



Ministerie van Infrastructuur
en Waterstaat

Using the DCC cross border Scanner NL app

V1.1, builds 43 (iOS), built 24 (Android)

Using the DCC cross border Scanner NL app

1. Generic

The app is used by international carriers to check the DCC (Digital COVID Certificate) by which travellers can demonstrate their health. The DCC is a digital certificate, issued by one of the DCC participating countries (the EEA - European Economic Area - countries). It contains information on the traveller's ID and one (and only one) of three proofs of health:

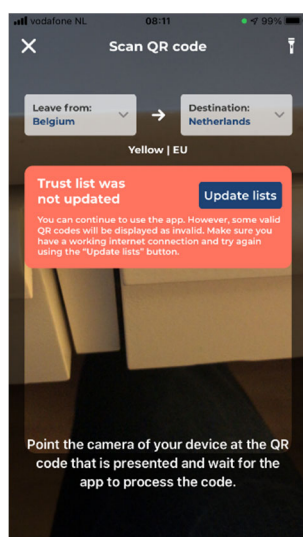
- Negative COVID test result;
- COVID vaccination;
- Recent recovery from COVID.

The DCC is represented by a QR code. The app uses the camera of your mobile device to scan a code that is shown by the traveller, either on his or her own mobile device screen, or in a printed version. Scanning a QR code with the app will prove that the DCC is issued by one of the participating countries.

When using the app for the first time, the on boarding process will explain the basics of the app and the terms of use (one time only). After you accept the terms of use, the app is ready for scanning.

1.1 Internet connection

The app does not require an internet connection to function properly. However, it is preferred to connect to internet at least once every 24 hours. If that time is passed without connection, an error is shown indicating the trust list¹ is not up to date. If no connection is available, the app will continue to function, however in time valid certificates may be displayed as invalid in rare cases. The error will disappear after a connection is made and configurations are updated.



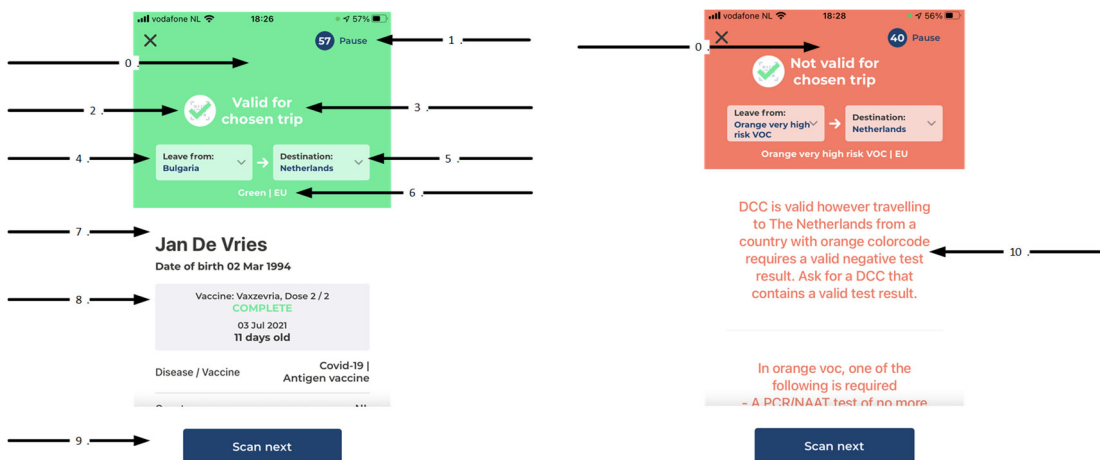
The steps to scan a code:

- Open the app and press "Start scanning".
- Point your camera at the code. Make sure you point it at only one code!
- Wait for the camera to lock onto the code. The result will appear immediately.
- Review the result.

¹ The trust list is a list of electronic signatures necessary to authenticate the QR code that is scanned.

