

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

·---

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



{"data":{"hdr":{"is":"AUS","t":"icao.vacc","v":1},"msg":{"pid":{"dob":"1977-05-

16","i":"PF0911009","n":"CITIZEN JANE

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

06-13","lot":"EP2163","seq":1}, {"adm":"**General**

Practitioner", "ctr": "AUS", "dvc": "2021-07-

01","lot":"ER7449","seq":2}]}}},"sig":{"alg":"ES256",

"cer":"MIIDhDCCAWygAwIBAgICGK0wDQYJKoZIhvcNAQELBQAwZTELMAkGA1UEBhMC QVUxDDAKBgNVBAoMA0dPVjENMAsGA1UECwwEREZBVDEMMAoGA1UECwwDQVBPM SswKQYDVQQDDCJQYXNzcG9ydCBDb3VudHJ5IFNpZ25pbmcgQXV0aG9yaXR5MB4XDTIx MDgzMTE0MDAwMFoXDTMxMDkzMDEzNTk1OVowHDELMAkGA1UEBhMCQVUxDTALB gNVBAMTBERGQVQwWTATBgcqhkjOPQIBBggqhkjOPQMBBwNCAARSVpOyHuLjm01TB1 ilbr3SrUp2GkQIM-

mPqubbW3mjs0DTeRKrfVTSkkZNgOGj_DB_fo3p8qGy8UVgT4DQRVhlo1lwUDAWBgd ngQgBAQYCBAswCQIBADEEEwJOVjAVBgNVHSUBAf8ECzAJBgdngQgBAQ4CMB8GA1UdI wQYMBaAFDYXwef1Z5VxLjd1cl5VgzGG6TgOMA0GCSqGSlb3DQEBCwUAA4ICAQCh_Qc5 i6-vewGqinR9EdUpsl0P4jqg0pdx7hyOtP

gYOwbTOegJyZOjyWZyuLlxGYuvCHqbrnATMedoloUJzt8GxHA-

4v5TUN2yEbRFXev8ur 0Y3uF4WXFr93Zl0LV7

8PBNZwXKfZEC6oTN_eVgtR37GdnYsWno0SuhR4fJo8JC_blivas8BJt78Hg8VhvWSK3uT0T58eYQjQhbsXV-BxJ2kSspdvkUF6-arLHh6DVS3ATPAGIm6f

EvF4AxnLq5OSHOC3zZR0SR9XntYxEwjo_bW8O0Se8qa5mlBp

Xmvlwh0Ij6sqVwEskvkM30GmQGfZh5VjFujN2AZnwpjOjK0R-JvR3u6jsBJqVMgm75H

gezOzayNiaqzhitrgg5KpO3gK_j3C-Doj5iPAm7I_63GyjUi8ZnqVUZ37UxM

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

nEylOKBndHwnvSomL54yBv83X2yAQsoYggU18LNXMH

 $\label{loss} UonTJ_ug7FU0LEX3qA1TeARJ4WBFNjysrBXQepVLowcbtvrhLFjocHjmCp3z17xUoKGI6da\ ajCbvedXgeeSWSD5CuMAXpdN3YmI7VdW7PCK4DD0E_raw6d_wKNGSYAh0TBpNLxnun\ quai-gFljgf4iRoys5F35KwmvpZw==",$

"sigvI":"FM5nk4TntHUSrVewwK3mqhmyXxAlJgKbu2qt9ZZI6U56PKVkzfDmIQKhURAlvnC Kv9SfzmgtLCUxQFpbf2EuXQ=="}} **VDS data** Header, biodata, passport number,

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 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

