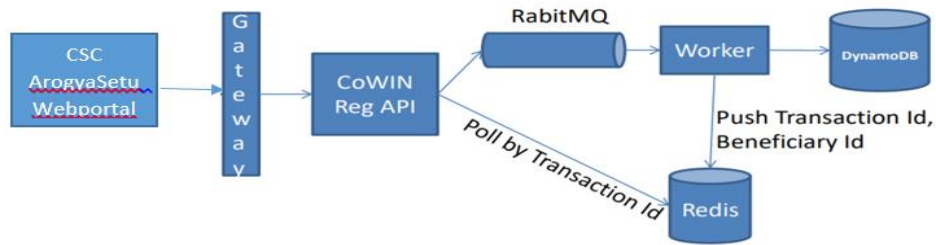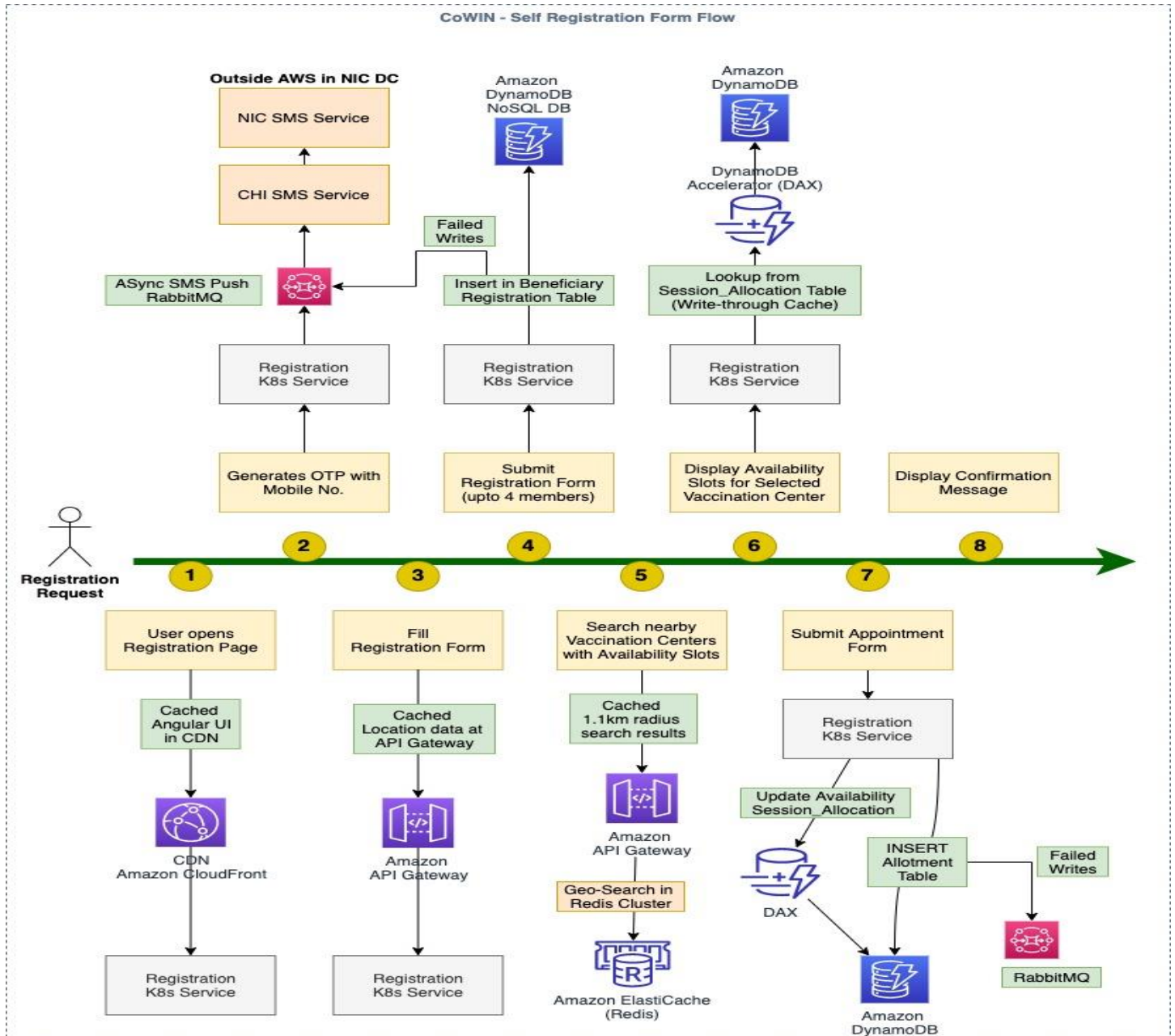## Internal work flow

System Architecture

Registration and Appointment API

Individuals will be registered into the application with the following information and get appointment at any near by vaccination center.

