

DIGITAL CREDENTIALING FOR C-19 VACCINATION

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THINKING DIGITAL INFRA, NOT A PACKAGED SOLUTION

MANY CONTEXTUAL INCLUSIVE SOLUTIONS SHOULD EXIST ON SAME DIGITAL BUILDING BLOCKS

Population scale digital credentialing requires various parts to be unbundled into a set of infrastructure elements that can be rebundled in many ways



MACHINE READABLE
SCHEMA AND
SHARED TAXONOMY



DECENTRALIZED
ISSUANCE OF DIGITAL
CERTIFICATE



DISTRIBUTION,
PRINTING,
ANYTIME ACCESS



USAGE
(DIGITAL/PHYSICAL),
VERIFICATION



MACHINE READABLE
SCHEMA AND
SHARED TAXONOMY

MACHINE READABLE
VERIFIABLE CREDENTIAL
COMMON TAXONOMY
SELF DESCRIBING
INCLUSIVE
MULTILINGUAL
PRIVACY PROTECTING
EXTENSIBLE
URLs TO FEEDBACK & INFO

STANDARDIZED MACHINE READABLE "VERIFIABLE CREDENTIAL" SCHEMA FOR C-19 DIGITAL CERTIFICATE WITH SHARED TAXONOMY

```
{
  "@context": [
    "https://www.w3.org/2018/credentials/v1",
    "https://www.who.int/2020/credentials/vaccination/v1"
  ],
  "id": "http://nha.gov.in/cred/ec58b28e-a6ab-49c2-a24d-ebefa02476cd",
  "type": ["VerifiableCredential", "ProofOfVaccinationCredential"],
  "issuer": "https://nha.gov.in/",
  "issuanceDate": "2021-01-01T19:23:24Z",
  "expirationDate": "2025-01-01T19:23:24Z",
  "Print-template": "http://nha.gov.in/cred/ec58b28e-a6ab-49c2-a24d-ebefa02476cd.svg",
  "credentialSubject": {
    "id": "urn:in.gov.uidai.aadhaar:11111111111",
    "name": "Pranod K Varma",
    "age": 53,
    "gender": "Male"
  },
  "evidence": [{
    "id": "https://nha.gov.in/evidence/vaccine/1234",
    "type": ["Vaccination"],
    "verifier": {
      "id": "https://nha.gov.in/evidence/vaccinator/3223",
      "name": "John Doe",
      "sig-image": "...",
    },
    "facility": {
      "id": "https://nha.gov.in/evidence/facilities/4545",
      "name": "ABC Hospital",
      "sig-image": "...",
    }
  }],
  "nonTransferable": "True",
  "proof": { ... }
}
```

Reference: <https://www.w3.org/TR/vc-data-model/>



DECENTRALIZED
ISSUANCE OF DIGITAL
CERTIFICATE

ONE OR MORE AGENCIES
NO CENTRAL PLATFORM
SELF CONTAINED
STANDARD DATA SPEC
CUSTOM VISUAL FORMATS
STANDARD PKI CERTS
AUTHENTICITY VERIFIABLE
CUSTOM EXTENSIONS

