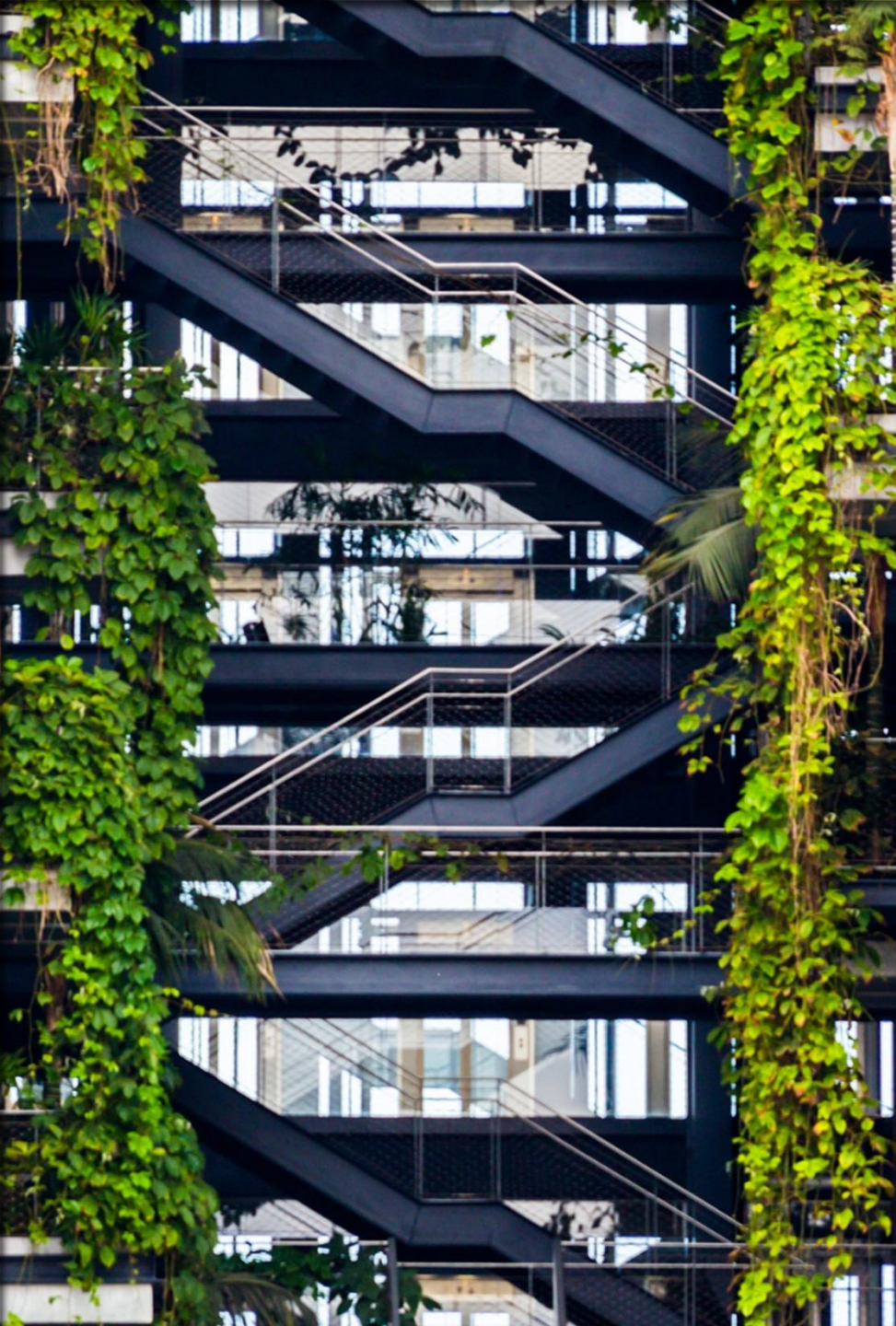# Traceability Implementation Guide
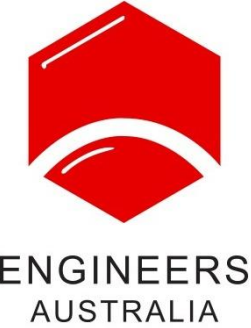
Dyan Johnson

