



Moving Trade from Analog to Digital: The ICC Digital Standards Initiative

January 2025

The Digital Standards Initiative

Mission



The ICC Digital Standards Initiative (DSI) aims to accelerate the development of a globally harmonised, digitised trade environment, as a key enabler of dynamic, sustainable, inclusive growth.

We engage the public sector to progress regulatory and institutional reform, and mobilise the private sector on adoption, implementation and capacity building.



Supported by:



Digital Standards Initiative: How we work

Industry Advisory Board (IAB)

Standards, Trust, Adoption in the private sector

Chair: Stephan Wolf, former CEO GLEIF

Vice Chairs: Robert Beideman, GS1 and Avanee Gokhale, Swift

Legal Reform Advisory Board (LRAB)

Policy, Legal Reform, Government capacity building

Chair Oliver Wieck, ICC Germany

Vice Chairs: Luca Castellani, UNCITRAL; Chantal Ononaiwu, CARICOM; Vashti Maharaj, The Commonwealth

Financial & Insurance



Multilateral Banks



Industry



Regional & Global Groups



Transport & Logistics



Trade & Business Associations



Standards & Trade Associations



Trade **Today**... and a Vision for the **Future**

Standards Complexity: 50-200 documents needed in a supply chain, no clarity on recommended e-doc standards. Time consuming.

Interoperable Data and Electronic Records used for all key supply chain transactions: Standardised approach to data enables sharing and end to end traceability.

No Trust: Data manually cut, pasted and shared, could be falsified or wrong. No use of technologies of security.

Secure and Trusted: Technology to verify, authenticate, and secure data and its transfer between parties. Reduced possibility of fraud and counterfeiting.

Legal Uncertainty: No legal protection for electronic records in trade → uncertainty for businesses, difficulties for insurance coverage.

Legal reform: Governments encouraged and enabled to align to MLETR to provide legal protection for use of ETRs in trade; guidance on the use of trade policy to drive digital trade.

Exclusionary: Only those who can navigate complex rules, data formats, and documentation can trade abroad. SMEs have more difficulty.

Capacity Building: A critical need across the public and private sectors in both developed and developing countries. Training enables digital transformation.

Our Vision: Roadmap to digital trade

- 1. STANDARDS**
Enable the development of a global baseline of standards for digital trade documents and data to facilitate interoperability across networks and platforms.
- 2. TRUST**
Develop frameworks for technology principles and practices to enable scalable digital trust across the entire trade ecosystem.
- 3. LEGAL**
Advocate and enable the adoption of legal reforms and enabling policy frameworks worldwide.
- 4. CAPACITY**
Engage and educate across the public and private sector to build capacity for digital trade; and collaborate to seed digitalisation at key leverage points.



Digital Trade builds on trade facilitation and paperless trade by putting data at the centre



Trade Facilitation

- Customs procedures simplification.
- Standardization of documentation.
- Infrastructure development for smoother trade flow.

WTO Trade Facilitation Agreement,
2013à 2017



Paperless Trade

- Digitization of trade documents such as invoices, bills of lading, and certificates of origin.
- Electronic data interchange (EDI) for seamless communication between trading partners.