- o Individual data
  - Name [String]
  - Gender [String]
  - Year Of Birth [String]
  - Moibile [String]
- o Facility Location Data
  - State [String]
  - District[String]
  - Block[String]
  - Pincode[String]
  - Facilityname [String]
  - InchargeName[string]
  - Mobile[string]
  - Lat[string]
  - Lang[String]
  - vaccinationtypeID[String]
  - Startdate[String]
  - Enddate[String]
  - onlineAppointmentVaccancy[int]
  - slots[string]
  - Vaccancy[int]

Header Details

This API will authenticated with the Authorization token in the header.

Example : **Authorization** – key should be present in the request

RESTful URL

All API details publisihed on API Setu and updated version available at url [https://apisetu.gov.in/public/api/cowin]

A) Token API

1. Login – login as guest user to get the token **(This guest token will be valid only for 15 min)**

API	Login as Guest
Request URL	https://sit.co-vin.in/api/v1/auth/guest/login
Request Method	POST
Sample Request Payload	{"user_name":"99999999999999999999"}

Sample Response	eyJhbGciOiJIUzI1NiIsInR5cCI6IkpXVCJ9.eyJ1c2VyX2lkIjoyMDAsInVzZXJfbmFtZSI6IjEyMzEyMzEyMzQiLCJkaXNwbGF5X25hbWUiOiJtb25pY2FhIiwicm9sZSI6MSwibW9iaWxlX251bWJlciI6MTIzMTIzMTIzNCwiY291bnRyeV9pZCI6MSwic3RhdGVfaWQiOjAsImRpc3RyaWN0X2lkIjowLCJibG9ja19pZCI6MCwiZmFjaWxpdHlfaWQiOjEsInVz

B) Registration APIs

1. Beneficiary Registration - API for beneficiary registration from partner applications. This API returns a beneficiary reference id as a unique identifier of the registered user. It also returns a token which is a user authentication token. This token is used as authentication token for appointment APIs.

API	Beneficiary Registration
Request URL	https://sit.co-vin.in/api/v1/registration/beneficiary/add
Authentication Methos	Token *Requires System Authentication using Guest User*
Request Method	POST Content-Type: application/json;

Sample Request Payload	{
	  "name": "Apparao",
	  "birth_year": "1980",
	  "gender": "Male",
	  "mobile_number": 8796561403,
	  "photo_id_type": 1,
	  "photo_id_number": 99999999999999,
	  "health_id_number": null,
	  "state_id": null,
	  "district_id": null,
	  "block_id": null,
	  "locality_id": null,
	  "pincode": null,
	  "address": "null",
	  "consent": "Y"
	}"consent":"Y/N"

Sample Response	{
	  "offline_mode": 0,
	  "beneficiary_reference_id": 21363381933156,
	  "token": "string"
	}

2. Beneficiary Update API- This Api is used for update the registered individuals

API	beneficiaryUpdate
Request URL	https://sit.co-vin.in/api/v1/registration/beneficiary/update
Request Method	POST
Authentication Methos	Token *Requires System Authentication using Guest User*

Sample Request Payload	{
	
	  "beneficiary_reference_id": 21363381933156,
	
	  "name": "Apparao11",
	
	  "birth_year": "1981",
	
	  "gender": "Male",
	
	  "mobile_number": 8796561403,
	
	  "photo_id_type": 1,
	
	  "photo_id_number": 99999999999999,
	
	  "health_id_number": null,
	
	  "state_id":,
	
	  "district_id":,
	
	  "block_id":,
	
	  "locality_id":,
	
	  "pincode":,
	
	  "address": "",
	
	  "consent": "Y"
	
	}

Sample Response	{
	
	  "offline_mode": 0,
	
	  "beneficiary_reference_id": 21363381933156,
	
	  "token": "string"
	
