

Guidelines for Integration of Co-WIN with Third-Party Applications Developed by Ecosystem Partners

1. Introduction

The **Co-WIN platform** for management of registration, appointment scheduling, managing vaccination and certification has been rolled out by the Ministry of Health and Family Welfare (MoHFW) and it is being used by all participating facilities in India's National Covid-19 Vaccination Programme. Private CVCs have been on boarded for the vaccination programme through the process laid down by the Ministry. Details of process for on boarding CVCs are as per the guidance issued by the MoHFW for Co-WIN 2.0 as amended from time to time and the same is available at www.mohfw.gov.in. Guidance note for Co-WIN 2.0 letter dated 23/4/21 is available at <https://www.mohfw.gov.in/pdf/GuidancedocCOWIN2.pdf> Since the launch, Co-WIN has published APIs for various functionalities. The intent is to enable various stakeholders such as States/UT Governments, Private Service Providers, Software Developers and any Other agencies who wishes to provide vaccination related services to develop and rollout software solutions around and compatible with Co-WIN (collectively described as "Application Service Providers" (ASPs) on behalf of State/ UT Governments or other approved Vaccination Service Providers to enhance the diversity and functionality complementing Co-WIN, offer better user experience and choice to people, including for improving access to COVID-19 vaccination.

While these ASPs can rollout software systems for all or some of the functionalities relating to registration, scheduling of appointment and management of vaccination and facilities, these systems will have to use the master database maintained as part of Co-WIN platform and any update (add/ delete / modify) will have to be made on this master database. They can retain copy of data relating to their customers subject to 'Terms of Service' provided as Annexure 2 of this document to ensure that the citizen has a consistent view of his/ her own record relating to registration, booking and vaccination irrespective of any third party applications he/she may use. Thus, Co-WIN will be a single source of truth with respect to all vaccinations providing unified visibility of the vaccination programme through the Co-WIN dashboard and enabling the government to drive policies based on aggregated data.

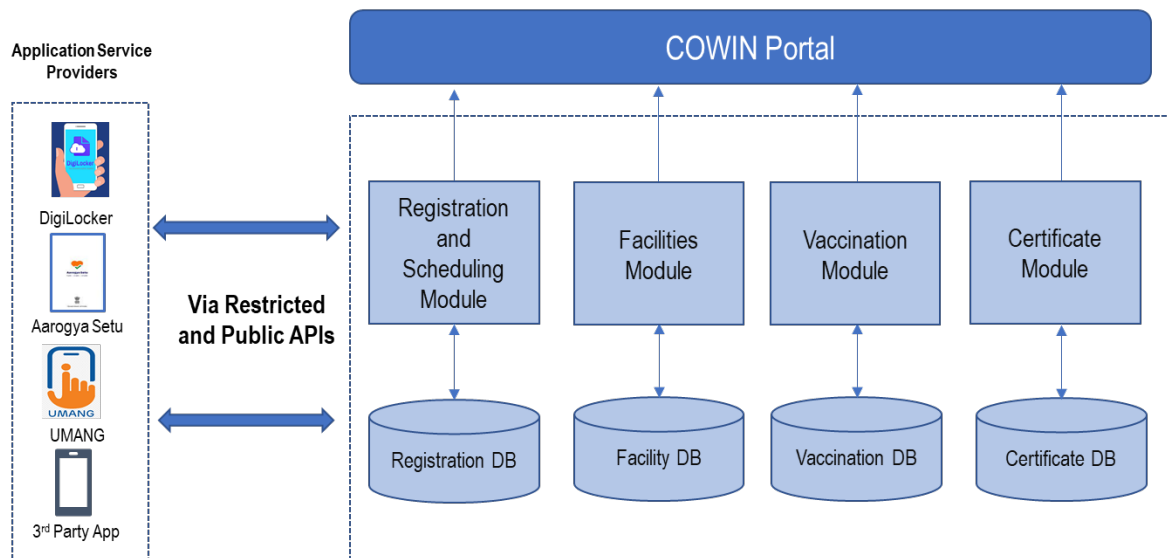
Further it is required that the issuance of digitally signed vaccination certificates will also have to be through Co-WIN. This will enable citizens to access their certificates anywhere anytime through the Co-WIN portal and multiple other third-party applications like Aarogya Setu, DigiLocker, Umang and others.

