": "Reason Code"
    },
    "reasonRem": {
      "type": "string",
      "maxLength": 50,
      "description": "Remarks"
    },
    "fromPlace": {
      "type": "string",
      "maxLength": 50,
      "description": "From Place"
    },
    "fromState": {
      "type": "integer",
      "maximum": 99,
      "description": "From State"
    },
    "toPlace": {
      "type": "string",
      "maxLength": 50,
      "description": "To Place"
    },
    "toState": {
      "type": "integer",
      "maximum": 99,
      "description": "From State"
    },
    "transMode": {
      "type": "integer",
      "enum": ["1",  "2","3","4"],
      "description": "Mode of transport (Road-1, Rail-2, Air-3, Ship-4) "
    },
    "totalQuantity": {
      "type": "number",
      "description": "Total Quantity"
    },
    "unitCode": {
      "type": "string",
      "maxLength": 3,
      "minLength": 3,
      "description": "Unit Code"
    }
  },
 "required": [
  "ewbNo",
  "fromPlace",
  "fromState",
  "toPlace",
```

```
   "toState",
   "reasonCode",
   "reasonRem",
   "transMode",
   "totalQuantity",
   "unitCode"
  ]
}
```

Data structure for Initiate Multi Vehicle Movement

Parameter Name	Type	Description	Values	Sample Data	Allowed character
ewbNo	Number(12)	E-way bill Generated		131000026 768	Numbers
fromPlace	Text(50)	Place of Consignor		BANGALORE SOUTH	Alpha-numeric
fromState	Number(2)	State of Consignor	Refer Code list	29	Numbers
reasonCode	Number(1)	Reason code for vehicle updation	Refer Code list	2	Numbers
toPlace	Text(50)	Place of Consinee		BANGALORE SOUTH	Alpha-numeric
toState	Number(2)	State of Consinee	Refer Code list	29	Numbers
reasonRem	Text(50)	Reason for Vehicle Updation		Vehicle details updated	Alpha-numeric
totalQuantity	Number	Total Quantity			Numbers
unitCode	Text(3)	Unit Code		NOS	Alpha
transMode	Number(1)	Mode of Transport	Refer Code list	1	Numbers
Parameter Name	Type	Description	Values	Sample Data	Allowed character
ewbNo	Number(12)	E-way bill Generated		131000026 768	Numbers
fromPlace	Text(50)	Place of Consignor		BANGALORE SOUTH	Alpha-numeric
fromState	Number(2)	State of Consignor	Refer Code list	29	Numbers
	Number(1)	Reason code for	Refer	2	Numbers

reasonCode	)	vehicle updation	Code list		
toPlace	Text(50)	Place of Consinee		BANGALORE SOUTH	Alpha-numeric
toState	Number(2)	State of Consinee	Refer Code list	29	Numbers
reasonRem	Text(50)	Reason for Vehicle Updation		Vehicle details updated	Alpha-numeric
totalQuantity	Number	Total Quantity			Numbers
unitCode	Text(3)	Unit Code		NOS	Alpha
transMode	Number(1)	Mode of Transport	Refer Code list	1	Numbers

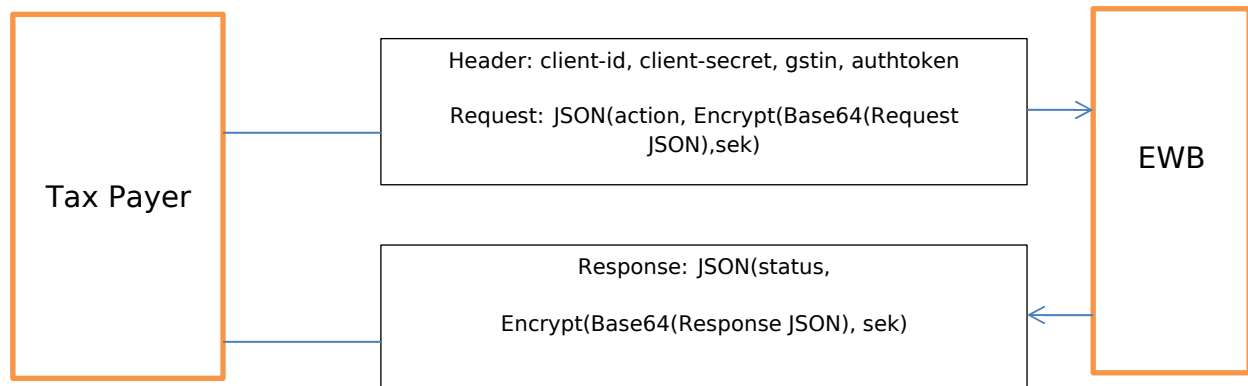## 2.   Add Vehicles details for Multi Vehicle Movement

Figure 2. Sequence Diagram: Adding Multi Vehicle API

The format and details of adding vehicle to Multi Vehicle Movement API request is depicted in following table.

URL	
	http://ewaybill2.nic.in/ewaybillapi/v1.02/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description

client-id	Client-id to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	Values
action		**MULTIVEHA DD**
Encrypt (Base64(Request JSON),sek)	Encrypted add vehicle to Multi Vehicle JSON string	

Response Payload

Attributes	Description	Value
status	Status of request	0 – for Failure ;1 – for Success
Encrypt(Base64(Response JSON),sek)	Response of add vehicle to Multi Vehicle JSON string, The response will have eway bill number and group no. and vehicle added date if it is successfully generated. Otherwise the response will have error codes	

Request JSON Format