2. The result screen

Results are shown in the result screen:

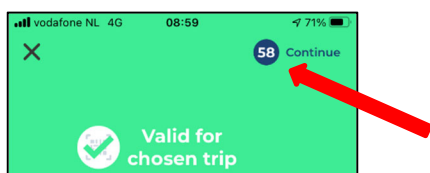


2.1 Meaning of the items:

0. Colour of the top of the screen: indicator for the validity of the trip chosen. Departure, destination and COVID status are valid (green colour), invalid (red colour²) or no rules are processed.
1. Timer and Pause button. Results are shown for one minute only; you need to press Pause if you need more time to check the certificate.
2. Icon to indicate validity of the certificate and signature (green checkmark for valid DCC's, red cross for invalid DCC's). So this green check mark does not indicate business rule results.
3. Explaining text to summarize status of the certificate check and possible follow up actions.
4. Selection box for departure location. Available in scanner screen and result screen. See paragraph 5 for more information.
5. Selection box for destination screen. Only destinations that actually can be verified are shown. If no rules are available in the app, the location is not shown. If country is not shown, select "Other" to prevent rules from being applied.
6. Indication of the colour code and EU/Non-EU to clarify which rules are applied.
7. Contents of the certificate: personal information (name and date of birth) to match with travellers ID.
8. Summarized contents of the certificate, showing relevant details for vaccines, tests and recovery. In the summary all relevant details about time (age of tests and vaccinations) are shown to support manual rule checks as much as possible.
9. The Scan Next button. This button takes you to the scanner interface to scan another QR code.
10. Explaining text about travel status. Please note that more than one text may be shown, which means the user needs to scroll down to be able to view the other DCC data.

2.2 Timer

The result screen features a timer running in the upper right-hand corner:

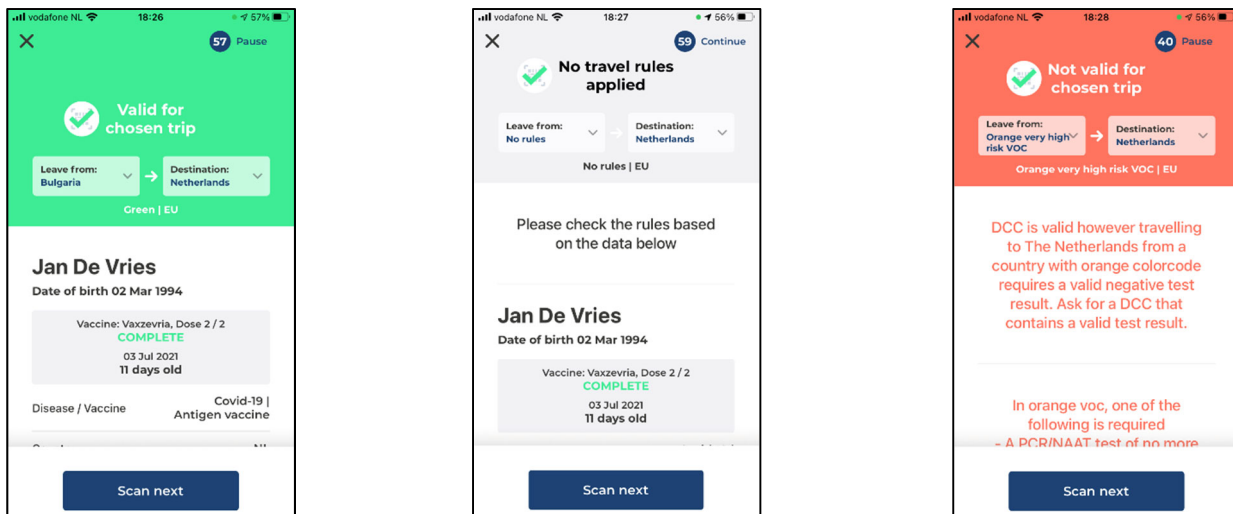


The timer will count down from 60 seconds. After this time, the scan result will disappear automatically for privacy reasons. If you need more time to interpret the result, you can press Pause to stop the timer or scan the same QR code again. At any time, you can proceed to the next scan by pressing the blue button at the bottom of the screen.

