

# 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.

## A—Commercial processes

### 1. Purchase Order (PO)

<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 Nodo Smistamento Ordini (NSO).</p> <p>Furthermore, the purchase order can hold legal significance akin to a contractual agreement.</p>
<b>Usage</b>	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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**United Nations Centre for Trade Facilitation and Electronic Business (UN/CEFACT):**

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.

**Universal Business Language (UBL):**

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.

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

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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**Platforms**

The exchange primarily depends on service providers and value-added networks. Additionally, private web portals and marketplaces are widely used.

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**Adoption**

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.

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**Other**

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.

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## 2. Commercial Invoice (INV)

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**Purpose**

A commercial document which consists of an itemised account of goods or services delivered, together with a demand for payment

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**Sender/receiver**

Sellers of goods and services/buyer of goods and services

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**Legal framework**

The legal framework is determined by the national laws applicable in each country.

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**Usage**

SWIFT [conducted a study](#) of cross-border payments with credit confirmations in the months of September and October 2020. The amount of cross-border payments on the SWIFT network for these two months was approximately 42 million. This of course includes B2B, B2C and C2C payments and excludes any payments that occur outside the SWIFT network. But it gives a starting point to understand the large volume of commercial invoices that are processed annually around the world.

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**Key standards**

There are a large amount of standards, some of which are conflicting. UN/CEFACT Cross Industry Invoice; ISO/IEC 19845:2015; GS1 EDI; European standard for eInvoicing (semantic model); PEPPOL (a set of technical specifications); ISO 20022 (metadata model); OFD format based on XML (data exchange format), a China-specific fixed format.

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**Major differences between standards**

There is a variance in standards for entity identification, date time stamps, country codes and currency etc., together with differing KDE definitions.

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There are a large number of eInvoicing platforms, with some of the major players including E-Fatura (Turkey); Factura Electronica (Peru); SimplerInvoicing (the Netherlands); CHORUS-factures (France) and Tradeshift (globally).

There are a number of platforms using the UBL format specifically. Beginning with the 2005 adoption of UBL for all public sector invoicing in Denmark (known as OIOUBL), UBL has become the foundation for a number of successful European public procurement frameworks, including EHF (Norway), Svefaktura (Sweden), ePrior (European Commission DIGIT), the National Health Service (UK), SimplerInvoicing (the Netherlands) and PEPPOL, the pan-European public procurement platform.

## **Platforms**

The PEPPOL community (OpenPEPPOL) serves government agencies and their suppliers from Austria, Denmark, France, Ireland, Italy, Norway, Poland, and Sweden through a network of over 100 Access Point all exchanging UBL conformant documents. Currently, there are OpenPeppol members in 41 countries in total. (32 countries in Europe plus Australia, Canada, China, India, Japan, Mexico, New Zealand, Singapore and USA). OpenPeppol has Certified Access Points in 29 European countries plus Australia, Canada, China, New Zealand, Singapore and USA, with Peppol Authorities placed in 17 countries. The European eInvoice Service Providers Association (EESPA) also recommends UBL for their Model Interoperability Agreement.

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Adoption of digital commercial invoices is at different states around the world. The EU mandates the implementation of eInvoicing in public procurement. Given that mandates issued by governmental bodies clearly have a huge impact on the level of adoption, some governments might also think about following suit.

Framing the problem: These documents largely depend on analogue processes. They must be printed and possibly stamped according to some jurisdictions, carried as legally valid original paper documents, and often endorsed by a state consulate.

## **Adoption**

There is also a large amount of conflicting standards, a lack of language codes for entity names and addresses, and difficulty translating invoice content into requirements for payment orders. There is currently an international initiative led by the Financial Stability Board (FSB) to enhance cross-border payments. In particular, this initiative addresses the lack of a global unique identifier for payment originators and beneficiaries (legal entities) in cross-border payments.

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**Adoption**

Finally, there are issues with the uptake of invoicing. The EU mandates the implementation of e-invoicing for public procurement, based on a receiving capability of invoices presented in the European standard in each member state. But the suppliers are not mandated to send invoices in a structured and electronic format, so contracting authorities can manage electronic invoicing, but often do not due to a low uptake.

- SDOs should ensure standards are open, internationally recognised and cost/benefit effective.
  - Governments should build on existing regulations, such as the EU's mandated e-invoicing for procurement to encourage suppliers to digitalise.
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**B—Transport processes****3. Shipper's Letter of Instructions (SLI)**

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**Purpose**

Otherwise known as Export Cargo Shipping Instruction, 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.

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**Sender**

Exporter/consignor, who provides instructions and information in respect to the instructions related to the shipment

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**Receiver**

Freight forwarder or logistics service provider

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**Legal framework**

There is no law, rule or regulation that mandates the issuance of this document, however, in practice it is issued for every transaction.

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**Usage**

While not mandatory for international trade, export instructions are frequently issued by consignors to freight forwarders through various electronic means, such as e-mail. This document plays a crucial role in logistics transactions between consignors, brokers or traders.

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<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 e-mail in formats such as PDF, DOC, or as plain text within the e-mail 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 SLIs several strategic steps can be taken:</p> <ol style="list-style-type: none"> <li data-bbox="528 1227 1364 1317"><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 data-bbox="528 1339 1364 1429"><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>

## 4. Packing List (PL)

<b>Purpose</b>	<p>A document which covers the physical delivery of goods from one physical site to another in line with a transport contract obligation</p>
<b>Sender/Receiver</b>	<p>Seller of goods and services/buyer of goods and services</p>

<b>Legal framework</b>	The B2B document in its primary usage is not subject to private and/or public laws.
<b>Usage</b>	There are no exact numbers available.
<b>Key standards</b>	UNCEFACT Buy-Ship-Pay (BSP) is the Global Supply Chain Reference Data Model used by key industry stakeholders.
<b>Platforms</b>	Any platform could be used as this is a B2B data exchange.
<b>Adoption</b>	Covered in the section “Cross-Cutting Recommendations”

## 5. Bill of Lading (BoL)

<b>Purpose</b>	A document to provide evidence of contract of carriage, confirmation of receipt for the goods; and/or a document of title
<b>Sender/Receiver</b>	An ocean carrier issues the final Bill of Lading, but the drafting process involves a freight forwarder or shipper too.  Presented to the nominated agent or office at destination in return for the goods.
<b>Legal framework</b>	There are some countries which have national legislation on bills of lading or multimodal transport.
<b>Usage</b>	Containerised ocean freight is estimated at 50 million per year.
<b>Key standards</b>	Key industry stakeholders have collaborated on and mapped their standards to the UN/CEFACT MMT Reference Data Model, such as BIMCO; DCSA; and FIATA.
<b>Major differences between standards</b>	The minor difference between the Bill of Lading standards is purely around the business use cases. For containerised freight movements the appropriate standard is DCSA; for Bulk Shipping BIMCO; and when freight forwarders act as a multimodal transport operator, FIATA eFBL.

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**Platforms**

For the electronic exchange of Bills of Lading in containerised ocean shipping, the platform provider must be approved by the International Group of Protection & Indemnity (IGP&I). As of September 2023, there are eleven approved platforms for the exchange of electronic Bills of Lading.

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**Adoption**

A lack of interoperability has in the past hindered development and growth in the uptake of electronic Bills of Lading (eBL), so adoption is currently very limited. However, through the contributions made by the various stakeholder groups there is now clear alignment between them using international standards.

The use of data standards is the key to creating interoperability, allowing Bills of Lading to be transacted at scale across multiple platform providers.

Part of the reluctance to adopt eBLs stems from uncertainty around their legal validity. Only a very small number of jurisdictions give electronic trade documents the same standing as their paper counterparts, which means commercial eBL solutions have had to get around this using contract law—whereby all parties essentially agree that the eBL is equivalent to a paper BL.

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## 6. Sea Waybill (SW)

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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 is 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.
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<b>Sender/Receiver</b>	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.
<b>Legal framework</b>	A Sea Waybill serves as evidence of the contract of carriage between the involved parties and acknowledges that the goods have been loaded.
<b>Usage</b>	Ocean carriers issue around 45 million Bills of Lading a year. Approximately 60% of Containerised Bills of Lading issued, that is 27 million, are now Sea Waybills.
<b>Key standards</b>	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).
<b>Major differences between standards</b>	<p>The difference in Sea Waybill standards primarily revolves around business use cases:</p> <ul style="list-style-type: none"> <li>• DCSA standard is used for containerised freight movements.</li> <li>• BIMCO standard is employed for bulk shipping.</li> <li>• Freight forwarders, acting as multimodal transport operators, use the FIATA waybill.</li> </ul>
<b>Adoption</b>	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.

## 7. Ship's Delivery Order (SDO)

**Purpose** A Ship's Delivery Order is a release document issued by the carrier releasing the cargo to the consignee mentioned in the Bill of Lading.