	}

3. Get beneficiary details – API to get benefiary details by benefiary reference id

API	Initiate beneficiary details
Request URL	https://sit.co-vin.in/api/v1/registration/beneficiary
Request Method	Get
Sample Request Payload	{"beneficiary_reference_id":21363181496731}

Sample Response	{
	  "beneficiary_reference_id": 123412341234,
	  "name": "Rajesh Pawar",
	  "birth_year": 1995,
	  "gender": "Male",
	  "mobile_number": "******1403",
	  "photo_id_type": 1,
	  "photo_id_number": "********9999",
	  "state_name": "",
	  "district_name": "",
	  "block_name": "",
	  "locality_name": "",
	  "pincode":"" ,
	  "address": ""
	}

4. Delete Beneficiary API : API to delete a beneficiary by benefiary reference id.

API	BeneficiaryDelete
Request URL	https://sit.co-vin.in/api/v1/registration/beneficiary/delete
Request Method	POST

Sample Request Payload	{
	  "beneficiary_reference_id": 123456789012
	}

Sample Response	Deleted Succssesfully

5. Mobile OTP – Initiate beneficiary authentication using mobile and OTP

API	Initiate mobile OTP for authentication
Request URL	https:// /sit.co-vin.in /api/v1/auth/confirmMobileOTP
Request Method	POST

Sample Request Payload	{
	  "mobile": 9876543210
	}

Sample Response	{
	"otp": 123456,
	  "txnId": "3fa85f64-5717-4562-b3fc-2c963f66afa6"
	}

6. Mobile OTP Validation – Initiate mobile authentication using OTP ConfirmMobile/OTP

API	Confirm mobile OTP for authentication
Request URL	https://sit.co-vin.in/api/v1/auth/mobileOTP
Request Method	POST

Sample Request Payload	{
	  "otp": 123456,
	  "txnId": "3fa85f64-5717-4562-b3fc-2c963f66afa6"
	}

Sample Response	{
	  "token": "string"
	}

7. Authenticate – Authenticate a beneficiary by Beneficiary Reference Id, mobile and year of birth

API	Authenticate a beneficiary by Beneficiary Reference Id/Mobile/DoB
Request URL	https:// sit.co-vin.in /api/v1/auth/confirmMobileDob
Request Method	POST

Sample Request Payload	{
	  "beneficiary_reference_id": 21363181496731,
	  "mobile": 9871234567,
	  "birth_year": 1980
	}

Sample Response	{
	  "token": "string"
	}

8. Linked Beneficiaries - API to get the list of benefiaries linked to the logged in/authenticated user's mobile number. This list can be useful to schedule one appointment for an entire family. This API requires beneficiary authentication using mobile/OTP or beneficiary reference number/mobile/date of birth validateion.

