

Building Products Summit 2026

Digital Claims & Assessments

A pathway towards automated compliance verification

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Non-compliance is ubiquitous

Types

- Counterfeit products
- Fake certificates
- Mis-labelling / substitution

Prevalence

- Around 10% of Australian building stock has serious non-compliance (Ref1).
- ABF audits 0.02% of 30m import declarations and finds 25% non-compliance
- Around 13% of all pharma sold in developing countries is fake (WHO)

Impact

- Human safety and health is compromised.
- Legitimate producers face unfair competition.
- Trust in conformity schemes and audits deteriorates.

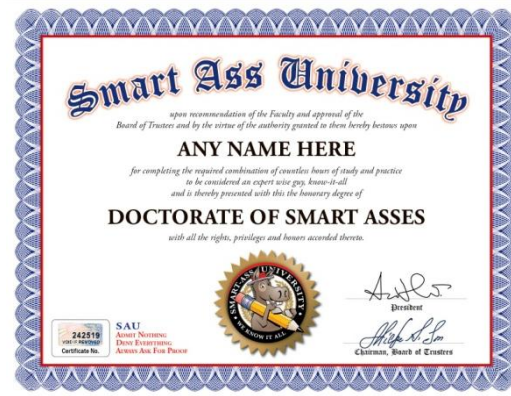
Ref1: NSW strata defect study, QBCC safer buildings, CSV cladding safety, Senate enquiry – non-conforming building products

Finding / Detecting this manually is very costly

It's too costly to check everything manually



And AI fakes will make it harder and harder to tell truth from lie



So, we need to automate compliance verification

Automation of

- Data discovery – scan the barcode and get all the data including certificates.
- Certificate integrity checks - genuine, not tampered, not revoked
- Identities and authorisation - CAB identity and accreditation
- Counterfeits & substitution – received material and certificate align