This document has been prepared in consultation with experts and various stakeholders and describes the guidelines on information exchange between Co-WIN and the various ASPs' software and the terms and conditions thereof. The Empowered Group on COVID Vaccinations shall continue to guide these efforts and these guidelines may be suitable amended from time to time as more features are introduced in CoWIN and the APIs are updated/amended.

2. Scope of Co-WIN

The Co-WIN Platform offers the following functionalities. Co-WIN is deployed on a cloud account of the MoHFW and can be accessed across the country through the internet.

CURRENT TECHNICAL ARCHITECTURE OF COWIN PLATFORM



- i. **Registration and Scheduling Module:** This module enables the onetime enrolment of a person into the system, as well as scheduling appointments for vaccination. This could be used for **self-service access** for registration and scheduling of appointment for vaccinations at a hospital or a CVC at a date and time of choice; or can be used for **assisted service for facilitated cohorts of beneficiaries** at the vaccination facilities for on-spot or walk-in registration. This module records the beneficiary registration and appointment details on the Co-WIN platform.
- ii. **Vaccination Facility Module:** This module is used to register and manage the facilities for providing Covid Vaccination related services. This includes features such as minimum age setting, declaration of vaccines and prices offered to beneficiaries and also the stock entries. This also includes a scheduling module for creation and publication of vaccination sessions with parameters such as online/on-spot slots rate and slots for 1st& 2nd doses and separate sessions for 45+&<45 age groups.
- iii. **Vaccination Module:** This module is used by the vaccination facilities to manage the workflow at the facilities, including verification of beneficiary ID and recording of vaccination events for a beneficiary on the Co-WIN platform.
- iv. **Certificate Module:** This module is used by the vaccination facilities to issue digitally verifiable vaccination certificates. After the vaccination is recorded in the Vaccination Module, it forwards the vaccination record with fields required for in the certificate, as per the specified standard. The certificate module stores these as an Immutable Vaccination Event Record (IVER) and generates digitally signed vaccination certificates. The vaccination certificates can be downloaded by the vaccinator to be printed and shared with the beneficiary, or can be accessed and downloaded by the beneficiary from the Co-WIN portal or applications or other applications that are already integrated such as Aarogya Setu, DigiLocker or Umang; after authentication of the beneficiary through an OTP.
- v. **Reporting of Adverse Events:** Co-WIN is integrated with Government of India's SafeVac system, for reporting of adverse events. If an adverse event is observed at the vaccination centre, vaccinators can report this in SafeVac, by clicking on the AEFI button in Co-WIN which will direct the vaccinator to the relevant SafeVac form

3. Access to Co-WIN by third-party applications

MoHFW provides API based access to Co-WIN for third-party software applications to provide a variety of value-added services directly to the beneficiary or enable empanelled COVID Vaccination Centres (CVC) to offer enhanced services to their users.

These 3rd party applications can be either offered directly to citizens (B2C) or offered to private CVCs (B2B) for following functionalities:

- A. discover vaccination centers and related information
- B. schedule appointments
- C. manage vaccination workflow (in the case when such application is offered to CVCs)
- D. generate/download certificates
- E. report any adverse events after vaccination as per AEFI guidelines

Where the CVCs are managing vaccination workflow through their applications, they will need to have a mechanism to verify the identity of the person vaccinated in accordance with the laws, policies and guidelines of the Government of India, in order to ensure that an appropriate certificate is issued. Following ID documents specified by MoHFW can be used for this purpose:

- i. Aadhaar
- ii. Driving License
- iii. PAN card
- iv. Passport
- v. Pension Passbook
- vi. NPR Smart Card
- vii. Voter ID

In the cases where Aadhaar is used, CVCs have to ensure that the guidelines prescribed under the Aadhaar Act are followed.

4. Type of Access to Co-WIN

Co-WIN API Services can be offered to ASPs, who intend to or are providing COVID vaccination related services and are registered for operations in India. Using the service, the approved organizations can avail the whitelisted data elements from Co-WIN in real-time. The ASPs can integrate the APIs with their applications to extend the quality and reach of their initiative.

The ASPs availing the APIs shall have to ensure adherence with the security practices notified by Government of India for secure API communications for managing keys and related ICT Infrastructure and services at their end. The ASPs shall ensure that the API is not abused, misused and that they duly abide by the Co-WIN privacy policy, the API Terms of Service (ToS), provided in the annexures and other provisions of the Information Technology Act, 2000.