API	API to get the list of benefiaries linked to the logged in user's mobile number.
Request URL	https://sit.co-vin.in/api/v1/appointment/linkedBeneficiaries
Authenticatio n Methos	Token *Requires User Authentication using Mobile/Aadhaar OTP*
Authenticatio n Methos	Token
Request Method	GET
| Sample Response | ```json
{
    "beneficiaries": [
    {
        "beneficiary_reference_id": 123412341234,
        "name": "Rajesh Pawar",
        "birth_year": 1995,
        "gender": "Male",
        "mobile_number": "******1403",
        "photo_id_type": 1,
        "photo_id_number": "********9999",
        "state_name": "",
        "district_name": "",
        "block_name": "",
        "locality_name": "",
        "pincode":""
        "address": ""
      },
    {
        "beneficiary_reference_id": 123412341963,
        "name": "Ajay Pawar",
        "birth_year": 1998,
        "gender": "Male",
        "mobile_number": "******1803",
        "photo_id_type": 1,
        "photo_id_number": "********8999",
        "state_name": "",
        "district_name": "",
        "block_name": "",
        "locality_name": "",
        "pincode":""
        "address": ""
    }
    ]
}
``` |

C) Appointment API

1. Schedule Appointment : API to schedule an appointment for vaccination. An appointment can be scheduled for a selected center, on a selected date and for a selected time slot. An appointment can be scheduled for multiple beneficiaries provided their registered mobile number is same as the registered mobile number of the logged in or authenticated beneficiary. This API requires beneficiary authentication using mobile/OTP or beneficiary reference number/mobile/date of birth validateion

API	Schedule Appointment
Request URL	https://sit.co-vin.in/api/v1/appointment/scheduleAppointment
Request Method	POST
Authentication Methos	Token *Requires System Authentication using Guest User*

Sample Request Payload	{
	
	  "center_id": 1234,
	
	  "date": "31-03-2021",
	
	  "slot_id": 1,
	
	  "beneficiaries": [
	
	    12341234123412
	
	  ]
	
	}

Sample Response	{
	
	    "appointment_confirmation_no": 21363381933156
	
	}

2. Reschedule Appointment : API to reschedule an appointment for vaccination. This API requires beneficiary authentication using mobile/OTP or beneficiary reference number/mobile/date of birth validateion.

API	Reschedule Appointment
Request URL	https://sit.co-vin.in/api/v1/appointment/rescheduleAppointment
Request Method	POST
Authentication Methos	Token *Requires System Authentication using Guest User*

Sample Request Payload	{
	
	  "appointment_confirmation_no": 21363381933156,
	
	  "center_id": 1234,
	
	  "date": "31-03-2021",
	
	  "slot_id": 1,

	"beneficiaries": [
	
	    12341234123412
	
	  ]
	
	}

Sample Response	{
	
	  "appointment_confirmation_no": 21363381933156
	
	}

3. Get Appointment Details : API to get the appointment details by for the logged in or authenticated beneficiary. This API requires beneficiary authentication using mobile/OTP or beneficiary reference number/mobile/date of birth validateion.

API	API to get appointment details of individuals
Request URL	https://sit.co-vin.in/api/v1/appointment
Authenticatio n Methos	Token *Requires User Authentication using Mobile/Aadhaar OTP*
Authenticatio n Methos	Token
Request Method	GET

Sample Response	{
	  "appointments": [
	    {
	      "beneficiaries": [
	        {
	          "beneficiary_reference_id": 123412341234,
	          "name": "Rajesh Pawar",
	          "birth_year": 1995,
	          "gender": "Male",
	          "mobile_number": "******1403",
	          "photo_id_type": 1,
	          "photo_id_number": "********9999",
	          "state_name": "Maharashtra",
	          "district_name": "Satara",
	          "block_name": "Jaoli",
	          "locality_name": "Jaoli",
	          "pincode": 413608,
	          "address": "C/o Pandurang Pawar"
	        }
	      ],
	      "center": {
	        "center_id": 1234,
	        "name": "District General Hostpital",
	        "center_incharge": "Sunil Kumar",
	        "mobile": 8765432109,

```
          "state_name": "Maharashtra",
          "district_name": "Satara",
          "block_name": "Jaoli",
          "vtc": "Jaoli",
          "location": "string",
          "pincode": 413608,
          "area": "Urban",
          "timings": "string",
          "vaccine_type": "string",
          "daily_capacity": "string",
          "centre_type": "Permanent",
          "expiry_date": "string"
        },
        "appointment": {
         "appointment_confirmation_no": 21363381933156,
         "date": "4-5-1995",
         "slot_id": 1,
         "slot_name": "Morning",
         "timings": "9AM-11AM",
         "status": "ACTIVE"
        }
      }
    ]
  }
```

D) Metadata API

1. get facility centers by pin

API	API to get centers by PIN
Request URL	https:// sit.co-vin.in /api/v1/appointment/centers/findByPin
Request Method	GET
Authentication Methos	Token *Requires System Authentication using Guest User*
URL Parameter	pin=110003

Sample Response	{
	  "centers" : [
	    {
	      "center_id":"1234",
	      "name":"District General Hostpital",
	      "center_incharge":"Sunil Kumar",
	      "mobile":"",
	      "district":"",
	      "state":"" ,
	      "location":"",
	      "pin":"",
	      "block"":"",
	      "vtc":"",
	      "area":"Urban/Rural",
	      "timings":"",
	      "vaccine_type":"",
	      "daily_capacity":"",

```
            "centre_type":"Permanent/Mobile/Static",
            "expiry_date":""
        },
        {

