

# Standard for the Bill of Lading

A roadmap towards eDocumentation

December 2020

# **Purpose**

This document provides the DCSA standard for the Bill of Lading as applied in container shipping. It also includes standards for the processes of preparing and issuing a Bill of Lading regardless of the channel used, i.e. physical or digital (the latter is referred to as the eBL). The standard also applies to the Sea Waybill.



# **Table of contents**

Ac	eronyms, and abbreviations	3
Pr	eface	4
1	Introduction	
	1.1 Standardisation of the Bill of lading	
	1.2 Scope of this publication	
2	Documentation process	7
	2.1 End-to-end documentation process	
	2.2 B/L process maps	
3	B/L standards and definitions	10
	3.1 Definitions of general terms related to the preparation and issuance of a B/L	10
	3.2 Definitions of B/L data fields	10
	3.3 Information model, Interface standards & API specifications	1
4	Journey towards eDocumentation	13
	4.1 Stakeholders	13
	4.2 Roadmap	14
	4.3 Call to action	14
Αŗ	pendix	15
	1. B/L Data field definitions and references	15
Tc	ıbles	
Ta	ble 1: Acronyms and abbreviations	3
Ta	ble 2: Description of relevant process steps	S
Ta	ble 3: B/L Data field definitions and references	38
	gures	
	gure 1: End to end documentation process	
Fiç	gure 2: Standardised B/L form data fields	11



## Acronyms, and abbreviations

Abbreviation	Term
B/L	Bill of Lading
eBL	Electronic Bill of Lading
r/c	Letter of Credit
ICC DSI	International Chamber of Commerce Digital Standards Initiative
eUCP600	Electronic Uniform Customs Practice 600
MLETR	Model Law on Electronic Transferrable Records
SI	Shipping Instructions
SD	Store Door
СУ	Container Yard
CFS	Container Freight Station
ICI	Less than Container Load
FCL	Full Container Load
ВВ	Break Bulk
TD	Transport document

Table 1: Acronyms and abbreviations

The definitions of terms used in this document can be found in the Glossary of Terms (GoT 3.0).



### **Preface**

DCSA envisions a digitally interconnected container shipping industry. Our mission is to be the de facto standards body for the industry, setting the technological foundation for interoperable IT solutions. Together with our member carriers, DCSA creates vendor-neutral, technology-agnostic standards for IT and non-competitive business practices. By working towards the widespread adoption of these standards, our aim is to move the industry forward in terms of customer experience, efficiency, collaboration, innovation, and respect for the environment.

Please refer to the DCSA website, https://dcsa.org/about/ for more information.

### Legal disclaimer

Copyright 2020 Digital Container Shipping Association (DCSA)

Licensed under the Apache License, Version 2.0 (the "License"); you may not use this file except in compliance with the License. You may obtain a copy of the License here: <u>License</u>

Unless required by applicable law or agreed to in writing, software distributed under the License is distributed on an "AS IS" BASIS, WITHOUT WARRANTIES OR CONDITIONS OF ANY KIND, either express or implied. See the License for the specific language governing permissions and limitations under the License.



### 1 Introduction

### 1.1 Standardisation of the Bill of lading

The Bill of Lading (B/L) has been and still is one of the key documents in international trade. The first written B/L dates back to Italy in 1564. But the B/L was invented centuries before the first written version became available. The core function of a B/L has always been to provide:

- Evidence of contract of carriage
- Confirmation of receipt for the goods
- A document of Title

Today, the B/L still serves these purposes. As a document of title (also termed negotiable document), the B/L is transferrable between parties based on rules in international trade law and local contract law. Unfortunately, electronic means of transferral are currently not recognised, which means the B/L must be printed to be legally valid.

B/L standardisation, and with that, the opportunity for digitalisation, must address regulatory change. The aim is a much more efficient and low-cost end-to-end documentation process, with less risk of fraud and human error, which will result in an improved customer experience.

The electronic version of the Bill of Lading (eBL) will enable all these benefits. The first attempt at creating an eBL was in the 1990s. However, research shows that today, only 0.1% of B/Ls are issued electronically. The global pandemic has exposed the urgent need for change.

DCSA's aim for standardisation and digitalisation of the B/L (and broader eDocumentation) is:

To implement digital standards and help drive regulatory changes, working towards a fully automated documentation process and paperless trade in container shipping, including:

- A fully digitised shipment documentation process
- A regulatory foundation for the adoption of eBL
- · Security standards for enabling the digital transfer of title documents
- Digitised supporting documents and certificates

Standardisation and digitalisation of the B/L comes with many challenges and stakeholder requirements to address. One key question is to how to transfer the core functions of the B/L to a digital format with functional equivalence, without jeopardising International trade customs and practices.