Master Builders Queensland

representing the National Building Products Coalition

TRACEABILITY AND DIGITALISATION OF BUILDING PRODUCT INFORMATION

Implementation Guide

for the Australian Construction Industry

NATIONAL BUILDING
PRODUCTS COALITION

NATIONAL BUILDING PRODUCTS COALITION

AIBS

Design Matters National

MASTER BUILDERS AUSTRALIA

BUILDING PRODUCTS INDUSTRY COUNCIL

ENGINEERS AUSTRALIA

GS1 Australia

PROPERTY COUNCIL of Australia

ACRS trusted steel

asbec AUSTRALIAN SUSTAINABLE BUILT ENVIRONMENT COUNCIL

MASTER ELECTRICIANS AUSTRALIA

Australian Institute of Architects

Ai GROUP

bdaa BUILDING DESIGNERS ASSOCIATION OF AUSTRALIA

ES ICC EVALUATION SERVICE

CSIRO

NATA

- Industry alliance to help advance the implementation of the **National Building Product Assurance Framework**.
- Response to the **Building Confidence Report**.
- Written to address the safe and compliant use of building products.
- Also contributing other priorities including:
  - improved productivity
  - embodied carbon
  - recycled material content
  - circular economy
  - modern slavery.

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NATIONAL BUILDING PRODUCT ASSURANCE FRAMEWORK

Element 1 - NCC Evidence of Suitability

Element 2 – Information Obligations

Element 3 – Product Traceability and Identification

Element 4 – Surveillance, Research and Information Sharing

Element 5 – Compliance and Enforcement

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Drivers for change

Building regulation
- ✓ National Construction Code
- ✓ building product safety legislation
- ✓ building manuals

Environmental and social requirements
- ✓ climate risk reporting
- ✓ modern slavery
- ✓ greenwashing
- ✓ carbon reduction
- ✓ circular economy
- ✓ client / industry targets

Contract obligations

Productivity imperative
- ✓ build more, more cheaply, faster

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International change

International trade digitisation

International trade systems are one area where there has been considerable progress towards increased digitalisation of product traceability.
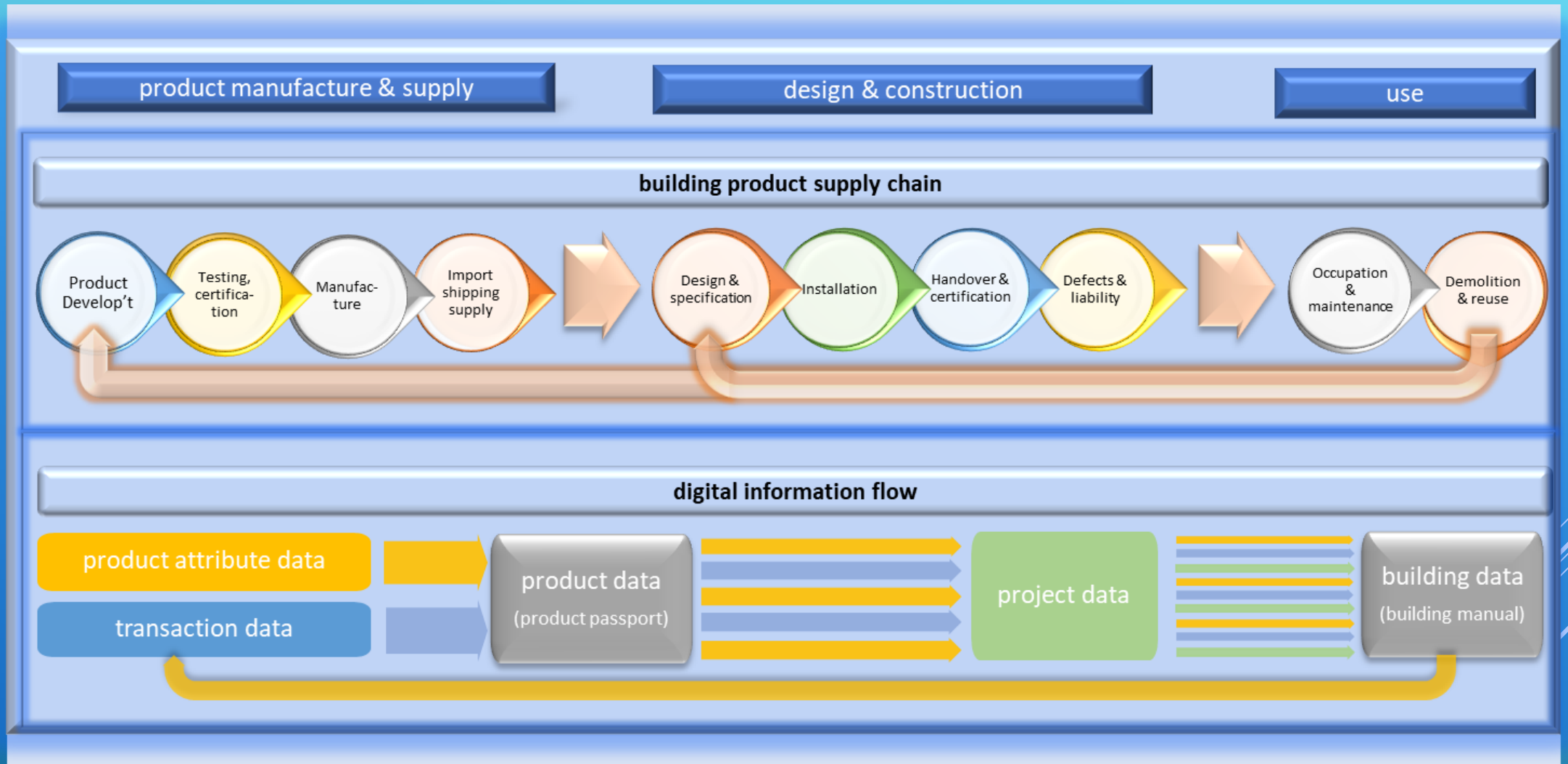
o   UN Digital Products Conformity Certificate Exchange

