

Data vs Documents

**How to unlock the power of data in
international supply chains**



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IUMI Webinar: Standardization of trade document data

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About Digital Standards Initiative (DSI)

Mission

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

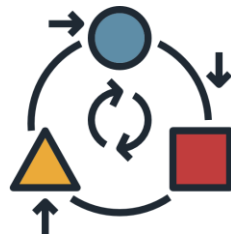
We engage the **public sector** to progress regulatory and institutional reform, and mobilize the **private sector** to align on standards and to adopt and scale digital trade and supply chain processes.

Governance

Our Governance Board sets the strategic direction, objectives, and engagement structure of the initiative annually and comprises the following organizations:



Principles & Practices



Adapt & Apply



Convene & Collaborate



Transparency & Accessibility

Our Broad Aims:



Make trade faster, cheaper and more secure through digitization and automation



Mitigate the potential for fraud, regulatory non-compliance and illicit trade



Enable transparency, agility and resilience in supply chains, by improving the quality, timeliness and pooling of data across the entire trade environment



Improve sustainability in trade and trade finance by opening new ways to measure, manage and drive ESG goals



Lower costs to serve, and bridge a persistent trade finance gap, particularly in the emerging markets*



Provide access to new forms of metadata throughout supply chains, further **enabling industries to measure and course-correct**

**Global Trade Finance Gap Widened to \$1.7 Trillion in 2020, based on ADB 2021 Trade Finance Gaps, Growth, and Jobs Survey*

Standards underpin interoperability and innovation

	What becomes standardized	...regardless of...	which enables innovation in...
Shipping container	The size of the box used to pack and transport goods	Shipper, liner, port, route, geography	How shipping lines service customers based in differentiated services and value-add
Digital photography	The way we can take, save and share a picture	Capturing device, brand, specs, method of transmission and sharing	How to enhance and leverage pictures in end-user applications
UNCITRAL Model Law on Electronic Commerce (MLEC)	A set of internationally acceptable rules aimed at removing legal obstacles and increasing legal predictability for electronic commerce	Geography, technology	The use of paperless communication, thus fostering efficiency in international trade.

The Realities of Trade Today

In over 90% of the trading world, trade and supply chain data is embedded in paper forms (physical or pdf), multiplied each time that goods and services cross borders before reaching the end consumer.

This data must be manually extracted, validated and entered into IT systems, most of which are not connected to each other.

The process is:

- prone to errors, discrepancies and even fraud
- time consuming and costly
- environmentally inefficient

Key obstacles to digitizing trade in businesses and supply chains*



Countries are at different stages of regulatory reforms that would legalize Electronic Transferable Records (ETRs), providing legal certainty and recognition.



Taxonomies, standards, and technologies vary widely across the trading system even where there is alignment on digitalization. Interconnection must be individually negotiated and accomplished.

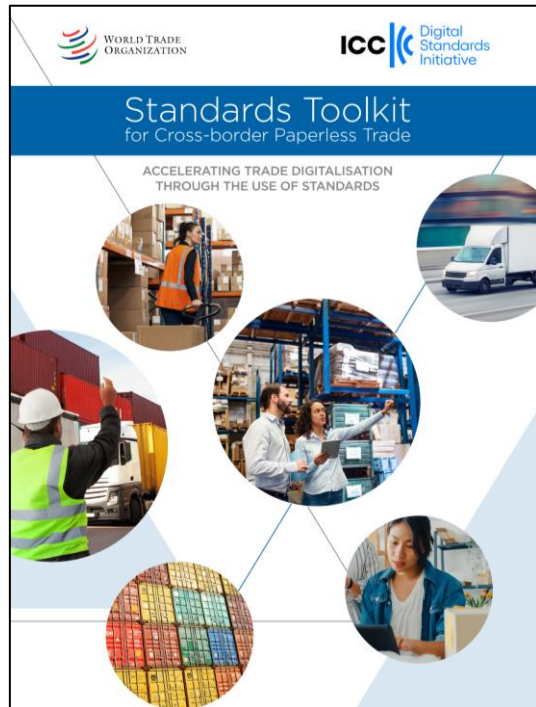


Digital networks have been created to drive common approaches and standards, and while these enable economic efficiencies, there are no established means to connect “digital islands” to one another.

**result of DSI's industry consultation in 2021*

Existing international standards to start the journey

Awareness of global standards and protocols are needed to drive inter-operability among various platforms, reduce fragmentation and improve end-to-end integration of supply chain participants.



SECTION 1 Foundational Standards

SECTION 2 Identifier Standards

SECTION 3 Corporations and Micro-, Small- and Medium-Sized Enterprises

SECTION 4 Carriers, Freight Forwarders and Logistics Operators

SECTION 5 Customs Authorities and other Cross-border Regulatory Agencies

SECTION 6 Interoperable Digitalisation Frameworks

- **ICC-WTO Standards Toolkit for Cross-Border Paperless Trade** provides an overview of existing international standards (e.g., industry eBL standard) as a practical tool to drive interoperability.
- Ongoing dialogues need to be facilitated between governments and industry to drive further convergence, identify potential gaps (including legislative gaps) and promote interoperability across alliance groups, industry forums, standards organizations, companies, and economies.

