

## **AUSTRALIAN PASSPORT OFFICE**

# **Unpacking a VDS-NC**



### **Australian Government**

#### International COVID-19 Vaccination Certificate

Proof of Vaccination Issued by AUS Version 1 UVCI VB0009990038

Date of birth: 1977-05-16

CITIZEN, JANE CATHERINE

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Passport number: PF0911009

Visible Digital Seal (VDS-NC)

Authorities can verify that this document is true and unaltered with a QR reader that checks against Australia's ePassport Country Signing Certificate Authority public key.

Protect the QR code from marks and damage

VACCINATION EVENT		100 M 10 N		
Vaccine or prophylaxis:		Vaccine brand:	Disease or agent targeted:	
XM68M6 (COVID-19)		Pfizer Comirnaty	RA01.0 (COVID-19)	
Date of vaccination:	Dose number:	Country of vaccination:	Administering centre:	Vaccine batch number
2021-06-13	1	AUS	Community Health	EP2163
2021-07-01	2	AUS	General Practitioner	ER7449

This document bears a Visible Digital Seal for a Non-Constrained Environment (VDS-NC), as specified by the International Civil Aviation Organization. UVCI means 'Unique Vaccination Certificate Identifier', XM68M6 and RA01.0 are World Health Organization codes for COVID-19.

### This is what a QR reader sees



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CATHERINE","sex":"F"},"uvci":"VB0009990038","ve":[{"des":"XM68M6","dis":"RA01.0", "nam":"Pfizer Comirnaty","vd":[{"adm":"Community Health","ctr":"AUS","dvc":"2021-

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19 u X 2 S v h TTQ70 n L-z HNfHOyBXJ g z Mi4Zkor 2 u ag HPz-W1XvNV w GE f FAu-to-start for the start of the

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 $\label{loss} UonTJ\_ug7FU0LEX3qA1TeARJ4WBFNjysrBXQepVLowcbtvrhLFjocHjmCp3z17xUoKGI6da\ ajCbvedXgeeSWSD5CuMAXpdN3YmI7VdW7PCK4DD0E\_raw6d\_wKNGSYAh0TBpNLxnun\ quai-gFljgf4iRoys5F35KwmvpZw==",$ 

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vaccination data

Signature algorithm

Compressed
Barcode Signing
Certificate (BSC) —
includes public
key and link to
Country Signing
Certificate
Authority (CSCA)
public key

Signature value

## Signing a VDS-NC

### Signature value Hash value **Asymmetric** FM5nk4TntHUSrVewwK3mgh c83ef2806b8b0c6282 encryption 3170a32eede46ddab myXxAlJgKbu2qt9ZZI6U56PKV kzfDmIQKhURAlvnCKv9Sfzmgt 1c30ee3b76175835ff e1ea9d3658f LCUxQFpbf2EuXQ== **Hash function** Signature algorithm Uses SHA256 algorithm ES256 (SHA256ECDSA ) Calculates short message digest (hash) using oneway calculation **VDS** data Header, biodata, passport number, vaccination data CSCA private key **BSC** private key Held securely Held securely Signs the BSC public keys Signs the VDS by applying the specified algorithm to the hash value

## **Authenticating a VDS-NC**