COUNTRIES SHOULD BE ABLE TO ISSUE CERTIFICATES USING THE STANDARD FORMAT IN A DECENTRALIZED MANNER

Form JSON

Digitally Sign

Attach a Print
Template

Vaccination Certificate

Certificate ID : DI45SSRI0233 Issue Date: 23 Dec 2021

Recipient's details:
Name: First Last Gender: xxxxx
ID Type: ID Number Age : XX

Centre of Vaccination:
Hospital Name, Location

Vaccine Code and Name

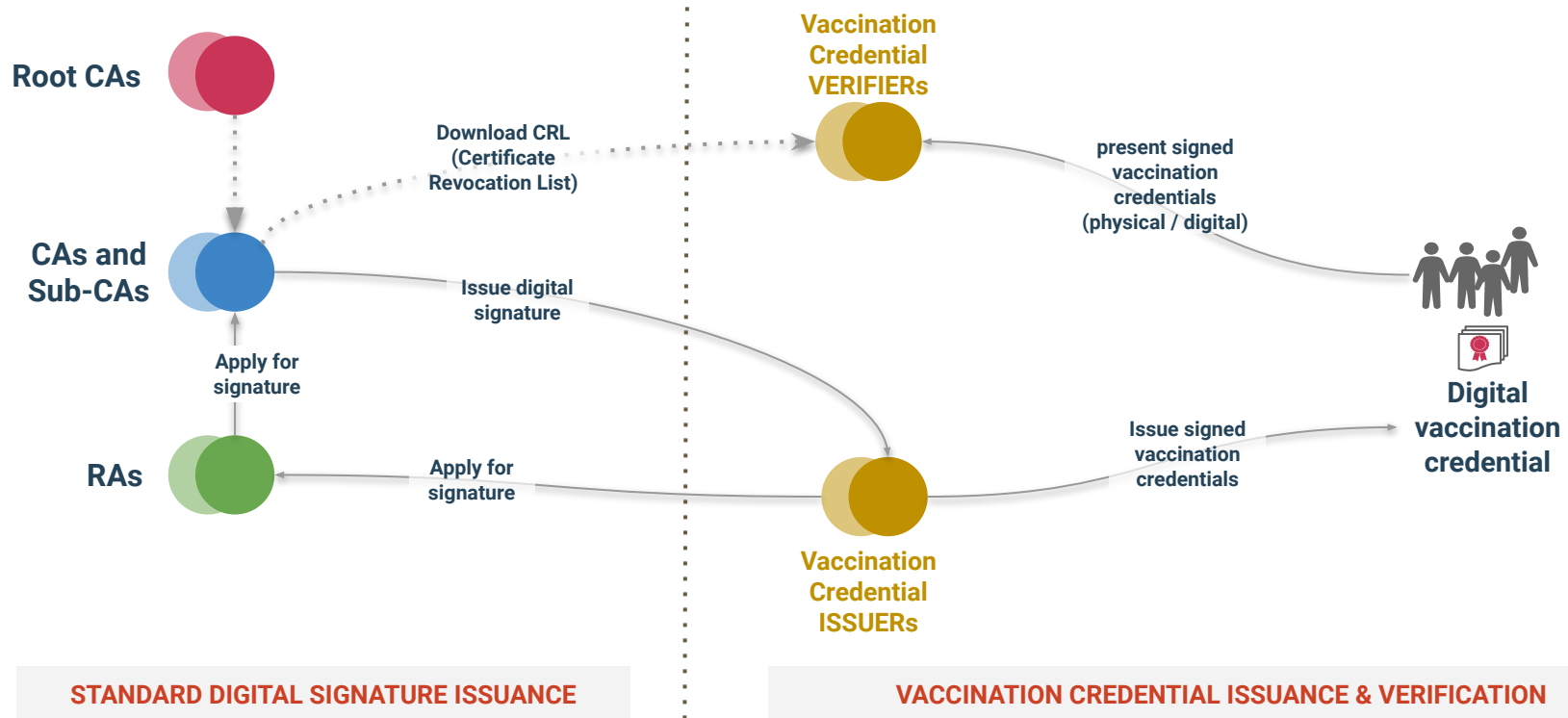
Date of Vaccination: 23 Dec 2021 **Valid until:** 23 Dec 2022

Facility Seal:  **Operator Signature:** 

logo: Ministry Name

LEVERAGING PKI AND DIGITAL SIGNATURE

ALREADY AVAILABLE ACROSS THE WORLD

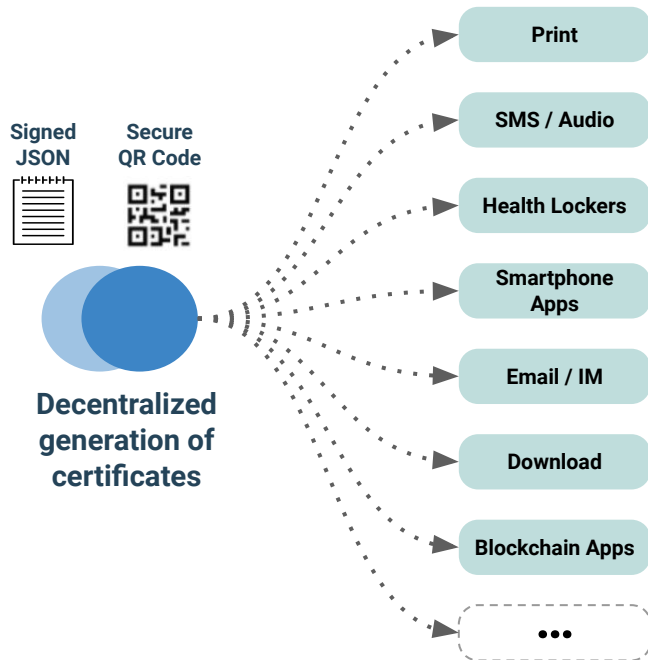




DISTRIBUTION,
PRINTING,
ANYTIME ACCESS

DIGITAL AND PHYSICAL
MULTI-CHANNEL DISTRIBUTION
ANY VISUAL TEMPLATE
ACCESS ANYWHERE, ANYTIME
ACCESS VIA APPS/LOCKERS
SELF/ASSISTED MODES
SECURE DELIVERY
DELIVER AS QR CODE