**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.

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

**Usage** It can be estimated that around 45 million Delivery Orders are issued annually.

**Key standards** Many Delivery Orders are still issued via e-mail 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.

**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.

## 8. Air Waybill (AW)

<b>Purpose</b>	An Air Waybill 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.
<b>Sender</b>	Usually, a forwarder acting as a representative of the shipper, or a shipper directly
<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.

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**Platforms**

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.

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.

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.

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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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## 9. Sea Cargo Manifest (SCM)

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**Purpose**

A Sea Cargo 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.

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**Sender**

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.

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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 a 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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## 10. Air Cargo Manifest (ACM)

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An Air Cargo Manifest serves various essential purposes in the air freight industry, including:

**Purpose**

- 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.

**Sender/Receiver**

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

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Flight manifests have a broad legal context that can vary by jurisdiction, cargo type, and regulatory bodies involved. Key legal considerations include:

#### Legal framework

- 1. Customs and border protection:** 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 authorities for ensuring that all goods are included in the cargo declaration or are brought to the attention of the Customs authorities in another authorised manner.
- 2. Transportation safety regulations:** 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.
- 3. International trade law:** When transporting goods between countries, manifests demonstrate adherence to international trade agreements, including tariff regulations, trade restrictions, and treaties.
- 4. Liability and insurance:** 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.
- 5. Security and anti-terrorism laws:** 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.

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.

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#### Usage

The International Air Transport Association (IATA) does not have statistics on the usages of electronic versions of the Flight Manifest.

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#### Key standards

e-Freight, including electronic Flight Manifest: <https://www.iata.org/en/programs/cargo/e/efreight/#tab-1>

The new generation Flight Manifest are part of the IATA ONE Record initiative: <https://www.iata.org/en/programs/cargo/e/one-record/>

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**Major differences between standards**

Requirements for Flight Manifests 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 the declaration/consignment level is the primary basis for cargo reports. 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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## 11. Rail Consignment Note (CIM)

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**Purpose**

The Rail 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.

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<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>	The Uniform Rules concerning the Contract of International Carriage of Goods by Rail (CIM UR) provide a legal basis for the electronic consignment note. They are 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).
<b>Adoption</b>	<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> <p>In general, it can be observed that in most member states of the Intergovernmental Organisation for International Carriage by Rail (OTIF) 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> <ol 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> </ol>

## 12. Road Consignment Note (CMR)

### Purpose

The Road Consignment Note plays a central role in the context of the UN Convention on the contract for the international carriage of goods by road (CMR Convention). 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.

Although CMR notes were traditionally paper-based, there is a growing push from businesses and government stakeholders to transition to an electronic format (e-CMR).

### Sender/Receiver

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).

Parties involved:

1. Transport services buyer (sender/consignor or consignee)—The buyer of transport services
2. Transport services provider (carrier)—The provider of transport services
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
4. Consignee—The party receiving a consignment of goods as stipulated in a contract of carriage by road (e-CMR)
5. Carrier/subsequent carrier—The party which provides transport services as stipulated in a contract of carriage by road (e-CMR)
6. Authorities—Any supervisory or controlling government bodies that carry out activities to control the movement of goods or make notes in accompanying documents

### Legal framework

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.

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.

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**Legal framework**

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-wide harmonised electronic format.

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**Usage**

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 on an annual basis.

The 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.

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**Key standards**

UN/CEFACT, in close collaboration with the International Road Union (IRU) has developed a business requirement specifications (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 renumarated transport of goods by road in compliance with the CMR and eCMR protocols.

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.

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**Platforms**

Any platform could be used as a business-to-business (B2B) and business-to-government (B2G) data exchange.

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**Adoption**

The users of the CMR expect the digital adoption of the document to increase when:

- regulations how to share the data with government authorities are harmonised.
- 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.

## 13. Cargo Insurance Document (CID)

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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## 14. Warehouse Receipt (WR)

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**Purpose**

A Warehouse Receipt is a document most commonly issued by a warehouse keeper, acknowledging the receipt of goods placed in a warehouse. It can also be used as a tool for financing and commodity trading, and can in certain cases also be used as collateral.

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**Sender/Receiver**

The creator or sender of the document is most commonly the warehouse keeper or owner of the warehouse in which the goods are stored, but in certain cases a contractual party such as a forwarder or transporter could also become a creator of the document. The receiver of the WR is the buyer or seller who has requested the goods be deposited in the warehouse.

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**Legal framework**

The specific legal framework of the WR is determined by the national laws applicable in each country. The FIATA Warehouse Receipt (FWR) is used in freight forwarders' warehousing operations, and is a standard document mainly used at national/territorial level. It too is subject to individual countries' laws, but there are also provisions regarding the activity of warehouse keepers in countries where forwarders use standard trading conditions.

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**Usage**

It is difficult to estimate the number of WRs in circulation, however it is very widely used in the commodity and agriculture markets. Millions of copies of the FIATA Warehouse Receipt, used in freight forwarders' warehousing operations, have been issued.

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**Key standards**

A FIATA WR is used by forwarders around the world and is a globally accepted document. It is adapted by each member country and is therefore issued as per the Standard Trading Conditions in each country.

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**Major differences between standards**

There are no major differences in standards, as the documents are issued in accordance with regulations or laws applicable in each country.

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**Platforms**

Currently, this document is being issued in a paper format, but individual organisations may also issue the same document in electronic format.

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**Adoption**

The use of Warehouse Receipts is limited in many developing countries because of institutional and structural shortcomings, among which the most prevalent are the following: lack of incentives for the development of a private storage industry owing to government intervention in agricultural markets; lack of an appropriate legal, regulatory, and institutional environment to support a system of Warehouse Receipts; and familiarity of the country's commercial, including its banking, community with warehousing receipts.

- Encourage the global adoption of the UNIDROIT Model Law on Warehouse Receipts once it is formally published
- SDOs, especially FIATA, should promote usage of WR at a national level by advising governments on how to adapt global standards for national purposes
- Increase familiarity of a country's commercial community with WRs, and incentivize the development of a private storage industry

Once digitalisation of the document is complete, greater awareness amongst trade actors of the digital WR can be achieved through either direct issuance from a TMS or software providers or through a common platform. Marketability to financial companies would also prove important, since the WR is often used in commodity futures.

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## 15. Dangerous Goods Declaration (DGD)

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**Document name**

Dangerous Goods Declaration (DGD)

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<b>Purpose</b>	<p>A DGD is used when shipping hazardous materials.</p> <p>By signing the declaration, the shipper confirms that the goods have been packaged, labelled, and declared according to the regulations. The declaration informs the carrier about the exact nature of the dangerous goods being shipped.</p> <p>Chapter 5.4 of the <a href="#">UN Recommendations on the Transport of Dangerous Goods</a> specifies the provisions for the mandatory documentation to be used during the transport of dangerous goods by all modes (air, maritime, road, rail and inland navigation). They allow the use of electronic data processing and electronic data interchange transmission as an alternative to paper documentation.</p> <p>As a matter of aviation safety, the International Civil Aviation Organization (ICAO) has developed a specific requirement for a transport document for dangerous goods transported by air.</p>
<b>Sender/receiver</b>	<p>Sender: supplier, shipper, logistic service provider, consignor</p> <p>Receiver: buyer, regulator, bank, government agency, operator, carrier, customs authority, consignee</p>
<b>Legal requirement</b>	<p>For carriage of dangerous goods by road and inland navigation, the recommendations of the UN Model Regulations are implemented through the <a href="#">Agreement concerning the International Carriage of Dangerous Goods by Road (ADR)</a> and the European <a href="#">Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways (ADN)</a> as well as those for rail through the Regulation concerning the <a href="#">International Carriage of Dangerous Goods by Rail (RID)</a>. Detailed provisions including a multimodal dangerous goods form are provided in Chapter 5.4 of these legal instruments.</p> <p>The air declaration is part of ICAO guidance on how states may comply with the standards and recommended practices of Annex 18—The Safe Transport of Dangerous Goods by Air to the Convention on International Civil Aviation (<a href="#">ICAO Doc 7300</a>). This guidance is fully detailed in the ICAO Technical Instructions for the Safe Transport of Dangerous Goods by Air (<a href="#">Doc 9284</a>). The declaration may be in hard copy or electronic.</p> <p>As a matter of public law, states may apply this ICAO guidance through their national regulations, giving them legal force.</p> <p>Regarding private law, consignors may be required to prepare a form certifying that the cargo has been packed, labelled and declared according with the International Air Transport Association (IATA) Dangerous Goods Regulations (DGR).</p>

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**Standards**

According to the [guidelines](#) on the use of RID/ADR/ADN 5.4.0.2, the electronic data exchange is allowed to satisfy the documentation requirements of Chapter 5.4, provided the procedure for capturing, storing and processing the data meet the legal requirements as regards evidential value and availability during transport in a manner at least equivalent to that of paper documentation. However, RID/ADR/ADN does not further define this equivalence.

