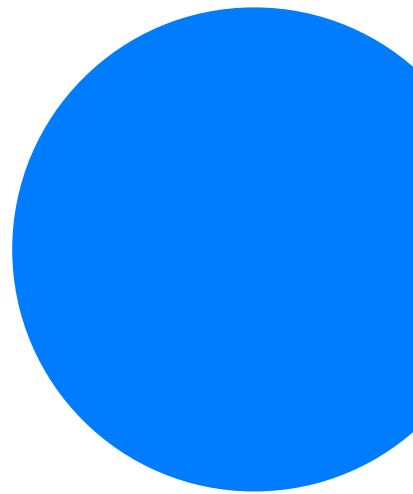


# Key Trade Documents and Data Elements

**Digital standards analysis and recommendations**





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# Executive summary

This report constitutes the major findings and recommendations of the ICC Digital Standards Initiative's Key Trade Document and Data Elements (KTDDE) Working Group, which was convened under its Industry Advisory Board to promote the interoperability of the digital representation of trade documents and the definitions of key data elements within them.

Trade documents are the building blocks of global supply chains today: they articulate key terms of transactions or events occurring between two or more parties along the supply chain. The KTDDE Working Group was established to treat all key trade documents so as to provide clarity and alignment on how to engage in trade digitalisation at any given point along the supply chain, using the trade document list contained in the Cross-border Paperless Trade Toolkit, co-published by the World Trade Organization, United Nations Economic and Social Commission for Asia and the Pacific and United Nations Commission on International Trade Law.

Thus, in March 2023, the DSI published its analysis and best practice recommendations for the seven most commonly used key trade documents, and established a process for treating the remaining 30 key trade documents, as follows:

BATCH 1 (7 documents) Launched March 2023	BATCH 2 (14 documents) June to October 2023	BATCH 3 (16 documents) November to Q1 2024	
<ul style="list-style-type: none"> <li>Commercial Invoice</li> <li>Packing List</li> <li>Bill of Lading</li> <li>Cargo Insurance Document</li> <li>Warehouse Receipt</li> <li>Non-preferential Certificate of Origin</li> <li>Customs Declaration</li> </ul>	<ul style="list-style-type: none"> <li>Customs Bond</li> <li>Letter of Credit</li> <li>Purchase Order</li> <li>Payment Confirmation</li> <li>Export Cargo Shipping Instruction</li> <li>Rail Consignment (CIM) Note</li> <li>Road Consignment (CMR) Note</li> <li>Sea Cargo Manifest</li> <li>Air Cargo Manifest</li> <li>Airway Bill</li> <li>Seaway Bill</li> <li>Ship's Delivery Order</li> <li>Bill of Exchange</li> <li>Promissory Note</li> </ul>	<ul style="list-style-type: none"> <li>Proof of Origin Documentation</li> <li>Health Certificate for Live Animal Products</li> <li>Export/Import Sanitary or Phytosanitary (SPS) Certificate</li> <li>CITES Certificate of Endangered Species</li> <li>Certificate of Inspection for Organic Products</li> <li>Dangerous Goods Documentation</li> <li>Export/import licence for controlled/dual-use goods, for agricultural products and any other products subject to a licence regime</li> </ul>	<ul style="list-style-type: none"> <li>Safety &amp; Security Declaration</li> <li>ATA Carnet (Transit)</li> <li>TIR (Transit)</li> <li>Union Transit</li> <li>Common Transit</li> <li>Binding Tariff Information</li> <li>Advance Tariff Ruling</li> <li>Excise Guarantee</li> <li>Administrative Documents used in the Excise Movement Control System</li> </ul>

\*WTO/UNESCAP/UNCITRAL, Cross-border Paperless Trade Toolkit, 2022

Document Types:

- Finance & Payment
- Transport & Logistics
- Documents of Title
- Product-Related Documentation
- Movement of products (export, import and transit)
- Duties and Excise documentations



The present report presents the detailed analysis of the 14 documents within Batch 2 and updates the analysis for the Cargo Insurance Document, which was originally part of Batch 1, to incorporate the latest developments in this field. It includes the creation of the Key Trade Data Glossary and offers an extensive review of digital standards for key trade documents and data across these 21 documents.

From this comprehensive analysis, three key cross-cutting recommendations have emerged:

1. **Best practice use of the Key Trade Data Glossary:** Developed as a reference tool to promote alignment and interoperability, the Key Trade Data Glossary ensures a common understanding of key trade data elements shared across networks and supply chains, enabling data accuracy and consistency.
2. **Standardised identifiers for seamless data collaboration:** The use of standardised identifiers for both subjects and objects within trade documents is highly recommended to enhance data integrity and efficiency.
3. **Towards decentralised, trusted data exchange at scale:** Initiatives are emerging for trusted, scalable, and decentralised data exchange throughout the supply chain. Collaboration can lead to valuable innovation and accelerate digitalisation of the trade ecosystem.

These recommendations have implications for various stakeholders, including:

- a) **Standards organisations (SDOs):** Given the importance of cohesive and common data definitions, SDOs should ensure that their deliverables include data definitions that are semantically interoperable with those of other SDOs, even if the syntax and format of their standards diverge;
- b) **Industry and private sector:** This report will serve as a timely reminder that a comprehensive digital transformation cannot occur unless all major links in the value chain collaborate;
- c) **Government agencies and cross-border regulatory agencies:** A reuse of business data in governmental and regulatory processes would cut compliance costs while increase accuracy and efficiency.

Stakeholders are encouraged to assess the Key Trade Data Glossary and provide feedback on its usability as part of the ICC Digital Standards Initiative's effort to stimulate global trade discussions.

Furthermore, it is anticipated that the analysis of substantially all remaining key trade documents (Batch 3) will be finalised by Q1 2024, with the objective of launching an interactive online tool for global supply chain data and standards in 2024.



# Introduction

Hosted by the International Chamber of Commerce (ICC) and with the support of established standard-setting bodies and international organisations, the Digital Standards Initiative (DSI) aims to accelerate the development of a globally harmonised, digitalised trade environment, as a key enabler of dynamic, sustainable, inclusive growth. DSI engages the public sector to progress regulatory and institutional reform and mobilises the private sector on adoption, implementation and capacity building.

DSI convenes a cross-industry and cross-regional Industry Advisory Board (IAB) which brings together the key private sector bodies associated with the advancement of digital trade across all regions, sectors, and supply chain functions. The IAB's Key Trade Documents and Data Elements (KTDDE) Working Group, who produced this report, promotes the interoperability of the digital representations of trade documents and definitions of key data elements within them.

As part of the first phase of this project, the working group completed an analysis of seven key trade documents. In this report, the working group analysed another 14 key trade documents (covering documents of title, finance and payments, and transport and logistics) and updated the analysis for the Cargo Insurance Document, which was originally part of Batch 1, to incorporate the latest developments in this field.

The ultimate aim is to complete an analysis of substantially all of the key trade documents identified in the Cross-border Paperless Trade Toolkit co-published by the **WTO, UNESCAP and UNCITRAL**<sup>1</sup> in 2022 and to develop a landscape analysis of digital standards for key trade documents and data to facilitate interoperability across networks and trade platforms.

## Principles

The analysis and recommendations have been conducted in adherence with three underlying principles, which aim to promote fairness, efficiency and transparency in global trade. To ensure that our recommendations are, as far as possible, globally relevant and that they consider different challenges and circumstances faced by trade parties around the world, the working group was also designed to be cross-regional and cross-sectoral.

- **Adapt and apply:** We recognise that many standards for digital documents and data elements already exist. We do not develop new standards, but we do highlight and recommend those that will help drive interoperability across the supply chain.
- **Convene and collaborate:** We do not have all the answers. We aim to convene those who have the most relevant expertise in each trade or standards related domain and drive collaboration in the public interest.
- **Transparency and accessibility:** We believe in open dialogue and inclusivity, publicly sharing our processes and considerations. Our commitment is to make information and resources easily available, fostering an environment where everyone can engage and contribute.

<sup>1</sup> Cross-border Paperless Trade Toolkit, co-published by the World Trade Organization (WTO), in collaboration with the United Nations Economic and Social Commission for Asia and the Pacific (ESCAP) and the United Nations Commission on International Trade Law (UNCITRAL) in 2022. [Online]. Available: [https://www.wto.org/english/res\\_e/publications\\_e/paperlesstrade2022\\_e.htm](https://www.wto.org/english/res_e/publications_e/paperlesstrade2022_e.htm).

## Methodology

The working group appointed sub-teams and leaders for each document. These sub-teams discussed findings every two weeks during working group meetings. Once the individual analysis was completed, a horizontal analysis revealed data elements which appeared across multiple documents. These attributes were extracted and grouped by similar meaning (e.g., brand description and product description) before being organised into 12 categories: References; Dates; Parties, Addresses, Places, Countries; Locations; Clauses, Conditions, Instructions; Terms; Amounts, Charges, Percentages; Measure, Quantities; Goods; Dangerous goods; Transport modes, Means and Equipment; Others.

With this data representation, the working group was able to map any conflicts in definitions that arose and to recommend best practices on those data types in the Key Trade Data Glossary.

The Key Trade Data Glossary is based on the existing work of standards development organisations that have already done foundational work in this area, including:

- the United Nations Trade Data Element Directory (UNTDDED, ISO 7372) developed and published by the United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT).
- Core Components Library (UN/CCL) Controlled Vocabulary, developed and published by UN/CEFACT.
- Universal Business Language (UBL) Version 2.3, developed and managed by the Organization for the Advancement of Structured Information Standards (OASIS).
- Message Reference Guide for Standards MT, developed and managed by the Society for Worldwide Interbank Financial Telecommunication (Swift).

- Supply Chain Finance (SCF) Glossary, published by the Global Supply Chain Finance Forum (GSCFF).
- WCO Data Model, developed and maintained through the World Customs Organization (WCO) Data Model Projects Team (DMPT).