UNESCAP Framework Agreement on
Cross Border Paperless Trade, 2016
à 2021

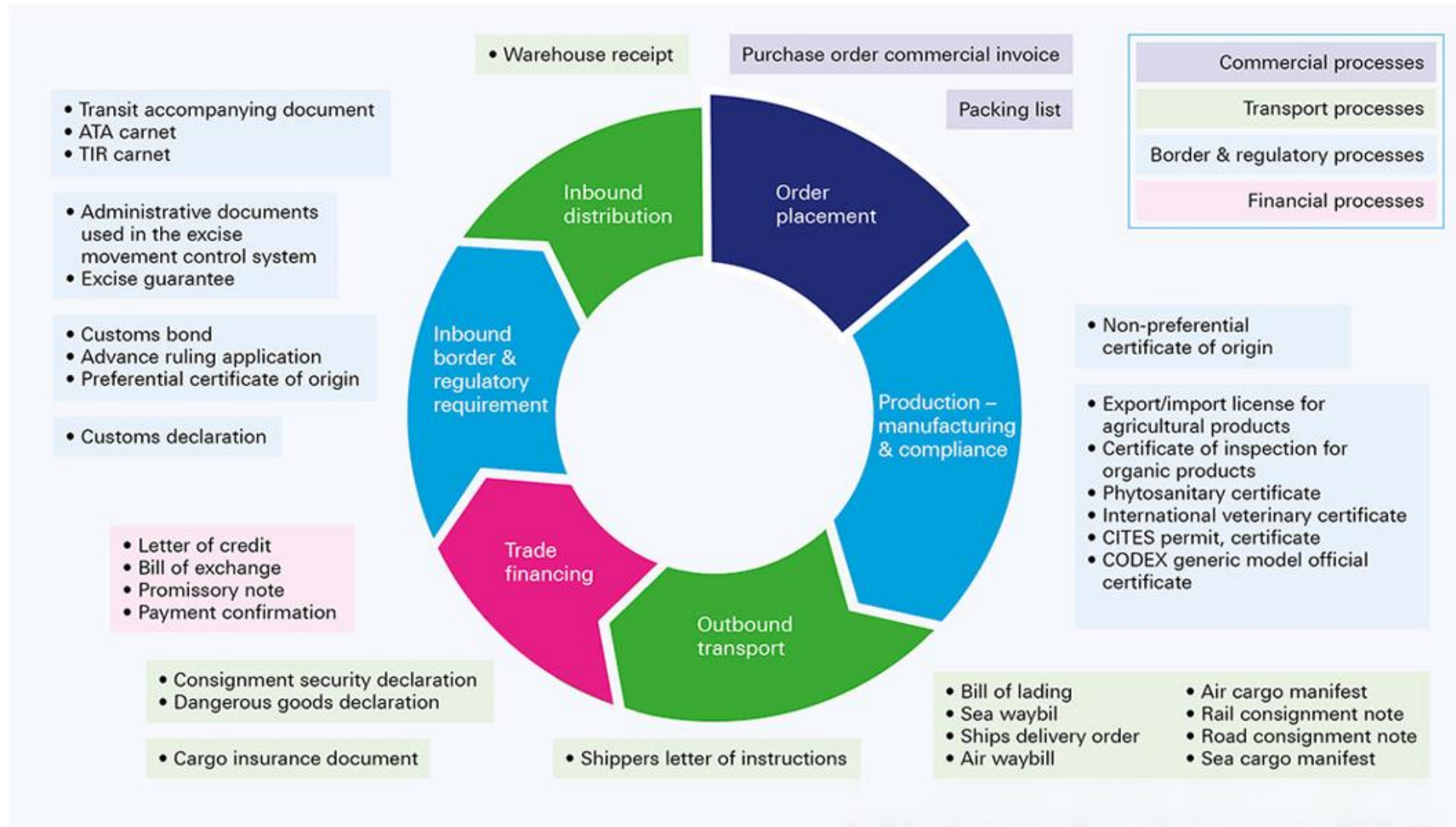


Digital Trade

- Focuses on both document and data embedded, and data sharing
- May utilize technologies like blockchain and digital signatures to secure and automate.

UNCITRAL Model Law on Electronic
Transferable Records (2017)