The IATA e-DGD initiative was launched at the end of 2016.

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**Differences**

The UN Recommendations on the Transport of Dangerous Goods: Model Regulations lay down the provisions for required documentation in transport of goods by all modes and are aligned with the Convention on International Civil Aviation, specifically Annex 18 and the ICAO Technical Instructions For The Safe Transport of Dangerous Goods by Air (Doc 9284). However, IATA does not authorise the use of the multimodal forms—as permitted by the model regulations for transport—in the IATA Dangerous Goods Regulations, which are industry standards beyond the ICAO requirements.

Such exclusion of a multimodal solution in the contemporary operating environment yields duplication in documentation requirements that can impede multimodal transport of goods at a time when they are a growing trend. Eliminating this exclusion for air could simplify processes, considering the trend and enable more seamless sharing of safety-critical cargo information across the entire supply chain.

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**Platforms**

Cargo Community Systems (CCS) are the emerging platform for sharing DGDs and data from other relevant documents.

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**Data**

- Address and contact details of shipper and receiver
  - Emergency contact details
  - Proper shipping name of the dangerous goods (e.g. Acetone)
  - Quantity
  - UN number (e.g. UN 1090): The four-digit number that identifies the type of dangerous goods being shipped. It is found on the Safety Data Sheet (SDS) under section 14.
  - Class or division (subsidiary hazard)
  - Net weight of dangerous goods and total shipment weight (if required)
  - DG packing group I, II or III (if required)
  - Whether the dangerous goods are radioactive or not
  - Additional handling information (if required)
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**Adoption**

Increased digitalisation of regulators and authorities who require the document, as well as concomitant standards are necessary for increased digital adoption. An example is the European Commission, which is working now on the implementation of the Electronic Freight Transport Information Regulation (eFTI) and will use the MMT RDM—itself incorporating the DGD—as the common interface for multimodal data exchange. Emerging standards that could further increase digital adoption include verifiable credentials and other decentralised architectures.

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## 16. Consignment Security Declaration (CSD)

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**Document name**

Consignment Security Declaration (CSD)

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**Purpose**

The CSD is one of the regulatory tools used in the protection of air cargo and mail throughout its movement in the supply chain. It certifies that the cargo has been cleared in accordance with security programmes of regulated agents, known consignors, or aircraft operators. It is developed by the ICAO.

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**Sender/receiver**

The declaration is completed by the entity that makes the cargo secure: the known consignor, regulated agent, aircraft operator that originally issued the security status.

It is accessible to all parties in the supply chain.

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**Legal requirement**

This declaration is part of ICAO guidance on how states may comply with the standards and recommended practices of Annex 17—Aviation Security to the Convention on International Civil Aviation (ICAO Doc 7300), signed in Chicago on 7 December 1944. This guidance is fully detailed in the ICAO Aviation Security Manual (ICAO Doc 8973 — Restricted), 13.5.7.27 to 13.5.7.33. This same document provides the template in Appendix 33. The declaration may be in hard copy or electronic.

States may apply this ICAO guidance through their national regulations, giving them legal force.

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**Standards**

Existing digital standards include: IATA Cargo Interchange Message Procedures (IMP), IATA Cargo Extensible Markup Language (XML), IATA ONE Record as well as the Universal Postal Union (UPU) for airmail.

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**Standards**

IATA, working closely with other stakeholders, developed an electronic version of the CSD, the eCSD, similarly intended to provide a common international standard for cargo shipments. IATA adopted the eCSD in Resolution 651 as a universal standard that provides consignment information in accordance with the guidance provided in ICAO Aviation Security Manual (ICAO Doc 8973 — Restricted) and the regulatory requirements of the European Commission Implementing Regulation (EU) 2015/1998.

ICAO and UNECE have collaborated through the UN CEFAC to include the CSD in the Multimodal Transport Reference Data Model (MMT RDM). These standards enable interoperability between existing digital standards for the CSD through re-use of the data elements and are available as free-of-charge, public goods on the [UNECE website](#).

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**Differences**

The ICAO Aviation Security Manual provides the template for the CSD.

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**Platforms**

Cargo Community Systems (CCS) are the emerging platform for sharing CSDs and data from other relevant documents.

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**Data**

1. Regulated entity category (RA, KC or AO) and identifier
  2. Unique consignment identifier: The identification of the consignment itself must be entered. This may be an air waybill, a house bill or a mail consignment identifier.
  3. Contents of consignment
  4. Origin
  5. Destination
  6. Transfer/Transit points
  7. Security status
  8. Received from: The coded identification of the category (i.e. regulated agent RA, known consignor KC or aircraft operator AO) that tendered the consignment must be entered.
  9. Screening method
  10. Grounds for exemption
  11. Other screening method(s)
  12. Security status issued by
  13. Security status issued on
  14. Regulated entity category (RA, KC or AO) and identifier
  15. Additional security information
-

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**Adoption**

Increased digitalisation of regulators and authorities who require the document, as well as concomitant standards are necessary for increased digital adoption. An example is the European Commission, which is working on the implementation of the Electronic Freight Transport Information Regulation (eFTI) and will use the MMT RDM—itself incorporating the CSD—as the common interface for multimodal data exchange. Emerging standards that could further increase digital adoption include verifiable credentials and other decentralised architectures.

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## C—Border and regulatory processes

### 17. Export/import licence for agricultural products (EIL)

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**Document name**

Export/import licence for agricultural products

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**Purpose**

An export/import license for agricultural products (EIL) is a permit issued by a government agency that allows the holder to bring or to send a specific quantity of agricultural products into or out of a country.

- 1. Regulatory compliance:** It ensures that agricultural products comply with both the exporting and importing countries' regulations on quality standards, health and safety requirements, and other country-specific criteria.
  - 2. Market access:** The licence is often a prerequisite for market access.
  - 3. Trade control and monitoring:** Governments use export/import licences to control and monitor the flow of agricultural goods across borders. This helps in maintaining food security, managing supply chains, and preventing illegal trade practices.
  - 4. Trade policy implementation:** These licences are tools for implementing trade policies, including tariff rate quotas and preferential agreements.
- 

**Sender/receiver**

Issuers are government regulatory bodies responsible for agricultural, trade, and customs regulations.

Receivers include:

- Exporters/importers or individuals engaged in the trade of agricultural products.
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**Sender/receiver**

- Banks/financial institutions involved in facilitating international agricultural trade transactions require an export/import licence as part of their due diligence.
- Customs authorities in the importing country will review the licence to ensure that the agricultural products meet the necessary legal and regulatory requirements before allowing them into the country.
- Other regulatory agencies, for example, health or environmental agencies might need to be informed, especially if the products are subject to specific health or environmental regulations.

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**Legal requirement**

The export/import licence for agricultural products is typically subject to both public and private laws, depending on the country and the specific agricultural product in question.

- Many countries require an export/import licence for agricultural products under public law. This is often to regulate the trade of these products, ensure food safety, comply with health standards, and protect domestic agriculture industries.
- In some cases, private laws or industry standards might also play a role, especially when it comes to certifications related to organic farming, fair trade, or other specific agricultural practices. While these are not always legally required, they can be crucial for market access and consumer trust.

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**Usage**

The degree of digitalisation of licencing systems is country dependent. Some parts may already be automated, while others remain manual. The process of obtaining an export/import licence for agricultural commodities typically involves the application to and approval by governmental authorities.

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**Standards**

No known digital standard

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**Data**

1. Licence/permit number
2. Issuer name
3. Recipient name and (usually) address
4. Recipient ID code (licence holder number or national business number)
5. Date of authorisation
6. Valid from date
7. Valid to date
8. Commodity types
9. Authorising officer name (and possibly ID code)
10. Conditions (and maybe condition ID number)

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**Data**

11. Relevant legislation/regulation(s):
    - i. Issuer
    - ii. Title
    - iii. Issue date
    - iv. Section
  12. Commodity type, for which formal digitalisation would likely require:
    - i. Commodity classification scheme
    - ii. Descriptor
    - iii. Machine-readable code value
- 

**Adoption**

- 1. Harmonisation of legal frameworks:** Globally, different countries have diverse legal frameworks governing export/import licenses. A key step towards digitalisation would be the harmonisation of these legal frameworks. This includes aligning the legal requirements for issuing, using, and verifying these licences across different jurisdictions.
  - 2. Development of universal standards:** Establishing universal standards for the format, content, and security features of digital export/import licences, including establishing identity verification mechanisms, is crucial. These standards should be developed in collaboration with international organisations like the WTO and the FAO to ensure global applicability and recognition.
  - 3. Integration with existing digital systems:** Digital export/import licences should be integrated with existing digital trade platforms and systems. This includes connecting them with customs management systems, electronic single windows, and other trade facilitation platforms to streamline processes and enhance efficiency.
  - 4. Stakeholder engagement and capacity building:** Engaging all relevant stakeholders, including governments, exporters, importers, and regulatory bodies, is essential. This involves raising awareness about the benefits of digital licences and building the capacity of these stakeholders to use and manage digital systems effectively.
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## 18. Non-preferential Certificate of Origin (CoO)