The types of access to Co-WIN are of two kinds;

- i. Open Access through **Public API**: This will allow any third-party application to access certain un-restricted information, that can be shared with its users (with or without value addition). This is limited only to read access in Co-WIN. As these third-party applications are given public APIs to access data from Co-WIN, the application providers will be responsible for the information displayed through their system. The extent of access will be limited and in case of any misuse impacting the performance

- of Co-WIN solution will result in blocking any such application and entities as per the policies of MoHFW and taking any other appropriate action in accordance with law.
- ii. Access through **Protected API**: This allows approved third-party applications to access specified information from Co-WIN and update the Co-WIN database, where applicable, subject to such conditions and validations as may be prescribed or required.

An indicative list of APIs that are already published, is provided in “Annexure 1” to this document.

5. Process for Access to Co-WIN

- i. All entities (ASPs), wishing to integrate with Co-WIN using APIs, including for use of only the Public APIs, will have to first register as ASPs. For this purpose, these organizations can send a request to partner@cowin.gov.in. (Refer Annexure 3).
- ii. ASPs that wish to integrate with the Co-WIN APIs, should nominate authorized system administrators along with their mobile numbers.
- iii. For the use of Protected APIs, as part of the approval process; such authorised system administrators will then be authenticated, before they are provided access credentials to use the Co-WIN APIs.
- iv. ASPs that wish to integrate with only the Co-WIN public APIs shall be provided a simple online registration to get API key. No separate approval shall be necessary for this.
- v. All ASPs accessing Co-WIN shall comply with security and data privacy safeguards published by Co-WIN together with any validation, restrictions or other policies or terms of service that Co-WIN publishes.
- vi. In order to access or use the Co-WIN protected APIs, all service providers of the third-party applications must agree to the “Terms of Service” as amended from time to time (refer Annexure 2) prescribed by the MoHFW. In case these third-party applications are used by a Private CVC, the Private CVC must also agree to be bound by the “Terms of Service”, and submit a declaration to this effect.
- vii. In case, third party applications are used by CVCs for accessing Co-WIN for extending services relating to vaccination like registration/ scheduling/ management of vaccination etc, the CVC shall be primarily responsible for compliance with all the guidelines issued by the MoHFW including maintenance of historical records and supporting documents (where applicable) for audit purposes and shall be liable for any actions relating to failure to comply.
- viii. All third-party applications that wish to integrate with Co-WIN using Protected APIs should undertake a prescribed integration and testing process with the Co-WIN APIs. For this purpose, the authenticated ASP system administrators will be provided with access to a sandbox environment with staging-level API keys to test integration with the Co-WIN APIs, that the ASP wishes to use in their operations. Only after a successful testing cycle is completed and demonstrated to a competent authority, will the ASP system administrators be provided with production-level API keys for their Application. All API keys will be managed through Co-WIN’s API console. (Refer “Registration and Setup Process for accessing COWIN APIs” in the Annexure 3.)

- ix. Sandbox for testing facility will be available also for Public API integration. In this case testing may not be mandatory except in cases where MoHFW deems necessary to protect the performance of Co-WIN.
- x. Prior to issuance of production-level API keys, the ASP shall have to give evidence to the CoWIN team that the CVC's system is secure from the perspective of data security and that such system indeed complies with the norms of use and retention of personal information of beneficiaries as prescribed in the Terms of Service (Annexure 2) in para 8.

6. Definitions

In these Guidelines, unless the context otherwise requires, the following terms shall have the meaning as described here:

- Application Service Provider (ASP) means any 3rd party service provider considered for on boarding on Co-WIN platform for COVID-19 vaccination programme.
- Terms of Service means the Legal agreements between 3rd party service providers and Co-WIN in order to use the offered service, as is enclosed in Annexure -2 and as may be amended from time to time.
- Registration and scheduling module means the Module in Co-WIN platform that enables registration and scheduling of appointments for vaccination by the eligible beneficiaries.
- Vaccination Management module means the Module in Co-WIN platform that manages workflow at the facility/vaccination centre.
- Certificate Module means the Module in Co-WIN platform that issues digitally verifiable credentials for vaccination.
- AEFI means Adverse events following immunization are the possible minor and major untoward medical occurrence which follows immunization.
- CVCs means Covid Vaccination Centres are healthcare facilities empanelled under Co-WIN and conducting vaccination.
- Public API means An API that allows third-party application to access certain un-restricted information, that can be shared with its users (with or without value addition).
- Protected API means An API that allows only approved third-party applications to access specified information from Co-WIN
- Ministry or MoHFW means Ministry of Health & Family Welfare.