### 1.2 Scope of this publication



This publication is a first step in enabling digitalisation of the B/L. It provides the DCSA standard for the B/L as applied in container shipping. This document also includes standards for the processes of preparing and issuing a B/L regardless of the channel used, i.e. physical or digital (when using a digital channel, the B/L is referred to as the eBL). The standard also applies to the Sea Waybill. This publication will consistently use the term B/L when referring to all types, unless otherwise stated.

This publication is about setting standards for B/L data definitions as well as defining an industry blueprint for how to prepare and issue a B/L. The standard is thus applicable to both the physical B/L as well as its digital equivalent. It is the first step in mapping an end-to-end, standardised documentation process that can be digitalised. As such, this document includes:

- An outline of the end-to-end documentation process
- Process maps related to preparing and issuing a B/L, including amendments
- General definitions of terms related to the B/L
- An overview of mandatory, conditional & optional B/L data fields
- B/L data field definitions (semantic and data-specific) aligned with UN/CEFACT

Additionally, the DCSA standard for the B/L also includes the following technical elements (addressed in separate documentation):

- Updated Information model containing all data entities and attributes related to preparing and issuing a B/L
- B/L interface standards (expected in January)
- B/L API specifications (expected in January)



### 2 Documentation process

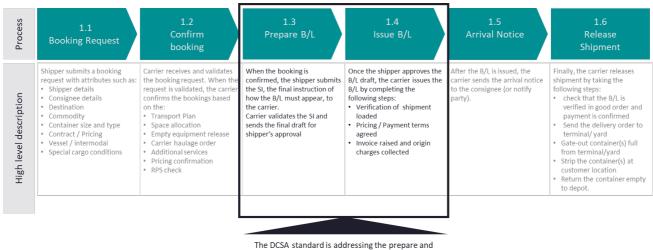
This chapter describes in detail the Documentation process, as well as details of the process maps for preparing and issuing a B/L.

### 2.1 End-to-end documentation process

The end-to-end documentation process concerns all necessary steps in the documentation process required for a shipper to transport goods from A to B. The time-consuming and manual nature of this process makes it a clear candidate for standardisation and digitalisation.

Since the B/L is the main output of the documentation process, the two process steps related to this are natural starting points for standardisation. However, given that most B/L data originates from earlier steps in the process, a holistic approach is needed. The remaining processes will be covered in subsequent publications.

The high-level steps of the end-to-end documentation process are described in figure 1 below.



issue B/L processes

Figure 1: End to end documentation process

The focus of this publication is to provide standards for the Prepare and Issue processes. The pain points associated with these processes are identified below:

- Physical handover of documents is resource-intensive, time-consuming and difficult, and has become a bottleneck during the COVID-19 pandemic.
- International couriering of the physical documents adds time and costs for the customer when exchanging a B/L between shipper and consignee (or notify party).
- The end-to-end documentation process is manual, error prone and labour-intensive, and, as such, costly to both customers and carriers.
- The manual security mechanism of a physical B/L increases the risk of fraud (e.g. security paper/barcoding).



• Lack of standards with regards to identifying parties causes trade compliance risks.

These pain points were used as a starting point for standardising the B/L process maps.

## 2.2 B/L process maps

As part of this publication, the process maps for preparing and issuing the B/L have been updated in the <u>DCSA Industry Blueprint (IBP 3.0)</u>. Two additional process maps have been defined to address amendments prior to and after B/L issuance.

The steps in the process maps (in scope this publication) are described in Table 2 below:

Process step	Involved players	Description
1.3 Prepare B/L (transport document)	Carrier, Customer/Shipper , and customs	<ol> <li>The shipper prepares the Shipping Instructions (SI).</li> <li>The carrier receives, checks for missing or incorrect information, and requests the information from the customer if required.</li> <li>The carrier processes and validates the SI.</li> <li>The carrier creates a draft B/L and sends it to the customer/shipper for review and approval. In case the draft is incorrect ('no approval'), the customer provides additional information.</li> <li>Once the customer/shipper approves the cargo descriptions on the B/L, the B/L is prepared – end.</li> </ol>
1.3.1 Amendments prior to issuance	Carrier and Customer/Shipper	<ol> <li>The customer submits the required amendments.</li> <li>The carrier receives and reviews the amendment request. Based on this review, the carrier checks whether it is possible to make the amendments.</li> <li>In case it is not possible, the carrier informs the customer, and the process stops. In case it is possible, the carrier proceeds with making the amendments to the B/L and calculates and applies the charges for the customer</li> <li>When the amendments are made, the carrier issues the B/L - end.</li> </ol>
1.4 Issue B/L (transport document)	Carrier and Terminal	<ol> <li>The vessel departs from the port, and the terminal sends the equipment loading report.</li> <li>The carrier receives the loading confirmation and confirms the equipment load status.</li> <li>The carrier confirms the payment condition and issues the B/L – end.</li> </ol>



## 1.4.1 Amendments after issuance

# Carrier and Customer/Shipper

- 1. The customer submits the required amendments.
- 2. The carrier receives and reviews the amendment request. Based on this review, the carrier checks whether it is possible to make the amendments.
- In case it is not possible, the carrier informs the customer, and the process stops. In case it is possible, the customer surrenders the original documents to the carrier.
- 4. The carrier receives and verifies the full set of original documents and proceeds with making the amendments to the B/L.
- 5. The carrier calculates and applies the charges related to making the amendments to the B/L and issues the B/L end.