<b>Purpose</b>	<p>A form which certifies expressly that a set of goods originated in a specific country. They are used in trade policy measures which are not related to the granting of tariff preferences. Note, the working group has specifically considered Non-Preferential CoOs, those that relate to rules of origin that are not linked to Free Trade Agreements. Non-Preferential CoOs are also used as part of a Letter of Credit or Call for Tender. Can also be used in the administration of the importer as proof of origin</p>
<b>Sender/Receiver</b>	<p>Sender: Varies between business-to-business (B2B) and business-to-government (B2G), but usually an exporter or authorised representative (e.g. freight forwarder). The issuing authority is usually a chamber of commerce.</p> <p>Receiver: Varies between B2B and B2G, but usually Bank and Buyer/Importer.</p>
<b>Legal framework</b>	<p>The main framework is provided by the WTO Agreement on Rules of Origin, and revised Kyoto Convention on Simplification and Harmonisation of Customs Procedures, but there are many laws that can influence the CoO. Sometimes there is no legislation involved, as when the importer is asking for the document as a part of internal origin procedures of the company.</p>
<b>Usage</b>	<p>More than 15 million documents a year, but there are no exact numbers available.</p>
<b>Major differences between standards</b>	<p>The layout of CoO's is mostly standardised, and there are no major differences between the definitions of different key data elements.</p>
<b>Platforms</b>	<p>Electronic CoOs are supported by the development of National Single Window services.</p>
<b>Adoption</b>	<p>Framing the problem: DSI's work suggests that most CoOs have the same lay-out, and in those countries where there are some additional boxes on the CoO this is not creating a blocking issue. There is also no blocker when it comes to thinking about key definitions (of exporter or applicant for example), since the CoO follows the other elements of the shipment.</p>

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So the question becomes around how to digitise. A challenge is that other parties require the CoO and establish sometimes their own requirements. For example, in the Netherlands, 500,000 CoOs are issued annually and 30,000 of them are going through an extra step with the Ministry of Foreign Affairs.

**Adoption**

Solutions could include:

- Continue to encourage the adoption of ICC guidance on digital procedures for issuing and attesting CoOs
- SDOs should raise awareness through standards guidance and asking chambers of commerce to encourage members to digitise.

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## 19. Preferential Certificate of Origin (PCoO)

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**Document name**

Preferential Certificate of Origin (PCoO)

**Purpose**

A Preferential Certificate of Origin (PCoO) is a document that certifies that goods in a particular shipment qualify for preferential tariff treatment under a specific Free Trade Agreement (FTA).

**Sender/Receiver**

The document is issued by a government agency in the exporting country, such as a chamber of commerce. It is sent by an exporter or authorised representative (e.g. freight forwarder).

The receiver of the document is usually the importer and the Customs authority of the importer country.

**Legal framework**

The overall framework is provided by the WTO Agreement on Rules of Origin, and the revised Kyoto Convention on Simplification and Harmonization of Customs Procedures. Every FTA has its own legal framework, the text/layout of the preferential CoO is described in the relevant FTA.

**Usage**

More than 15 million a year

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<b>Key standards</b>	<p>Most preferential CoOs have a similar layout.</p> <ul style="list-style-type: none"> <li>• <a href="#">ICC WCF Certificate of Origin Guidelines</a></li> <li>• <a href="#">Appendix I, II and III of Annex K of the Revised Kyoto Convention</a></li> <li>• <a href="#">UN/CEFACT</a></li> <li>• <a href="#">OASIS UBL</a></li> <li>• <a href="#">WCO Data Model</a></li> </ul>
<b>Differences</b>	<p>The layout of a PCoO is mostly similar, and there are no major differences between the definitions of different key data elements.</p>
<b>Platforms</b>	<p>In some countries, electronic CoO exchanges are enabled by National Single Window services.</p>
<b>Key data elements</b>	<ul style="list-style-type: none"> <li>• Document: CoO certificate number; additional numbers (LC number etc.)</li> <li>• Party: exporter—consignor (applicant); importer—consignee—to order (facultative); Certifying body (details of the issuing organisation including place and the date of issuance and authorisation)</li> <li>• Location: Origin of the goods</li> <li>• Transport: Particulars of transport details (facultative)</li> <li>• Goods: Marks and numbers; Number and kind of package; Description of the goods</li> <li>• Measure: Gross weight—quantity</li> <li>• Countries involved in the FTA</li> <li>• Number of the Customs declaration</li> <li>• Other information</li> </ul> <p>A CoO is connected to a shipment, therefore information about the exporter and description of the goods has to be the same as that used in other documents.</p>
<b>Adoption</b>	<p>Digitalisation must be allowed in the text of the FTA, which may be a long process.</p>

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<b>Document-specific challenges</b>	<p><b>Framing the problem:</b> The following challenges should be taken into consideration regarding the digitalisation of preferential CoO.</p> <ul style="list-style-type: none"> <li>• Legal framework: Achieving and concluding negotiation within the framework of an FTA with contracting parties to reach mutual agreement on the digital CoO, noting that e-COs will not be accepted without the agreement of importing countries. However, currently many of the FTAs do not include legal options for digital CoOs.</li> <li>• There are around 400 FTAs globally. Most countries do have more than one FTA. Digitalisation from a technical perspective is not that difficult in a single FTA. The difficulty is that solution A developed in FTA X might not work in FTA Y because the countries are not the same in both FTAs. The WCO is developing an Interconnectivity Framework for e-CoOs with the aim to streamline and harmonise the interconnectivity of e-CoOs at the global level.</li> <li>• Self-certification: In a lot of FTAs, self-certification is becoming the standard practice. Self-certification (invoice declaration) might be a an aspect that has an influence on the digitalisation of preferential CoO. For example, if the aim is to use only self-certification in most FTAs of a country, the focus will be on the promotion of self-certification instead of the development of an e-CoO.</li> </ul>
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<b>Document specific solutions</b>	<p>The main challenge will be the legal aspect. Many older FTAs do not have a provision to work with digital CoOs. If this legal aspect is not solved between contracting countries within an FTA, it is not an option to start the development of an e-CoO system.</p>
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## 20. Customs Declaration (CD)

<b>Purpose</b>	<p>A document to enable a declarant to indicate the customs procedure to be applied to the goods.</p>
<b>Sender/Receiver</b>	<p>A variety of actors, such as the declarant, exporter, importer, owner of the consignee, carrier etc./ Customs administration.</p>
<b>Legal framework</b>	<p>The legal basis for Customs and Goods Declarations is governed by the Revised Kyoto Convention on the Simplification and Harmonization of Customs Procedures/ General Annex Standard 3.6, 3.7, 3.8, 3.11. Also relevant is the WCO Recommendation on the use of the WCO Data Model (DM).</p>

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**Usage**

According to WCO Annual Report 2021/2022, there were 485.5 million Customs/Goods import declarations (of which 94.9% were digital) and 506.4 million export declarations (of which 95.5% were digital).

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**Key standards**

Standards are defined by the WCO Data Model, which also contains definitions for KDEs referring to the UN Trade Elements Directory (ISO-7372).

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**Major differences between standards**

There are no other major global standards.

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**Platforms**

WCO Data Model is a platform agnostic standard. Customs administrations may determine appropriate data exchange protocols for their Automated Customs systems.

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**Adoption**

Both the status of global adoption of the WCO DM and the adoption of the electronic Custom/ Goods Declaration appear in the WCO Data Model [www.wcoomd.org/DataModel](http://www.wcoomd.org/DataModel).

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## 21. CODEX Generic Model Official Certificate (CODEX)

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**Document name**

CODEX Generic Model Official Certificate

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**Purpose**

To describe and attest to attributes of consignments of food destined for international trade.

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**Sender/Receiver**

The certificate is issued by, or under the control of the exporting country's competent authority, including by a certifying body recognised by the competent authority to issue such a certificate.

The certificate is received by the competent authority of the importing country.

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**Legal requirement**

Official certificates are a legal requirement to ensure through attestations and essential information that food safety and/or fair practices in the food trade requirements are met.

