

## Intergovernmental Ledger

**Digital Verification Platform** 

**Cheryl Wong** 

Customs and Modernisation Branch Cheryl.Wong@abf.gov.au

# Simplified Trade Agenda

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 Simpler, more efficient and digitised trade system for business

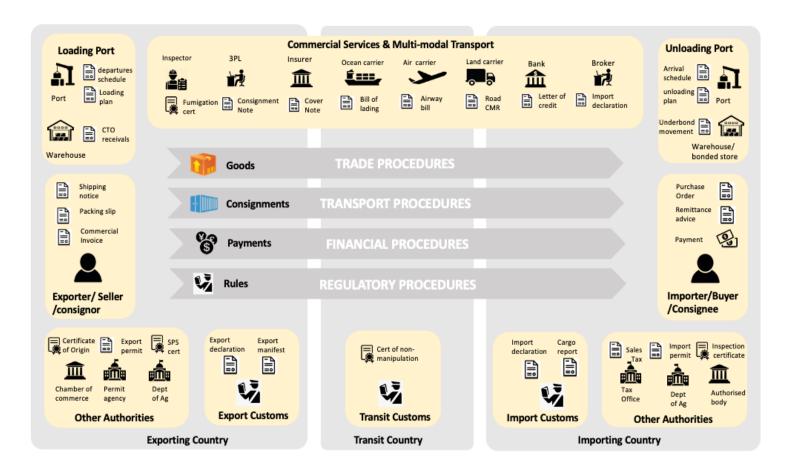
## Role of ABF

Leading Australia's customs and border modernisation efforts

# **Paperless Trading**

- High cost of trade in Australia
- Persistent paper-based trade documents
- Why?
  - Because regulators need confidence of integrity
- Digitisation has challenges
  - Tamper proof, identity linked, verifiable, interoperable, secure, cost effective
- Opportunity for digitalisation COVID-19

# Trading Eco-System



# Intergovernmental Ledger (IGL)

- Digital verification platform
  - Trade documents
- Technology
  - Verifiable credentials
  - Blockchain
  - OpenAttestation
- Benefits
  - Privacy, Security and Trust
  - No hassle for partner countries
  - Easy to Scale
  - Interoperability

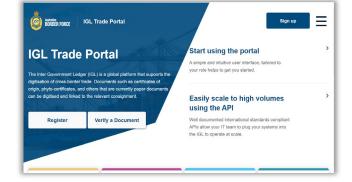
#### **Verification: Mobile Camera**

## QR-coded Certificate of Origin

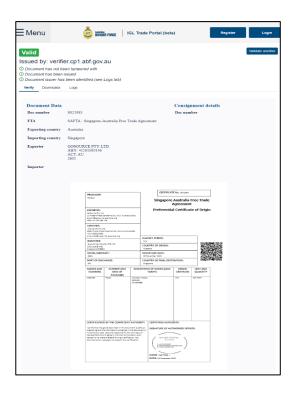




### **Verification: IGL Portal**

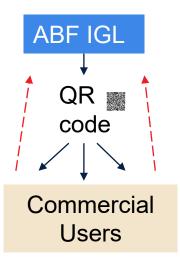


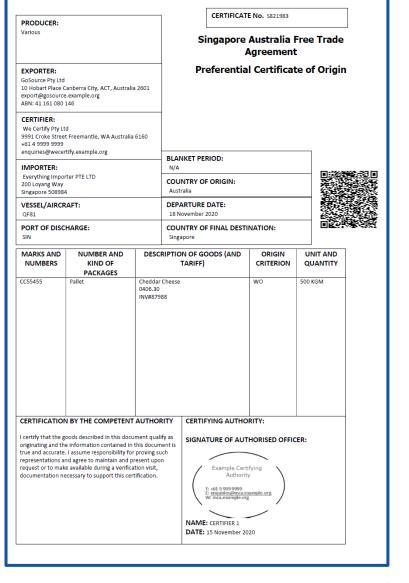
## ABF Verifier: ABF-hosted domain



#### What does IGL do?

- Provides a 'proof of issuer' for trade documents (unique QR code)
- Release to trading eco-system
- Provides Verification hosted by ABF domain – layer of trust - to authenticate the document.





# **Australia-Singapore Trial**

- Australia-Singapore Digital Economy Agreement
- Proof of concept Trial
  - Singapore Customs and Singapore Infocomm Media Development Authority
  - Test IGL digital verification framework
- Trial scope
  - Certificates of origin under Asean-Australia-New Zealand FTA and Singapore-Australia Free Trade Agreement.
- Participants
  - Issuers: Australian Chamber of Commerce and Industry and Australian Industry Group
  - Commercial users: Rio Tinto, ANZ, DBS Bank and Standard Chartered
  - Regulatory authority: Singapore Customs