Table 2: Description of relevant process steps

A detailed view of these process maps can be found in the DCSA Industry Blueprint 3.0.



### 3 B/L standards and definitions

In addition to the standardised processes, the core of the DCSA standard for the B/L consists of the following building blocks:

- Definitions of general terms related to the preparation and issuance of a B/L
- Definitions of BL data fields including a stipulation of whether the fields are mandatory, conditional, or optional per process step
- Interface standards and API specifications

The standards are technology agnostic, open source and readily accessible. The definitions, interface standards and API definitions should facilitate adoption to quickly achieve DCSA standard-compliant B/L processes. This will improve the end-to-end documentation process both from a customer and supplier perspective.

## 3.1 Definitions of general terms related to the preparation and issuance of a B/L

The first building block, the general terms of the B/L, are established to enable semantic interoperability and ensure a common vocabulary. As such, these terms and acronyms, including definitions, are included in the DCSA Glossary of Terms 3.0 (GoT).

### 3.2 Definitions of B/L data fields

The second building block of the DCSA B/L standard includes:

- B/L data fields aligned with UN/CEFACT
- B/L data field definitions
- B/L data field input format.

The standardised B/L includes the fields as shown in figure 2. The data definitions can be found in appendix 1. The definitions of these fields are included in version 3.0 of the <u>Glossary of Terms</u>.



Category				Data fields			
Party	Shipper	Consignee	Notify party	Also notify	Shipper forwarding agent	Consignee forwarding agent	Forwarding agent reference number
Purty	Freight payer	SCAC code	Tax ID / LEI	Address	Phone	Email / Fax	Consignee reference number
Transport document	Date of issue	Place of issue	Transport document number	Number of original B/Ls	Transport document issuer	Signature	Onboard date
document	Terms & conditions	Received for shipment date	Disclaimer	Transport document type	Number of B/L copies		
	Place of Receipt	Port of Loading	Port of Discharge	Place of Delivery	Declared value	Service Type	Shipment terms
Shipment	Onward inland routing	Precarried by	Export reference number	Point and country of origin of goods	Carrier booking number		
Vessel	Vessel	Voyage number					
Cargo item	Marks & numbers	Description of goods	Measurement	Total number of containers or packages received by the Carrier	HS code	Cargo Gross Weight	Reefer Humidity
	Unit	Part load indicator	Reefer Temperature setting	Reefer ventilation			
Shipment equipment	VGM	Total container weight	Container tare weight	Container type	Container number		
Seal	Seal number	Seal source					
Charges	Prepaid amount	Collect amount	Freight & charges	Prepaid/ collect	Freight payable at	Currency	
Carrier clauses	Carrier clauses						
Booking	Service contract	Commodity					

Figure 2: Standardised B/L form data fields

As briefly explained in section 2.1, the B/L data originates in preceding process steps (1.1 Booking request and 1.2 Booking confirmation and Shipping Instructions). Each data field in the DCSA B/L standard includes a stipulation as to whether the field is mandatory, conditional, or optional, per process:

- **Mandatory**, i.e. this data field must be completed and used. An example 'Shipper'. Details in this data field are mandatory in every process as part of the documentation process.
- **Conditional**, i.e. depending on certain conditions, a data field must be completed and used. An example is 'Onward inland routing'; this data field is used only when onward transport is done by the customer. The conditions are included in the detailed overview.
- **Optional**, i.e. it is optional to be completed and used, at the discretion of the party involved. An example is the 'Also notify' data field; the shipper may or may not want to use this field.

The complete overview can be found in appendix 1.

### 3.3 Information model, Interface standards & API specifications

The third building block of the DCSA B/L standard consists of three elements that enable the data standards:



- DCSA B/L Information model, as part of DCSA IM 3.0 (including Track & Trace and Operational Vessel Schedules)
- DCSA B/L Interface standards
- DCSA eBL API specifications

Both the DCSA Information Model as well as the DCSA B/L Interface Standards can be found on DCSA.org (expected in January). The API specifications can be found on SwaggerHub (expected in January).



### 4 Journey towards eDocumentation

The DCSA B/L standard is the first step towards a standardised and digitalised end-to-end documentation process, i.e. eDocumentation. As other industries have gone through similar changes, it is to be expected that the adoption of the eBL will take time. Many factors influence (the speed of) adoption. Based on initial research and analysis, all stakeholder groups appear to be in favour of transforming the industry into a digitally enabled environment.