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	<p>Paperless exchange of official certificates is the act of competent authorities or certifying bodies providing, receiving and archiving the identified information and relevant attestations required by the importing country in electronic form.</p>
<b>Usage</b>	<p>The capability for electronic exchanges of certificates is larger than the implementation of paperless exchange of certificates.</p> <p>A rough estimation based on the answers of the 25 countries which answered a recent OECD survey is that currently a maximum of 8% of the certificates has been covered by electronic exchanges. An unknown percentage of these exchanges is paperless.</p>
<b>Standards</b>	<p><a href="#">OFFICIAL CERTIFICATES, CXG 38-2001</a></p> <p><a href="#">UN/CEFACT Electronic SPS Certificate (eCert)</a></p> <p><a href="#">WCO Data Model</a></p> <p>LPCO package</p> <p>Codex Derived Information Package</p>
<b>Differences</b>	<p>Basically there are no differences.</p> <p>The generic reference model (which is extracted from the UN/CEFACT Electronic SPS Certificate, short eCert) of the Codex generic model official certificate has been the primary guidance for any data standardisation initiatives, including the updating the WCO Data Model Codex Derived Information Package.</p>
<b>Platforms</b>	<p>Exchanges are on bilateral G2G basis.</p> <ol style="list-style-type: none"> <li>1. The electronic certification system of the importing competent authority retrieves (the information is “pulled”) or receives (the information is “pushed”) certificates data directly from the electronic certification system of the exporting competent authority or certifying body through a web service interface (e.g. Simple Object Access Protocol, short SOAP).</li> <li>2. The electronic certification system of the exporting competent authority or certifying body provides certificates to the competent authority or to the certifying body of the importing country through Simple Mail Transfer Protocol (SMTP).</li> </ol>
<b>Data</b>	<p>See <a href="#">Generic reference model of the Codex generic model official certificate</a>.</p>

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**Adoption**

Identification of automation needs for SPS-certification systems in a single window environment at the national level and consideration of the appropriate expansion of use of digital technologies for the capability to electronic exchange SPS certificates through single window interoperability.<sup>1</sup>

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**Other**

Examine the potential for further contributions from relevant international organisations to the identification of appropriate digital technological solutions to facilitate international paperless exchanges of health certificates in a single window environment.<sup>2</sup>

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## 22. Phytosanitary Certificate (ePhyto)

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**Document name**

Phytosanitary certificate (ePhyto)

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**Purpose**

To attest that consignment meets phytosanitary import requirements and is undertaken by a national plant protection organisation (NPPO)

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**Sender/Receiver**

The phytosanitary certificate is issued by the exporting country's NPPO official authority.

The certificate is received by the NPPO official authority of the importing country.

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**Legal requirement**

There are legal requirements for phytosanitary certificates when importing or exporting plants and plant products. These requirements are in place to protect against the spread of harmful pests and diseases across borders.

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**Usage**

More than 5,000,000 electronic phytosanitary certificates (ePhyto) have been exchanged in a productive environment since its implementation in 2020. Monthly exchange average: 200,000 ePhytos.

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**Standards**

[IPPC ePhyto Solution](#)

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1 OECD (2021), "Digital opportunities for Sanitary and Phytosanitary (SPS) Systems and the trade facilitation effects of SPS Electronic Certification", OECD Food, Agriculture and Fisheries Papers, No. 152, OECD Publishing, Paris, <https://doi.org/10.1787/cbb7d0f6-en>.

2 Ibid.

<b>Differences</b>	No differences. All implementations use IPPC Standard 17A
<b>Platforms</b>	Multilateral (HUB-IPPC), Regional (IOPACK Pacific Alliance), Bilateral (G-to-G)
<b>Data</b>	<a href="#">IPPC ePhyto Solution</a>
<b>Adoption</b>	Dissemination and training
<b>Other</b>	Examine the potential for further contributions from relevant international organisations to the identification of appropriate digital technological solutions to facilitate international paperless exchanges of health certificates in a single window environment. <sup>3</sup>

## 23. International Veterinary Certificates (WOAH)

<b>Document name</b>	<p>International veterinary certificates of the World Organisation for Animal Health (WOAH):</p> <ul style="list-style-type: none"> <li>• Veterinary certificate for international trade in live animals and hatching eggs</li> <li>• Veterinary certificate for international trade in oocytes, embryos or semen</li> <li>• Veterinary certificate for international trade in products of animal origin</li> <li>• Veterinary certificate for international trade in bees and brood combs</li> <li>• Veterinary certificate for international movement of dogs, cats and ferrets originating from countries considered infected with Rabies</li> <li>• Veterinary certificate for international trade in laboratory animals</li> </ul> <p>Passport for international movement of competition horses</p>
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<sup>3</sup> OECD (2021), "Digital opportunities for Sanitary and Phytosanitary (SPS) Systems and the trade facilitation effects of SPS Electronic Certification", OECD Food, Agriculture and Fisheries Papers, No. 152, OECD Publishing, Paris, <https://doi.org/10.1787/cbb7d0f6-en>.

<b>Document name</b>	<p>International aquatic animal health certificates:</p> <ul style="list-style-type: none"> <li>• Health certificate for international trade in live aquatic animals and gametes</li> <li>• Health certificate for international trade in products of aquatic animal origin</li> </ul>
<b>Purpose</b>	<p>To assure that commodities introduced into the importing country comply with the standards of the WOA. H.</p>
<b>Sender/receiver</b>	<p>The veterinary certificate is issued by the exporting country's veterinary authority and received by the veterinary authority of the importing country.</p> <p>The aquatic animal health certificate is issued by the exporting country's certifying official authorised by the competent authority and received by the competent authority of the importing country.</p>
<b>Legal requirement</b>	<p>International veterinary certificates, issued in accordance with Chapter 5.2. of the Terrestrial Code, describes the animal health and public health requirements that are fulfilled by the exported commodities.</p> <p>International aquatic animal health certificates, issued in conformity with the provisions of Chapter 5.11. of the Aquatic Code, describe the aquatic animal health and public health requirements that should be fulfilled prior to export of commodity.</p>
<b>Usage</b>	<p>A rough estimation based on the answers of the 25 countries which answered a recent OECD survey is that currently a maximum of 8% of the certificates has been covered by electronic exchanges. An unknown percentage of these exchanges is paperless</p>
<b>Standards</b>	<ul style="list-style-type: none"> <li>• <a href="#">Section 5, Veterinary certification (chapters 5.1, 5.2, 5.10-5.13) of the Terrestrial Animal Health Code</a></li> <li>• <a href="#">Section 5, Health certification (chapters 5.1, 5.2 and 5.11) of the Aquatic Animal Health Code</a></li> <li>• <a href="#">UN/CEFACT Electronic SPS Certificate (eCert)</a></li> <li>• WCO Data Model, LPCO package, WOA. H Derived Information Package (WCO work expected to start in 2024)</li> </ul>



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**Adoption**

- Identification of automation needs for SPS-certification systems in a single window environment at the national level and consideration of the appropriate expansion of use of digital technologies for the capability to electronic exchange SPS certificates through single window interoperability.<sup>4</sup>

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**Other**

Examine the potential for further contributions from relevant international organisations to the identification of appropriate digital technological solutions to facilitate international paperless exchanges of veterinary and aquatic animal health certificates in a single window environment.<sup>5</sup>

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## 24. CITES Permit / Certificate (CPC)

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**Document name**

CITES permits and certificates (CPC)

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**Purpose**

With these documents, the issuing authority confirms that the conditions for authorising the trade in species listed in the the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES), parts or derivatives thereof, are fulfilled. This means that the trade is legal, sustainable and traceable in accordance with Art. III, IV and V of the convention. It aims to ensure that international trade in specimens of wild animals and plants does not threaten their survival.

The types of permits and certificates include the Export Permit, Import Permit, Introduction from the Sea Certificate, Re-Export Certificate, Certificate of Origin and special provisions of the convention (Pre-Convention Certificate, Musical Instrument Certificate etc.).

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**Sender/receiver**

Issuer: [CITES Management Authority](#) with supporting information from the CITES Scientific Authority when required by the convention.

Sender or receiver: traders (exporter, importers), zoos, academic institutions, research bodies etc.

Customs or border control authorities need to have access to the ePermitting system.

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4 OECD (2021), "Digital opportunities for Sanitary and Phytosanitary (SPS) Systems and the trade facilitation effects of SPS Electronic Certification", OECD Food, Agriculture and Fisheries Papers, No. 152, OECD Publishing, Paris, <https://doi.org/10.1787/cbb7d0f6-en>.