## Analysis and recommendations

After a comprehensive analysis of Batch 2 documents and taking into consideration the initial feedback received from a range of trade platforms and banks regarding the recommendations outlined in Batch 1 documents, the following key cross-cutting recommendations have been identified:

### 1. Best practice use of the Key Trade Data Glossary:

The Key Trade Data Glossary has been developed as a reference tool to promote alignment and interoperability of key trade data elements across networks and supply chains, particularly for those data elements which are shared across multiple documents and are used by multiple supply chain partners upstream or downstream. Ensuring that there is a common understanding of data elements that are actively being exchanged is a prerequisite to future deeper harmonisation and alignment. This alignment will ensure data accuracy and consistency throughout the supply chain.

### 2. Standardised identifiers for seamless data collaboration:

Standardised identifiers for both subjects and objects are indispensable connectors for enabling seamless end-to-end data collaboration across physical and financial supply chains and the use of standardised identifiers<sup>2</sup> in all trade documents is highly recommended. These identifiers are essential for enabling digital communication, data sharing and verifiability.

2 An overview of identifiers [and their standards and register(s)] relevant for the design of blockchain systems and the interoperability of those systems with non-blockchain systems is published in Technical Report ISO/TR 6039:2023 prepared by Technical Committee ISO/TC 307, <https://www.iso.org/standard/81978.html>

**3. Towards decentralised, trusted data exchange at scale:** There are a significant number of initiatives underway that look beyond current practices of sharing digital or electronic versions of trade documents, to address how this might evolve into the exchange of data across the supply chain, in a trusted, scalable, and decentralised manner. We encourage further collaboration in this area and believe that these initiatives are not only a source of valuable innovation but will also realise the digitalised trade ecosystem sooner.

## Document-specific highlights

### Air Cargo Manifest and Air Waybill

Encourage global adoption of the International Air Transport Association (IATA)'s ONE Record data sharing standard for enhanced air cargo information exchange.

### Bill of Exchange and Promissory Note

Advocate for greater adoption of the UNCITRAL Model Law on Electronic Transferable Records (MLETR) in all local jurisdictions to secure legal recognition for their electronic versions and encourage the trade financial ecosystem to adopt and drive usage of the electronic Payment Undertaking (ePU) standard by the International Trade and Forfeiting Association (ITFA) Digital Negotiable Instruments (DNI) Initiative.

### Cargo Insurance Document

Promote digitalisation awareness in the insurance sector and advocate for greater alignment among national associations within the International Union of Marine Insurance (IUMI) to establish universal minimal data requirements.

### Customs Bond

Call on the World Customs Organization (WCO) to continue efforts and share progress made under the WCO Data Model Projects Team (DMPT) to align diverse national customs processes and data requirements for customs bond internationally.

### Export Cargo Shipping Instruction

Promote education and awareness among cargo owners and upstream players and foster greater alignment within industries to establish minimal data requirements for shipping instructions.

### Letter of Credit

Advocate for greater adoption of electronic Bills of Lading to remove friction associated with paper and leverage eUCP<sup>3</sup> for electronic presentation of required documents.

### Payment Confirmation

Promote standardised identifiers for all parties to improve efficiency and transparency in cross-border payments processes.

### Purchase Order

Encourage the adoption of product master data alignment and interoperable web vocabularies as a prerequisite to ensure efficient data collaboration in a digital procurement environment.

### Rail Consignment (CIM) Note

Ensure CIM Uniform Rules<sup>4</sup> (UR) are clarified or supplemented to facilitate uniform interpretation and implementation of e-consignment notes.

### Road Consignment (CMR) Note

The Additional Protocol to the CMR Convention<sup>5</sup> has established itself as the convergence mechanism to enable functional equivalence to e-consignment notes. More countries should be encouraged to ratify or ascend to this Treaty.

## Approach to standards harmonisation

Given the reality of multiple electronic versions of trade documents in existence, whether due to national regulations or commercial practices, the DSI Industry Advisory Board holds the view that DSI should continue to focus attention and encourage the alignment of standards for machine-readable data elements as a building block for interoperability across networks and platforms.

3 A supplement and digital companion to the UCP 600, ICC Uniform Customs and Practice for Documentary Credits.

4 Uniform Rules Concerning the Contract of International Carriage of Goods by Rail.

5 Convention on the Contract for the International Carriage of Goods by Road (CMR)



Where convergence, interoperability or harmonisation seems unlikely, DSI could still help “move the needle” on interoperability in several ways:

- DSI can provide transparency on the different digital document standards, as well as raise awareness of the benefits of greater alignment (and the costs of lack of standardisation);
- DSI can encourage or facilitate the establishment of mutual recognition or equivalency amongst different standards;
- DSI can recommend or state a preference for a particular standard in certain critical areas such as digital identity.

## Unpacking the KTDDE’s findings

The report’s recommendations have implications for a number of key stakeholders:

- **Standards development organisations:** Given the importance of cohesive and common data definitions, standards development organisations (SDOs) should ensure that their deliverables include data definitions that are semantically interoperable with those of other SDOs, even if the syntax and format of their standards diverge.
- **Industry and private sector:** While industrial actors should implement globally recognised standards where they exist, this report also serves as a timely reminder that a comprehensive digital transformation cannot occur unless all major links in the value chain collaborate.
- **Government agencies and cross-border regulatory agencies:** A reuse of business data in governmental and regulatory processes would cut compliance costs while increase accuracy and efficiency.

## Key next steps and timeline

This document and the accompanying Key Trade Data Glossary which include information about digital standards for key trade data across the 21 documents reviewed in Batch 1 and 2 aims to re-energise a conversation regarding global trade, not conclude it. After publication, DSI welcomes participants in the trade ecosystem to road-test these standards and recommendations and provide valuable feedback.

Additionally, an analysis of the next batch of 16 key trade documents (Batch 3) will be substantially completed by Q1 2024.

The milestone goal is the first globally interoperable data and standards map for the end-to-end supply chain, which DSI aims to deliver as an interactive online tool in 2024.



# Key documents analysis

The following section includes the analysis of the key documents, which have been edited for consistency, tone and clarity. The analysis is based on the experience of the contributors to the report as well as wide secondary research.

## Air Cargo Manifest

A cargo flight manifest serves various essential purposes in the air freight industry, including:

- 1. Identifying cargo:** The manifest provides a comprehensive list of all items or goods loaded onto the aircraft. It facilitates clear identification, detailing descriptions, quantities, and types of goods.
- 2. Regulatory compliance:** This document is crucial for regulatory adherence, offering evidence that transported items comply with relevant laws, including safety and security regulations. It can also serve as a declaration of cargo content, value, and destination, aiding in customs compliance.
- 3. Planning and management:** Airline staff rely on the manifest for effective loading and unloading of goods. It guides them to the specific location of items and assists in planning for weight distribution and balance, ensuring safe aircraft operation.
- 4. Tracking and accountability:** Cargo manifests contribute to supply chain tracking. If discrepancies or issues arise, they help pinpoint when and where problems occurred, facilitating accountability.
- 5. Insurance and liability:** In the unfortunate event of accidents, damage, or loss, the manifest serves as a record of the aircraft's cargo. This record is vital for insurance claims and determining liability.

### Purpose

### Sender/Receiver

The uplifting station is responsible for transmitting the flight manifest to the respective destinations as well as compliance with the regulation for each destination.

	<p>Flight manifests have a broad legal context that can vary by jurisdiction, cargo type, and regulatory bodies involved. Key legal considerations include:</p> <ol style="list-style-type: none"> <li><b>1. Customs and border protection:</b> Many countries require manifests for customs processing of imports and exports. This aids in enforcing trade laws, tariff collection, and preventing prohibited item transport. The Revised Kyoto Convention (RKC) provides definition of “cargo declaration” and outlines that the carrier shall be held responsible to the Customs for ensuring that all goods are included in the cargo declaration or are brought to the attention of the Customs in another authorised manner.</li> <li><b>2. Transportation safety regulations:</b> Air transport safety is governed by international and national organisations such as the Federal Aviation Administration (FAA) in the US and European Aviation Safety Agency (EASA) in Europe. Manifests help ensure compliance with rules on weight distribution, hazardous materials, and more.</li> <li><b>3. International trade law:</b> When transporting goods between countries, manifests demonstrate adherence to international trade agreements, including tariff regulations, trade restrictions, and treaties.</li> <li><b>4. Liability and insurance:</b> In cases of loss, damage, or disputes, manifests serve as cargo records. They are valuable in legal proceedings related to insurance claims, liability determinations, and contract disputes.</li> <li><b>5. Security and anti-terrorism laws:</b> Many jurisdictions mandate cargo information submission to security agencies before flights to combat smuggling, illegal immigration, and terrorism. Manifests play a key role in meeting these requirements.</li> </ol> <p>Inaccurate, incomplete, or fraudulent manifests may result in severe legal penalties, such as fines, goods seizure, license revocation, or criminal charges. Consequently, proper manifest preparation and handling are critical legal concerns for airlines and freight carriers.</p>
<b>Legal framework</b>	
<b>Usage</b>	<p>The International Air Transport Association (IATA) does not have statistics on the usages of electronic versions of the Flight Manifest.</p>
<b>Key standards</b>	<p>e-Freight, including electronic Flight Manifest:</p> <p><a href="https://www.iata.org/en/programs/cargo/e/efreight/#tab-1">https://www.iata.org/en/programs/cargo/e/efreight/#tab-1</a></p> <p>The new generation Flight Manifest are part of the IATA ONE Record initiative: <a href="https://www.iata.org/en/programs/cargo/e/one-record/">https://www.iata.org/en/programs/cargo/e/one-record/</a></p>

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**Major differences  
between standards**

Flight manifest requirements are generally standardised globally thanks to international regulations and industry standards set by bodies like the International Civil Aviation Organization (ICAO) and IATA. These guidelines promote consistency in air transport across countries.

However, variations can arise in cargo specifics and customs rules. The WCO Data Model (WCO DM) outlines that Declaration/Consignment level is the primary basis for Cargo report. Different nations or states may demand additional or different information in the manifest. For example, some countries might necessitate more comprehensive cargo descriptions, specific declarations for certain goods, or customs-related data for duty calculations. This variation is particularly notable for regulated or restricted items, such as hazardous materials, controlled substances, or specific technologies.

