



UBIRCH



**DIGITAL**

**CORONA TEST**

**CERTIFICATE**

# GETTING THE WORLD BACK TO TRAVEL

The COVID-19 pandemic has had a huge impact on the world economy and everyday life. Even once a vaccine is found, the virus will continue to pose a threat to society if a person's SARS-CoV2 status cannot be trusted.

To help speed up our return to normal, the blockchain cybersecurity specialist UBIRCH and a consortium of medical device manufacturers, laboratories, hospitals, and clinical data management system providers have developed the IT infrastructure for a Digital Corona Test Certificate.

# VERIFIABLE CORONA STATUS WITH UBIRCH SOLUTION

In cooperation with:

HEALEX

GOVDIGITAL

bdr.  
BUNDESDRUCKEREI

Lufthansa  
Industry Solutions

and many more

The Digital Corona Test Certificate is a readily available secure solution that verifies a person's SARS-CoV-2 status in compliance with GDPR and the highest data security standards.

## HOW IT WORKS

If a person gets tested or vaccinated at a laboratory authenticated by German government office Bundesdruckerei, UBIRCH anchors an anonymous digital fingerprint in a blockchain – hosted on secure servers in Germany by govdigital. This way, an individual's certified SARS-CoV-2 status can be easily verified subsequently at any departure or entry point.

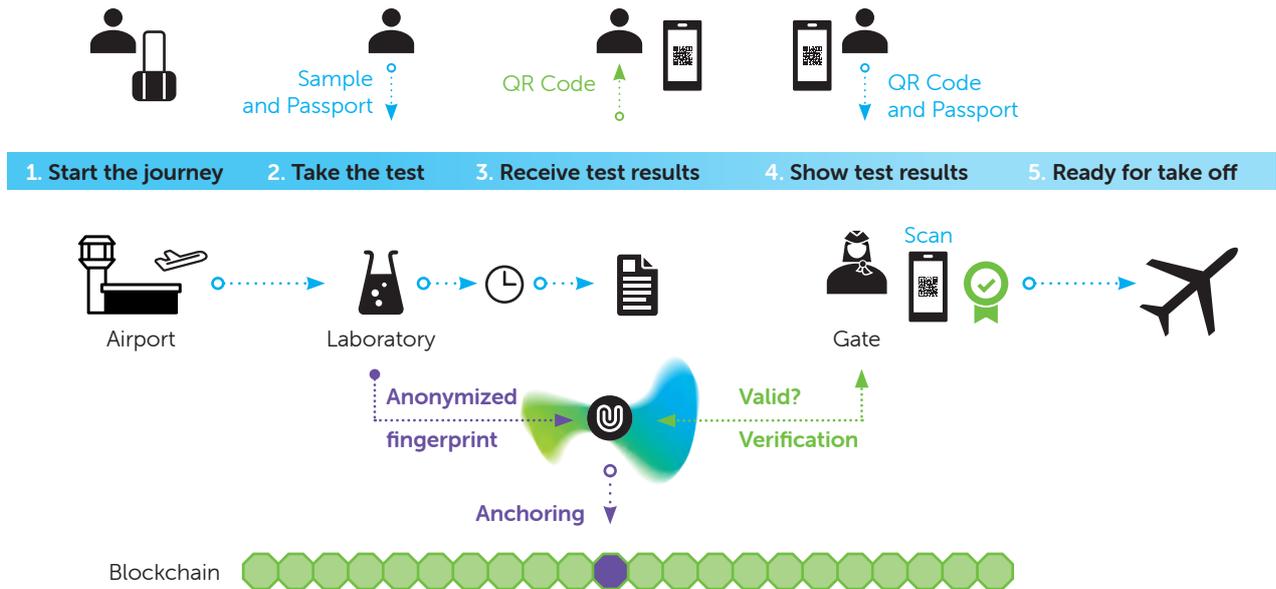
The Digital Corona Test Certificate can be used to hasten our return to normal in critical areas where individuals will likely have to demonstrate a verified negative SARS-CoV-2 status or proof of vaccination, such as airports, manufacturing facilities, and big events.





## A PRACTICAL EXAMPLE – SAFE, HASSLE-FREE TRAVEL WITH THE DIGITAL CORONA TEST CERTIFICATE

The following example of the testing facilities at Frankfurt International Airport shows how the Digital Corona Test Certificate can be effectively implemented and create added value for all parties involved.