o   UN Transparency Protocol

o   World Trade Organisation Single window

o   Australian Trade Data Sharing Framework (consultation)

o   Digital Verification Platform (Australian Border Force)
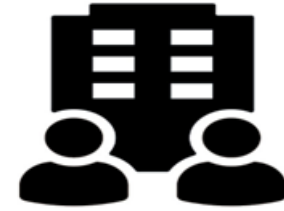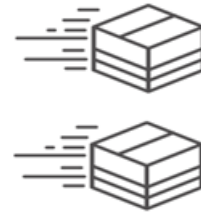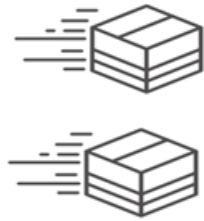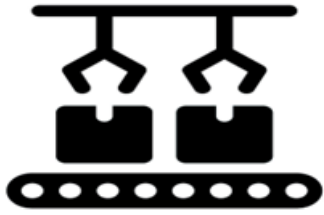
Europe - Digital Product Passports

The European Union has begun implementing requirements for digital product passports (DPP) to collect and share product information across the supply chain. The main goal being to enable product circularity and verify carbon neutrality.

Manufacturers and suppliers of construction products	Building practitioners	Building owners, managers and occupants
Increase productivity, better manage risk and improve market positioning o reveal effective and ineffective processes for the focus of continuous improvement o limit losses and waste from product recalls o help address logistical issues o help reduce the incidence of counterfeit products o competitive advantage from providing information in a trusted manner.	Increase productivity, reduce costs, better manage construction and compliance risks and improve quality o greater certainty to regulatory compliance o greater certainty in meeting contractual obligations o reduced need for duplication of data entry, reducing opportunity for errors and delays o support of appropriate product substitution during construction o facilitate better use of new, innovative products and product substitution o know that the product specified or ordered is the one delivered to site o help in preventing expensive disputes o limit delays at the point of building sign-off.	Better information facilitating appropriate ongoing maintenance and reuse.