[Download WTO-ICC standards toolkit](#)

Section 1 – Foundational standards

Leveraging the same foundational standards enables more efficient sharing, reporting and reusability of high quality, reliable data while reducing the amount of translation required between supply chain actors.

Table 1.1 Foundational standards available for adoption

TYPE	APPLICABLE STANDARD	PURPOSE
Country Code	ISO 3166-1	Internationally recognised codes that represent a country name.
Code for Trade and Transport Locations	UN/LOCODE latest release	A list of all locations, such as an administrative or economic area, as defined by the competent national authority in each country, related to international trade and transport, identified by the five-character code system.
Date and Time	ISO 8601	A clearly defined way of presenting dates and times that is understandable to both people and machines.
Unit of Measure	United Nations (UN) Unit of Measure (UOM)	Codes for units of measurement used in international trade with names, factors of conversion, symbols and sectors of application.
Freight Containers	ISO 6346	An international standard covering the coding, identification and marking of intermodal (shipping) containers used within containerised intermodal freight transport.

Question: What date is 11.12.2022 or 11/12/2022?

European trader: 11 December 2022

American trader: 12 November 2022

If everyone were to use the ISO 8601 standard, we would all correspond using YYYY-MM-DD format and avoid confusion for both people & machines.

Section 2 – Identifier standards

All supply chain actors would benefit from a consistent reference to established identifier standards which provide systematic identification of subjects and objects.

Identifier Standards for Subjects		
Legal Entity Identifier (LEI)	LEI ISO 17442	The LEI connects to key reference information that enables clear and unique identification of legal entities. LEI issuers—also referred to as Local Operating Units (LOUs)—provide registration, renewal and other services, and act as the primary interface for businesses to obtain ² an LEI. The LEI data are available for any user free of charge on www.gleif.org .
Physical Locations or Parties	Global Location Number (GLN)	An identifier of an organisation’s physical or logical addresses (Ship From, Ship To, etc.) and internal locations.

an ISO-standardized 20-character code that uniquely identifies a legally registered organization, or ‘legal entity’, thus answers the questions of ‘who is who’ and ‘who owns whom’.

Section 4 – Carriers, freight and logistics operators

Motivated not only by the prospect of improving operational efficiencies but also by the ability to add greater value and differentiation to their offer by enabling a closer, real-time connection with customers and providing an improved customer experience.

From vendor-dependent eDocs to industry open standards, underpinned by common international reference library...

- ✓ Digital Container Shipping Association (DCSA) with nine of the top 10 carriers in the world, representing 70% container trade
- ✓ BIMCO the world's largest international shipping association, members in >130 countries, representing 60% world's tonnage
- ✓ FIATA International Federation of Freight Forwarders Associations representing freight forwarders in 150 countries

Bill of Lading

[DCSA electronic bills of lading \(eBLs\) for multimodal container shipping](#)

[BIMCO electronic bills of lading \(eBLs\) for dry and wet bulk \(COMING SOON\)](#)

[Electronic FIATA Multimodal Transport Bills of Lading \(eFBL\)](#)

Section 4 – Carriers, FF and logistics operators



Paperless FIATA BL for Freight-Fowarders

Start to issue paperless FBLs through your everyday tool. Save time and money while bringing trust and security to your partners.



Paperless FIATA BL for Software providers

Promote interoperability and attract new customers, by getting extra visibility towards Freight-Forwarders. The eFBL kit is free of charge.