Annexure 1

LIST OF Co-WIN APIS

This section summarizes the Co-WIN Public and Protected APIs that will be available for integration by third-party applications. For further details on the API specifications, please also refer <https://apisetu.gov.in/public/marketplace/api/cowin/cowin-public-v2> & <https://apisetu.gov.in/public/marketplace/api/cowin/cowin-protected-v2>

1. Public API

- a. Fetch Inventory of vaccination slots API: To allow third-party Apps to access in real-time the continuously updated list of available vaccination slots in Co-WIN . This will enable these apps to provide various options to the users like “look for available slots for vaccination / vaccines under multiple search criteria”.
- b. Fetch certificate API. To allow third-party Apps to access vaccination certificates of the users from Co-WIN, against a beneficiary reference id / registered mobile number. This will enable these apps provide options to the users to download their vaccination certificates. In this case Co-WIN will respond with the requested certificate(s) only after OTP validation by Co-WIN using the registered mobile number.

2. Protected APIs

- a. Beneficiary Registration APIs: To register a citizen for vaccination.
- b. Appointment APIs: To schedule an appointment, or to re-schedule an existing appointment or to cancel an appointment.
- c. Vaccination APIs: To record vaccination data for generation and download of Vaccination Certificate and reporting of AEFI for a beneficiary

This API list may be subsequently updated as new APIs are developed and published in www.apisetu.gov.in.

Annexure 2

TERMS OF SERVICE

Every Application Service Provider (ASP), that wishes to utilize the CoWIN APIs, shall have to submit an undertaking that the ASP agrees to the following Terms of Service:

1. Consent

Any application (API Client) developed by ASPs that uses Co-WIN APIs to access and collect data from Co-WIN, should ensure that it cannot access and collect personal data except as provided in the guidance issued by the MoHFW. Wherever personal data is collected, consent management will have to be undertaken as per the extant policy/ directions of the government issued in this regard as may be applicable. If any user does not consent for sharing of their data, through the Co-WIN APIs, then it must be ensured that such users have other viable and alternate mechanisms by which they can avail of Co-WIN related services through these applications.

2. Accessibility

Authorized third-party organizations should only access (or attempt to access) whitelisted data elements in the manner described, in the API documentation (refer <https://apisetu.gov.in/public/marketplace/api/cowin/cowin-public-v2> & <https://apisetu.gov.in/public/marketplace/api/cowin/cowin-protected-v2>). If Co-WIN has assigned any developer credentials to the organisation, such credentials must only be used in relation to the applicable APIs. It must not misrepresent or obfuscate the identity of MoHFW or the identity of their organisation. These authorized organizations shall not share or disclose intentionally or unintentionally the API Keys or user details, or any information retrieved through API except as approved under this guideline.

3. Termination

MoHFW can terminate the use of the Co-WIN APIs any time with or without giving any notice. The authorized organizations can also terminate the use of the APIs any time by giving 30 days prior notice. However, in case of termination initiated by the authorized organizations the access key will be deactivated 30 days from the date of the notice submitted to MoHFW..

MoHFW's Co-WIN team can terminate the API Terms of Service and discontinue the right to use the APIs and features thereof without cause and at any time without liability or other obligation. Upon such termination the organisation will immediately stop using the API and on the request of Co-WIN team, delete any data collected using the API except the data that they are necessarily required to maintain for complying with existing laws.

Any non-compliance or submitting any false information or violation of the Co-WIN API Terms of Service or misuse of the service, would result in appropriate legal actions.

4. Support

The authorized organization can seek support from MoHFW's Co-WIN team for any support related technical queries related to the APIs. However, Co-WIN will not have any obligations to make any changes in the Co-WIN software or APIs to address the technical queries.

5. API Limitations

API requests will have predefined limited usage policies that may limit the number of users that can be served, including other limitations, as deemed appropriate by MoHFW. Authorized organisations shall not circumvent or attempt to circumvent these limitations, and appropriate action in accordance with law shall be taken in the instance of such circumvention or attempt to circumvent. If, for any reason and exception is desired, a written consent from MoHFW's Co-WIN team is required.