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**Platforms**

Flight manifests are transmitted in various formats, depending on stakeholders' needs and capabilities:

1. IATA Cargo Interchange Message Procedures (IMP) or Cargo Extensible Markup Language (XML) Electronic Data Interchange (EDI) systems
2. Application Programming Interface (API) where airlines and partners have such capabilities
3. E-mail or web portals when better means are not available
4. Paper documents in regions with less advanced infrastructure

Since 2018, IATA has been introducing the ONE Record data sharing standard. It aims to replace messaging standards and platforms with a data-centric standard that retains data at its source. This standard creates transport records by linking necessary data for documents like flight manifests to distributed data sources, making air transport data platform-independent.

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## Air Waybill

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**Purpose**

Constitutes a contract of carriage between the shipper and airline, outlining their responsibilities. It also functions as a cargo receipt, provides essential customs information, enables tracking, and streamlines billing and accounting processes.

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**Sender**

Usually, a forwarder acting as a representative of the shipper, or a shipper directly

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<b>Receiver</b>	The carrier (airline)
<b>Legal framework</b>	Established primarily through the Montreal Convention of 1999 (MC99), which defines the Air Waybill (AWB) as a legal contract between the airline and the shipper, with its Conditions of Contract governed by Resolution 600b of the Cargo Services Conference managed by IATA. Furthermore, IATA Resolution 672 enables the use of electronic Air Waybills (e-AWB), supported by the Multilateral E-Air Waybill Agreement, with IATA member airlines automatically cosigning these agreements. Additionally, the Conditions of Contract are subject to international conventions and ICAO regulations regarding liabilities and damages in air transport, providing a comprehensive legal framework for AWBs.
<b>Usage</b>	The IATA reports that there are 1.2 million Air Waybills issued for international transport, with over 80% being electronic Air Waybills.
<b>Key standards</b>	<p>The new generation Air Waybills are part of the IATA ONE Record initiative. The ONE Record standard comprises a data model, API specification, and security measures for streamlined data exchange in the air cargo industry, available on GitHub.</p> <p>The older version uses IATA Cargo-XML messaging, which reuses the components from the UN/CEFACT Core Components Library (UN/CCL).</p>
<b>Major differences between standards</b>	IATA Air Waybills are used for international freight transport by carriers, but domestic air transport follows a similar format. Postal freight, like air mail, follows international postal conventions under the Universal Postal Union (UPU). Some integrators, such as FedEx and DHL, may not be subject to these regulations when the shipper, forwarder, and carrier are the same company.
<b>Platforms</b>	<p>Electronic Air Waybills (e-AWBs) are often processed through Cargo Community Systems (CCS), which enable various parties in the air cargo industry to exchange electronic documents.</p> <p>Since 2018, IATA has been introducing the ONE Record standard, which replaces messaging platforms with a data-centric approach that leaves data “at source” and creates transport records by linking data needed for documents to these distributed data sources, making air transport data platform-independent.</p> <p>UN/CEFACT has also incorporated e-AWBs in its Multi-Modal Transport Reference Data Model (MMT-RDM) to enhance interoperability in transport information sharing through collaboration with IATA and ICAO.</p>

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**Adoption**

e-AWB adoption exceeded 80% in 2022 after a 15-year campaign, during which Cargo XML and older format Cargo-IMP were still accepted but not PDFs. ONE Record adoption has just begun, with airlines aiming to be capable of using it for air transport data, including AWB, by 1 January 2026, although actual usage may continue with Cargo IMP and Cargo XML for a few years following the transition.

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**Other**

The vision for ONE Record is an end-to-end digital logistics and transport supply chain where data is easily and transparently exchanged in a digital ecosystem of air cargo stakeholders, communities and data platforms.

ONE Record is an openly accessible standard and IATA has made available a list of documentation and resources (<https://www.iata.org/en/programs/cargo/e/one-record/>). The IATA Multilateral Data Agreement (MDA) offers a standardised non-disclosure agreement, allowing stakeholders to sign with IATA once and subsequently exchange data through the ONE Record API with all other signatory parties at no cost.

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## Bill of Exchange and Promissory Note

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**Purpose**

A Promissory Note (PN) is a signed document that represents a written promise to pay a specified sum to a designated person or bearer at a specified future date or upon demand.

A Bill of Exchange (B/E) is a written order directing a person to make a specific payment to a named payee.

Both PN and B/E are independent payment undertakings (debt obligations) between parties, codified in various legal systems worldwide, and have a rich history of court interpretations.

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**Sender/Receiver**

PN's are instruments issued directly by the payor to the payee i.e., there is no additional drawer. B/Es are often referred to as 3-name paper as they are drawn by one party on, and accepted by, another for the benefit of a third party, the ultimate payee or beneficiary. Both instruments may be guaranteed by a bank or other party by adding its endorsement.

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<b>Legal framework</b>	<p>Both instruments, Promissory Notes (PN) and Bills of Exchange (B/E), are independent debt obligations codified under English law, specifically the Bills of Exchange (BoE) Act 1882, which has evolved through court interpretations and contains essential terms like principal amount, interest rate, maturity date, and issuer's signature. Similar definitions are found in legal systems influenced by the 1930 Geneva Convention.</p> <p>A recent amendment to English law—the Electronic Trade Documents Act (ETDA) with effect from September 2023 allows electronic systems to create irrevocable payment undertakings, transferable to a specified party with no defence against payment to the transferee, who becomes the holder in due course under the BoE act.</p>
<b>Usage</b>	<p>PN's and B/E's are used around the globe in paper and digital forms. It is expected that the English law change referenced above allowing possession and control of a digital asset will expand the usage of PN's and B/E's.</p>
<b>Key standards</b>	<p>The ITFA Digital Negotiable Instruments (DNI) Initiative has developed an electronic payment undertaking (ePU) standard to fully digitise B/E and PN.</p>
<b>Major differences between standards</b>	<p>There are no major differences between different standards for PN's and B/E's and they have the same international standard as outlined above.</p>
<b>Platforms</b>	<p>There are a multitude of platforms around the world that are dealing with PN and B/E type instruments like Payment Undertakings using mostly similar languages as outlined above.</p>
<b>Adoption</b>	<p>The principal obstacles encountered by the market have been legal and not technical. The change in English law and the alignment with the UNCITRAL Model Law in Electronic Transferable Records (MLETR) in the Commonwealth countries and other trading nations will increase the adoption of PN's and B/E and their usage in existing or new platforms around the globe.</p>

## Cargo Insurance Document

The Cargo Insurance Document serves to provide evidence of insurance coverage, fulfilling various international trade and regulatory needs. Depending on context, it may be presented as:

### Purpose

- **Certificate of Insurance and Insurance Policy:** typically issued at the shipper's request, often to fulfil Letter of Credit requirements.
- **Debit Note (of insurance):** typically issued in specific countries upon the consignee's request to comply with import customs requirements.

### Sender/Receiver

Issued by the insurer or a broker (acting on behalf of the insurer), with input typically provided by the Assured through the insurer's online portal.

Received by the shipper or consignee and may subsequently be forwarded to a bank or customs authorities as needed.

### Legal framework

While legal recognition and negotiability may vary by jurisdiction, the cargo insurance document adheres to established international practices, despite the absence of specific international conventions or rules governing its contents or usage. Both ICC Uniform Rules for Documentary Credits (UCP) and Incoterms® reference these insurance documents, reinforcing their significance in international trade and commerce.

### Usage

In 2023, cargo insurance documents are primarily issued in PDF or paper format, with limited structured data exchange due to the scarcity of platforms equipped for this purpose. Unfortunately, there are no available statistics for estimating the global issuance of these documents.

### Key standards

During the 1990s, "Certificate of Insurance" and "Consignment Advice for Insurance" functional messages, based on the United Nations/Electronic Data Interchange for Administration, Commerce and Transport (UN/EDIFACT) message IFTMCA, were introduced. However, there have been no further EDI activities on insurance documents since then, suggesting limited practical use of these standards. To align with contemporary digital platforms featuring API capabilities, a data standard for structured insurance data, pioneered by Cargo Insurance Data Association (CIDA) was introduced in 2022.



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**Platforms**

Although insurance documents can be issued through in-house digital platforms or integrated with other software from third-party providers (such as Fermion Merimen or Oceanwide Marine Suite), platforms specifically designed for cargo insurance data are rare. Examples include Japan-based TradeWaltz which serves pan-Asian trading.

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**Adoption**

Differing data definitions and required elements across markets is a key reason behind the slow adoption of standardised cargo insurance documents till date. A significant driver in future is the broader digitalisation of trade documents, particularly commercial invoices and bills of lading. As structured data exchange becomes more common for these documents, the demand for cargo insurance documents in structured data formats is expected to rise.

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## Customs Bond

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**Purpose**

Customs Bonds are usually used as guarantee for exemptions of foreign trade duties, taxes and obligations set out under Custom rules and Regulations.

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**Sender/Receiver**

Sender (Principal): Declarant—exporter, importer.

Receiver (Beneficiary/Obligee): Customs administration (Government).

Surety (Guarantor): Insurance company issuing the bond on behalf of the principal.

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**Legal framework**

Customs bonds are subject to diverse regulations worldwide. In the United States, a Customs Import Bond is obligatory for goods exceeding a value of US\$2,500, guaranteeing payment of duties, taxes, and fees to Customs & Border Protection (CBP). In France, numerous articles pertain to customs bonds. Each country may have distinct rules governing their use and requirements.

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**Usage**

Further research is required to determine the annual global issuance of documents, encompassing both electronic and paper formats. Additionally, in select countries, many importers maintain ongoing customs bonds to facilitate frequent imports.