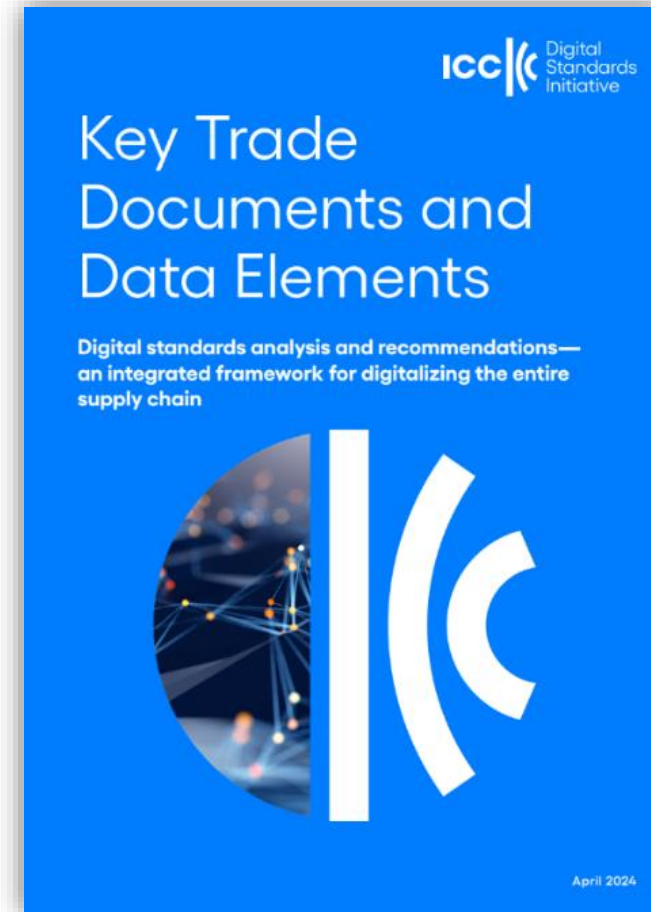
Our vision for **interoperability** connects the 36 key trade documents via core data in electronic versions



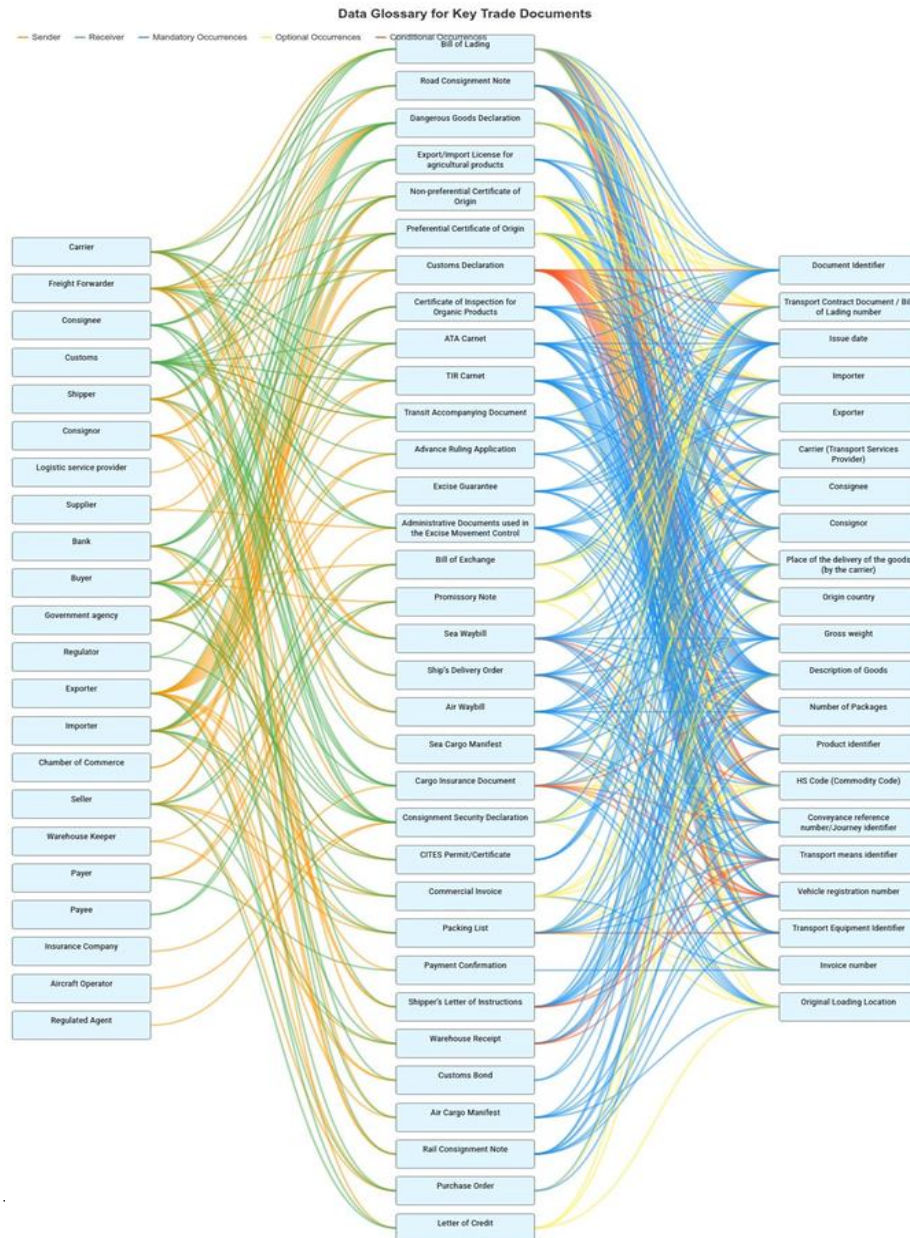
KTDDE articulates a move from **Documents to Data** across the supply chain