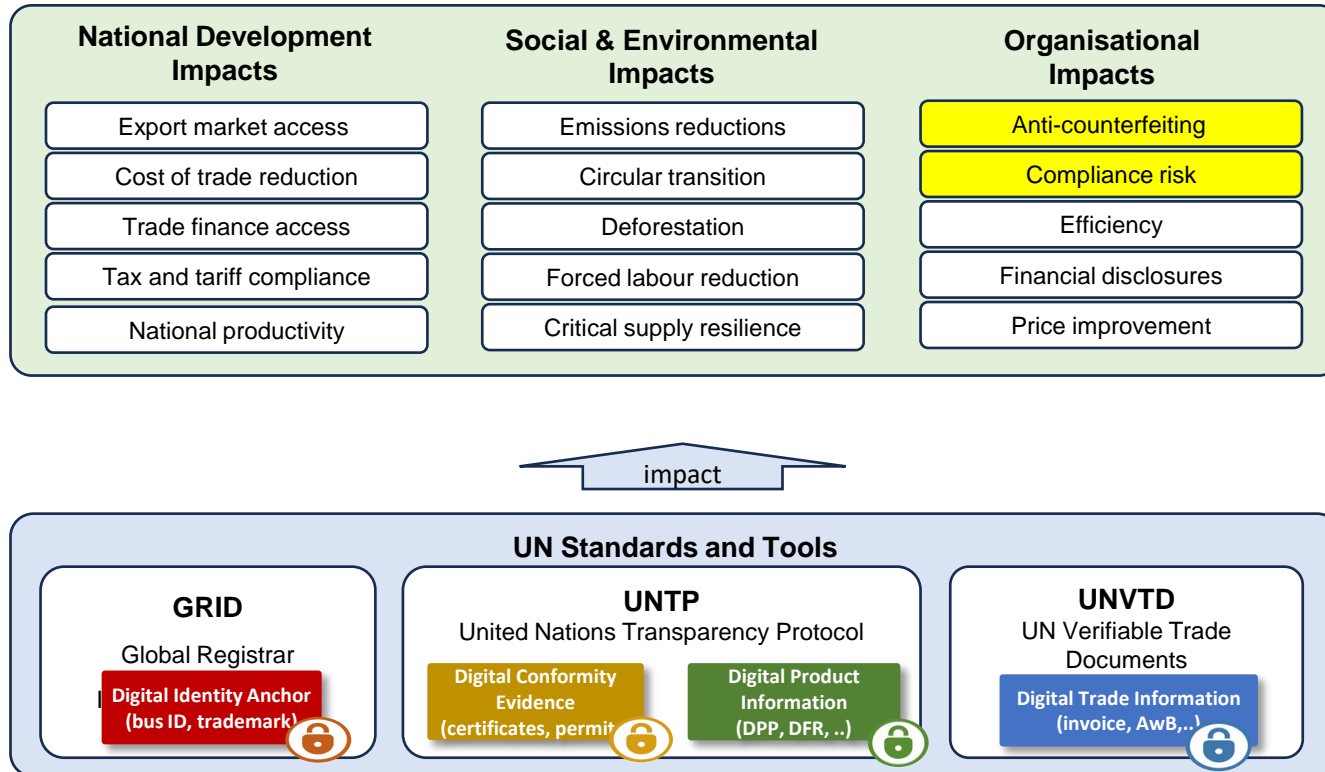
Using

- Link resolvers - QR (or RFID) -> Link list -> credentials
- Verifiable Credentials - (signed, verifiable, revokable). AI can't fake signatures.
- Digital Identity Anchors (issuer is really CAB x and is accredited)
- Trust graphs (verification of linked data across multiple credentials)

Impact

- Verify everything – reducing the haystack to manageable size for humans.
- Increased value attached to conformant products – incentives for industry.
- New business models – eg QR in your house that is scanned & updated for each service.

UN/CEFACT standards show the way



UNTP in particular has a strong compliance focus

VALUE the data

Business Case Template (BCT)

Individual organisation business case for UNTP implementation

Community Activation Program (CAP)

A community level business case for collective action.

Impact Assessment Framework (IAF)

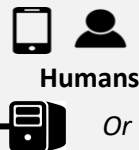
Ongoing post-implementation reporting to track value.

FIND the data

Identity Resolver (IDR)

Get list of links

Scan barcode on the box or the document



Or

Machines

the DATA

Get the data

Digital Traceability Event (DTE)

Traceability

Digital Product Passport (DPP)

Transparency

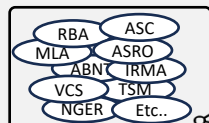
Digital Facility Record (DFR)



Digital Conformity Credential (DCC)

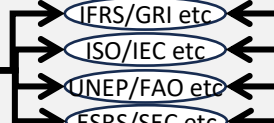
Trust

UNDERSTAND the data



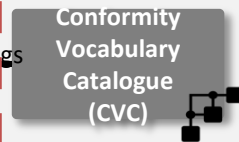
1000's Sectoral/local rules

maps to



Global references

catalogs



SECURE the data

Decentralised Access Control (DAC)

Prove authority to access sensitive data, no matter where it is located.