² A red screen never indicates that a person is infected with COVID-19, or may infect others.

3. Result: valid codes

If the code has a valid signature and validity date, the app will show the contents of the DCC:



All possible screen appearances for valid certificates.

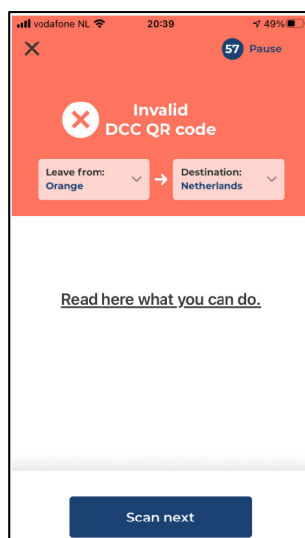
The **rules** that are processed determine the colour of the top of the result screen, so this depends on the choice you make in the “Leave from” and “Destination” fields:

- Green: valid trip.
- Grey: no rules processed. Manual check is required.
- Red: rules processed, but additional checking needed.

4. Result: invalid code

The QR code contains all the DCC data and an electronic signature. The code also contains other technical validity properties. The app verifies the signature and properties; if something is not correct, the app will:

- show a red screen without showing the content of the certificate.
- show the red cross icon indicating that DCC is technically invalid.
- show text Invalid DCC QR code.



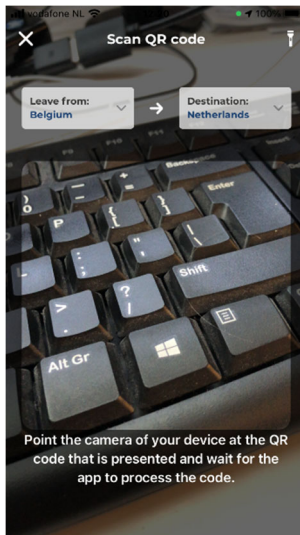
Click the link to find out the potential reasons why the screen is red and for checking out your options. Clicking the link does not require an Internet connection. However, please note that a red screen will initiate an automatic update of the reference list of valid issuing countries, which does require a working Internet connection to succeed.

Always try a second scan if the first scan fails.

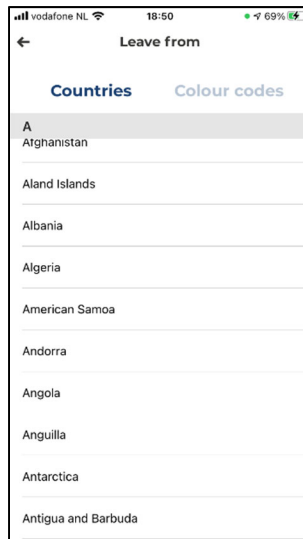
5. Processing business rules

The app can process business rules³. Only business rules from countries that publish their rules via de EU gateway are available: all participating countries are automatically listed in the Destination selection screen.

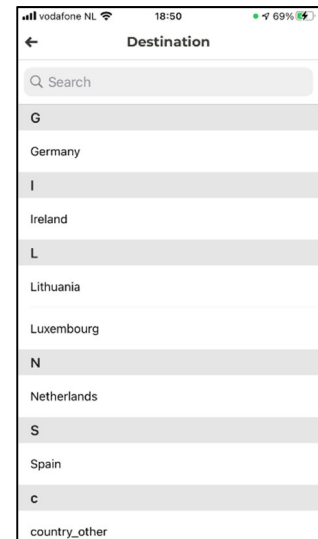
Please note that selecting a departure country via the “Leave from” selection only affects trips that have destination The Netherlands. This is because risk levels are not exchanged among participating countries!



1. The scanner screen



2. The country or colour code selection screen



3. The destination selection

Business Rules (for all available destinations in the list) are processed if:

- Any selection different from “country_other” is made in the selection list (picture 3).

Travelling conditions for **The Netherlands** are processed when:

- The Netherlands is selected in the “Destination” box (picture 3).
- Any selection is made in the “Leave from” box (picture 2), either a country or a colour code.