            "center_id":"5678",
            "name":"District Private Hostpital",
            "center_incharge":"Sunil Kumar",
            "mobile":"",
            "district":"",
            "state":"" ,
            "location":"",
            "pin":"",
            "block"":"",
            "vtc":"",
            "area":"Urban/Rural",
            "timings":"",
            "vaccine_type":"",
            "daily_capacity":"",
            "centre_type":"Permanent/Mobile/Static",
            "expiry_date":""
        }
    ]
}
```

2. Get facility centers by block

API	API to get centers by block
Request URL	https:// sit.co-vin.in /api/v1/appointment/centers/findbyBlock
Authentication Methos	Token *Requires System Authentication using Guest User*
Request Method	GET
URL Parameter	block_id=1234

Sample Response	{
	  "centers" : [
	    {
	      "center_id":"1234",
	      "name":"District General Hostpital",
	      "center_incharge":"Sunil Kumar",
	      "mobile":"",
	      "district":"",
	      "state":"" ,
	      "location":"",
	      "pin":"",
	      "block"":"",
	      "vtc":"",
	      "area":"Urban/Rural",
	      "timings":"",
	      "vaccine_type":"",
	      "daily_capacity":"",
	      "centre_type":"Permanent/Mobile/Static",
	      "expiry_date":""

        },
        {
            "center_id":"5678",
            "name":"District Private Hostpital",
            "center_incharge":"Sunil Kumar",
            "mobile":"",
            "district":"",
            "state":"" ,
            "location":"",
            "pin":"",
            "block"":"",
            "vtc":"",
            "area":"Urban/Rural",
            "timings":"",
            "vaccine_type":"",
            "daily_capacity":"",
            "centre_type":"Permanent/Mobile/Static",
            "expiry_date":""
        }
    ]
}

3.   . Get centers by district

API	API to get centers by district
Request URL	https:// sit.co-vin.in /api/v1/appointment/centers/findbyDistrict
Authentication Methos	Token *Requires System Authentication using Guest User*
Request Method	GET
URL Parameter	district_id =1234

Sample Response	{
	  "centers" : [
	    {
	      "center_id":"1234",
	      "name":"District General Hostpital",
	      "center_incharge":"Sunil Kumar",
	      "mobile":"",
	      "district":"",
	      "state":"" ,
	      "location":"",
	      "pin":"",
	      "block"":"",
	      "vtc":"",
	      "area":"Urban/Rural",
	      "timings":"",
	      "vaccine_type":"",
	      "daily_capacity":"",
	      "centre_type":"Permanent/Mobile/Static",
	      "expiry_date":""
	    },

```
        {
            "center_id":"5678",
            "name":"District Private Hostpital",
            "center_incharge":"Sunil Kumar",
            "mobile":"",
            "district":"",
            "state":"" ,
            "location":"",
            "pin":"",
            "block"":"",
            "vtc":"",
            "area":"Urban/Rural",
            "timings":"",
            "vaccine_type":"",
            "daily_capacity":"",
            "centre_type":"Permanent/Mobile/Static",
            "expiry_date":""
        }
    ]
}
```

4. Get time slots by center and date range

API	API to get time slots by center and date range
Request URL	https://host/api/v1/appointment/timeslots/findByCenter
Request Method	GET
URL Parameter	center_id=1234 from=01-03-2021 to=31-01-2021
Authentication Methos	Token *Requires System Authentication using Guest User*

Sample Response	<pre>{
	        "center_id":"1234",
	                "timeslots" : [
	                  {
	                      "date":"01-03-2021",
	                      "slot_id":"3456",
	                      "slot_name":"Morning",
	                      "timings":"9AM-11AM",
	                      "available_capacity":"5"
	                  },
	                  {
	                      "date":"02-03-2021",
	                      "slot_id":"9673",
	                      "slot_name":"Afternoon",
	                      "timings":"1PM-3PM",
	                      " available_capacity ":"0"
	                  }
	            ]
	}</pre>

5. Get Photo ID Type – This API is an authenticated GET request to get all the ID type

API	getBeneficiaryIDType
Request URL	https://sit.co-vin.in/api/v1/registration/beneficiary/getBeneficiaryIdType
Request Method	GET
Sample Request Payload	/api/v1/registration/beneficiary/getBeneficiaryIDType

Sample Response	[
	  {
	   "type": "Aadhaar Card",
	   "id": 1,
	   "doc_type": null
	  },
	  {
	   "type": "Driving License",
	   "id": 2,
	   "doc_type": "DRVLC"
	  },
	  {
	   "type": "Health Insurance Smart Card issued under the scheme of Ministry of Labour",
	   "id": 3,
	   "doc_type": null
	  },
	  {
	   "type": "MNREGA Job Card",
	   "id": 4,
	   "doc_type": "MNRGA"
	  },
	  {
	   "type": "Official identity cards issued to MPs/MLAs/MLCs",
	   "id": 5,
	   "doc_type": null
	  },
	  {
	   "type": "PAN Card",
	   "id": 6,
	   "doc_type": "PANCR"
	  },
	  {
	   "type": "Passbooks issued by Bank/Post Office",
	   "id": 7,
	   "doc_type": null
	  },
	  {
	   "type": "Passport",
	   "id": 8,
	   "doc_type": "PSPRT"
	  },
	  {