5 Ibid,

<b>Legal requirement</b>	<p>Articles <a href="#">III</a>, <a href="#">IV</a>, <a href="#">V</a>, <a href="#">VI</a> and <a href="#">VII</a> of the CITES</p> <p>Stricter domestic laws and measures, or simplified procedures under the convention may be followed for the issuance of CITES permits or certificates.</p>
<b>Standards</b>	<p>There are two data models. The mapping between the CITES implementations in the two data models enables B2G and G2B data exchanges to be shared efficiently.</p> <ul style="list-style-type: none"> <li>UN/CEFACT Reference Data Models: The CITES ePermit data model subset is based on the UN/CEFACT Buy-Ship-Pay global supply chain reference data model.</li> <li>WCO Data Model: The data model is based on the WCO Data Model version 3.11.</li> </ul> <p>The CITES ePermitting data models are available in CITES Electronic Permitting Toolkit Version 3.0, available in <a href="#">English</a>, <a href="#">French</a> and <a href="#">Spanish</a>. The class diagrams and the schemas are also available in <a href="#">html</a>.</p> <p>The description of CITES Permits and Certificates and the Standard CITES Form are available in <a href="#">Resolution Conf 12.3 (Rev CoP19) on Permits and Certificates</a>.</p>
<b>Differences</b>	<p>UN/CEFACT BSP Data Model defines its semantics from the perspective of the global supply chain which supports the B2B data as well as the B2G data across trade, transport and cross-border management.</p> <p>WCO defines all the semantics in its data model from the perspective of the cross-border agency regulatory processes thereby supporting G2G and G2B data exchange requirements.</p>
<b>Platforms</b>	<p>There are no global platforms for exchanging eCITES permits and certificates.</p> <p><a href="#">Species+ API, developed by UNEP-WCMC</a>, provides the up-to-date lists of species in the CITES Appendices including details of quota, suspension etc. This API can be integrated with ePermitting systems.</p>
<b>Data</b>	<p>Mandatory information (data elements) that should be included in CITES permits and certificates are available in Annex 1 of the <a href="#">Resolution Conf 12.3 (Rev CoP19) on Permits and Certificates</a>.</p> <p>Under normal procedures, all data elements are required. However, under Exemption and other special provisions (<a href="#">Article VII</a> of the Convention), or in case of stricter domestic measures by countries additional information or conditions may apply.</p>

<b>Platforms</b>	<p>The adoption of digitalisation for the CITES permit/certificate could increase by:</p> <ol style="list-style-type: none"> <li>1. improving the capacity and resources of the CITES Management Authorities to implement and manage the ePermit systems;</li> <li>2. enabling the interoperability of ePermit systems with other national systems like National Single Windows;</li> <li>3. increasing the collaboration among Management Authorities and Customs or border control authorities.</li> </ol>
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## 25. Certificate of Inspection for Organic Products (CIO)

<b>Document name</b>	Certificate of Inspection for Organic Products (CIO)
<b>Purpose</b>	<p>The CIO ensures the organic products imported into the country conforms to internationally recognised standards for organic product life cycle i.e. growing, production, processing, animal raising practices, pest and weed control, and compliant with applicable laws/organic standards of the countries.</p>
<b>Sender/Receiver</b>	<p>The certificate is generated by third party certification agencies accredited under the organic standards of Participatory Guarantee Systems (PGS). The International Federation of Organic Agriculture Movements, short <a href="#">IFOAM</a>—Organics International, supports PGS that certify producers based on active participation of stakeholders. They are built on a foundation of trust, social networks and knowledge exchange.</p> <p>The certificate is a mandatory document for exporting and importing countries certifying that products grown and produced are organic as per the organic standards of the country.</p>
<b>Legal requirement</b>	<p>CIO is a mandatory custom document. The products are allowed to be exported or imported only when a certificate issued by the certification agency confirms compliance under the country organic standards.</p>
<b>Usage</b>	<p>The documents are issued in paper and digital form. Currently, various countries are using the certificate issued through digital channel i.e. Trade Control and Expert System (TRACES)—EU and Tracenet—India etc. it will be difficult to estimate the number of documents issued in paper and/or digital form in a year.</p>

<b>Standards</b>	<p>The technical standards are linked to the specific standard of the country of import. For example:</p> <ul style="list-style-type: none"> <li>• US National Organic Program (NOP), from USDA Organic Regulations 7 CFR Part 205</li> <li>• European Regulation (EU), from EC 834/2007 &amp; 889/2008</li> <li>• Japan Agricultural Standards (JAS)</li> <li>• India National Standards for Organic Products (India NSOP)</li> <li>• Canadian Organic Standards</li> <li>• China—National Organic Standard GB/T19630-2019</li> <li>• IFOAM</li> </ul>
<b>Differences</b>	<p>There are no major differences between certificates of inspection for organic products required by various countries except specific national standards along basic details common to all CIO.</p>
<b>Platforms</b>	<p>The integrated statistical tool TRACES—EU allows the extraction of valuable data in relation to imports into the EU, exports from the EU and intra-Union trade.</p> <p>Tracenet is a platform offered by APEDA (India) for facilitating process certification of export of organic products from India which comply with the National Programme for Organic Production (NPOP).</p>
<b>Data</b>	<ul style="list-style-type: none"> <li>• Organic standard</li> <li>• Issuing certification body</li> <li>• Importer</li> <li>• Exporter</li> <li>• Product exported from</li> <li>• Import certificate number</li> <li>• CoO</li> <li>• Country of export</li> <li>• Country of destination</li> <li>• Harmonized Tariff Code</li> <li>• Marks and numbers</li> <li>• Container number and kind</li> <li>• Trade name of the product</li> <li>• Invoice number</li> <li>• Bills of Lading number</li> <li>• Vessel name</li> <li>• Product name</li> <li>• Total net weight</li> </ul>
<b>Adoption</b>	<p>The major hurdles encountered are the legal, technical and regulatory environment of the country. To enable adoption, there should be harmonisation of standards among various countries. IFOAM has been upfront in promoting harmonisation and equivalence in organic agriculture since 2002.</p>

## 26. Customs Bond (CB)

<b>Purpose</b>	Customs Bonds are usually used as guarantee for exemptions of foreign trade duties, taxes and obligations set out under Custom rules and Regulations.
<b>Sender/Receiver</b>	Sender (Principal): Declarant—exporter, importer. Receiver (Beneficiary/Obligee): Customs administration (Government). Surety (Guarantor): Insurance company issuing the bond on behalf of the principal.
<b>Legal framework</b>	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.
<b>Usage</b>	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.
<b>Key standards</b>	Customs Bonds do not adhere to a universal template; instead, each country's customs authority typically provides bond wordings. 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. 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.
<b>Platforms</b>	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> ).

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<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>
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## 27. ATA Carnet (ATA)

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<b>Document name</b>	ATA Carnet
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<b>Purpose</b>	<p>The ATA Carnet (ATA) is an international customs document that permits duty-free and tax-free temporary import of goods for up to one year. Using an ATA Carnet, goods—mainly professional equipment, exhibition and fair goods, and commercial samples—can be declared in multiple countries/customs territories using one unified document. Import duties and taxes temporarily exempted are secured by an ATA Carnet International Guaranteeing Chain (ATA Chain) administered by the International Chamber of Commerce’s World Chambers Federation (ICC WCF). The term “ATA” is a combination of the initial letters of the French words “Admission Temporaire” and the English words “Temporary Admission”.</p>
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<b>Sender/Receiver</b>	<p>ATA Carnets are issued worldwide by guaranteeing and issuing associations approved by national customs authorities and affiliated with the ICC WCF ATA Chain.</p> <p>The target users of the ATA Carnet are companies or individuals sending or carrying goods for overseas missions. It can also be used by their representatives.</p>
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<b>Legal requirement</b>	<p>The ATA Carnet procedure including the template of the document is governed by international conventions, namely the <a href="#">Customs Convention on ATA Carnets for the Temporary Admission of Goods</a> (ATA Convention) and / or the <a href="#">Convention on Temporary Admission</a> (Istanbul Convention). National laws also apply where the conventions remain silent. The document is a facility (thus not mandatory).</p>
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<b>Usage</b>	<p>ATA Carnets are accepted in approximately 80 countries/customs territories. More than 200,000 documents are issued per year, equivalent to at least 800,000 transactions per year.</p>
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**Standards**

The ICC WCF, through its World ATA Carnet Council (WATAC), has been responsible for the administration of the ATA Chain since 1963 and leading the digitalisation of ATA Carnets (eATA) in cooperation with the WCO. A digital ATA Carnet system has been made available by ICC.

Following the end of eATA pilot phase on 30 June 2023, the eATA project entered its global transition preparation phase. The global transition kick-off is scheduled to start in early 2025, and the ATA Carnet procedure is expected to go fully digital by 2027.

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**Platforms**

The ICC ATA Carnet system, a comprehensive real-time lifecycle management system, features a centralised database that connects with other components, creating a network that efficiently handles carnet data for various users. This system is divided into two system interfaces and three user interfaces, catering to the specific needs of different ATA Carnet stakeholders such as an ICC ATA Carnet app (ACA) for carnet holders, and ICC ATA Carnet Customs (ACC) for customs officials.

The system's functionality is straightforward yet robust: Holders order carnets online through National Issuing and Claims Systems (NICS) integrated with the ICC ATA Carnet system. They download them onto a smartphone app (ACA), and use QR codes for transactions at border crossings. Customs officials can scan these QR codes to access detailed carnet information, confirm transactions, and manage potential claims using ACC. This process ensures secure and efficient handling of carnets, enhancing the ease of international business transactions.