6. Purpose of Information collected via the APIs

Co-WIN recognizes the importance of privacy of its end-users and also of maintaining confidentiality of the information provided by its end-users (either directly or via third-party organizations) as a responsible data controller and data processor. Co-WIN will provide these API services (both "public" and "protected" APIs), so that authorized third-party organizations can leverage and provide value added services to citizens, other businesses and relevant customers. In providing these Services, Co-WIN will process the data that the authorized third-party organizations will submit via the APIs and instruct Co-WIN to process on their behalf. This data will be subject to the data protection guidelines and applicable laws and policies, established or issued by the Government of India. The type of information sought by Co-WIN, via these APIs, will be as per the details outlined in the "LIST OF Co-WIN APIs" section (refer the "Annexure 1"). Co-WIN will retain the information, shared by the authorized third-party organizations, on its servers for as long as is reasonably necessary for the purposes established by the Government of India in accordance with the applicable law and policies issued by the Ministry, primarily for COVID-19 vaccination. Where this information is no longer required, Co-WIN will ensure it is either securely deleted or stored in a way which means it will no longer be used by either itself or any of its authorized partners (third-party organizations availing the Co-WIN APIs).

It is important that the third-party organizations have a clearly defined privacy policy of their own in accordance with applicable law for the time being in force in India, so that it articulates the information collected from the end users (including personal data, such as account creation data, usage information, data retention requirements and cookie information). Co-WIN processes the API data in accordance with the third-party organization's instructions and will be subject to Co-WIN's rules for data validation and completeness for further processing.

7. Re-Distribution

Authorized organizations shall not re-distribute any data that they are able to access through the API and shall ensure that integration of all such data shall compulsorily be limited to the specific services provided by Co-WIN. Under no circumstances, shall an organisation use the data collected as part of the Covid Vaccination Programme of the Government for any purposes other than the purposes specified herein, and as may be permitted by the government.

8. Use and Retention of information

1. Prior to seeking beneficiary's consent, authorized organizations must inform each of their beneficiaries in a clear, concise and accessible manner of the specific purpose for which the data would be used, the period of time for which it shall be retained and the manner in which it shall be deleted.
2. Once collected, the organization shall only use the data for the stated purpose in accordance with these guidelines and delete it on or before the expiry of the retention period or as defined in the API Terms of Service.
3. All API Clients shall be designed to only collect as much data as is strictly necessary to achieve the stated purpose and to delete such data as soon as possible after such purpose has been served.
4. For the avoidance of all doubts, no API Client shall be designed to use the data for a purpose unrelated to the management of COVID-19 Vaccination nor shall the period for which the data is retained by the API Client exceed the data retention provisions set out by Co-WIN.
5. The CVCs can retain the patient data as required for complying with the existing applicable laws of data retention, as may be required. However, no ASP shall store the Aadhaar number or the details or any copy of the identity cards/documents being used by beneficiaries, either in physical or electronic form, under any circumstances. Such information will be stored only at CoWIN and will be provided to the ASP's systems through the CoWIN APIs for facilitating various functional needs such as recording of vaccination events and generation of certificates etc.
6. Whenever personal information needs to be published for the purposes of managing COVID-19 vaccinations, only the last 4 digits of the Aadhar number/Identity document, may be printed.
7. The authorized organizations shall ensure that they will generate and maintain auditable logs of the Co-WIN data collected and processed by the API Client, including details and records of the storage, access and sharing of any such data, and shall, on demand, make such logs available to the Co-WIN team.
8. The authorized organization shall not use the APIs and the data available through APIs to engineer any products that lead to any automation of the data input processes specially those where the data is to be entered by the citizen/beneficiary. Provision of the API keys must not be construed as a concurrence of the Ministry, for any such misuse of the system, the APIs and the data accessed or made available through the APIs.
9. The CoWIN APIs or the data accessed through the APIs shall not be commercially exploited.

9. Data Security

1. The authorized organizations shall use all reasonable efforts to protect the user data collected by the API Client from unauthorized access or use, and take all measures as may be required by any applicable law in relation to security of personal data, and will promptly report to MoHFW's Co-WIN team and the users about any unauthorized access or use of such information to the extent required by Law.
2. To the extent possible, the API client should follow the anonymisation principles, where applicable. All API communication should be done in a secure manner, using a transport layer encryption.

3. The API Keys should not be exposed in plain text.
4. The API Keys allotted to one organization, should not be shared with anyone else except as may be allowed by the Ministry.
5. In case of any compromise of the API Key, then the same should be immediately reported to the Co-WIN team.
6. The data collected through the APIs, shall be stored within India only.