System enablers (government policy and regulators)	Product certification and compliance providers
❑ Increase industry productivity ❑ Improve building quality and safety ❑ Meet environmental and social goals (embodied carbon, circular economy and modern slavery)	❑ Protecting the value of certification and the reputation of certifiers by ensuring that certificates being referenced are real, current and that their coverage is relevant to the product in question. ❑ Achieve economies of scale, reducing cost of services

BUILDING PRODUCT SUPPLY CHAIN

shared principles

common data conventions
classifications, unique identifiers

shared information
data templates

verification
verifiable credentials / trust anchors

industry data tools
e.g. building information modelling

Shared Principles

1. Outcome-based

2. Trustworthy and verifiable

3. Transparent

4. Secure and private

5. Interoperable and technology agnostic

6. Comprehensive in scope

7. Continuously improving

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Common Data Conventions

❑ **Unique identifiers**

- o trading parties

- o trading locations

- o products a company uses or creates

- o logistics units a company receives or ships

- o inbound and outbound shipments

❑ **Common classification**

- o Common Data Model (Standards Australia)

- o Uniclass / ETIM

Data Template

Data elements		Classification / Description	Required / Optional
Product Conformance Product Technical Statement	Statement of application and intended use	how and where the product is fit for its intended purpose to achieve the nominated applicable Performance Requirement(s) or Deemed to Satisfy Provision(s) of the NCC, including: (i) NCC edition; and (ii) classification of building or structure as prescribed by the NCC for which the product is applicable; and (iii) type of construction for which is applicable; and (iv) NCC clause number; or (v) where not covered specifically by the NCC, the standard number, title, and edition, and any other relevant details.	required
	Conformity declaration	from the supplier confirming that the product meets the relevant requirements of the NCC or standards that are noted in 'Statement of application and intended use'. includes evidence which is sufficient to substantiate the conformity claim and: (i) be unambiguous and indicate full compliance with the stated requirements; and (ii) reference where evidence of proportionality of risk is required, a documented process undertaken to determine which evidence in A5G3 is suitable to demonstrate conformity; and (iii) include proof of that evidence (test reports, inspection records, etc); and (iv) include any other documents and the extent to which they are relied upon in making the declaration; and (v) include any other information as required by NCC.	required

Data Template

Environmental and social performance	Responsible Products Value	provided by the Green Building Council of Australia	where required
	Environment Product Declaration	digitised to ISO 22057	where provided
	carbon - embodied	GWP by CO_2 - eq NABERS Rating Certificate	optional
	carbon - stored	NABERS Rating Certificate via a Carbon Removal Indicator[45]	optional
	recycled content	provenance, composition, quality	where required
	modern slavery	evidence of a social audit to the International Labour Organization indicators of Forced Labour[46]	where required
	other environmental and social performance attributes		optional

WORK UNDERWAY

- ❏ Australasian Certification Authority for Reinforcing and Structural Steel (ACRS)

- ❏ Supply Chain Modernisation Project

- ❏ Timber Chain of Custody Certification

- ❏ National Traceability Advisory Group

- ❏ Building 4.0 CRC

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National Traceability Pledge

Join us in signing the National Traceability Pledge.

Take the Pledge ❯

Signatories of the National Traceability Pledge commit their support for the implementation of digital traceability across the Australian construction supply chain based on the following principles:

1.Outcome-based
Enables data collection and sharing that is meaningful, timely, complete and accurate.

2.Trustworthy and verifiable
Builds trust and credibility, improving customer/consumer confidence.

3.Transparent
Improves the visibility of product information at supply-chain decision-making points.

4.Secure and private
Information is secure from tampering and allows for restrictions on sensitive data.

5.Interoperable
Shared data templates and platform-independent information exchange along the entire supply chain, and across construction product types.

6.Continuously improving
Adaptable, serving existing needs today and emerging priorities.

Join us on LinkedIn or online....

Our Work

The National Building Products Coalition is an industry alliance helping advance the implementation of the National Building Product Assurance Framework.

The Framework was prepared by the ABCB in response to the Building Confidence Report, which sought to address systemic issues in the Australian construction industry.

The Coalition is an open alliance, which welcomes the participation of any organisation who shares our goals.

Building Products Coalition

Industry coalition to help advance the implementation of the National Building Product Assurance Framework.