

Vaccination Certification & Verification, powered by Zebra Technologies

Safe, secure and open to all

To get the world moving again it needs a safe, secure and free-for-all vaccine certification programme, such as the Digital Green Certificate outlined by the EU. Zebra is unique in providing both the digital and physical verification of vaccinations that's essential to ensure that certification is open to everyone.



1. JOSIE'S CREDENTIALS ARE CREATED

Josie is being vaccinated. A clinician populates the Electronic Health Record (or specific Vaccination Credentials database) software with Josie's personal and vaccine data. This is saved onto a secure system.



2. THEN VALIDATED

The health authority's information is added using its Electronic Health Record software to make Josie's credential verifiable. A unique identifier – containing no patient data – is created. This is stored in the central EHR system, while a unique identifier for the credential, is stored on a decentralized ledger such as the Tangle from IOTA, a tamper-proof distributed ledger. Equally if permitted, the unique identifier can be stored on the EU Gateway.



3. AND VERIFICATION OF JOSIE'S STATUS IS PREPARED

A personal digital signature, (for example, this could be a number, QR code or barcode) is created for Josie that embeds the unique identifier stored on the distributed ledger. Using Zebra printers a smart card is created for Josie that encodes the digital signature. This ensures she never has issues when her data needs to be checked (e.g. loss of battery on her smartphone). As well as vaccination data, test results and natural immunity can be added to the card at any time. The card design is easy to create while the printers can output high volumes quickly, reliably and accurately. The cards last for years.



4. THE SIGNATURE CAN ALSO BE USED IN MOBILE APPS

Alongside the card, Josie could also be issued with a digital signature to use in an app on her mobile device.







5. WITH HER CERTIFICATE JOSIE IS FREE TO CHASE THE SUN

Josie simply presents her card to verifying authorities such as customs teams for stress-free travel.

6. WHENEVER REQUIRED HER STATUS IS CHECKED

Josie's card is scanned using a mobile device and data is crosschecked in real time against the decentralized data base (e.g. the IOTA Tangle); she's free to enjoy her holiday.

7. WITH A SOLUTION THAT'S SAFE, SECURE AND **OPEN TO ALL**

The solution is ready to go, scalable, cost efficient and with physical and digital certificates is open to all. It flexes easily to accommodate new requirements and is interoperable with other health passes and verification systems. Furthermore, verification through a decentralized database such as the IOTA Tangle means that any authority with a web connection and a card reader can validate certificates safely and securely.