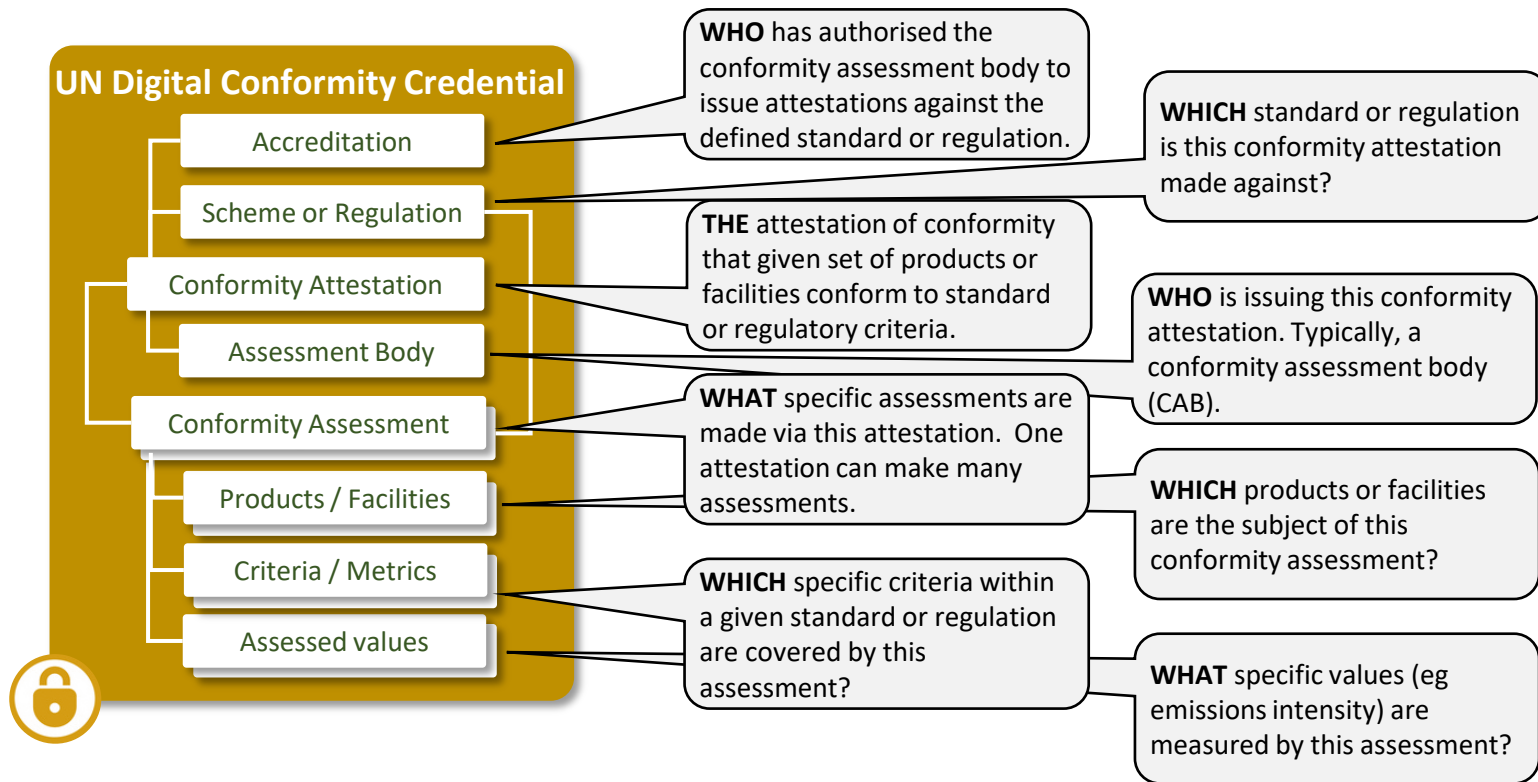
Digital Identity Anchor (DIA)