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<b>Key standards</b>	<p>Customs Bonds do not adhere to a universal template; instead, each country's customs authority typically provides bond wordings.</p> <p>However, for temporary import and export tax exemptions, the ATA Carnet, recognised by approximately 80 countries and customs territories, serves as a widely accepted form of security.</p> <p>The ATA Carnet is an international customs document enabling duty-free temporary export and import of non-perishable goods for up to 12 months, replacing other customs paperwork. Apart from the ATA Carnet, there is no standardised document for Customs Bonds in the surety market.</p>
<b>Platforms</b>	<p>The e-ATA project is an ongoing initiative led by ICC, in cooperation with the WCO, towards the digitalisation of the ATA Carnets (<a href="https://iccwbo.org/business-solutions/ata-carnet/eata-carnet/">https://iccwbo.org/business-solutions/ata-carnet/eata-carnet/</a>).</p>
<b>Adoption</b>	<p>To enhance the digital adoption of this document, two key factors are needed:</p> <ol style="list-style-type: none"> <li>1. A comprehensive digital repository of relevant guarantee wordings to facilitate the issuance of accurate documentation for various jurisdictions.</li> <li>2. Standardisation of requirements across countries and regions to promote consistency in the adoption of digital processes.</li> </ol>

## Export Cargo Shipping Instruction

<b>Purpose</b>	<p>Otherwise known as Shipper's Letter of Instruction (SLI), this document serves as instructions from the Exporter to the Freight Forwarder, providing the scope of services required as well as essential information for documentation and transport-related guidance.</p>
<b>Sender</b>	<p>Exporter/Consignor, who provides instructions and information in respect to the instructions related to the shipment</p>
<b>Receiver</b>	<p>Freight forwarder or logistics service provider.</p>
<b>Legal framework</b>	<p>There is no law, rule or regulation that mandates the issuance of this document however in practice it is issued for every transaction.</p>

<b>Usage</b>	<p>While not mandatory for international trade, export instructions are frequently issued by consignors to freight forwarders through various electronic means, such as email. This document plays a crucial role in logistics transactions between consignors, brokers, or traders.</p>
<b>Key standards</b>	<p>Globally, there are established standards for this document commonly referred to as the Shipper's Letter of Instructions, which individual shippers issue based on their legal or commercial needs. The International Federation of Freight Forwarders Associations (FIATA), on the other hand, has introduced a standardised document known as the "FIATA Forwarders Instructions" (FFI), with plans to develop a digital version aligned with the UN/CEFACT MMT-RDM.</p>
<b>Major differences between standards</b>	<p>The issuance of this document lacks a formal standard or guideline, resulting in challenges when distinguishing between various standards. Different organisations or industries utilise their unique formats created internally, causing minor variations in this common form that provides instructions to Freight Forwarders. Typically, it is exchanged via email in formats such as PDF, DOC, or as plain text within the email body.</p>
<b>Platforms</b>	<p>This document holds significant importance in international trade as it serves as the initial information source for tracking the movement of goods. In specific industries like Grain and Coffee trading, private platforms like Covantis and Cargoo have successfully onboarded a substantial portion, accounting for over 60% of the industry's participants.</p>
<b>Adoption</b>	<p>To boost the digital adoption of the Shipper's Letter of Instruction (SLI), several strategic steps can be taken:</p> <ol style="list-style-type: none"> <li><b>1. Education and awareness:</b> Shippers should be educated about the advantages of going digital, like reduced paperwork, quicker processing, and enhanced accuracy.</li> <li><b>2. Standardisation:</b> Establish industry-wide standards for digital SLIs to ensure compatibility across different platforms and systems, reducing the learning curve for shippers.</li> </ol> <p>By implementing these measures, the adoption of digital SLIs can be enhanced, resulting in a more efficient and streamlined shipping process for all stakeholders involved.</p>

## Letter of Credit

<b>Purpose</b>	A letter of credit (LC) is a bank-issued document that assures a seller of payment from a buyer under specific conditions, serving as a secure payment method for international trade, especially when trust is limited. LC ensures payment to the seller only after the goods meet agreed-upon conditions, reducing the risk of fraud and non-payment, offering security to both parties in the transaction.
<b>Sender</b>	The issuing bank, that is the bank that issues the letter of credit at the request of the buyer, usually the importer or purchaser of goods or services.
<b>Receiver</b>	The beneficiary/seller (the party entitled to receive payment under the LC, usually the exporter or supplier of goods or services).
<b>Legal framework</b>	LCs are subject to the ICC Uniform Customs & Practice for Documentary Credits (UCP 600). The legal requirements for using a letter of credit can vary depending on the jurisdiction and the specific terms and conditions of the letter of credit.
<b>Usage</b>	Cross-border Letters of Credit (LCs) are mainly issued using the Swift network, and in 2022, around 3.2 million LCs were issued.
<b>Key standards</b>	The ICC Uniform Customs and Practice for Documentary Credits (UCP 600) establishes the global standards for the utilisation of letters of credit in international trade. Additionally, the Swift network, particularly its Category 7—Documentary Credits standards, serves as the primary technical framework for handling Letters of Credit, making Swift the central infrastructure for exchanging LCs and related messages. Typically, MT700 message is sent by the issuing bank to the advising bank to indicate the terms and conditions of a documentary credit which has been originated by the sender (issuing bank).



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### Major differences between standards

The main issue is that while the SWIFT standard aligns with UCP 600 for issuing Letters of Credit (LCs), the document checking stage remains heavily reliant on paper, making LCs appear cumbersome and paper-intensive. This manual handling of documents during the crucial checking process often leads to processing delays, discrepancies, and fraud concerns.

Furthermore, the absence of a consistent global standard for party identification in LC transactions creates trust and security challenges. Names and addresses, traditionally used for identification, do not align with the requirements of digital ecosystems, where precise identification is crucial. Establishing a universal identifier could simplify party validation, enhance anti-fraud efforts, and enable advanced analytics for combating financial crime.

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Various platforms facilitate the exchange of Letters of Credit (LCs):

Bank to bank:

1. **Swift:** Swift serves as a widely used platform for LC exchange among banks globally, covering over 200 countries and territories, with more than 11,000 users. It offers a secure and standardised platform for MT700 message exchange related to letters of credit.

Corporate to bank:

### Platforms

1. **Bank proprietary channels:** These online banking channels enable corporate customers to engage digitally with their banks. They support functions like LC application submission from corporates to banks and LC advising from banks to corporates.
  2. **Multi-bank platforms:** This category includes platform providers like Bolero, ELCY, Komgo, and the Swift for Corporates standard developed by Swift. These platforms facilitate LC-related interactions involving multiple banks and corporate users.
  3. **APIs:** While there are no industry-wide API standards for LCs, some banks, corporates, and third parties have adopted customised API frameworks through mutual agreements. These bespoke implementations enable communication, for example, in LC advising, using agreed-upon APIs.
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	<p>Increasing the digital adoption of LC would require a combination of:</p> <ol style="list-style-type: none"> <li><b>1. Standardisation:</b> The adoption of common standards for the digital exchange of letters of credit and data (e.g. API) could help to streamline the process and reduce the risk of errors and delays. These standards could include the use of common data formats, authentication protocols, and other technical specifications. In particular a standard identifier for parties is needed.</li> <li><b>2. Regulatory changes:</b> Regulatory changes, such as the recognition of electronic signatures and the acceptance of digital documents, could help to facilitate the digital adoption of LC.</li> </ol>
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## Payment Confirmation

<b>Purpose</b>	The primary purpose of a Payment Confirmation is to provide evidence that a payment has been made and received.
<b>Sender</b>	The financial institution receiving the payment.
<b>Receiver</b>	The issuer of the payment
<b>Legal framework</b>	Since the end of 2022, payment confirmations are mandatory on Swift network.
<b>Usage</b>	Cross-border Letters of Credit (LCs) are mainly issued using the Swift network, and in 2022, around 3.2 million LCs were issued.
<b>Key standards</b>	ISO 20022 is the main standard for financial messaging, with MX messages defined for the Swift network <sup>6</sup> , while MT messages are traditional Swift message types. <sup>7</sup>

<sup>6</sup> An MX is an XML message definition for use on the Swift network. Most MX messages are also ISO 20022 messages.

<sup>7</sup> An MT (message text) is a traditional message type for use on the Swift network. The message text standards have been developed to support the business transactions of Swift users.

<b>Platforms</b>	Payment confirmations can be obtained through various methods, including using the Swift GPI Tracker, which allows banks to track their payment instructions in real-time; Swift interfaces through MT199 messages transitioning to MX formats; batch confirmations; and API calls via the GPI connector. Additionally, an ISO 20022-compliant messaging standard is available to provide confirmations to the Tracker, simplifying the transition from MT.
<b>Other</b>	Payment confirmation today is straightforward, merely verifying a specific sum in a designated account, lacking safeguards against fraud, notably authorised push payment fraud. Some national systems exchange identifiers to help identify beneficiaries, but this approach is confined to domestic schemes. Addressing identity challenges in cross-border payments is a key focus for regulators, financial institutions, and corporations in this space. The ongoing FSB cross-border payments initiative underscores this commitment.
<b>Purchase Order</b>	
<b>Purpose</b>	An electronic purchase order document is a digital document that initiates a transaction, defining prices, quantities and delivery dates in accordance with pre-negotiated contractual conditions, between a buyer and a seller. It is used by a buyer to request goods, items or services from a supplier.
<b>Sender</b>	The buyer of goods and services
<b>Receiver</b>	The seller of goods and services
<b>Legal framework</b>	<p>In the context of electronic invoicing, as per the European Union (EU) directive, the purchase order can serve as one of the business controls that confirm the authenticity of an invoice.</p> <p>In the public sector, particularly for tender-related matters, the purchase order must be publicly disclosed. In Italy, specifically within public healthcare procurement, the electronic order is obligatory and is processed through a public platform known as NSO (Nodo Smistamento Ordini).</p> <p>Furthermore, the purchase order can hold legal significance akin to a contractual agreement.</p>

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**Usage**

Nearly 200,000 companies worldwide utilise GS1 EANCOM and XML standards. However, the adoption of these standards, particularly in e-Invoicing, is likely below 50%, primarily due to challenges faced by small and medium-sized enterprises (SMEs), despite the benefits being more pronounced for suppliers.

