EU Digital COVID Certificate

ESCAP/WHO Regional Workshop on Digital COVID Certificate in support of cross-border travel and tourism recovery

16 September 2021
What is the EU Digital COVID Certificate?

Digital proof that a person has either

- been vaccinated against COVID-19
- received a negative test result
- recovered from COVID-19

What does it entail?

- Data is encoded, compressed and digitally signed in interoperable barcode
- Paper or digital format, easy to read
- Free of charge
- Bound to an EU citizen: 1 certificate, 1 holder
- Europe-wide validity
- Signature validation key exchange is done via an EU Gateway
Outline technological architecture

Country A (issuer)  
Country B (verifier)

EUDCC Gateway

Third countries

EU Digital COVID Certificate

Signing

Verifying

private key

public key(s)

Third country issued digital certificate

Verifier app \textit{offline verification}

Third countries

Third country issued digital certificate

Europe Commission
The DCC story

17 March
Announcement of proposal for Digital Green Certificate

14 April
Council adopts position

21 April
Technical specifications agreed among MS in the eHealth Network

29 April
EP adopts position after fast-track procedure

1 June
EU DCC Gateway goes into production

1 July
Entry into force of Digital Covid Certificate Regulation – 26 countries already go live before

10 July
CH first third country granted equivalence decision

12 August
End of transition period

August onwards
New third countries granted equivalence decisions
DCC in numbers

43
Countries connected to the EU DCC Gateway

30
EU27+EEA

13
Third countries

15
Countries from across 5 continents whose applications are still under assessment

468m+
Issued certificates

383m
vaccination certificates

40m
PCR test certificates

38m
rapid antigen test certificates

7m
recovery certificates
Key success factors and challenges

Overall, the EU Digital Covid Certificate has been a big success

• **Success factors**: political will, clear objectives, teamwork and trust, funding, early implementation of EU DCC Gateway

• Challenges:
  - Time constraints
  - Heterogeneity of EU Member State healthcare systems
  - Initial agreement on use purpose
  - Data protection
  - Public expectations

These challenges have not been show-stoppers, making the EU Digital Covid Certificate system a success story
The team

Lead DGs: JUST (CdF), SANTE, CNECT, HOME (CdF twin Regulation)

Support DGs: DIGIT, BUDG, COMM, MOVE, JRC, SG, LS, NEAR, INTPA

Member States: (eHealth Network, Health Security Committee)
EU Digital COVID Certificate and third countries

• Work with third partners to connect to EU system, where core principles are respected (security and data protection)

• Technical specifications and software publicly available

• Also: Recommendation 2020/912 on entry into the EU: MS should allow entry for individuals having received last dose of EU-authorised vaccine (+ possibility for WHO emergency list vaccines)

• Also: MS can issue EU DCCs based on reliable proof of vaccination in a third country (Article 8(1))
The equivalence decision process

**Initiation**
First contact, pre-checks of readiness, technical clarification

**Self-assessment**
Completion by applicant country of Evaluation Checklist

**Technical check**
Assessment of Evaluation Checklist; Formal submission of application for Equivalence Decision; Technical screening of third country; notification of results of technical compliance tests to third country

**Equivalence Decision**
On positive opinion from technical team, preparation of Equivalence Decision (ED); Vote in Member State Committee; following positive vote, adoption and publication of Implementing Act and notification of ED

**Onboarding**
Applicant country on-boarding with final tests; Go Live and exchange of keys
Consequences of an equivalence decision

- **Article 8(3):** The acceptance by the Member States of the certificates that have been subject to an equivalence decision are subject to Article 5(5), Article 6(5) and Article 7(8) of the EU DCC Regulation.

- Applies in principle only for travel within the EU, not to the EU (governed by Council Recommendation 2020/912)

- Specifically for **vaccination certificates**, Member States:
  - *are obliged* to accept vaccination certificates issued for a COVID-19 vaccine that has been centrally authorised in the EU.
  - *may* accept vaccination certificates issued for a COVID-19 vaccine that has been authorised by a Member State or a COVID-19 vaccine that has completed the WHO emergency use listing procedure.
Guidelines and technical specifications

All documents are available from: [https://ec.europa.eu/health/ehealth/covid-19_en](https://ec.europa.eu/health/ehealth/covid-19_en)

Datasets and value sets
- JSON Schema for EU Digital COVID Certificates
- eHealth Network guidelines on verifiable vaccination certificates - basic interoperability elements
- Guidelines on COVID-19 citizen recovery interoperable certificates - minimum dataset
- A common list of COVID-19 rapid antigen tests, and a common standardised set of data to be included in COVID-19 test result certificates

Technical specifications
- Volume 1: formats and trust management
- Volume 2: EU Digital COVID Certificate Gateway
- Volume 3: 2D Barcode Specifications
- Volume 4: EU Digital COVID Certificate Applications
- Volume 5: Public Key Certificate Governance
- EU DCC Validation Rules
- Validation of EU Digital COVID Certificates in the context of air transport

Architecture
- Trust framework
- Reference implementations for issuance, storage and verification apps

Other
- Template for paper version for EU DCCs

Third countries
- Third country DCC Equivalence Decision checklist
- Annex 1: Evaluation checklist
- Annex 2: Technical procedure
- Annex 3: Application form
Thank you