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**Data**

- Carnet holder Information: name and address.
  - Representative
  - Intended use
  - Countries/customs territories to use
  - Carnet number
  - Issuing association and guaranteeing association
  - Issuing date and place
  - Expiration date: The validity of the carnet.
  - Goods description: Detailed description of the goods being transported, including their quantity, value, weight/volume, country of origin, and any relevant serial numbers or identifiers.
  - Additional declarations and signatures
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**Data**

- Declaration date and place
  - Final date of re-exportation (given by Customs at the time of declaration)
  - Final date of re-importation (given by Customs at the time of declaration)
  - Customs remarks
- 

**Adoption**

To increase the digital adoption of the ATA Carnet, it is essential to have proper support from the WCO, the Taxation and Customs Union Directorate-General of the European Commission, and other national customs authorities, i.e. contracting parties to the ATA/Istanbul Conventions.

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## 28. TIR Carnet (TIR)

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**Document name**

TIR Carnet

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**Purpose**

A TIR Carnet is an internationally recognised customs document used to facilitate the movement of goods across borders by road freight transport. It acts as both a transit declaration and a security guarantee, simplifying and standardising customs procedures and ensuring the payment of all duties and taxes.

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**Sender/Receiver**

The TIR Carnet document is issued by national associations affiliated with the International Road Transport Union (IRU), the guaranteeing organisation for the TIR system.

The primary users of the TIR Carnet are transport companies involved in the international movement of goods by road and Customs authorities of contracting parties to the TIR Convention, 1975.

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**Legal requirement**

The legal instrument the [Customs Convention on the International Transport of Goods under Cover of TIR Carnets \(TIR Convention\), 1975](#), an international treaty administered by the UNECE.

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**Usage**

TIR Carnets are accepted in 78 countries/customs territories. As of 2019, the IRU reported that over 3 million TIR Carnets were issued annually worldwide.

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**Standards**

In 2003, the contracting parties to the TIR Convention launched the [eTIR project](#) to fully computerise the TIR procedure.

The aim of the project, and in particular the eTIR international system, was to ensure the secure exchange of data between national customs systems for the international transit of goods, vehicles or containers according to the provisions of the TIR Convention and to allow customs to manage the data on guarantees, issued by the guarantee chain to authorised users of the TIR system.

The standard is based on the WCO SAFE Framework of Standards and the WCO Data Model.

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**Platforms**

There is no IT platform for the TIR Carnet. However, the fully digitised TIR mechanism it is managed by the eTIR international system. Once fully implemented, the TIR Carnet document will be replaced by the accompanying document under the eTIR procedure.

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**Data**

- Issuing organisation
  - Validity date
  - Holder of the TIR Carnet
  - Containers identification
  - TIR Carnet reference number
  - Customs office of departure
  - Country of departure
  - Country of destination
  - Registration number of road vehicles
  - Identification marks or numbers of packages or articles
  - Number of packages
  - Description of goods
  - Gross weight
  - Seals or identification marks
  - Customs office departure date
  - Route
  - Customs office of departure or of entry en route
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**Adoption**

The eTIR project is in the early stage of adoption. Some countries have launched pilots projects that proved successful. Information about the eTIR project is available on the [eTIR website](#).

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**Other**

It is the aim of the UNECE and the TIR secretariat to continue to provide a well-functioning international mechanism to further improve cooperation and coordination among contracting parties to the TIR Convention and the transport industry. The legal framework is continuously discussed at its respective governing bodies where contracting parties to the TIR Convention raise aspects to ensure the TIR transit system operates in a streamlined manner and to ensure the TIR transit system is always in line with the requirements of the transport industry and the Customs authorities alike. The UN is the depositary of the TIR Convention and provides the framework and services to administer and, where necessary, adapt the TIR Convention to changing requirements.

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## 29. Transit Accompanying Document (TAD)

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**Document name**

Transit Accompanying Document (TAD)

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**Purpose**

A TAD is used in international trade for goods moving through one or more countries without being cleared for import or export in those transit countries.

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**Sender/Receiver**

In most cases, the customs office at the starting point of the goods' transit journey, issues the TAD. Alternatively, a consignor can be authorised to issue TADs themselves under specific conditions.

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**Legal requirement**

The TAD is based on the Common Transit Convention (CTC), an international treaty that governs the movement of goods under customs control. The CTC and any amendments are legally binding for member countries.

The New Computerised Transit System (NCTS) is an IT system that is mainly used for handling the common transit procedure (CTP) and the national transit procedure (NTP). The primary legal basis for the NCTS in the EU is Regulation (EC) No 2454/93, which lays out the rules and procedures for using the system.

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**Usage**

As of 2023, the European Commission reported over 100 million NCTS declarations annually.

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<b>Standards</b>	<p>The standards specifying the TAD are primarily set by two international organisations:</p> <ul style="list-style-type: none"> <li>• WCO: The WCO Transit Guidelines outline best practices and recommended data elements for the document</li> <li>• EU: For member states, EU regulations establish specific requirements for the TAD. <a href="#">EU Regulation (EC) No 414/2009</a> specifies the format and content of the TAD used within the EU's common transit procedure.</li> </ul>
<b>Platforms</b>	<p>The NCTS is used for all transit goods passing through transit on the way to the importing country/final destination in the EU.</p>
<b>Data</b>	<ul style="list-style-type: none"> <li>• TAD unique reference number</li> <li>• Customs office of departure</li> <li>• Customs office of destination</li> <li>• Description of goods: type, quantity, and weight.</li> <li>• Commercial value of goods</li> <li>• Harmonized System (HS) code</li> <li>• Planned route</li> <li>• Means of transport</li> <li>• Seals and security measures</li> <li>• Type of guarantee</li> <li>• Guarantee amount</li> <li>• Guarantee holder</li> <li>• Consignor and consignee details</li> <li>• Authorised person</li> </ul>
<b>Adoption</b>	<p>In the EU, the NCTS is mandatory for intra-EU transit movements.</p> <p>Outside the EU, there is a mix of eTAD and paper TAD usage depending on specific countries and regional agreements.</p>
<b>Other</b>	<p>Transports Internationaux Routiers (TIR) is based on an international agreement, not EU regulations, and is not part of Union or Common Transit.</p>

## 30. Advance Ruling Application (ARA)

**Document name** Advance Ruling Application (ARA)

**Purpose**

This document is used to apply for a written decision issued by a competent authority which provides the applicant with an assessment of:

- the classification of goods in the Customs tariff nomenclature of the respective country or Customs territory;
- origin of the goods,
- or the treatment which should be applied on a certain element for the determination of the Customs value,

prior to an import or export transaction, for a specified period.

**Sender/Receiver**

The applicant seeking advance ruling is an importer, exporter, producer or any person with a justifiable cause or a representative thereof.

The competent authority is the Customs administration or designated body responsible for the issuance of advance rulings.

**Legal requirement**

[Article 3.1 of the WTO Trade Facilitation Agreement](#) outlines that each Member shall issue an advance ruling in a reasonable, time bound manner to an applicant that has submitted a written request containing all necessary information.

Standard [9.9 of the General Annex to the Revised Kyoto Convention](#) outlines that the Customs shall issue binding rulings at the request of the interested person, provided that the Customs have all the information they deem necessary.

The [WCO Recommendation on Introduction of the programmes for binding pre-entry classification information \(1996\)](#).

**Standards**

The WCO developed technical guidelines outline all necessary information reasonably required to process a request for assessment of the classification, origin of the good or valuation.

There is not a single, universal electronic standard for advanced ruling applications. However, many countries have implemented electronic filing systems for various tax and customs rulings. In addition, some regional trade agreements have specific procedures for requesting advance rulings, some with electronic components.

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<b>Data</b>	<ul style="list-style-type: none"> <li>• name and address of the applicant</li> <li>• detailed description of the goods</li> <li>• classification of goods envisaged</li> <li>• legal basis for the classification of the goods</li> <li>• whether the advance ruling required is for preferential or non-preferential purposes</li> <li>• composition of the goods</li> <li>• documents available on the composition of the goods and their component materials</li> <li>• conditions enabling origin to be determined</li> <li>• description of the nature of the transaction(s), e.g., contract, terms of sale, etc.</li> </ul>
<b>Adoption</b>	Several WCO Members have implemented digital solutions, e.g., online application system.

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## 31. Excise Guarantee (EG)

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<b>Document name</b>	Excise guarantee (EG)
<b>Purpose</b>	EGs are financial instruments that ensure the payment of excise duties on specific goods, such as alcohol, tobacco, and certain energy products. In international trade, an EG helps protect the financial interests of the importing country by ensuring that it can collect the due excise duties in case the importer fails to comply with tax obligations. This guarantee is particularly relevant in scenarios where goods are moved under suspension of excise duty, meaning the duty is deferred until the product reaches its final destination or is consumed.
<b>Sender/Receiver</b>	An EG is typically created by the importer or exporter (the party responsible for paying the excise duties) and is directed towards the government agency or customs authority responsible for regulating and collecting excise duties in the country where the goods are being imported or exported. The EG acts as a form of financial assurance that the government will receive the due taxes and duties for the traded goods.