## Intergovernmental Ledger

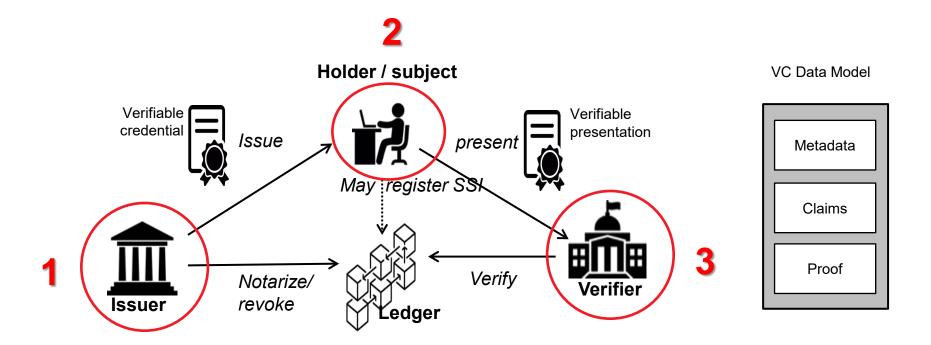
How it works

Steve Capell

Consultant

Steve.Capell@gmail.com

## **W3C Verifiable Credentials**



**Issuer** – Issues the verifiable credential

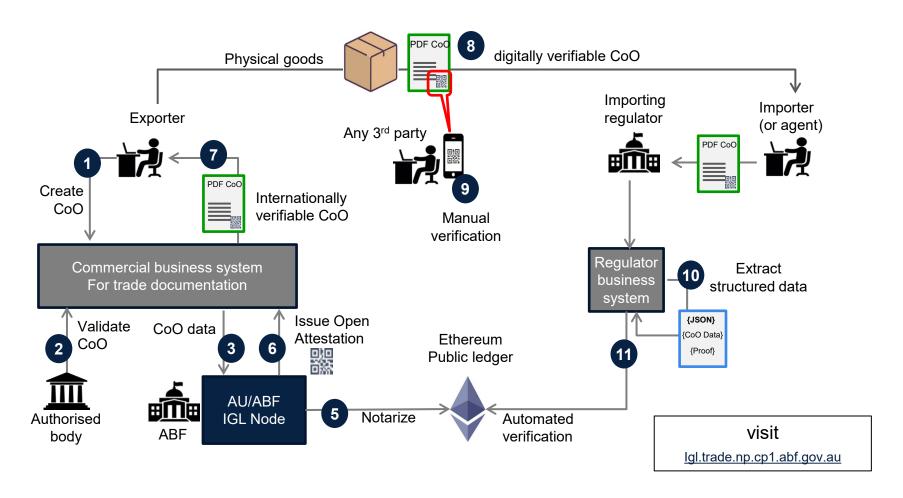


**Holder** – Holds the verifiable credential

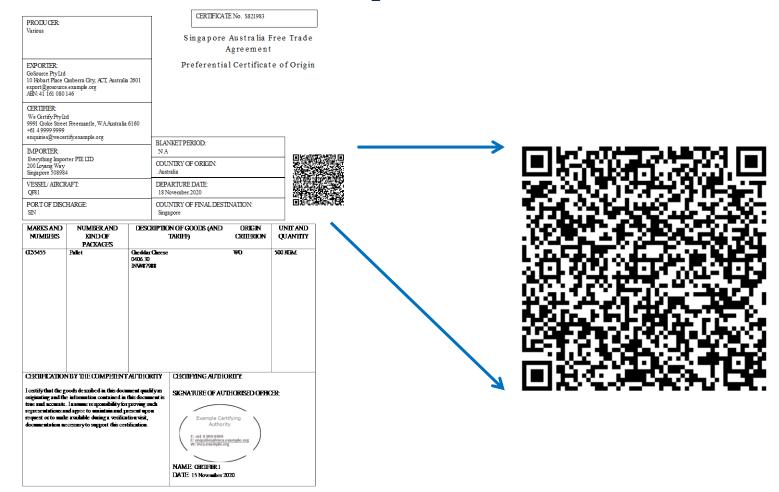


**Verifier –** Verifies the claims

# Open Attestation / CoO



## Example CoO



# Why Verifiable Credentials?

- Tamper proof: Impossible to change without invalidating the document.
- Identity linked: Strongly linked to the identity of issuer and subject (eg trader)
- Revocable: Revoked documents will show as invalid even after issue.
- Redactable: Holder can redact private or commercially sensitive data.
- Verifiable: By any supply chain party even if unknown to the issuer.
- Automatable : High volume verifiers can automate verification & ingest full data
- Compatible: with 500 year-old paper-centric supply chain processes
- Interoperable: with millions of independent issuers & verifiers, even across ledgers
- Legal: meets all legal constraints (eg UN/CITRAL & GDPR)
- Secure : from all plausible attack vectors & cyber compliant.
- Private: the holder owns the data no central data store or arbiter of trust.
- Cost effective: No central infrastructure needed, transaction costs arbitrarily low.
- Flexible: Although often DLT based, they can work without DLTs (with limitations)

## Why Blockchain?

Verifiable Credentials do not need blockchain technology to work. But there are some advantages in using a high integrity public permissionless ledger such as Ethereum

- Notary (non-repudiation): An issuer cannot claim that a VC was not issued because the
  hash of the VC was recorded in a public ledger when it was created. Perhaps less of an
  issue for very high integrity issuers like regulators.
- De-coupling: Issuer does not need to maintain high availability infrastructure for verification.
- **Single source of truth**: If/when there are 1000's of different issuers and verifiers then there is still only one place / protocol for verification.