#### 4.1 Stakeholders

DCSA is collaborating with various stakeholders in global trade to address the following topics:

- 1. The financial industry (Banks, ICC, trade finance platforms etc.) to ensure:
  - DCSA B/L standards alignment with the eUCP600 standards
  - · Adoption of digital transfer of documents by trade institutions
  - Standardised global identification of legal entities
  - Trade compliance simplification (with sanctioned or embargoed commodities and/or parties) across international stakeholders
- 2. **eBL solution providers** (P&I approved) to ensure:
  - Standardisation of bylaws (required by eBL solution providers to adopt their eBL solutions) to meet trade law requirements
  - System/platform interoperability across providers so that a B/L can be seamlessly transferred between platforms
- 3. Regulatory bodies to ensure:
  - MLETR adoption across country jurisdictions
- 4. Customs authorities to ensure:
  - Manifest submissions continue to meet customs requirements from both a trade security and tariff assessment perspective
  - Further electronic enablement of Manifest submission
- 5. **Customers** to ensure:
  - Customer requirements and needs are consistently being considered and addressed
- 6. Standardisation bodies (UNECE, GS1 and others) to ensure:
  - Semantic interoperability, i.e. alignment on terms and definitions driving common understanding
  - Technical interoperability, i.e. alignment of information/reference data models
- 7. Fintech platforms to ensure:



• DCSA B/L standards alignment with current solutions

### 4.2 Roadmap

As stated before, many factors influence (the speed of) adoption. In addition to continuing collaboration with stakeholders (as described in chapter 4.1), DCSA will undertake the following activities in 2021 to support widespread industry adoption of eBL:

- Standardise B/L terms and conditions to ease trade compliance across industry stakeholders
- Standardise clauses requested by shippers (e.g. to be stowed under deck, clean onboard or other clauses to accommodate local trade practices) to enable automated validation of SI's
- Standardise the booking request and confirmation process, as part of the end-to-end documentation process
- Standardise arrival notification & shipment release processes, as part of the end-to-end documentation process
- Standardise security guidelines for the issuance of the eBL and seek IGP&I approval to ensure insurance coverage for carriers
- Establish guidelines for authentication and authorisation (in line with IGP&I) to address digital endorsement of a B/L (functional equivalence)
- Extend the DCSA standard for B/L to cover refrigerated cargo, dangerous goods, and specials
- Standardise insurance, trade finance or L/C certificates issued by carriers and validate with banks whether the certificates are required
- Standardise certificates issued by authorities, such as certificates of origin or phytosanitary certificates

### 4.3 Call to action

DCSA invites all stakeholders to participate in the journey towards paperless trade by signing up to our project via <a href="DCSA.org/contact">DCSA.org/contact</a>. We also encourage feedback from all industry stakeholders that are working on (e)B/L or have ideas about digitalising and standardising the B/L with the aim of achieving paperless trade.

# Appendix



## 1. B/L Data field definitions and references

#	Field	UN Assigned ID	Current definition of field	Data input format	1.1 Booking request	1.2 Booking confirmation	1.3 Prepare B/L	Conditions (if applicable)	1.4 Issue B/L
1	Transport document Issuer	UN00001809	Issuing container shipping line (carrier).	Entity Name, Address, Phone, Fax, Website, Issuer ID (e.g. SCAC Code).	Mandatory	Mandatory	Mandatory		Mandatory
2	Shipper	UN00001807	Any person or legal entity by whom or in whose name, or on whose behalf, a contract of carriage of goods by sea has been concluded with a carrier, or any person by whom or in whose name, or on whose behalf, the goods are actually delivered to the carrier in relation to the contract of carriage by sea.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID.	Conditional	Conditional	Mandatory	Can be left blank until submission of SI if booking party (Shipper forwarding agent) is provided at time of booking request	Mandatory
3	Consignee	UN00001808	The party to whom a cargo is consigned under a contract of carriage or a transport document or electronic transport record. It can be the end receiver.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID, to order identifier.	Optional	Optional	Conditional	For 'to order' B/L, the consignee is blank	Conditional

	,	1	,	_
,		•	1	dcsc

							· · ·	,	
4	Freight Payer	N/A	The party responsible for settling payment of freight to the carrier.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID, to order identifier.	Mandatory	Mandatory	Mandatory		Mandatory
5	Notify party	UN00001818	The person or company to be advised by the carrier upon arrival of the goods at the destination port.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID.	Optional	Optional	Optional	Only when a notify party is provided and in case of a 'to order' B/L	Conditional
6	Also notify	UN00001818	A party (person or company) who should also be notified of the arrival of the cargo along with Notify party.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID.	Optional	Optional	Optional		Optional