```
{
 "ewbNo": 131001111287,
"groupNo": "1",
"vehicleNo": "PQR1234",
"transDocNo": "1234",
"transDocDate": "12/10/2017",
"quantity": 15
}
```

Response JSON Format

```
{
"ewbNo":"131001111287",
"groupNo":"1",
"vehAddedDate":"05/06/2018 02:08:00 PM"
}
```

Validations

1. Eway bill should be active and valid
2. Initiation for multi vehicle movement should have been done and the group no. should exist
3. Valid vehicleNo should be there
4. Valid transDocNo and transDocDate as per the allowed format.
5. If transMode is 1 while initiating, vehicleNo is mandatory, else transDocNo is mandatory
6. Quantity should not be more than the total quantity mentioned in the multi vehicle initiation request
7. The sum of all quantity mentioned in the previous vehicles of the same group should not be more than the total quantity mentioned during multi vehicle initiation request

Schema for Initiate multi vehicle movement

```
{
 "$schema": "http://json-schema.org/draft-04/schema#",
 "type": "object",
 "properties": {
  "ewbNo": {
    "type": "number",
    "maxLength": 12,
    "minLength": 12,
    "description": "Ewaybill Number"
  },
  "groupNo": {
    "type": "string",
    "description": "Group Number"
  },
  "vehicleNo": {
    "type": "string",
    "minLength": 7,
    "maxLength": 15,
    "description": "Vehicle Number"
  },
  "transDocNo": {
    "type": "string",
    "maxLength": 15,
    "description": "Transport Document Number"
  },
  "transDocDate": {
    "type": "string",
    "pattern": "[0-3][0-9]/[0-1][0-9]/[2][0][1-2][0-9]",
    "description": "Transport Document Date"
  },
  "quantity": {
    "type": "number",
    "description": "Quantity"
```

```
    }
  },
  "required": [
    "ewbNo",
    "groupNo",
    "vehicleNo",
    "transDocNo",
    "transDocDate",
    "quantity"
  ]
}
```

Data structure for Adding Vehicle to Multi Vehicle Movement

Parameter Name	Type	Description	Values	Sample Data	Allowed character
ewbNo	Number(12)	E-way bill Generated		131000026768	Numbers
groupNo	Number (1)	Group Number			Numbers
vehicleNo	Text(15)	Vehicle number		KA12TR1234	Alpha-numeric
transDocNo	Text(15)	Transporter Document number		12-86/3	Alphanumeric, -, /
transDocDate	Text	Transporter Document Date	dd/mm/yyyy format	12/09/2017	
quantity	Number	Quantity			Numbers

3.   Change Vehicles details for Multi Vehicle Movement

Tax Payer

Header: client-id, client-secret, gstin, authtoken

Request: JSON(action, Encrypt(Base64(Request JSON),sek)

EWB

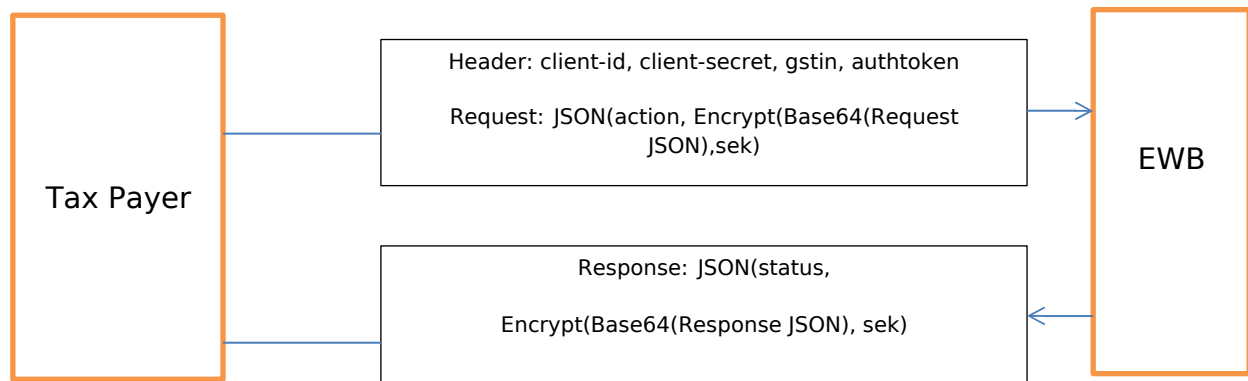Response: JSON(status, Encrypt(Base64(Response JSON), sek)

Figure 3. Sequence Diagram: Updating Vehicle in Multi Vehicle Movement API

The format and details of updating vehicle in Multi Vehicle Movement API request is depicted in following table.

URL	
	http://ewaybill2.nic.in/ewaybillapi/v1.02/ewayapi/
Content-Type	application/json
Method	POST

Request Header

Attributes	Description
client-id	Client-id to be provided by E-WAY BILL SYSTEM
client-secret	Secret to be provided by E-WAY BILL SYSTEM
gstin	GSTIN of Requester(Tax payer or Transporter)
authtoken	Authentication token returned by the E-way bill system

Request Payload

Attributes	Description	Values
action		**MULTIVEHUPD**
Encrypt (Base64(Request JSON),sek)	Encrypted update vehicle details in Multi Vehicle Movement JSON string	

Response Payload

Attributes	Description	Value
status	Status of request	0 – for Failure ;1 – for Success
Encrypt(Base64(Response JSON),sek)	Response of update vehicle details in Multi Vehicle Movement JSON string, The response will have e way bill number and group no. and vehicle updated date if it is successfully generated. Otherwise the response will have error codes	

Request JSON Format