Analysis by the Key Trade Documents and Data Elements (KTDDE) Working Group under ICC DSI:

- **36 trade documents** analysed and aligned with the goal of seamless data sharing and interoperability
- Comprehensive **key trade data glossary** accessible as an [interactive web tool](#)
- The first **integrated framework** drawing on different data models and approaches across private and public sectors



Focus on **Core Data** across trade documents



Mapping the players, documents, and data across physical and financial supply chains

A first piece of the framework to enable data sharing, with trust, at scale.

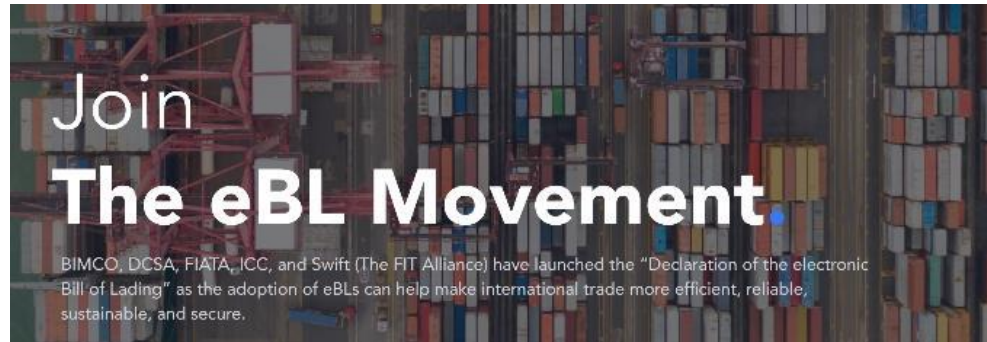
<200 key data elements are utilised across trade documents, with many shared across multiple documents:

- **189** key data elements (DE) identified in the glossary
- Average # DE per document= **26**
- **142** DE used in more than 1 document
- **53** DE used in more than 5 documents
- **21** DE used in more than 10 documents (*left chart*)



Experience this live on CBPT website [here](#)