	,			_
,	1	11	1	dcsa
-		<u>/</u> , •		

7	Shipper Forwarding Agent	UN00001811	A company that acts as an agent for other companies, and is involved in the collection, shipment, and delivery of goods.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID.	Optional	Optional	Optional		Optional
8	Consignee Forwarding Agent	UN00001811	A company that acts as an agent for other companies, and is involved in the collection, shipment, and delivery of goods.	Company name, physical address (should be provided in structured format, but can be printed as unstructured to match L/C requirement), person contact name, email or fax, phone and LEI or Tax ID.	Optional	Optional	Optional		Optional
9	Place of Receipt	UN00005799	The location where the cargo is handed over by the shipper, or his agent, to the shipping line. This indicates the point at which the shipping line takes on responsibility for carriage of the container.	Physical location dependent on mode of transport and/or UN Locode	Conditional	Conditional	Conditional	Only when pre- carriage is done by the carrier	Conditional (see column I)

	,		/	_
,			1	dcsc
			11	4000

							<b>*</b> • • • • • • • • • • • • • • • • • • •	,	
10	Port of Loading	UN00001829	The location where the cargo is loaded onto a first sea-going vessel for water transportation.	Port location international naming standard and UN Locode	Mandatory	Mandatory	Mandatory		Mandatory
11	Port of Discharge	UN00001830	The location where the cargo is discharged from the last sea-going vessel.	Port location international naming standard and UN Locode.	Mandatory	Mandatory	Mandatory		Mandatory
12	Place of Delivery	UN00002979	The location where the cargo is handed over to the consignee, or his agent, by the shipping line and where responsibility of the shipping line ceases.	Physical location, naming according to local standards and/or UN Locode.	Conditional	Conditional	Conditional	Only when onward transport is done by the carrier	Conditional (see column I)

	,	1	<b>≠</b> .		_
,		•		1.	dcsa

							· · · · · · · · · · · · · · · · · · ·	<u> </u>	
			The location where the cargo is	Physical location, naming according	Optional	Optional	Conditional	When onward	Conditional (if
			transported from port of discharge to	to local standards				transport is done	requested by
			consignee location on consignee's					by customer	shipper)
			responsibility (merchant haulage).						
13	Onward inland	UN00003141							
13	routing	UNUUUU3141							
			Indicates the type of service offered at	CY/CFS/SD code	Mandatory	Mandatory	Mandatory		Mandatory
			the place of receipt or place of delivery.	Specify export and import (origin-					
			The options are	destination), e.g., CY / CY, CY / SD.					
			- CY or container yard (incl. rail ramp)						
			where the carrier takes ownership of a						
			fully stuffed container provided by the						
			customer at the carrier/carrier's						
			appointed supplier's facility (usually						
14	Service Type	UN00001327	called terminal or depots)						
'	Service Type	01100001327	- SD or store door, indicating that the						
			carrier is taking ownership of a fully						
			stuffed container at the customer's						
			appointed premises.						
			- CFS or container freight station,						
			indicating that the carrier has received						
			the cargo and is responsible for						
			stuffing of the cargo within the						
			container.						

	,			_
,		•	1	dcsc
,				

				- FCL stands for "Full Container Load"	Shipment terms always have two	Mandatory	Mandatory	Mandatory	,	Mandatory
				and means that the Shipper /Consignee or its agent or	components:"(I)/(II)" where (I) refers to the loading of the cargo into the					
				subcontractor is responsible for	Container and (II) to the unloading of					
				stuffing/stripping the cargo into/out of	the cargo out of the Container.					
				the container and who bears every responsibility /liability in such respect.	LCL/FCL for example means that the cargo was stuffed into the Container					
		Shipment Terms		- LCL stands for "Less than Container	by the Carrier but unloaded by the					
1	15	(FCL, LCL and BB)	UN00002091	Load" and means that it is Carrier or its	Consignee.					
		(FCL, LCL dild BB)		Agent or subcontractor who is						
				responsible for stuffing/stripping the cargo into/out of the container and						
				who bears every responsibility /liability						
				in such respect.						
				- BB stands for "Break Bulk" - indicating						
				that the carrier has received the cargo which is not containerised.						
				A floating, sea going (mother vessels	The name of the first sea going	Mandatory	Mandatory	Mandatory		Mandatory
				and feeder vessels) structure with	vessel on board which the cargo is					
				either an internal or external mode of propulsion designed for the transport	loaded or intended to be loaded.					
				of cargo and/or passengers. Ocean						
				vessels are uniquely identified by an						
1	16	Vessel	UN00001326	IMO number consisting of 7 digits, or alternatively by their AIS signal with an						
				MMSI number.						
				A carrier-specific voyage identifier.	Alphanumeric identifier	Mandatory	Mandatory	Mandatory		Mandatory
1	17	Voyage Number	UN00002040							