```
        "type": "Pension Document",
        "id": 9,
        "doc_type": null
      },
      {
        "type": "Service Identity Card issued to employees by Central/ State Govt./ PSUs/ Public
Limited Companies",
        "id": 10,
        "doc_type": null
      },
      {
        "type": "Smart Card issued by RGI under NPR",
        "id": 11,
        "doc_type": null
      },
      {
        "type": "Voter ID",
        "id": 12,
        "doc_type": "VTRID"
      },
      {
        "type": "Others(Local Authority)",
        "id": 13,
        "doc_type": null
      }
    ]
```

6. Get Gender– This API is authenticated request to get all the gender

API	GetGender
Request URL	https://sit.co-vin.in/api/v1/registration/beneficiary/getGender
Request Method	GET
Sample Request Payload	/v1/registration/beneficiary/getGender

Sample Response	[
	
	  {
	
	    "gender": "Male",
	
	    "id": 1
	
	  },
	
	  {
	
	    "gender": "Female",
	
	    "id": 2

```
      },
      {
        "gender": "Others",
        "id": 3
      }
    ]
```

7. Get State – This API is authenticated request to get all the state details

API	states
Request URL	https://sit.co-vin.in/api/v1/admin/location/states
Request Method	GET
Sample Request Payload	/api/v1/admin/location/states
Sample Response	[{"state_id":58,"state_name":"123"},{"state_id":56,"state_name":"Ambegaon"},{"state_id":1,"state_name":"Andaman and Nicobar Islands"},{"state_id":2,"state_name":"Andhra Pradesh"},{"state_id":3,"state_name":"Arunachal Pradesh"},{"state_id":4,"state_name":"Assam"},{"state_id":5,"state_name":"Bihar"}]

8. Get District – This API is authenticated request to get all the district details based on the selected state

API	districts/:stateID
Request URL	https:// sit.co-vin.in /api/v1/admin/location/districts/21
Request Method	GET
Sample Request Payload	/api/v1/admin/location/districts/21
Sample Response	[{"district_id":391,"district_name":"Ahmednagar"},{"district_id":364,"district_name":"Akola"}

9. Get Block – This API is authenticated request to get all the block details based on the selected district

API	blocks/:districtId
Request URL	https:// sit.co-vin.in /api/v1/admin/location/blocks/931
Request Method	GET
Sample Request Payload	/api/v1/admin/location/blocks/931
Sample Response	[{"block_id":195,"block_name":"Block 164"}]

10. Get Locality - This API is authenticated request to get all locality details by pincode.

API	getLocalitybyPincode
Request URL	https:// sit.co-vin.in /api/api/v1/admin/location/getLocalitybyPincode/112233
Request Method	GET
Sample Request Payload	/api/v1/registration/beneficiary/v2/getComorbidity
Sample Response	[{"locality_id":1,"office_name":null,"locality_name":"Naya Kheda, Richhawar","pincode":112233}]

HTTP Response (Sucess/Failure)

Status	Response
200	{"offline_mode":0,"beneficiary_reference_id":21363381933156}
400	{"errorCode":"USRRES0001", "error":"INPUT_FILE_MISSING"}
400	{"errorCode":"USRRES0002", "error":"INVALID_FILE_NAME"}
400	{"errorCode":"USRRES0003", "error":"INVALID_FILE_TYPE"}
400	{"errorCode":"USRRES0005", "error":"INVALID_FILE_HEADERS","Wrong_Headers":"{Worng column names}"}
401	Unauthenticated access!
500	Internal Server Error

HTTP Response Code

Status	Description
200	OK
400	Bad Request
401	Unauthorized
500	Internal Server Error