Arriving and departing passengers can now take a Corona express test at Frankfurt International Airport in Germany. The “walk-in” test center is easily accessible to passengers in the public area of Terminal 1.

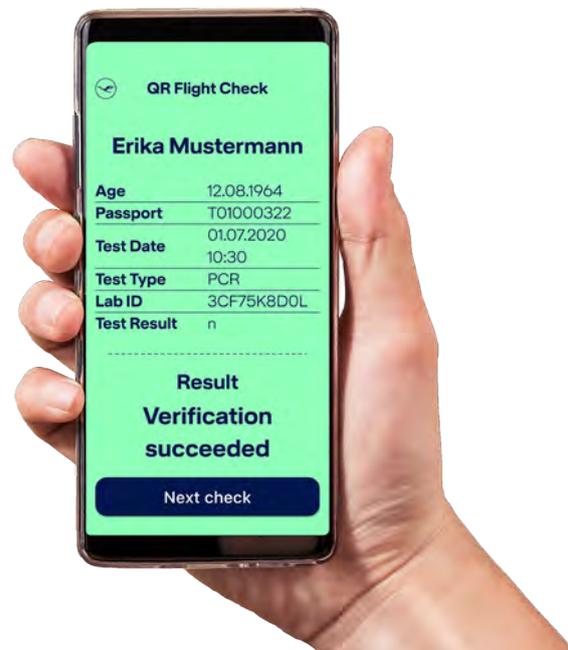
After taking and analyzing the sample, the laboratory sends the test results to the passenger’s mobile phone within three hours. Automatically, an anonymous digital fingerprint is anchored by UBIRCH’s unique technology in a blockchain.

At no point during the process are person-specific user data visible in the blockchain. In compliance with GDPR and the highest data security standards, control over user data always lies with the person concerned.

This way, an individual’s certified SARS-CoV-2 status can easily be verified by the airline at the departure gate, the arrival airport, or any other entry point by scanning a QR Code.

Lufthansa Industry Solutions (LHIND), for instance, could offer a convenient and secure service for the passengers to have their Digital Corona Test Certificate verified directly at the gate. The service can be adapted for other facilities or industries easily.

LHIND’s verification app is equipped with an API linked to UBIRCH technology. Once the QR Code is scanned and the verification successful, precisely that verification fingerprint is anchored directly into a blockchain as an immutable and non-repudiable event, closing any potential loopholes in the chain-of-trust.



# BENEFITS FOR ALL

Increasingly, destination countries now require passengers to test negative for Sars-Cov-2 before allowing them entry. The Digital Corona Test Certificate process at Frankfurt International Airport serves as a blueprint for opening up international travel – with benefits for all featured in the equation:

## » LABORATORIES PROFIT FROM ADDITIONAL SALES

For laboratories, being the selected partner of a dedicated testing center at an airport or another public entry point offers potential for additional sales. Providing the blockchain anchored Digital Corona Test Certificate is a unique selling point for laboratories since test results that are transferable, non-repudiable, verifiable, and GDPR compliant have more relevance.

## » AIRLINES ENSURE SAFETY BY SAVING TIME AND MONEY ALL AT ONCE

Since airlines must transport passengers back to their countries of origin if these are not permitted entry by the arrival country, many airlines ask for passengers for test results before they can board the aircraft. Thanks to the streamlined Digital Corona Test Certificate process, airlines can safeguard health and minimize repatriation costs.

## » PASSENGERS TRAVEL SAFELY, SAVE TIME, AND REDUCE THE RISK OF BEING DENIED ENTRY

The Digital Corona Test Certificate saves passengers time, offers them convenience, and safeguards their health. Involving trusted partners, airport test centers provide one-stop passenger testing and do not require a doctor's appointment in advance. By taking the test at the airport – either upon departure or on arrival – passengers reduce the risk of being turned back or forced into quarantine upon returning from a holiday or business trip. What is more, a negative test result provides passengers with the emotional reassurance that they are not a super spreader.