	1	<b>/</b> ,		_	
,			1	dcs	٢
•			11	400	_

18	Marks and Numbers	UN00001279	The identifying details on a package or the actual markings that appear on the package(s). This information is provided by the customer.	Any text the shipper wishes to add.	Optional	Optional	Mandatory	Optional
19	Description of goods	UN00001708	The details that accurately and properly describe the cargo being shipped in the container(s) as provided by the shipper.	Text describing the goods which may contain the number of cartons, bags, pallets, or other units packed in the Container(s).	Optional	Optional	Mandatory	Mandatory
20	Commodity	n/a	A high-level description of goods to be shipped which allows the carrier to confirm acceptance and commercial terms. To be replaced by "description of goods" upon submission of shipping instruction	Text describing the goods being booked for transportation	Mandatory	Mandatory	N/A	N/A

	,	1		_
,		11	1	dcsc
		<u>/</u> 1		

21	HS code	UN00004997	The Harmonised System is an international nomenclature for the classification of products. It allows participating countries to classify traded goods on a common basis for customs purposes. At the international level, the Harmonised System (HS) for classifying goods is a six-digit code system.	4/6/8/10 numeric characters	Optional	Optional	Mandatory	Depends on customs/country requirements	Conditional
22	Cargo gross weight (per container)	UN00001730	The grand total weight of the cargo and weight per container(s) including packaging items being carried, which can be expressed in imperial or metric terms, as provided by the shipper. Excludes the tare weight of the container(s).	Gross cargo weight described as a numeric string where the unit of measure must be specified (imperial or metric).	Approximate value	Approximate value	Mandatory		Mandatory
23	Verified Gross Mass (VGM)	UN00003387	A declaration made by the shipper or a person authorised by the shipper, informing the carrier or its agent of the gross weight of the container including cargo weight, bracing, dunnage, and container tare weight.	Gross cargo weight described as a numeric string where the unit of measure must be specified (imperial or metric).	N/A	N/A	Optional		N/A

	,	•		_	
,		11	1 ,	d	csa
`		<u> </u>		G	,3U
	*	<b>/</b> ` .	🥭 🔨.		

24	Total Container Weight	UN00003122	Includes Cargo Gross Weight plus Container Tare Weight. It is populated based on data in the cargo gross weight and container tare weight fields.	Prepopulated field by the carrier based on weight and container tare weight.	N/A	N/A	N/A	Optional
25	Measurement	UN00001779	Volume, which is calculated by multiplying the width, height, and length of the packed cargo, can be expressed in cubic meter or cubic feet, as provided by the shipper.	Measurement of cargo described as a numeric string in imperial or metric units.	Approximate value	Approximate value	Mandatory	Mandatory
26	Freight payable at	UN00000550	Location where payment will be rendered by the customer. Usually refers to Basic Ocean Freight alone.	Physical location, naming according to local standards	N/A	Optional	Mandatory	Mandatory

	,	1	/	_
,		•	4.	dcsc

			1				· ·	,	1
27	Place of issue	UN00001647	Location where the Original bill of lading was issued.	Physical location, naming according to local standards	N/A	Optional	Conditional	Not applicable for eB/L	Mandatory
28	Date of issue	UN00000315	Date when the Original bill of lading was issued.	Local date at place of issue, ISO-8601 format	N/A	N/A	Optional		Mandatory
29	Number of original B/Ls	UN00001640	Number of original B/L copies that have been issued to the customer.	A number	N/A	N/A	Conditional	Not applicable for eB/L	Mandatory

							_ <b>/</b>	
30	Number of B/L copies	N/A	Number of B/L copies which have been issued to the customer	A number	N/A	N/A	Optional	N/A
31	Carrier booking number	UN00001766	A unique number assigned to a scheduled transportation movement, which allocates assets, space needed and a transport plan.	Unique set of alphanumeric characters provided by carrier.	Optional	Mandatory	Mandatory	Mandatory
32	Container number	UN00001990	A unique identifier of the container used to carry the cargo. The length/type of the sequence can be different for shipper-owned containers. Container number includes a unique serial number (with check digit), the owner and a country code. The standard is managed by the Bureau of International Containers (BIC).	Alphanumeric sequence, usually composed of 4 letters and 7 numbers.	Optional	Optional	Mandatory	Mandatory

	,	1	/	_
,			1	dcsc
			1	4000

			1	T	I		· · ·	,	1
		1	A specification of the type of container,	4-character alphanumeric code	Mandatory	Mandatory	Mandatory		Mandatory
		1	e.g., dry, reefer, open-top etc., based on	based on ISO 6346.		1			
			ISO code 6346.						
3	Container	UN00001991							
١,٠	size/type	01400001991							
	. ,,								
			An identifying number of the shipper	Alphanumeric string provided by the	Optional	Optional	Conditional	Conditional based	Conditional
		1	(Individual or entity) used for tax	shipper.		1		on customs	
			purposes.	T. P. P.				requirements	
			parpesse.					roquirornonio	
	Shipper LEI or TAX								
34	ID	UN0000055							
			An identifying number of the consignee	Alphanumeric string provided by the	Optional	Optional	Conditional	Conditional based	Conditional
			(Individual or entity) used for tax	consignee.	1			on customs	
			purposes.					requirements	
			purposes.					requirerrierits	
		1				1			
	Consignee LEI or								
3!	TAX ID	UN0000055				1			
	IAA ID	1				1			
		1				1			
		1				1			
		1				1			
				l .	I	1	l		