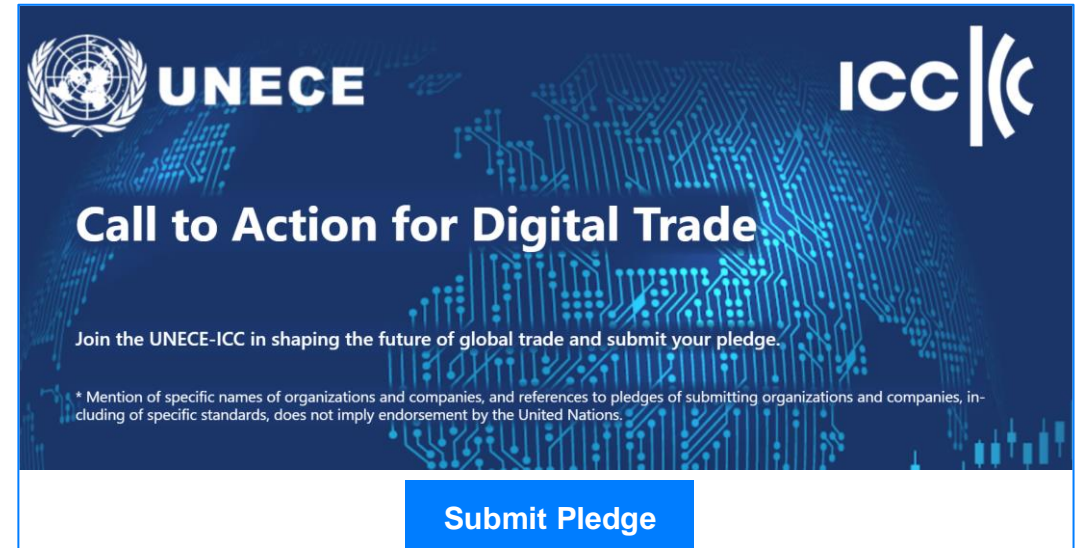
From Standards to Adoption



FIT ALLIANCE Universal eBL Declaration

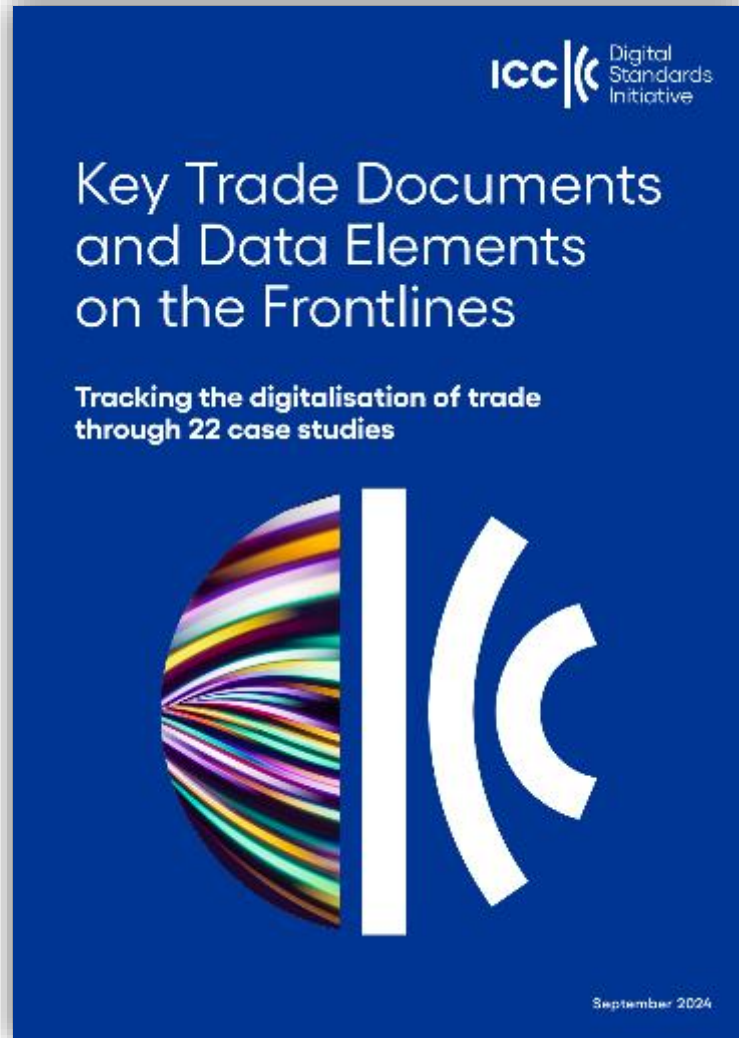
2022: 1st eBL survey revealed **5%** have made the full transition to eBL, **28%** already use eBLs in conjunction with paper; **58%** of those using only paper B/Ls report their organisations plan to use eBLs in the future