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**UN/CEFACT (United Nations Centre for Trade Facilitation and Electronic Business):**

UN/CEFACT has been at the forefront of developing international data standards and business processes for supply chain facilitation from paper trade documents (United Nations Layout Key—UNLK) to UN/EDIFACT (United Nations Electronic Data Interchange for Administrations, Commerce, and Transport). UN/CEFACT also introduced Reference Data Models (RDM) based on the UN/CEFACT Core Component Library (UN/CCL). These standards cover various facets of international trade, including procurement, transport, border clearance, and more.

**UBL Format (Universal Business Language):****Key standards**

ISO/IEC 19845:2015 specifies the Universal Business Language (UBL), offering a generic XML interchange format for business documents. UBL provides a suite of structured business objects and associated semantics expressed as reusable data components and common business documents.

**GS1 EDI (Electronic Data Interchange):**

GS1 EDI provides global standards for electronic business messaging which encompasses master data alignment, order processing, delivery, financial settlement, transport, and warehouse management. Key business partners covered include retailers, manufacturers, healthcare operators, and logistic service providers.

**ANSI X.12 850:**

The American National Standard Institute (ANSI) oversees standards and conformity assessment in the United States. ANSI X.12 is the EDI standard, with “850” representing the Order message.

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**Major differences between standards**

Various standards in the market utilise different technical representations such as XML or EDIFACT. However, the primary focus should be on achieving semantic interoperability, where a consistent understanding and meaning of a term are maintained, irrespective of its technical representation. Interoperable web vocabularies could help simplify the inherent complexities of trade by providing a universal language for data exchange to ensure that data is understood and processed consistently across different systems.

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<b>Platforms</b>	The exchange primarily depends on service providers and value-added networks. Additionally, private web portals and marketplaces are widely used.
<b>Adoption</b>	Digital ordering adoption is driven by several key factors. Knowledge dissemination and targeted training on existing Purchase Order standards play a vital role. Additionally, sharing best practices among business groups and locations enhances awareness.
<b>Other</b>	Master data alignment, facilitated through platforms like GS1 Global Data Synchronisation Network (GDSN), plays a pivotal role in ensuring the accuracy and effectiveness of procurement processes.

## Rail Consignment (CIM) Note

<b>Purpose</b>	The CIM consignment note regulates international carriage of freight traffic by rail. The contract is concluded when the railway undertaking accepts the shipment, and the dispatch station's stamp (a date stamp) is placed on the consignment note. Signed/stamped by both sender and the carrier, the CIM consignment note is used in most European countries and in several countries that are party to the Convention concerning International Carriage by Rail (COTIF). Both the sender and the receiver (consignee) have the right to modify the carriage contract.
<b>Sender</b>	The consignor who issues this consignment note in the country of dispatch's language with a translation into one of three languages: French, German, or English.
<b>Receiver</b>	The consignee who receives both the shipment and original consignment note.
<b>Legal framework</b>	CIM UR (Uniform Rules concerning the Contract of International Carriage of Goods by Rail) provides a legal basis for the electronic consignment note. It is harmonised with the law applicable to other modes of transport, in particular with the Convention on the Contract for the International Carriage of Goods by Road (CMR).
<b>Key standards</b>	The issuance of paper and electronic consignment notes are recommended to follow latest edition of CIM Consignment Note Manual (GLV-CIM).

	<p>The CIM UR expressly provide a legal basis for the electronic consignment note (Article 6 § 9) based on the principle of functional equivalence, but no detailed requirements are stipulated.</p>
<b>Adoption</b>	<p>In general, it can be observed that in most OTIF (Intergovernmental Organisation for International Carriage by Rail) Member States there is a strong trend towards the transition from paper to electronic documents only, or in parallel with paper documents in national rail transport. However, the exclusive use of electronic transport documents is negligible in international rail transport.</p>
<b>Other</b>	<p>The CIM consists of five printouts:</p> <ul style="list-style-type: none"> <li>i. original consignment note for the receiver of the shipment (consignee)</li> <li>ii. invoice for carrier and supplementary sheet for carriers who invoice intermediate section</li> <li>iii. arrival note/customs for destination customs office/destination carrier</li> <li>iv. duplicate of the consignment note for the sender (consignor), as well as a supplementary sheet</li> <li>v. duplicate invoice for the forwarding carrier.</li> </ul>

## Road Consignment (CMR) Note

<b>Purpose</b>	<p>The CMR consignment note plays a central role in the context of the UN Convention on the contract for the international carriage of goods by road (or CMR). Most European nations, along with various others, have ratified this convention. This document is a critical tool for companies, drivers, and recipients involved in the transportation process, containing essential details about the transported goods, as well as information about the parties responsible for transport and receipt.</p> <p>Although CMR notes were traditionally paper-based, there's a growing push from businesses and government stakeholders to transition to an electronic format (e-CMR).</p>
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	<p>The e-CMR is a proof of contract existence between the sender/consignor and the carrier under the CMR Convention. The e-CMR includes up to three different signatures as specified in the CMR convention (the sender/consignor, the carrier, and the consignee).</p> <p>Parties involved:</p> <ol style="list-style-type: none"> <li>1. Transport services buyer (sender/consignor or consignee)—The buyer of transport services.</li> <li>2. Transport services provider (carrier)—The provider of transport services.</li> <li>3. Sender/consignor—The party consigning goods as stipulated in a contract of carriage by road (e-CMR) and referred as Sender in the CMR Convention</li> <li>4. Consignee—The party receiving a consignment of goods as stipulated in a contract of carriage by road (e-CMR).</li> <li>5. Carrier/subsequent carrier—The party which provides transport services as stipulated in a contract of carriage by road (e-CMR).</li> <li>6. Authorities—any supervisory or controlling government bodies that carry out activities to control the movement of goods or make notes in accompanying documents</li> </ol>
<p><b>Sender/Receiver</b></p>	
<p><b>Legal framework</b></p>	<p>Road transport service providers must use the CMR Consignment for the international transport of goods by road between two of the 55 countries that have adopted the United Nations Economic Commission for Europe (UNECE) Geneva 1956 CMR convention.</p> <p>The UNECE Geneva 2008 e-CMR Protocol addition defines the conditions when the e-CMR is equivalent to its paper version. Road transport service providers can use an e-CMR between two of the 33 countries that adopted the e-CMR Protocol addition.</p> <p>National regulations define how the CMR and e-CMR can be used for sharing transport information with authorities for compliance purposes. From 2025, the EU 2020/1056 electronic Freight Transport Information (eFTI) regulation will harmonise how the CMR transport information can be shared with EU control authorities in an EU harmonised electronic format.</p>
<p><b>Usage</b></p>	<p>The CMR is one of the most important transport documents. It is estimated that the 27 EU Member States and the UK issue about 470 million CMR documents on an annual basis.</p> <p>The road consignment note (CMR) has a significant secondary use as proof of delivery in the context of EU intracommunity delivery of goods when VAT is due as destination.</p>

<b>Key standards</b>	<p>UN/CEFACT, in close collaboration with IRU (International Road Union) has developed a business requirements specification (BRS) and XML standard for the e-CMR. The e-CMR Process covers the way information is exchanged between the parties of a consignment note for the renumeralated transport of goods by road in compliance with the CMR and eCMR protocols.</p> <p>The UNCEFACT e-CMR specification is a subset of the UN/CEFACT Multi-Modal Transport Reference Data Model (MMT-RDM), which is a subset of the UN/CEFACT Buy-Ship-Pay Reference Data Model.</p>
<b>Platforms</b>	<p>Any platform could be used as a Business-to-business (B2B) and Business to government (B2G) data exchange.</p>
<b>Adoption</b>	<p>The users of the CMR expect the digital adoption of the document to increase when:</p> <ul style="list-style-type: none"> <li>• regulations how to share the data with government authorities are harmonised.</li> <li>• the digital recording of the handing over of the consignment from the sender/consignor to a carrier as well as the proof of the delivery of the goods by the carrier to the consignee, or subsequent carrier is harmonised.</li> </ul>

## Sea Cargo Manifest

<b>Purpose</b>	<p>A manifest is a summary of all cargo loaded on a ship, including descriptions, container numbers, shipper and consignee details, weight, measurements, packing information, and cargo specifics like UN Numbers, International Maritime Organization (IMO) Class for hazardous goods, temperature settings for refrigerated cargo, and dimensions for over-dimensional cargo.</p>
<b>Sender</b>	<p>The sea cargo manifest is created by the shipping line using bill of lading data provided by the booking party. It compiles all bills of lading for the voyage, organising them by port of loading and port of discharge. This compilation is done by the shipping line or its agent after confirming that all cargo is loaded on the ship.</p>

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**Receiver**

Copies of the sea cargo manifest are distributed to various stakeholders involved in the cargo's voyage, including customs (at the ports of load and discharge), ports (at the ports of load, discharge, and transshipment), the destination agent, and the shipping line's headquarters for revenue calculations. While the manifest is primarily transmitted electronically, in many countries, it is still submitted manually to customs in multiple paper copies as mandated by local customs regulations.

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**Legal framework**

The Revised Kyoto Convention (RKC) provides definition of "cargo declaration" and outlines that the carrier shall be held responsible to the customs for ensuring that all goods are included in the cargo declaration or are brought to the attention of the customs in another authorised manner.

Ships must comply with local customs regulations, obligating the submission of cargo manifest copies outlining goods intended for port discharge, transshipment, or transit—this is mandatory. Failure to submit it before the ship arrives at a port may lead to cargo discharge restrictions.

Many countries mandate digital submission to customs, often requiring advance submission at the port of discharge.

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**Usage**

The majority of countries globally accept manifests in electronic or paper formats. Approximately 90-95% of major ports are likely to transmit and accept these documents electronically.

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**Key standards**

The primary digital standards for submitting sea cargo manifests to customs are the UN/EDIFACT formats CUSCAR and CUSDEC. The WCO Data Model (WCO DM) outlines that the declaration/consignment level is the primary basis for a cargo report. Additionally, various independent and country-specific proprietary systems enable electronic customs document transmission, each with its unique data requirements based on its design.