ONCE THE CERTIFICATE IS ISSUED, MULTI-CHANNEL
DISTRIBUTION AND PRINT SCHEMES SHOULD WORK
TO ENSURE COUNTRIES AND USERS HAVE A CHOICE



Distribution via one or
more channels for
inclusive population
scale access



USAGE
(DIGITAL/PHYSICAL),
VERIFICATION

INSTANT VERIFICATION

OFFLINE / ONLINE

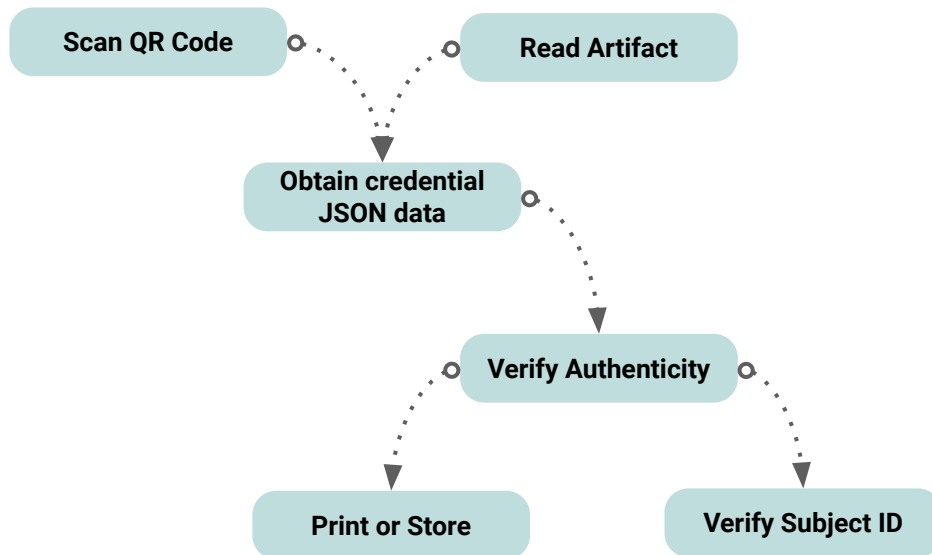
DECENTRALIZED

WITHIN / ACROSS BORDERS

PRESENT / PRESENCE-LESS

PHYSICAL / DIGITAL

MANUAL OR AUTOMATED VERIFICATION,
PRESENT OR PRESENCE-LESS,
WITHIN OR ACROSS BORDERS



VACCINATION CERTIFICATE IN DIVOC

- Conforming to WHO/IHR guidelines* based on W3C verifiable credential* specifications
- Aligns with FHIR or ICD codifications.
- Authenticity verifiable via digitally signed QR code
- Available digitally on smartphone with QR code
- Printable for non-smartphone users
- Multilingual templates (for data and layout)
- Ability for users to download/print after vaccination either at facility or from home in self/assisted modes
- Integratable to Lockers and other apps
- Easy integration with immunization e-registry

 COUNTRY
LOGO



Vaccination Certificate
टीकाकरण प्रमाण पत्र

Program Name / कार्यक्रम का नाम

Certificate ID / प्रमाणपत्र क्रमांक : 116357162
Issue Date. / जारी करने की तिथि : 20-Dec-2020

Recipient's details / प्राप्तकर्ता का विवरण: 20-Dec-2020
Name / नाम : Madhav P
ID Details आईडी विवरण : Aadhaar # 1111 2222 3333
Gender / लिंग : Male
Age / उम्र : 26

Centre of Vaccination / टीकाकरण केंद्र : Awesome Hospital, Bengaluru
बहुत बढ़िया अस्पताल, बंगलुरु

Vaccine and Manufacturer / टीका और निर्माता : Covax19, Oxford

Date of Vaccination / टीकाकरण की तिथि : 20-Dec-2020

Vaccine Dose / टीका की खुराक : 1 of 2

Valid Until / वैधता : 20-Jun-2021

 PROGRAM
LOGO

This is a tagline
यह एक टैगलाइन है

For more information / अधिक जानकारी के लिए
 <https://<vaccination-info-URL>>
 1800 1800 1800

THANK YOU

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