2024: results forthcoming soon



- ✓ creating policies conducive to digital trade and uniform regulations
- ✓ aligning legal systems
- ✓ adopting globally interoperable standards for cross-border processes
- ✓ aligning data definitions and cross-referencing common standards for global interoperability, among others

Proven benefits in time, cost and competitiveness



An eBL solution reduced document amendment times from over a week to

under 24h

Source: BHP

Freight forwarders using eFBL can cut drafting time and save costs

by 70%

Source: CargoX

Electronic submission of Certificate of Origin via ASEAN Single Window saved businesses

\$150 million

Source: ASEAN

Digital Delivery Orders cut processing time for trade & logistics sector

by 80%

Source: Dubai Trade

Digitalised documentary collection cut transaction times from 15 days to

under 24h

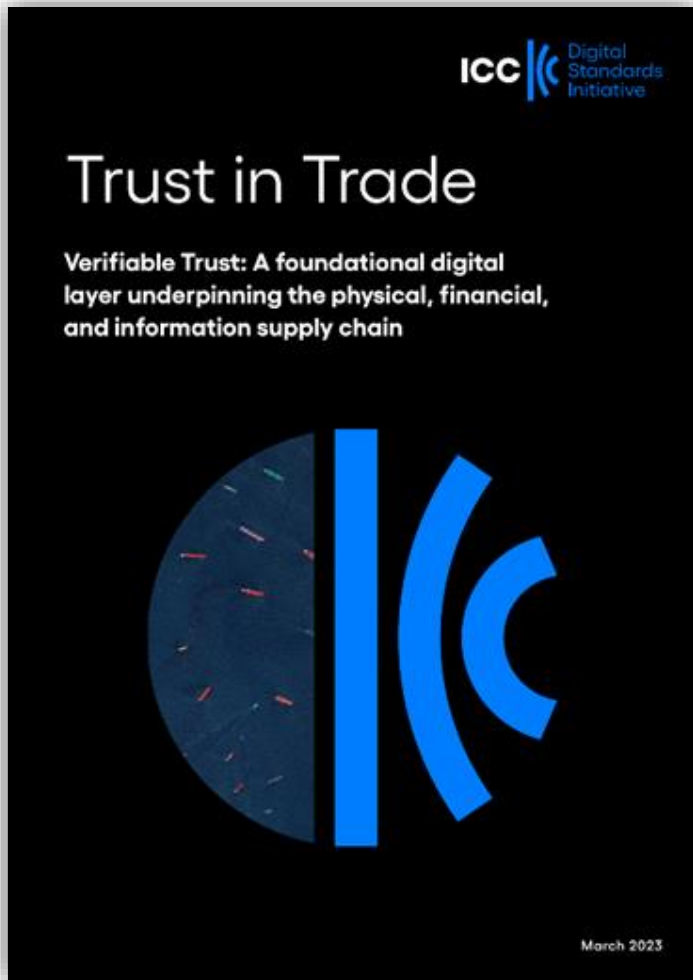
Source: Lloyds Bank

Digitalised Promissory Notes reduced transaction time from days

to minutes

Source: XDC Trade Network

Scalable digital trust



A vision for digital trust at scale:



Zero trust architecture / verifiable trust



Authentication of users / subjects and objects



Reliability of systems: integrity, singularity, and control

Towards digital trust at scale

Developed: **RELIABILITY ASSESSMENT FRAMEWORK**

- Responding to the call for reliable systems under MLETR
- The framework, developed in collaboration with the Digital Governance Council of Canada, has issued its first Statement of Verification



MLETR
Reliable Systems Assessment Framework

ICC Digital Standards Initiative | CONSEIL DE GOUVERNANCE NUMÉRIQUE | DIGITAL GOVERNANCE COUNCIL