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**Major differences between standards**

Carriers, non-vessel operating common carriers (NVOCCs), forwarders, customs brokers, and consolidators have relied on EDI standard for sea cargo manifest transmission over many years.

While some API capabilities exist among stakeholders, there are no equivalent standards for this document.

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**Platforms**

Data exchange platforms facilitating this document through EDI messaging can vary across companies and are often integrated with Enterprise Resource Planning (ERP) software.

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**Adoption**

Approximately 90-95% of major ports are likely to transmit and accept these documents electronically. With user-friendly standards, further adoption can be swift and extensive.

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## Sea Waybill

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**Purpose**

The Sea Waybill is much like an ocean Bill of Lading, but non-negotiable. Its primary purposes are to serve as evidence of the contract of carriage and to confirm the goods' receipt.

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**Sender/Receiver**

Similar to an original Bill of Lading, a Sea Waybill can be issued by both a carrier and a freight forwarder. Here's the typical process:

- A freight forwarder or shipper provides a 'Shipping Instruction' to an ocean carrier.
- The ocean carrier reviews and processes the 'Shipping Instruction' and generates a draft Sea Waybill.
- The forwarder or shipper reviews the draft Sea Waybill. If it's acceptable, the process moves forward. If not, they request changes, and this loop continues until an acceptable version is achieved.
- The ocean carrier then issues the final version.

A Sea Waybill is commonly used in transactions between the carrier and the freight forwarder. For instance, when a shipment is moved using a House Bill of Lading, it is quite typical for the freight forwarder to request the carrier to issue the Sea Waybill. This approach helps the forwarder save on courier fees and reduces the risk of misplacing an original document.

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**Legal framework**

A Sea Waybill serves as evidence of the contract of carriage between the involved parties and acknowledges that the goods have been loaded.

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**Usage**

Ocean carriers issue around 45 million bills of lading a year. Approximately 60% of Containerised Bills of Lading issued are now Sea Waybills i.e. 27 mil.

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**Key standards**

Key industry stakeholders—Baltic and International Maritime Council (BIMCO), Digital Container Shipping Association (DCSA) and FIATA—have collaborated on and mapped their standards to the UN/CEFACT Multi-Modal Transport Reference Data Model (MMT-RDM).

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**Major differences between standards**

The difference in Sea Waybill standards primarily revolves around business use cases:

- DCSA standard is used for containerised freight movements.
  - BIMCO standard is employed for bulk shipping.
  - Freight forwarders, acting as multimodal transport operators, use the FIATA waybill.
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**Adoption**

Over the past two decades, the use of the Sea Waybill has grown significantly. While documents used to be issued in negotiable form until the early 2000s, trust has increased among trade partners and freight forwarders. This has led to a higher adoption of the Sea Waybill, except in certain countries like Brazil, where national legislation restricts its use. Approximately 60% of Containerised Bills of Lading issued are now Sea Waybills.

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## Ship's Delivery Order

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**Purpose**

A Delivery Order is a release document issued by the carrier releasing the cargo to the consignee mentioned in the bill of lading.

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**Sender/Receiver**

The carrier issues the delivery order upon receiving:

- One or all duly endorsed Original Bill(s) of Lading, or;
- A duly authorised Bank Guarantee (in the absence of an original bill of lading), or;
- A Telex Release confirmation from the loading port or principal confirming surrender of one or all Original Bills of Lading issued for the shipment, or;
- A copy of a Sea Waybill issued.

In many countries, the delivery order is necessary for customs clearance and cargo retrieval from storage locations such as ports, terminals, or depots.

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**Legal framework**

There is no specific governing regulation for the usage of a delivery order, whether private or public.

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**Usage**

It can be estimated that around 45 million delivery orders are issued annually.

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**Key standards**

Many delivery orders are still issued via email in PDF format, but a widely adopted standard for this document is the UN/EDIFACT COREOR.

The Container Release Order (COREOR) message is an Electronic Data Interchange (EDI) message used to request the release of full containers to a specified party.

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**Adoption**

In the case of this document, there are no issues with the digital adoption as by and large, it is already digitally transmitted, and if the standards set are made easy, there will be large scale and quick adoption.

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# Key Trade Data Glossary

## Glossary content

The data glossary comprises the following information:

- Data element short name
- UID, unique identification number of the data element specified in the United Nations Trade Data Elements Directory (UNTDDED), also known as ISO 7372.
- Description TDED is the description of the data element in the UNTDED
- Count is the number of occurrences of the data element across the 21 trade documents
- M is the number of Mandatory occurrences of the data element across the 21 trade documents
- O is the number of Optional occurrences of the data element across the 21 trade documents
- C is the number of Conditional occurrences of the data element across the 21 trade documents.
- The next 21 columns are headed by abbreviations of the 21 trade documents

The data is sorted by category and by number of occurrences. The bottom of the table shows the number of data elements used per document and the M, O, C number of occurrences.

It is important to note that the intent was to highlight conceptually key data elements that are used across the documents, not to create a complete data dictionary that could be used to generate comprehensive electronic messages.

## Standards

Several international standards have been considered. The main reference used for developing this data glossary is the United Nations Trade Data Element Directory (UNTDDED), also known as ISO 7372. It is available here: <https://unece.org/untdded-iso7372>.

Other standards have been considered. Some definitions are more detailed in other standards compared to the UNTDED. However, the working group didn't identify any major differences that might create an obstacle to digitalisation. These other standards include the following:

- UN/CEFACT controlled vocabulary, <https://unece.org/sites/default/files/2021-12/CCL21B-ControlledVocabulary.pdf>
- Universal Business Language (UBL) from OASIS, also known as ISO/IEC 19845, <https://docs.oasis-open.org/ubl/os-UBL-2.3/UBL-2.3.html#S-UBL-2.3-DOCUMENT-SCHEMAS>
- Swift standards, <https://www2.swift.com/knowledgecentre/products/Standards%20MT/publications#November%202022>
- The World Customs Organization (WCO) Data Model, <https://www.wcoomd.org/DataModel>
- The Global Supply Chain Finance Forum (GSCFF), <http://supplychainfinanceforum.org/glossary/#d>

## DSI KTDDE Data Glossary Process

The KTDDE working group used the following process from June to October 2023:

- 1. Analyse documents.** Team leaders were appointed to collect information on 14 documents used in international trade. This included the identification of relevant data elements used in each document.
- 2. Combine with data from batch 1.** The information collected on the 7 trade documents analysed during batch 1 in 2022 was combined with the batch 2 information, resulting in a combined data glossary.
- 3. Data Categorisation.** The data elements identified in the glossary were categorised on the basis of the UNTDED data categories.
- 4. Definitions.** The UNTDED definition of each data element was retrieved and included in the glossary. Other standard references were used to compare the data elements definitions: UN CEFACT controlled vocabulary, UBL, SWIFT, GSCFF, WCO data model.
- 5. Data qualification.** Each data element used in a document was flagged as Mandatory, Optional or Conditional. Mandatory means that the data element must be used in a given document. Optional means that the data element is used at the discretion of the parties exchanging a document. Conditional means that the data element may be required under certain conditions. All data elements used in the Customs Declaration document are marked as Conditional since national Customs organisations are free to use some or all of the data elements within the WCO dataset in accordance with their national legislation.

## List of Key Trade Documents Codes

#	Code	Document name
1	CoO	Non-preferential Certificate of Origin
2	INV	Commercial Invoice
3	WR	Warehouse Receipt
4	PL	Packing List
5	BoL	Bill of Lading
6	CD	Customs Declaration
7	CID	Cargo Insurance Document
8	PO	Purchase Order
9	CMR	Road Consignment Note
10	CIM	Rail Consignment Note
11	SDO	Ship's Delivery Order
12	SLI	Shipper's Letter of Instructions
13	SCM	Sea Cargo Manifest
14	SW	Sea Waybill
15	AW	Air Waybill
16	ACM	Air Cargo Manifest
17	CB	Customs Bond
18	LC	Letter of Credit
19	BoE	Bill of Exchange
20	PN	Promissory Note
21	PC	Payment Confirmation

## Data Glossary for 21 Key Trade Documents

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
References																											
Transport Contract Document / Bill of Lading number	1188	Reference number to identify a document evidencing a transport contract	11	4	6	1	O				O	C	O		O		M		M	M	M				O	O	
Invoice number	1334	Reference number to identify an invoice	9	3	5	1	O	M		O		C	M		O										O	O	M
Contract number	1296	Identifier of a contract concluded between parties such as between buyer and seller	8	1	6	1	O	O		O	M			C						O					O	O	
Booking reference number	1016	Reference number assigned by a carrier or its agent to identify a specific consignment such as a booking reference number when cargo space is reserved prior to loading.	6	0	5	1					O	C			O					O					O	O	
Document Identifier	1004	Reference number identifying a specific document	6	4	1	1	O				M	C			M										M	M	
Documentary credit identifier	1172	Reference number to identify a documentary credit	6	1	3	2	O						O					O						M	C	C	
Freight Forwarder reference number	1460	Reference number assigned by the freight forwarder to identify a particular consignment	5	1	4	0					O				O					M					O	O	
House waybill document identifier	1039	Reference number to identify a house waybill	5	1	4	0					O				O						M				O	O	
Purchase Order number	1022	Identifier assigned by the buyer to an order	5	1	4	0	O	O						M											O	O	
Unique Consignment Reference (UCR)	1202	Unique reference identifying a particular consignment of goods	4	0	3	1						C			O										O	O	
Certificate of origin number	1RRR	Reference number to identify a certificate of origin	2	1	1	0	M								O												
Customs Declaration Document, Trader Assigned	1097	Reference assigned by a trader to identify a declaration	2	0	1	1						C			O												
Insurance policy number	1RRR	Reference number to identify an insurance policy	2	1	1	0			O				M														



Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Dates																											
Issue date	2007	Date that a document was issued and when appropriate, signed or otherwise authenticated	11	10	0	1	M	M	M	M	M	C	M			M		M							M	M	
Actual arrival date	2107	Date and or time of the arrival of means of transport.	5	0	4	1					O	C			O		O		O								
Estimated time of departure	2195	Date and or time when a transport means is scheduled to depart	5	2	2	1					O	C	M		O						M						
Estimated time of arrival	2349	Date and or time of the estimated arrival of means of transport	4	1	2	1					O	C			O						M						
Payment due date	2480	Date when an amount due should be made available to the creditor under the terms of payment	4	3	1	0		M																	M	M	O
Actual departure date	2281	Date and or time of the departure of means of transport	3	0	2	1					O	C			O												
Consignment loading date	2347	Date and optionally time when a consignment is to be or has been loaded onto a means of transport	3	2	0	1					M	C			M												
Documentary credit document effective end date	2211	Date on which the validity of a documentary credit expires	3	1	0	2																		M	C	C	
Documentary credit document issue date	2237	Issue date of a documentary credit	3	1	0	2																		M	C	C	
Delivery date	2138	Date and optionally time by which the merchandise should be delivered to the buyer, as agreed between the seller and the buyer	2	2	0	0								M		M											
Despatch date	2170	Date and optionally time on which goods are, or are expected to be despatched or consigned	2	1	1	0									O			M									
Invoice date	2377	Date of issue of an invoice	2	1	0	1		M				C															
Latest pick-up date	2131	Latest date and optionally time when a consignment of goods can be picked-up by a carrier.	2	0	2	0									O									O			
Order date	2011	Date of order	1	1	0	0								M													

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Parties, addresses, places, countries																											
Consignee	3132	Party to which goods are consigned	11	8	1	2	O			M	C	C			M	M	M	M	M	M	M						
Buyer	3002	Party to which merchandise or services are sold.	9	4	3	2		M		M	O	C		M	M			C							O	O	
Consignor	3336	Party consigning goods as stipulated in the transport contract by the party ordering transport	9	7	1	1	O				M	C			M	M		M	M	M	M						
Carrier (Transport Services Provider)	3126	Party providing the transport of goods between named points	8	6	1	1				O	M	C			M		M			M	M	M					
Notify party	3180	Party to be notified.	7	2	2	3					C	C			O			C	M	M	O						
Importer	3020	Party who makes—or on whose behalf a Customs clearing agent or other authorised person makes—an import declaration. This may include a person who has possession of the goods or to whom the goods are consigned	6	1	4	1	O				O	C											M		O	O	
		Party selling merchandise or services to a buyer	6	3	2	1		M		M			C		M										O	O	
Exporter	3030	Party who makes, or on whose behalf the export declaration is made, and who is the owner of the goods or has similar rights of disposal over them at the time when the declaration is accepted	5	1	3	1	M				O	C													O	O	
		Party to whom an invoice is issued.	5	2	3	0		M							O										O	O	M
Freight Forwarder	3170	Party undertaking forwarding of goods	4	2	2	0					O				O			M			M						
Documentary Credit Applicant Agent Bank	3234	Name and address of a bank, other than an issuing bank, which is acting on behalf of the applicant of a documentary credit	3	0	3	0																		O	O	O	
Documentary Credit Available Bank.	3242	Name and address of a bank at which the Documentary credit is available.	3	1	2	0																		M	O	O	

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Documentary Credit Beneficiary	3260	Name and address of the beneficiary of a documentary credit	3	1	2	0																		M	O	O	
Documentary Credit Reimbursing Bank	3350	Name and address of a bank nominated by the issuing bank to reimburse	3	0	3	0																		O	O	O	
Insurance company	3PPP	Details related to the company engaged in the business of insurance	3	2	0	1						C	M										M				
Issuer / Drawer	3PPP	The entity or person who issues the bill of exchange (the party making the payment)	3	3	0	0									M										M	M	
Payee	3370	Party to which a payment is to be or has been made	3	3	0	0																			M	M	M
Seller's bank	3012	Bank designated by the seller to receive payment.	3	1	2	0		M																	O	O	
Ship to / Delivery Party	3144	Party to which goods should be delivered, if not identical with consignee such as the place where a container is to be, or has been, positioned.	3	0	2	1						C		O	O												
Buyer's bank	3420	Bank employed by the buyer to make a payment	2	0	2	0																			O	O	
Despatch Party	3282	Party where goods are to be, or have been, taken over by a carrier such as the place where a container is picked-up.	2	0	2	0									O			O									
Documentary Credit Applicant	3198	Name and address of the applicant of a documentary credit	2	1	1	0		O																M			
Documentary Credit Drawee.	3290	Name and address of party on whom any draft is to be drawn from the documentary credit.	2	0	2	0																		O	O		
Drawee	3PPP	The entity or person who is obligated to make the payment specified in the bill of exchange (the party receiving the payment request)	2	1	1	0																			M	O	
Insured party	3136	Party which benefits from insurance coverage. For example, in transport this is usually the shipper.	2	1	0	1							M						C								

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Warehouse	3156	Warehouse where a particular consignment has been stored	2	0	0	2						C			C												
Consignment route	3050	Route to be used for the transport of goods	1	0	0	1						C															
Customs office of entry	3088	Customs office at which the goods enter the customs territory of destination	1	0	0	1						C															
Freight payer	3470	Name and address of a party responsible for the payment of freight charges	1	1	0	0					M																
Seller's bank account number	3492	Identifier of an account with the bank designated to receive payment	1	1	0	0		M																			
Warehouse depositor	3004	Party depositing goods in a warehouse	1	1	0	0			M																		
Warehouse keeper	3022	Party taking responsibility for goods entered into a warehouse	1	1	0	0			M																		
Locations																											
Place of the delivery of the goods (by the carrier)	3000	Location to which a consignment is to be delivered to the final consignee.	10	8	1	1				M	C		M	M	M	M	M		M	M			M	O			
Baseport Unloading Location	3356	The place or port at which the cargo is discharged or unloaded from a means of transport according to the transport contract. The goods may or may not be discharged from the main means of transport at this place or port	9	6	2	1		O		C	M		M		M		M		M	M				O			
Original Loading Location	3099	Seaport, airport, freight terminal, rail station or other location where the goods were first loaded onto the means of transport being utilised for their carriage.	9	6	3	0		O				M			O		M		M	M		M		O			
Origin country	3238	Name of the country in which the goods have been produced or manufactured, according to criteria laid down for the application of the Customs tariff or quantitative restrictions, or any measure related to trade.	7	2	4	1	M	O			O	C		O	O			M									

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Place of issue	3410	Location where a document was issued and when appropriate, signed or otherwise authenticated.	6	4	0	2						C	C			M		M							M	M	
Despatch	3150	Place, from or at which despatch is to take place.	5	2	3	0					O				O			M					M	O			
Payment Location	3108	Name of the place where the payment has been, or should be made.	5	1	3	1					O		C						M					O	O		
Place or departure	3214	Port, airport or other type of location from which a means of transport is scheduled to depart or has departed	5	3	2	0	O						M		O						M	M					
Arrival location	3258	Port, airport or other type of location at which a means of transport is scheduled to arrive or has arrived	3	2	0	1						C									M	M					
Exportation country	3220	Country from which a consignment of goods was initially exported to the importing country without any commercial transaction taking place in intermediate countries. Syn.: country whence consigned. Country of despatch: country from which goods are despatched between countries of a Customs union	3	1	1	1					O		C										M				
Pick-up Party	3282	Name and address of the party where goods are to be, or have been, taken over by a carrier such as the place where a container is picked-up	2	0	1	1					O				C												
Account holder	3192	Holder of an account	1	1	0	0																					M
Consignment. Exit Customs Office	3096	Name of the customs office at which the goods leave or intended to leave the customs territory of despatch	1	0	0	1						C															
Destination country	3014	Country to which a consignment of goods is to be or has been delivered.	1	1	0	0									M												
Emergency Contact	3058	The name of the person to be contacted in the event of a dangerous goods emergency	1	0	0	1									C												

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC	
Insurance claim adjuster	3360	Name and address of the insurance claims adjuster	1	1	0	0							M															
Name of the destination station	3392	Seaport, airport, freight terminal, rail station or other place at which goods are unloaded from the means of transport having been used for their carriage	1	1	0	0										M												
Place of taking over of the goods (by the carrier from the consignor or his agent)	3348	Place where the goods are taken over by the carrier	1	0	1	0									O													
Clauses, conditions, instructions																												
Transport Contract Document Conditions	4002	Reference to carrier's conditions of carriage printed on document or provided separately.	5	2	2	1				O	M	C			O							M						
Authentication	4426	Proof that a document has been authenticated indicating where appropriate the authentication party	4	2	0	2						C						C							M	M		
Insurance condition	4112	Reference to the general conditions of contract under which an Insurance certificate is issued , and/ or wording of the specific conditions pertaining to the shipment in question.	2	1	0	1							M					C										
Loading Instructions	4080	Instructions on where or how specified packages or containers are to be loaded on a means of transport.	2	0	1	1									C						O							
Delivery Instructions	4492	Delivery instructions relating to a consignment.	1	0	1	0									O													
Packing Instructions	4078	Free form description of a set of handling instructions. For example how specified goods, packages or transport equipment (container) should be handled.	1	0	0	1									C													
Terms																												
Payment Method	4467	Code specifying a method of payment	6	0	5	1		O				C		O											O	O	O	
Trade terms conditions description	4052	Free form description of delivery or transport terms (Incoterms)	5	1	3	1		O			O	C						M		O								



Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Payment term	4277	Identification of the terms of payment between the parties to a transaction (generic term).	4	2	2	0		O						O											M	M	
Trade terms conditions	4053	Code specifying the delivery or transport terms (Incoterms)	4	0	3	1		O			O	C								O							
Document endorsement	4428	Proof that a document has been signed	2	2	0	0																			M	M	
Handling Instructions	4078	Free form description of a set of handling instructions. For example how specified goods, packages or transport equipment (container) should be handled.	2	0	0	2									C			C									
Amounts, charges, percentages																											
Customs value	5032	Amount declared for customs purposes of those goods in a consignment which are subject to the same customs procedure, and have the same tariff/ statistical heading, country information and duty regime	4	1	1	2					C	C			O								M				
Freight and charges amount	5290	Costs incurred by the shipper in moving goods, by whatever means, from one place to another under the terms of the contract of carriage. In addition to transport costs, this may include such elements as packing, documentation, loading, unloading, and insurance (to the extent that they relate to the freight cost)	4	0	2	2					C	C			O						O						
Goods value	5128	Value of the goods for the calculation of the freight or similar transport charges.	3	0	2	1						C			O			O									
Insurance amount	5486	Amount of premium payable to the insurance company for insuring the goods	3	0	2	1						C	O		O												
Monetary amount	5004	Monetary amount	3	3	0	0																			M	M	M

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Tax amount	5490	Amount in national currency resulting from the application, at the appropriate rate, of value added tax (or similar tax) to the invoice amount subject to such tax.	3	0	1	2						C	C	O													
Allowance / Charge	5189	Code specifying a type of an adjustment to a monetary amount such as an allowance or charge.	2	0	1	1						C		O													
Documentary credit amount	5450	Amount of the documentary credit.	2	1	1	0		O															M				
Statistical value	5218	Value declared for statistical purposes of those goods in a consignment which have the same statistical heading	2	1	0	1						C											M				
Total collect charges	5398	Monetary amount of all of the consignment charges which are to be collected from the consignee at or after delivery.	2	0	2	0					O				O												
Total invoice amount	5444	Total monetary amount charged in respect of one or more invoices	2	1	0	1		M				C															
Insured value amount	5011	Representation in figures of the total sum covered by an insurance for a particular consignment.	1	1	0	0							M														
Order amount	5390	Total amount of an order	1	0	1	0								O													
Prepaid amount	5302	Monetary amount of all of the consignment charges which have been paid in advance	1	0	1	0					O																
Tax or fee assessment basis amount	5286	The amount on which a duty or tax or fee will be assessed	1	0	0	1						C															
Tax or fee type	5152	Type of duty or tax applicable to commodities or type of tax or fee applicable to services	1	0	0	1						C															
Unit Price	5110	Price per unit of quantity on which an article item amount is calculated.	1	0	1	0								O													

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Measure, Quantities																											
Gross weight	6012	Total gross weight (mass) of all goods items referred to as one consignment including packaging but excluding any transport equipment	10	9	0	1	M		M		M	C			M		M	M	M	M	M						
Volume (Cube)	6322	Measurement normally arrived at by multiplying the maximum length, width and height of pieces or package or transport equipment. Also known as cube.	7	5	1	1				M	M	C			M			O		M	M						
Net weight	6014	Total net weight (mass) of all the goods items referred to as one consignment	5	2	3	0	O	O		M	O							M									
Transport Means, gross weight	6300	The measure of the overall size of a vessel determined in accordance with the provisions of the International Convention on Tonnage Measurement of Ships, 1969.	4	2	2	0	O		M		O								M								
Transport Temperature	6242	Instructions regarding the temperature under which the cargo has to be transported	4	0	0	4				C	C	C								C							
Humidity percentage	6004	The measurement of the moisture in the air, measured as a percentage	2	0	1	1		O			C																
Package width	6098	Measure of the width of a package	2	0	1	1						C						O									
Customs Tariff Quantity Deduction	6032	Quantity to be deducted from the tariff quantity to calculate the duty/tax/fee assessment basis for Customs	1	0	0	1						C															
Package length	6096	Measure of the length of a package	1	0	1	0												O									
Quantity ordered	6024	The quantity which has been ordered	1	1	0	0								M													
Goods																											
Description of Goods	7002	Plain language description of the nature of a goods item sufficient to identify it for customs, statistical or transport purposes	14	11	2	1	M	O	M	M	M	C	M		M	M		M		M	M	M		O			

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Number of Packages	7012	Number of packages per goods item packaged in such a way that they cannot be divided without first undoing the package	11	8	0	3	M		M	M	M	C	C			C	M	M		M	M						
HS Code (Commodity Code)	7357	Code specifying a type of goods for Customs, transport or statistical purposes (generic term)	10	2	4	4	O	O		O	C	C	O		C			M		C	M						
Type of Packaging (UNCEFACT coded) and shipping marks	7065	Code specifying the type of packaging of an item	7	3	3	1	O			M	O	C			O			M		M							
Product identifier	7135	Reference number identifying a product	6	1	2	3	O		C		O	C		M	C												
Shipping Marks	7102	Free form description of the marks and numbers on a transport unit or package	5	2	1	2	O					C					M	C	M								
Consignment summary description	7004	Plain language description of a consignment in summary terms	4	3	0	1						C							M		M	M					
Dangerous Goods																											
Packaging, Danger Level, Code	8339	Code specifying the level of danger for which the packaging must cater	4	0	1	3				C	O				C					C							
Proper Shipping / Technical Name	7254	Proper shipping name, supplemented as necessary with the correct technical name, by which a dangerous substance or article may be correctly identified, or which is sufficiently informative to permit identification by reference to generally available literature	4	0	1	3				C	O	C			C												
Dangerous Goods Regulation Code	8273	Code specifying a dangerous goods regulation	3	0	1	2						C			O					C							
Dangerous goods, RID class number	8351	Identification of a hazard class applicable to dangerous goods as defined by the relevant regulation authority such as the IMDG Class Number of the SOLAS Convention of IMO and the ADR/RID Class Number for the road/rail environment	3	1	1	1					O	C				M											

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
UNDG Number	7124	United Nations Dangerous Goods Identifier (UNDG) is the unique serial number assigned within the United Nations to substances and articles contained in a list of the dangerous goods most commonly carried.	3	0	0	3				C		C			C												
Dangerous Goods Technical Name	7254	Proper shipping name, supplemented as necessary with the correct technical name, by which a dangerous substance or article may be correctly identified, or which is sufficiently informative to permit identification by reference to generally available literature	2	0	0	2									C					C							
Flashpoint temperature	7088	The value of the flashpoint of dangerous goods	2	0	0	2						C			C												
Lower Orange Hazard Placard ID	8186	The identity number for the lower part of the orange hazard placard required on the means of transport	1	0	0	1									C												
Upper Orange Hazard Placard ID	8158	The identity number for the upper part of the orange hazard placard required on the means of transport	1	0	0	1									C												
Transport modes, means and equipments																											
Transport means identifier	8212	Name of a specific means of transport such as the vessel name	12	7	1	4	O		C	M	M	C	C		M	M	M	C	M	M							
Vehicle registration number	8213	Identifier of a specific means of transport such as the International Maritime Organisation number of a vessel	11	5	1	5	O			M	M		C		M	M	C	C	C	C		M					
Transport Equipment Identifier	8260	Identifier of a piece of transport equipment e.g. container or unit load device	9	5	2	2	O			C	O	C			M	M	M		M	M							
Conveyance reference number/journey identifier	8028	Identifier of a journey of a means of transport, for example voyage number, flight number, trip number	8	5	1	2				M	O	C	C				M		M	M	M	M					
Container size and type	8155	Code specifying the characteristics, i.e. size and type of a piece of transport equipment	3	2	1	0	O				M									M							

Data element	UID	Description TDED	Count	"M"	"O"	"C"	CoO	INV	WR	PL	BoL	CD	CID	PO	CMR	CIM	SDO	SLI	SCM	SW	AW	ACM	CB	LC	BoE	PN	PC
Full or empty container	8169	Code specifying how full a piece of transport equipment is	3	2	0	1					M	C								M							
Mode of Transport	8067	Code specifying a mode of transport	2	1	1	0	O													M							
Transport equipment operator	3174	Party owning, operating or controlling the transport equipment, for example container	2	2	0	0															M	M					
Transport means at border crossing	8270	Identifier of the means of transport used in crossing the border out of the country of despatch for export or into the country of final destination for import	1	0	0	1						C															
Others																											
Seal Identifier	9308	The identification number of a seal affixed to a piece of transport equipment.	5	3	0	2					M	C			C		M		M								
Tax Regime Type.Code	9213	Code specifying a regime according to which tax is assessed such as preferential duty rate.	1	0	0	1						C															
			Count	28	25	10	24	56	70	25	18	68	9	15	29	17	30	23	9	7	16	36	35	7			
			"M"	7	10	7	13	18	0	14	8	19	9	12	15	15	20	20	9	7	7	11	10	5			
			"O"	21	15	1	5	30	0	4	9	32	0	2	5	1	4	3	0	0	9	22	22	2			
			"C"	0	0	2	6	8	70	7	1	17	0	1	9	1	6	0	0	0	0	3	3	0			

# Appendix A:

## Working group members

Associations/Standards bodies	User companies
Baltic and International Maritime Council (BIMCO)	BHP
Digital Container Shipping Association (DCSA)	Dangote
International Federation of Freight Forwarders Associations (FIATA)	DB Cargo
Global Legal Entity Identifier Foundation (GLEIF)	ExxonMobil
GS1	Finastra
International Air Transport Association (IATA)	HSBC
International Civil Aviation Organization (ICAO)	Inditex
International Chamber of Commerce (ICC)	Rio Tinto
International Credit Insurance & Surety Association (ICISA)	Santander
International Trade and Forfaiting Association (ITFA)	Secro
International Union of Marine Insurance (IUMI)	Shipping & Freight Resources
International Organization for Standardization (ISO)	Sucafina
Society for Worldwide Interbank Financial Telecommunication (Swift)	T3i Partner
United Nations Economic Commission for Europe (UNECE)	The World Bank
United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT)	
Universal Postal Union (UPU)	
World Customs Organization (WCO)	







The International Chamber of Commerce (ICC) is the institutional representative of more than 45 million companies in over 170 countries. ICC's core mission is to make business work for everyone, every day, everywhere. Through a unique mix of advocacy, solutions and standard setting, we promote international trade, responsible business conduct and a global approach to regulation, in addition to providing market-leading dispute resolution services. Our members include many of the world's leading companies, SMEs, business associations and local chambers of commerce.



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.