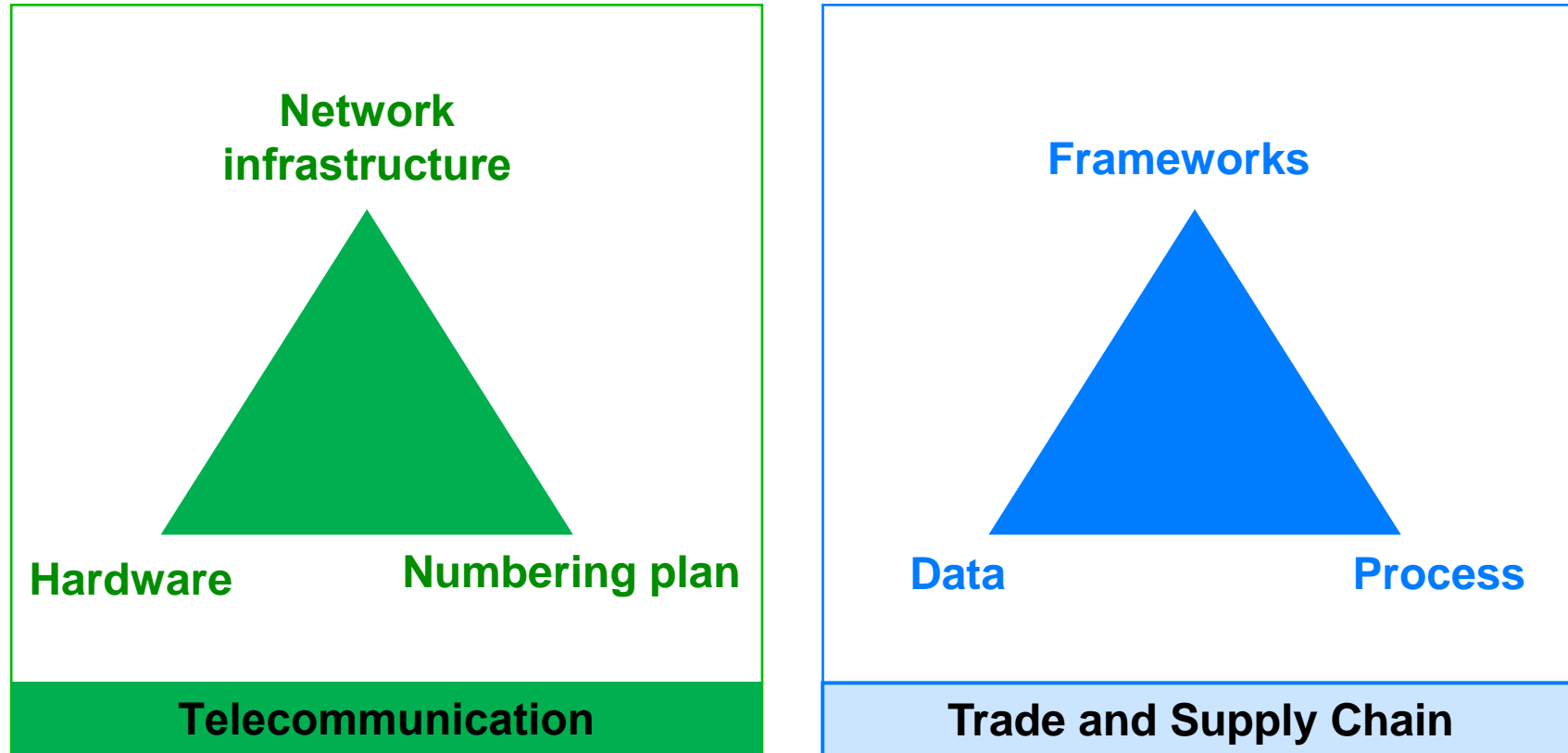
“We often get asked if we’re favouring one particular technology over another and we’re not. We’re technology-agnostic.



As long as the standards are good, and we have interoperability, we don’t need to focus on the technology. The market will decide what system best suits their needs.”



How do we achieve interoperability?



DATA - Production of various information elements from the physical and financial supply chains

PROCESS - Processes of various actors that need to reference those data

FRAMEWORK - messaging, technical standards, identity and security protocols, rules & regulations

Role of the DSI Industry Advisory Board

The Industry Advisory Board has a cross-regional and cross-industry representation, bringing together leaders with diverse backgrounds and experiences who share a passion for solving key challenges facing trade digitization efforts.



Mobilize actors across supply chain for further alignment

- The IAB is addressing two critical operational challenges facing digital trade:
 - (1) common data standards and taxonomies;
 - (2) the technology that manages trade data for trust, transparency, and inter-operability.
- The **Key Trade Documents and Data Elements Working Group** aims to harmonize the digital representations of trade documents and the definitions of key data elements, thus creating the basis for digital trade standards, starting with 8 documents: Certificate of Origin, Commercial Invoice, Warehouse Receipts, Packing Lists, Bills of Lading, Customs Declaration Forms, Insurance Certificates, Customs Bonds.
- The **Trusted Technology Environment Working Group** will provide a starting point for consensus on standards, protocols, and technologies for management of trade data globally.
- Both Working Groups will share their findings in 1Q 2023.

Vision of 70-80% of global trade digitalized within 5 years

All key supply chain and trade documents digitalized to consensus data sets, with clearance on trade platforms that facilitate data exchange and sharing of aggregate data.

EFFICIENCY & VISIBILITY

- **Speed, traceability & flexibility** with real time data flows and decisions
- **Sustainability** data tracked digitally for consumer choice and preferential financing
- **Lower overall transport and logistics costs** due to automated clearing, reduced errors and lower admin on shipments

TRANSPARENCY

- **Traceability & security of customs and trade** *without* the additional manpower demands
- **Decreased fraud** and tax non-compliance
- **Real time actions** on supply of key goods and services

INCLUSION

- **Growth through global markets** with easier, more transparent trade standards and border procedures
- Access to **more finance** with data-driven credit scoring
- Compete on **level playing field** with more established corporates

*Trade as a growth driver :
sustainable, secure, open and inclusive*

The Future Trade Forum in March 2023 will leverage our expertise and network to galvanize parties across the economy to accelerate action and innovate for digital trade

The FTF aims to be the leading platform to align, inspire and catalyze actions to accelerate global progress on digital trade annually.

The inaugural 4-day event comprises :

- Capacity building, certifications and training
- CEO, policymaker and leadership dialogues
- Industry and policy deep dives
- Startup, tradetech and innovation showcase





Shape the future of global trade -
join us!

<https://www.dsi.iccwbo.org/dsi-newsletter-signup>

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