Engagement Name:		
Engagement Type:		
Entity:		
Entity Location:		
Status:		
Entity Authority:		
Entity Contacts:		
Main Scope:		
Topic:		
Sub-Scope:		
Focus:		
Assessment Class Level:		
Carex:		
Applicable Standard:		
Validation/Verification:		
Director:		
Audit Team Member:		
Additional Information:		
Assessment Methodology:	Self Assessment	
Scope of System:	Provide the following information: Description of the target system to be assessed. If detail warrants, provide information in a separate document.	
ETR Type:	Bill of Lading	XXX
	TBD	XXX
		XXX



Revision of the Assessment tool and production of a final framework

Press Release to inform the market of pilot outcome

Sept 2024

Sept 2024

Public release under self-assessment

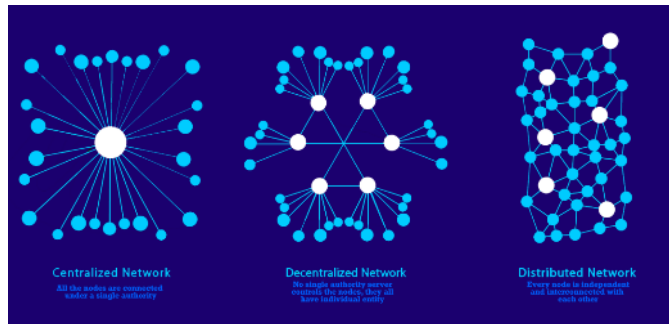
Oct 2024

Development of third-party assessment scheme

2025



Infrastructure for digital trust at scale



Decentralised and Distributed, but with trust
from digital islands to portable data



Digital Identity
Counterparty identification and authentication
Data sourcing
Payment infrastructure



IOT
Verified data points with audit trails
24/7 visibility

Legal Foundations: Model Law on Electronic Transferable Records (MLETR)



MLETR “enables the use of electronic transferable records (ETRs) that are functionally equivalent to transferable documents and instruments including bills of lading, bills of exchange, promissory notes and warehouse receipts.”

An ETR has the same legal standing as paper/pdf, thereby granting contracting parties security and title.

State	
Bahrain	2018
Belize	2021
France	2024
Kiribati	2021
Papua New Guinea	2022
Paraguay	2021
Singapore	2021
Timor Leste	2024
United Arab Emirates	
Abu Dhabi Global Market	2021
United Kingdom of Great Britain and Northern Ireland	2023

What's new with MLETR?

- E-signature ready
- Ability to distinguish the original from copies
- Ability for an e-doc to be confidential
- Readable by machine (and human)
- Can be transferable, stored, and processed by the holder
- Legally binding/enforceable