	,	1	/	_
,		•	4.	dcsc

			1	1		1	· · ·	• •	
36	Notify party LEI or TAX ID	UN00000055	An identifying number of the notify party (Individual or entity) used for tax purposes.	Alphanumeric string provided by the consignee.	Optional	Optional	Conditional	Conditional based on customs requirements	N/A
37	Seal Number	UN00001916	An identification number of a seal affixed to the container.	Set of alphanumeric characters provided by the carrier.	N/A	N/A	Conditional	Not applicable for flat rack containers	Mandatory
38	Seal source	UN00001917	The seal provider.	Carrier, shipper, customs, or veterinary seals	N/A	N/A	Conditional	Conditional on type of commodity	Conditional

		<b>≠</b> .		_		
,			1	d	CS	C
•			11		U	•

39	Address	UN00000010	A physical address including postal code and country code in a structured format. If an unstructured format is required for L/C or other purposes this must be provided separately.	Address should be provided in structured format but can be printed as unstructured to match L/C requirement.	Mandatory	Mandatory	Mandatory	Mandatory
40	Phone Number	UN00000129	Contact number of the individual or customer	Numeric string including country-specific dialling codes.	Mandatory	Mandatory	Mandatory	N/A
41	Email	UN00000097	Unique identifier for an email account of the customer that is used to both send and receive email messages over the Internet.	String including an account name (varchar) followed by a @ and completed with a domain name.	Mandatory	Mandatory	Mandatory	N/A

		_
,	111.	dcsa
	<u> </u>	ucsu
	 🗸 🛕 🐪 🐣	

42	Fax	UN00000759	Phone number connected to a customer's printer.	Numeric string including country- specific dialling codes.	Optional	Optional	Optional		N/A
43	Container tare weight	UN00001985	The weight of an empty container.	Gross container weight described as a numeric string where the unit of measure must be specified (imperial or metric).	N/A	N/A	Conditional	Only with shipper- owned containers	Conditional (see column I)
44	Transport document number	UN00000310	Unique identifier of the transport document allocated by the shipping line. Under certain conditions provided by the customer in the SI. It is the main number used for tracking the status of the shipment.	Set of unique alphanumeric characters, possibly including a prefix as provided by the carrier.	Optional: Shipper to specify how many numbers are required	Conditional	Conditional	When the B/L is printed at the shipper location, the B/L number is provided by shipper from a range provided by the carrier.	Mandatory

	, 💆 🎤 🧎	_
,	1111.	dcsa
	1011	ucsu
		,

45	Export Reference Number	UN00006563	Identification number provided by shipper.	String of letters and numbers (alphanumeric input)	N/A	N/A	Optional		Optional
46	Point and country of origin of goods	UN00001746	The location where the goods shipped are manufactured and/or produced.	Physical location, naming according to local standard.	Optional	Optional	Optional		Optional
47	Precarried by	UN00001842	Place and mode of transportation for pre-carriage (e.g. truck, barge, rail), under shipper's responsibility (This part of the definition is still under discussion).	Physical location dependent on mode of transport and/or UN Locode and truck, rail, or barge.	Optional	Optional	Conditional	When transport to the port of loading is organised by the customer	Conditional (if requested by shipper)

	,	◢ .		_
,			1	dcsc
			1	4000

48	On board date	UN00001775	Date when the last container that is linked to the bill of lading is physically on board the vessel indicated on the bill of lading.	Local date at place of issue, ISO-8601 format	N/A	N/A	N/A	Mandatory
49	Received for shipment date	UN00001774	Date when the last container linked to the B/L is physically in the terminal and customs cleared for the intended vessel.	Local date at place of issue, ISO-8601 format	N/A	N/A	N/A	Optional
50	Signed By (Signature)	UN00004520	Field where the responsible person (Carriers agent) issuing the original bill of lading to the customer signs.	Carrier signature (digital or physical, printed signature)	N/A	N/A	N/A	Mandatory

	,		<b>≠</b> .	,	_	
,		•		1	dc	SC
,					40	

51	SCAC	UN00005056	The Standard Carrier Alpha Code (SCAC) is a unique code used to identify vessel operating common carriers (VOCC).	4-character code	Optional	Optional	Conditional	Only for shipments to USA	Optional
52	Freight and charges	UN00002900	The different charges applicable for a customer to pay the carrier.	Numeric string in the form of currency with a maximum of 2-digit decimals.	N/A	N/A	N/A	Based on country requirements	Conditional
53	Prepaid/Collect	UN00004996	Indicates whether freight & charges are due for payment before the shipment is affected, before the transport document is released to shipper (Prepaid), or before the shipment is finalised and cargo is released to consignee (Collect).	3-character code to identify INCO terms.	Optional	Optional	Mandatory		Mandatory