Get proof of identity and role from a trust authority and use it anywhere

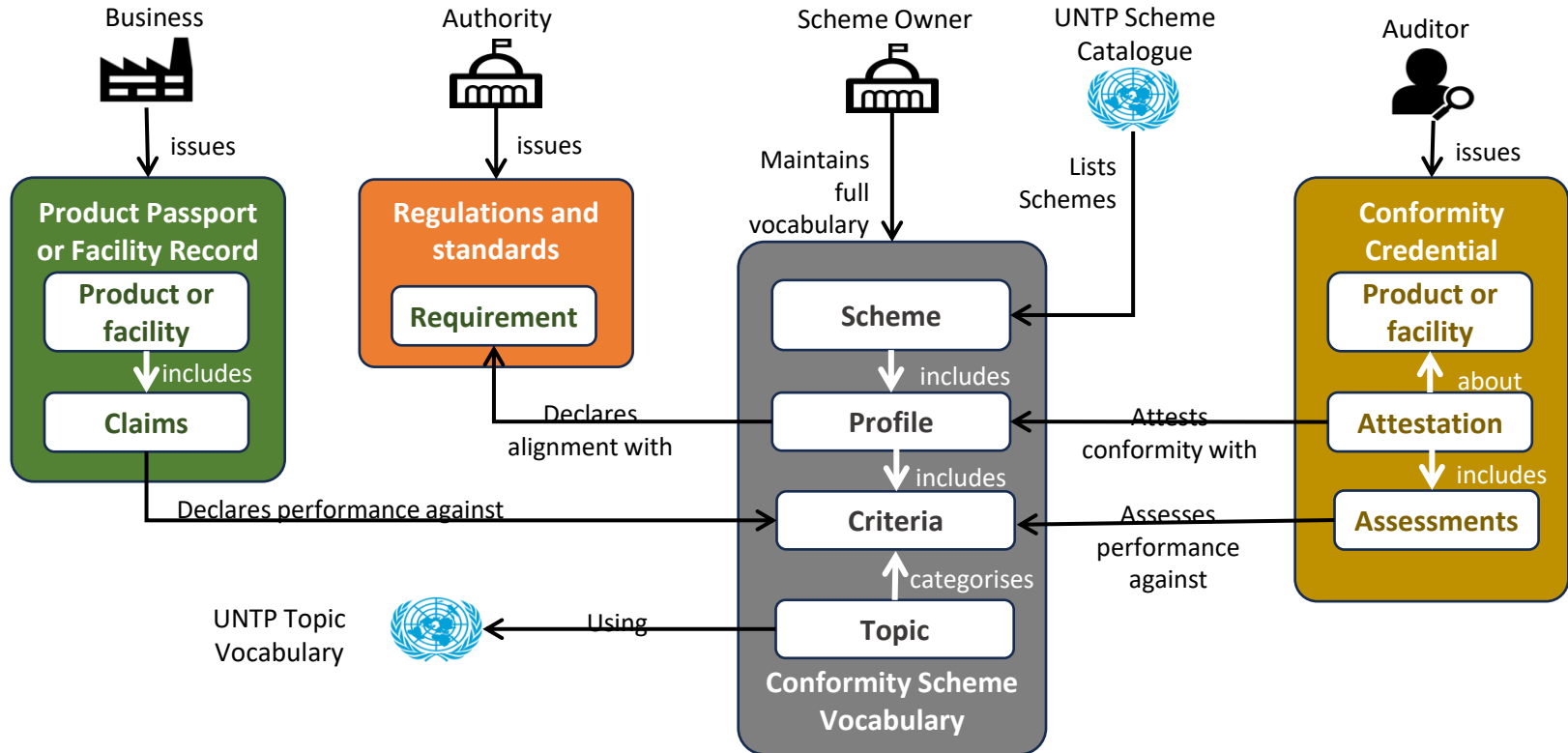
Verifiable Credentials Profile (VCP)

Make all credentials tamper-proof, verifiable, revokable & interoperable

The Digital Conformity Credential



The Conformity Vocabulary Catalog



Call to action – who does what to make this real?

Scheme Owners & standards bodies

Implement the CVC to make your scheme digitally referenceable and machine assessable.

Conformity Assessment Bodies (CABs)

Issue your certificates as DCCs that explicitly reference CVC criteria so that compliance verification can be automated.

Accreditation Authorities

Issue accreditations to CABs against Schemes so that authority verification can be automated.

Identifier Schemes

Make your identifiers resolvable so that given an ID of a product or facility, a verifier can easily find the credentials about that product or facility.

Industry Member Associations

Manage a Community Activation Program (CAP) with your members that ensures consistency and interoperability across all members. Run pilots to prove **scalability**.

Software Vendors

Issue UNTP DPP, DFR, and DTE (or EPCIS) from your systems so your customers can easily participate in this digitally verifiable

Manufacturers

Issue DPPs for your products with unique identifiers at batch level that match the identifiers in test certificates. Revoke DPPs when there's evidence of counterfeiting.

Builders

Automate your building site goods-in and back-office conformity verification and offer incentives to suppliers that digitise (or penalties to those that don't).

It's not as hard as it sounds

All that sounds like a huge challenge. But it's not as hard or scary as it sounds and, once done, costs go down and compliance goes up – increasing value for all.

- Some scheme owners, identifiers schemes, CABs, accreditation authorities, manufacturers, builders have already started on this journey so we can begin to benchmark costs & values.
- AI is your friend for low-cost implementation (as well as your enemy for counterfeiting).
- A number of very capable specialised service providers that have done this already in construction and other sectors are ready to help.

Example – a human readable linked data graph



1. Scan this QR to see a battery passport
2. Click the “JSON” tab to see the machine data
3. Scroll down to Declarations (after the scorecards) and click the “Evidence” link.
4. Click on “issued To” to see a sample identity credential.

NOTE

- This is just test-data and test system - not perfect.
- Anti-counterfeiting of products is also possible, but that’s another (related) story.

More information

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Thanks!