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**Sender/Receiver**

Banks or financial institutions may also be involved in providing or underwriting the EG, especially when the value of the goods and the corresponding duties are significant. This arrangement helps to mitigate the financial risk for both the trading parties and the government authority involved in the transaction.

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**Legal requirement**

The requirement for an excise guarantee is typically mandatory under the laws of most countries, particularly for the import or export of goods subject to excise taxes. The conditions under which an excise guarantee is required vary depending on the jurisdiction and the specific type of product being traded.

Example: Excise goods that are moving within the UK, or between the EU and Northern Ireland, in excise duty suspension must be covered by financial security in the form of a movement guarantee. It is the consignor's responsibility to make sure that a valid movement guarantee is in place, with detail of the guarantee recorded on the appropriate movement documentation prior to the goods being dispatched in duty suspension.

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**Standards**

The standards for EGs are typically established by national government authorities and agencies responsible for customs and excise regulations within each country.

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**Data**

This document typically includes key data elements such as:

- Guarantor information: Name and contact details of the entity providing the guarantee.
  - Importer/exporter information: Name and details of the company or individual responsible for the import/export of goods.
  - Description of goods: Detailed information about the goods being imported or exported, including type, quantity, and value.
  - Excise duty amount: The specific amount of excise duty that the guarantee covers.
  - Validity period: The time frame during which the guarantee is valid.
  - Terms and conditions: Specific conditions under which the guarantee is applicable.
  - Signatures and endorsements: Signatures of authorised persons and any necessary official endorsements.
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**Adoption**

- 1. Standardisation and harmonisation:** Develop and promote a common digital standard or template for EGs that are harmonised across different countries and regions.
  - 2. Regulatory support and legislation:** Engage with government and regulatory bodies to ensure that digital EGs are legally recognised and enforceable.
  - 3. Integration with existing systems:** Ensure that the process of issuing and managing EGs is integrated with existing digital trade and customs platforms. This includes compatibility with National Single Window systems and other digital customs management tools.
  - 4. Enhanced security measures:** Implement robust security protocols to ensure the authenticity and integrity of digital EGs.
  - 5. Awareness and training:** Conduct awareness campaigns and training programmes for stakeholders, including businesses, customs officials, and financial institutions, to encourage the adoption of digital processes and educate them about the benefits and functionalities of digital EGs.
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## 32. Administrative Documents used in the Excise Movement Control System (EMCS)

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**Document name** Administrative documents used in the Excise Movement Control System (EMCS in the EU, or equivalent)

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**Purpose** The EMCS in the EU, including the UK, primarily revolves around the monitoring and control of movements of excise goods under duty suspension within the EU. The ECMS utilises digital administrative documents such as the Electronic Accompanying Document (eAD) and the Simplified Accompanying Document (SAD). These documents are integral to the movement and control of excisable goods, with the eAD being used for goods under excise duty suspension and the SAD for duty-paid products.

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**Sender/Receiver** These documents are typically created by:

- Suppliers or manufacturers: For movements of excise goods under duty suspension, the supplier or manufacturer of the goods is often responsible for creating and submitting the required excise documents such as the eAD in the EU's EMCS.
- Warehouse keepers: In cases where goods are moved from an excise warehouse, the warehouse keeper may be responsible for creating the necessary documentation, such as the SAD for duty-paid products.

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<b>Sender/Receiver</b>	<p>The targets or recipients of these documents usually include:</p> <ul style="list-style-type: none"> <li>• Regulatory or government agencies: Specifically, Customs and excise authorities who oversee the movement of excise goods and ensure compliance with regulations.</li> <li>• Carriers and logistic service providers: They may receive these documents as part of the logistics and transportation process, ensuring they are transporting goods in compliance with excise regulations.</li> </ul> <p>Other parties like buyers, banks, or other financial institutions might also be involved in the process, particularly in scenarios where the movement of goods is linked to financial transactions or trade financing.</p>
<b>Legal requirement</b>	<p>The administrative documents used in the EMCS are subject to public laws and are legally required in the EU to ensure that the movement of excise goods is monitored and controlled, helping to prevent fraud and ensuring that all necessary duties are paid.</p> <p>The two main types of documents in this system are:</p> <ol style="list-style-type: none"> <li>1. eAD: This document is used for the movement of excise goods under duty suspension. It contains essential information about the movement, including details of the sender, receiver, and goods being transported. The eAD is a legal requirement and ensures that excise goods are properly monitored from the point of dispatch to the point of receipt within the EU.</li> <li>2. SAD: This document is used for the movement of duty-paid excise goods. Like the eAD, it contains information about the sender, receiver, and the goods but is used when the goods have already had duty paid on them.</li> </ol>
<b>Usage</b>	<p>More than 190,000 economic operators currently use the ECMS</p>
<b>Standards</b>	<p>The EMCS is a computerised system that tracks and monitors the movement of excise goods within the EU to ensure proper excise duty compliance. The system involves the exchange of various administrative documents to facilitate the movement of excise goods and ensure accurate record-keeping.</p>
<b>Platforms</b>	<p>The EMCS is specific to the EU and is used for the movement of excise goods like alcohol, tobacco, and energy products. It streamlines and secures the process of excise goods movement across the EU member states, ensuring that all necessary duties and taxes are accounted for and paid where applicable.</p>

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	Key functionalities of the EMCS include:
<b>Platforms</b>	<ol style="list-style-type: none"> <li>1. Electronic processing and monitoring of excise goods movements.</li> <li>2. Providing an online system for traders to submit and receive notifications related to the movement of excise goods.</li> <li>3. Ensuring that excise goods are accompanied by an eAD during their movement under duty suspension.</li> <li>4. Enabling real-time tracking of excise goods and immediate notification of any irregularities or changes in their movement.</li> <li>5. Allowing customs and excise authorities to electronically verify and control the movement of excise goods.</li> </ol>

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<b>Data</b>	See example from the <a href="#">UK guide</a> which has data element details for the eAD.
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<b>Adoption</b>	<ul style="list-style-type: none"> <li>• Providing APIs or other means of integration between the ECMS and business software used by the relevant industries.</li> <li>• Adapt and pilot the EMCS model in different global regions, tailoring it to meet specific local legal and regulatory requirements. This approach involves modifying the system to align with each region's unique excise goods control framework while maintaining its core functionalities. Implementing pilot programs in interested countries will demonstrate the system's effectiveness in diverse settings, providing valuable insights for its broader deployment and ensuring its flexibility and relevance across various jurisdictions.</li> </ul>
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## D—Financial processes

### 33. Letter of Credit (LC)

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<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. An 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.

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<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 an LC can vary depending on the jurisdiction and the specific terms and conditions of the LC.
<b>Usage</b>	Cross-border LCs are mainly issued using the Swift network. 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 LCs in international trade. Additionally, the Swift network, particularly its Category 7—Documentary Credits standards, serves as the primary technical framework for handling LCs 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).
<b>Major differences between standards</b>	<p>The main issue is that while the SWIFT standard aligns with UCP 600 for issuing 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.</p> <p>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.</p>
<b>Platforms</b>	<p>Various platforms facilitate the exchange of LCs:</p> <p>Bank to bank:</p> <ol style="list-style-type: none"> <li><b>1. Swift:</b> 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.</li> </ol>

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	Corporate to bank:
<b>Platforms</b>	<ol style="list-style-type: none"> <li><b>1. Bank proprietary channels:</b> 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.</li> <li><b>2. Multi-bank platforms:</b> 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.</li> <li><b>3. APIs:</b> 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.</li> </ol>

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	Increasing the digital adoption of LC would require a combination of:
<b>Adoption</b>	<ol style="list-style-type: none"> <li><b>1. Standardisation:</b> The adoption of common standards for the digital exchange of LCs 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 LCs.</li> </ol>

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## 34. Payment Confirmation (PC)

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<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 the Swift network.

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**Key standards**

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>

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**Platforms**

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.

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**Other**

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.

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## 35. Bill of Exchange (BoE) and 36. Promissory Note (PN)

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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 (BoE) is a written order directing a person to make a specific payment to a named payee.

Both PN and BoE 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**

PNs are instruments issued directly by the payor to the payee i.e., there is no additional drawer. BoEs 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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6 An MX is an XML message definition for use on the Swift network. Most MX messages are also ISO 20022 messages.

7 A Message Text (MT) 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>Legal framework</b>	<p>Both instruments, PNs and BoEs, 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>PNs and BoEs are used around the globe in paper and digital forms. It is expected that the change in English law referenced above allowing possession and control of a digital asset will expand the usage of PNs and BoEs.</p>
<b>Key standards</b>	<p>The ITFA Digital Negotiable Instruments (DNI) Initiative has developed an electronic payment undertaking (ePU) standard to fully digitise BoEs and PNs.</p>
<b>Major differences between standards</b>	<p>There are no major differences between different standards for PNs and BoEs 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 BoE 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 PNs and BoEs and their usage in existing or new platforms around the globe.</p>