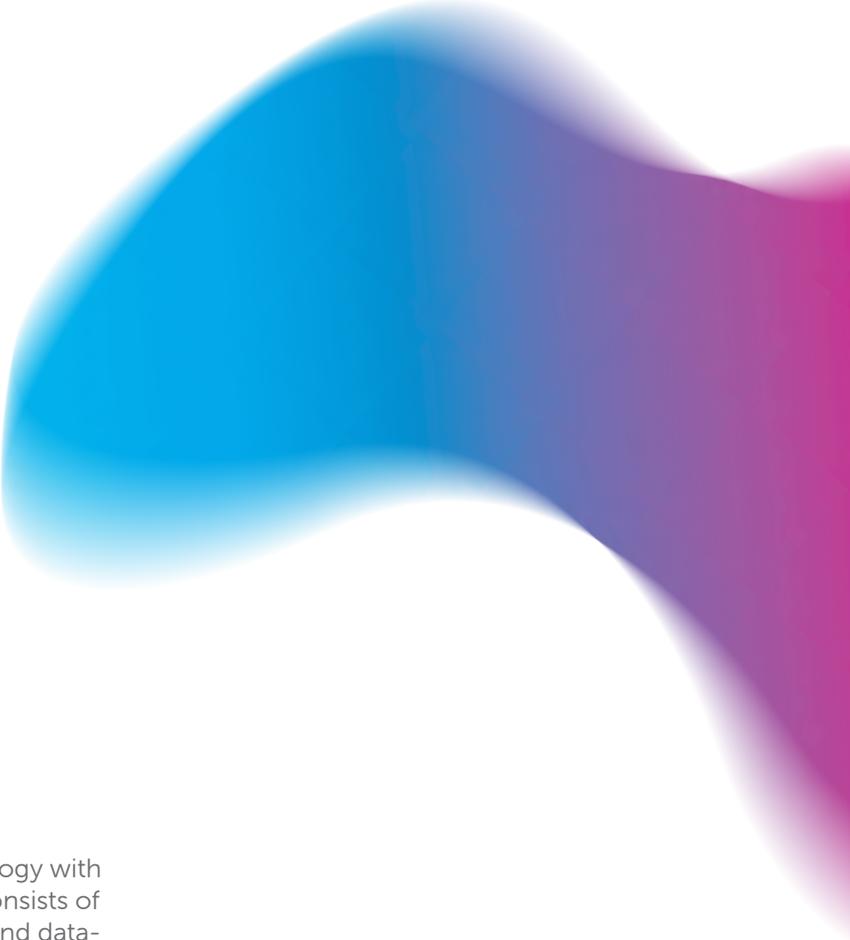
## » AIRPORT OPERATORS SAFEGUARD HEALTH AND SPEED THE RETURN TO NORMAL

The Digital Corona Test Certificate combined with local test infrastructures accelerate the transition back to normal travel volumes and revenues. It promotes trust and safety and represents a key service airport operators can conveniently offer to customers and partners in return for being their preferred airport business partners.

**Independently from the added value it offers the different stakeholders, the Digital Corona Test Certificate is an effective measure in the fight against Corona and makes the world a safer place for all of us.**

# WHY UBIRCH?

The plug and play UBIRCH solution turns a negative test result into a GDPR compliant digital certificate by anchoring anonymous fingerprints into a blockchain. After being *ubirched*, test results become transferable, immutable, non-repudiable, and verifiable while complying with the highest data security standards. This creates measurable added value fast, especially for laboratory partners.



## ABOUT UBIRCH

UBIRCH is the specialist for blockchain-based technology with locations in Cologne, Berlin, and Munich. The team consists of experienced specialists for cryptography, blockchain and data-driven business models. UBIRCH primarily addresses customers from the manufacturing industry, smart cities, insurance, healthcare, energy supply, automobile, air & space, and logistics segments. Consisting of an extremely lightweight client and the matching cloud backend, UBIRCH enables data security at military-grade standards and thus offering new data-driven business models. Innovative cryptography and blockchain technologies guarantee the trustworthiness of IoT data. Further information is available at [www.ubirch.com](http://www.ubirch.com)

**SOUNDS INTERESTING? CONTACT US!**

---

UBIRCH GmbH – Berlin, Cologne and Munich  
+ 49 221 99 988 248  
[sales@ubirch.com](mailto:sales@ubirch.com)  
[www.ubirch.com](http://www.ubirch.com)

---