MLETR Tracker: www.digitalizetrade.org/mletr

Legal reform / MLETR alignment

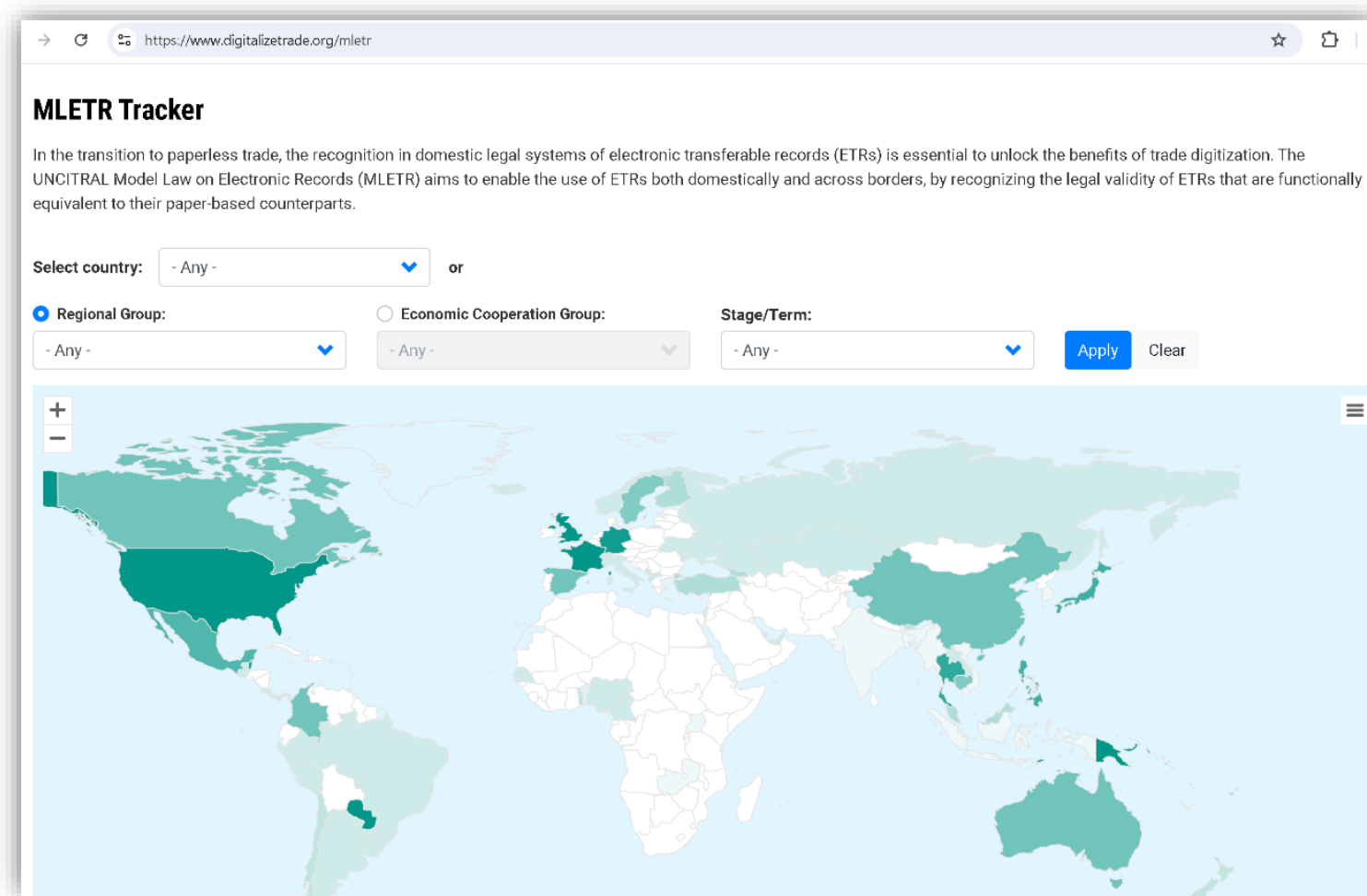
Aligned: 37% of global GDP

Committed: 26% of global GDP

WTO E-comm JSI: 80%+ of global trade

ASEAN: Digital Economy Framework Agreement

APEC: Policy Priority



Steps towards MLETR / legal reform for digital trade

Enacting MLETR requires political will, public-private sector collaboration, and capacity building and training to ensure smooth implementation.



Government has facilitated:

- Capacity building
- Economic impact study and roadmap
- Consultation with key stakeholders

Government shows commitment via:

- Trade agreements
- Public statements
- Political declarations

Government identifies a single accountable entity to drive forward actions across government and private sector

Working group containing key departments across government, e.g. trade, digital, finance, customs, revenues, etc.

Government has drafted or been assisted to identify gaps to alignment

Recent update: Certificate in Digital Trade Strategy



A professional credential

CDTS – Updated, with new content including case studies on MLETR

+

MLETR Foundations – a [one-hour online starter course](#) on MLETR and digital trade

+

FAQ on MLETR now on ICC Academy website

The ICC Academy is the online learning arm of the International Chamber of Commerce

 icc.academy/digital-trade-strategy-certificate
icc.academy/mletr-foundations

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