```
{
 "ewbNo": 111000609282,
 "groupNo": 1,
```

```
"oldvehicleNo": "PQR1234",
"newVehicleNo": " PQR1234",
"oldTranNo":"ABC123",
"newTranNo": "PQR123",
 "fromPlace": "Lucknow",
"fromState": 09,
"reasonCode": "1",
"reasonRem": "vehicle broke down"
}
```

Response JSON Format

```
{
"ewbNo":"131001111287",
"groupNo":"1",
"vehUpdDate":"05/06/2018 02:55:00 PM"
}
```

Validations

1. Eway bill should be active and valid
2. GroupNo should be mapped to eway bill and should exists for that e-way bill
3. OldvehcileNo or oldTranNo should exists for the same e-waybill and group in the system
4. Valid vehicle number and reason codes

Schema for Initiate multi vehicle movement

```
{
 "$schema": "http://json-schema.org/draft-04/schema#",
 "type": "object",
 "properties": {
  "ewbNo": {
    "type": "number",
    "maxLength": 12,
    "minLength": 12,
    "description": "Ewaybill Number"
  },
  "groupNo": {
    "type": "number",
    "description": "Group Number"
  },
  "oldvehicleNo": {
    "type": "string",
    "minLength": 7,
    "maxLength": 15,
    "description": "Old Vehicle Number"
  },
```

```
    "newVehicleNo": {
     "type": "string",
     "minLength": 7,
     "maxLength": 15,
     "description": "New Vehicle Number"
    },
    "oldTranNo": {
     "type": "string",
     "maxLength": 15,
     "description": "Old Tran Number"
    },
    "newTranNo": {
     "type": "string",
     "maxLength": 15,
     "description": "New Tran Number"
    },
    "fromPlace": {
     "type": "string",
     "maxLength": 50,
     "description": "From Place"
    },
    "fromState": {
     "type": "integer",
     "maximum": 99,
     "description": "From State"
    },
    "reasonCode": {
     "type": "string",
     "maxLength": 1,
     "minLength": 1,
     "description": "Reason Code"
    },
    "reasonRem": {
     "type": "string",
     "maxLength": 50,
     "description": "Remarks"
    }
   },
   "required": [
    "ewbNo",
    "groupNo",
    "oldvehicleNo",
    "newVehicleNo",
    "oldTranNo",
    "newTranNo",
    "fromPlace",
    "fromState",
    "reasonCode",
    "reasonRem"
   ]
```

}

Data structure for Updating Vehicle for Multi Vehicle Movement

Parameter Name	Type	Description	Values	Sample Data	Allowed character
ewbNo	Number (12)	E-way bill Generated		131000026768	Numbers
groupNo	Number (1)	Group Number			Numbers
oldvehicleNo	Text(15)	Vehicle number		KA12TR1234	Alpha-numeric
newVehicleNo	Text(15)	Vehicle number		KA12TR1234	Alpha-numeric
oldTranNo	Text(15)	Old Tran Number			Alphanumeric, -, /
newTranNo	Text(15)	New Tran Number			Alphanumeric, -, /
fromPlace	Text(50)	Place of Consignor		BANGALORE SOUTH	Alpha-numeric
fromState	Number (2)	State of Consignor	Refer Code list	29	Numbers
reasonCode	Number (1)	Reason code for vehicle updation	Refer Code list	2	Numbers
reasonRem	Text(50)	Reason for Vehicle Updation		Vehicle details updated	Alpha-numeric