10. Compliance with Law, Third Party Rights, and Other Terms of Service

The authorized organizations will comply with all applicable laws, regulation, policies and third-party rights (including without limitation, any laws regarding the import or export of data or software, privacy, and local laws) established by Government of India. These organizations will not use the APIs to encourage or promote illegal activity or violation of third-party rights including these “Terms of Service” with Co-WIN.

11. Correctness of Data provided by third party systems

The ASPs updating data in Co-WIN shall be solely responsible for the correctness of the such data and any liability arising out of any data so provided shall completely rest with such third party. Any liabilities civil or criminal, arising out of any incorrect data shall solely lie with the concerned ASP.

12. Prohibitions and Confidentiality

When using the Co-WIN APIs, the authorized third-party organizations shall ensure (or allow those acting on behalf of organizations) that the following actions aren't performed;

1. Sublicense/subcontracting of the APIs—the authorized organizations will not create an API Client that functions substantially the same as the Co-WIN APIs and offer it for use by third parties.
2. Perform an action with the intent of introducing any viruses, worms, defects, Trojan horses, malware, or any items of a destructive nature; to Co-WIN services.
3. Interfere with or disrupt the APIs or the servers or networks providing the APIs.
4. Promote or facilitate unlawful online gambling or disruptive commercial messages or advertisements.
5. Reverse engineer or attempt to extract the source code from any API or any related software.
6. Use the APIs to process or store any data in contravention of the IT Act, or any applicable policies or guidelines issued by the Government of India.

13. Use of Government logo

Government logo may only be used after a separate explicit approval has been obtained from the Ministry in this regard.

14. Display of approval

Any ASP application will have to prominently display on the application's citizen facing interface that it is “Approved by CoWIN”, so as to distinguish it from applications that are not approved.

Annexure 3

REGISTRATION AND SETUP PROCESS FOR ACCESSING CO-WIN PROTECTED APIS

In order to avail the Co-WIN protected API Services, please read the Terms of Service (referred above, in “Annexure 2”) and ensure adherence to these terms. The following steps will have to be undertaken by interested third-party organizations to avail access to the Co-WIN protected APIs.

Step1: As part of the registration process, interested third-party organizations need to send their details (about their organization), for use of both the Public and Protected APIs to: partner@cowin.gov.in. The following details should be mentioned through official email id, by the authorised signatory of the Organization.

- Name of the Organization
- Type of Organization: Government/Private
- Registration Number of Organization (DIN) (Not applicable in case of Government)
- Details of the authorised Person Registering on behalf of the Organization
 - Name :
 - Designation :
 - Mobile Number :
 - Phone Number :
 - Email Address :
- Postal address of the Organisation:
 - House No./Building No./Street Name
 - City/Village
 - District
 - State
 - Pincode
- Purpose(s) for which the Organization will be using Co-WIN API:
- Tentative number of Employees/Users/Customers that would be catered
- Expected API Requests per day
- E-Mail ID used for Co-WIN API access
- Official Website of the Organization
- Link to the page in Organization’s website, where Terms of Service and Privacy Policy is mentioned

Step 2: The authorized persons of the applicant organization will have to submit a declaration to the effect that – “I _____ (Name of the authorized person), hereby declare, on behalf of the _____ (Name of Organization) that the information mentioned above is factually correct and that the Organization undertakes to abide by all the terms and conditions of the Terms of Service, as specified in the Annexure 2 of the “Guidelines for Integration of Co-WIN with Third-Party Applications Developed by Ecosystem Partners”.”

Please note that, it is mandatory to send the details and the declaration mentioned above to partner@cowin.gov.in, without these details the registration request shall not be processed. A declaration to the effect that the applicant organisation agrees to the Terms of Services as specified in Annexure 2, shall also have to be submitted.

Step 3: After a successful registration, a developer account will be created for the third-party organization. The developer account provides a staging-level API Key for accessing Co-WIN APIs, a sandbox for testing Co-WIN APIs, as well as API usage metrics. The third-party

organization must demonstrate a successful 'test' for the intended use, using the Co-WIN APIs to the designated Co-WIN officials.

Step 4: After the successful 'test' of the Co-WIN APIs, a production-level API Key would be issued but it won't be linked to any of the APIs. To activate it for a particular API, navigate to the desired API and "subscribe". The API Key is now subscribed to the API and can be accessed for production-operations.