	,	1	/	_
,			1	dcsc
			1	4000

54	Terms and conditions	UN00001854	Carrier general terms and conditions printed on page I of the transport document.	Standard text per carrier	N/A	Optional	N/A	•	Mandatory
55	Total number of containers or packages received by the Carrier	UN00001801	In case of a CY receipt, this indicates the number of containers linked to a shipment. In case of a CFS receipt, this indicates the number of packages received by the carrier.	Numeric value	Conditional	Conditional	Mandatory	In steps 1 and 2, only mandatory in case of number of containers	Mandatory
56	Carrier Clauses	UN00001649	Additional clauses for a specific shipment added by the carrier to the bill of lading, subject to local rules/guidelines or certain mandatory information required to be shared with the customer.	Standard text	N/A	N/A	Conditional	Clauses added by the carrier to the bill of lading subject to local rules / guidelines or certain mandatory information required to be shared with the customer. Is not a separate field on the bill of lading and usually printed below cargo description	Conditional (see column I)

	,	•		_
,		11	1	dcsa
٠.			· / 🔏	ucsu
	•	<b>/</b> , `	<u>ر ' ر</u>	

57	Unit	UN00004530	The unit of measurement for the charge	A unit of measure	N/A	N/A	Optional	Optional
58	Currency	UN00001672	The currency in which the charge is billed.	Currency unit; 3-character code (ISO 4217)	N/A	Optional	Optional	Optional
59	Prepaid Amount	UN00001787	The amount to be paid prior to shipment being effected.	Numeric string in the form of currency with a maximum of 2-digit decimals.	N/A	Optional	Optional	Optional

,	· / /	_
		dcsa

60	Collect Amount	UN00001786	The amount to be paid upon the release of the cargo.	Numeric string in the form of currency with a maximum of 2-digit decimals.	N/A	Optional	Optional		Optional
61	Service Contract	UN00005807	Reference number for agreement between shipper and carrier through which the shipper commits to provide a certain minimum quantity of cargo over a fixed period and the carrier commits to a certain rate or rate schedule	Unique numeric string as provided by the shipper and confirmed by the carrier.	Optional	Optional	Optional		Optional
62	Declared Value	UN00004995	Filled out when the shipper declares the value of the cargo in order to avoid the carrier's limitation of liability and "Ad Valorem" freight is paid , i.e., freight is calculated on the basis of the value of the goods declared by the shipper.	Numeric value	Optional	Optional	Optional	If customers want the value to show, evidence is required, and customers need to approve additional insurance fee charge from the carrier (very exceptional).	Conditional

	,	1	/	_
,		•	4.	dcsc

63	Disclaimer	UN00001538	A clause used when printing an electronic B/L that specifies that it is not valid on paper.	Text - "original electronically issued, not valid on paper"	N/A	N/A	Conditional	Only applicable for eBL	Conditional
64	Transport document type	UN00001831	Specification of the transport document type to be issued by the carrier. Options are either B/L or Sea Waybill.	Text - two input options: B/L or Sea Waybill	N/A	N/A	Mandatory		Mandatory
65	Reefer Temperature setting	UN00005795	The setting requested by the customer at time of booking request for the carrier to operationally set when releasing containers. May be expressed as a range min/max and a date range.	Fahrenheit /Celsius; Positive/Negative	Conditional	Conditional	Conditional	Conditional on being a live reefer (as opposed to non-operating reefer)	Conditional

	,	1	<b>/</b> ,	,	_
,		•		4	dcsc

							· · ·	,	
66	Reefer Humidity	n/a	The setting requested by the customer at time of booking request for the carrier to operationally set when releasing containers. May be expressed as a range min/max and a date range.	PCT	Conditional	Conditional	Conditional	Conditional on being a live reefer (as opposed to non-operating reefer)	Conditional
67	Reefer Ventilation	n/a	The setting requested by the customer at time of booking request for the carrier to operationally set when releasing containers. May be expressed as a range min/max and a date range.	CBM/Hr	Conditional	Conditional	Conditional	Conditional on being a live reefer (as opposed to non-operating reefer)	Conditional
68	Part Load indicator	N/A	An identifier for when a container has more than one bill of lading and shipment terms are FCL/FCL. Used to identify that all sets of original documents must be surrendered prior to the release of container at destination.	Number	Conditional	Conditional	Conditional	Only applicable if more than one B/L per container	Conditional

								dcsa	
69	Forwarding agent Reference Number	UN00001767	Identification number provided by forwarding agent	String of letters and numbers (alphanumeric input)	N/A	N/A	Optional		Optional
70	Consignee Reference Number	UN00001764	Identification number provided by Consignee	String of letters and numbers (alphanumeric input)	N/A	N/A	Optional		Optional

Table 3: B/L Data field definitions and references