If the option “No rules” is selected in colour codes, none of the rules are processed the certificate contents are displayed.

5.1 How it works:

At the top of the screen, you will see two selection boxes: “Leave from:” on the left and “Destination:” on the right. The “Leave from” field let you choose the country or the colour code that applies to the country from which the traveller is leaving (departure country). The “Destination” field let you select a destination county for which travelling rules can be processed. If you choose “country_other”, no rules are processed.

The “Leave from” selection list is built from a few Dutch external sources⁴. The Dutch government updates these sources on a weekly basis. The app is updated via configuration files that are updated from the internet when the app is started, and after that once an hour and on certain actions in the app (like the Start Scanning button, or any negative scan result).

If the option “No rules” is selected in colour codes, none of the rules are processed the certificate contents are displayed.

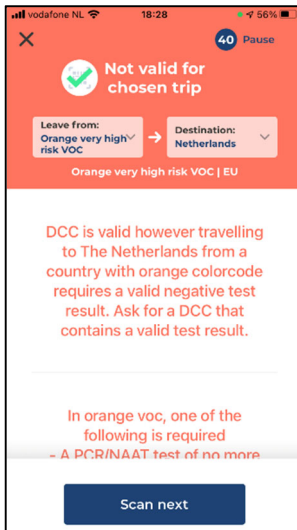
If you do not select a departure country, colour code or destination country on the camera screen, you can still do so on the result screen. The result screen immediately changes change according to the rules that apply if you change the selection.

³ Business rules are the travelling conditions of participating countries that apply to the contents of the DCC. Items like quarantine declaration

⁴ Main source is <https://wetten.overheid.nl/BWBR0045180/>.

5.2 DCC invalid for chosen trip

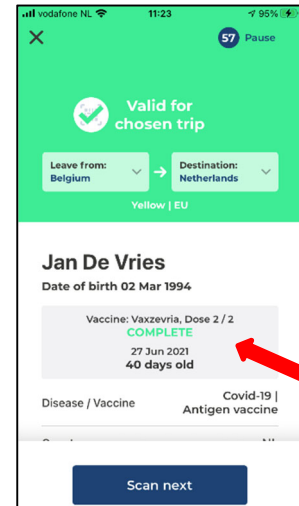
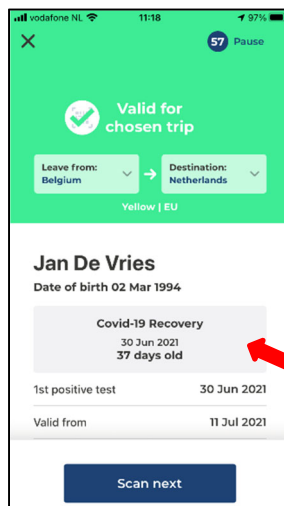
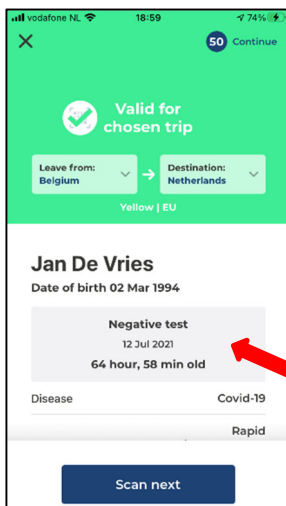
In the situation where the DCC is invalid for the chosen trip, the result screen will show that although the code itself is valid, the DCC shown does not provide sufficient proof to decide whether travelling is allowed. The messages explain all of the additional requirements that apply.



Example of certificate that is verified as correct, but travelling requirements are not fully met. Please note that in case more than one business rule is not met, all explanatory texts are shown.

6. Result summary

Specific attention for the summarized results in the DCC. As the age (time passed since test was taken, days past since last vaccination) of the results is critical, the result screen will show prominently exactly how old they are (see picture), as accurately as it is presented in the DCC.



Example of summarized contents

