



Industry Blueprint – Container Shipping 2023.4 Process Catalogue

**Digital Container Shipping Association
(DCSA)**

December 2023

Digital Container Shipping Association (DCSA)



The DCSA Industry Blueprint 2023.4 is one of the main initiatives and publications of the DCSA.

VISION

The vision of DCSA (Digital Container Shipping Association) is to shape the digital future of container shipping by being the industry's collective voice. Together with our members, DCSA works towards alignment and standardization of IT and non-competitive business practices. Our aim is to move the industry forward by setting frameworks for effective and universally adoptable standards and exploring possibilities for innovation. We are vendor neutral and technology agnostic to enable widespread adoption of DCSA standards.

MEMBERS

The Digital Container Shipping Association has the following members: CMA-CGM, Evergreen, Hapag-Lloyd, HMM, Maersk, MSC, ONE, Yang Ming and ZIM.

DCSA Members



Descriptions per process in the Industry Blueprint 2023.4

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	1. Shipment Journey	1.1 Register booking request	The process covers the registration of a booking request, a check for missing and/or incorrect information, a check for booking compliance issues and the possible subsequent transmission of a booking acknowledgement to the customer.	Booking received
Booking-to-Return	1. Shipment Journey	1.2 Validate, plan and confirm booking request	The process covers the validation of the booking request against constraints like pricing, capacity, equipment availability, special cargo requirements, and resolution of any related errors, if needed. The carrier will then check if carrier haulage is involved and register the planned transport. After registration, if all checks are cleared, the carrier creates a route plan and generates the booking confirmation.	Booking confirmed
Booking-to-Return	1. Shipment Journey	1.2.1 Amend booking	The process covers the request of a customer to amend the booking. The process includes validation by the carrier of the amendments. Based on the outcomes the carrier will or will not approve the amendments. In both cases the customer will be notified.	Booking confirmed
Booking-to-Return	1. Shipment Journey	1.2.4 DG booking pre-validation	After the carrier has registered the booking request/amendment, if the booking contains dangerous goods several checks must be performed against their own/VSA partner company policy. This includes checking the vessel(s) Certificate of Competency (COC) for dangerous goods and assessing space availability on all journey legs adhering the IMDG segregation rules. If the carrier cannot proceed with the DG pre-validation at that time, he will put the booking/amendment request on standby and wait for clearance of the checks. Once all checks are cleared, the carrier will proceed with the remaining steps of the process 1.2 Validate, plan, and confirm booking request. In the case of a booking amendment, the remaining steps of the process 1.2.1 Amend booking will be followed.	Booking received Dangerous Goods constraints validated
Booking-to-Return	1. Shipment Journey	1.3 Prepare Bill of Lading (transport document)	The process covers the preparation of the Bill of Lading (B/L), which includes a check for missing and/or incorrect information, the creation of a draft Bill of Lading (B/L), which is sent to the customer for approval and an approval by the carrier.	Shipping instructions received Draft Bill of Lading approved Manifest information received

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	1. Shipment Journey	1.3.1 Amendments prior to issuance	The process covers the amendments made to the draft Bill of Lading (B/L) previously approved by the customer, prior to issuance. This includes submitting the amendments, checking whether the amendments can be made, making the amendments, notifying the customer and issue the B/L	Amendments made B/L finalized
Booking-to-Return	1. Shipment Journey	1.4 Issue Bill of Lading (transport document)	The process covers the release of the Bill of Lading (B/L), which starts with the vessel departure and includes an equipment loading report, confirmation of loading, equipment load status and payment condition and the issuance of the Bill of Lading.	Vessel departure Export payment cleared Bill of Lading issued
Booking-to-Return	1. Shipment Journey	1.4.1 Amendments after issuance	The process covers the amendments made to the Bill of Lading (B/L) after issuance, which includes submitting the amendments, receiving all the original documents issued, checking whether the amendments can be made, make the amendments, notifying the customer and re-issue the B/L	Transport document surrendered Amendments made B/L finalised
Booking-to-Return	1. Shipment Journey	1.5 Issue arrival notice	The process covers the generation and issuing of an arrival notice.	Arrival notice created Arrival notice issued
Booking-to-Return	1. Shipment Journey	1.6 Shipment release and closing	The process defines the shipment release and closing, which includes a request for cargo release, terminal approval and customs clearance, when the clearance is confirmed and all checks are cleared, the cargo release is authorized, and a full release message is generated. hereafter it is checked whether carrier haulage is involved, if not, the release message is sent to the customer and terminal and after approval the cargo is released, all equipment will be returned, and the final charges settled.	Customs and terminal approval and payment clearance Cargo released Empty containers returned Final invoice sent
Booking-to-Return	2. Equipment Journey	2.1 Nominate depot and empty equipment	The process covers the allocation of equipment for the booking based on container type/size requirements. A release order is generated and sent to applicable stakeholder (e.g. depot).	Empty equipment/depot allocated

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	2. Equipment Journey	2.2 Submit Verified Gross Mass	The process details the submission of the verified gross mass (VGM) of a container by the carrier to required stakeholders (terminal). The information is sent by the Shipper to the carrier and contains information about the Verified Gross Mass (Weight) of the container along with a signature (can be electronic) identifying the person responsible for the declared weight. The process also includes a check whether all information is included and a preparation of a consolidated VGM for submission.	VGM submitted
Booking-to-Return	2. Equipment Journey	2.3 Assign empty drop-off	The process details the activities completed to assign the empty drop-off location where equipment is to be returned to and subsequent notification of drop-off location to depot.	Empty drop-off assigned
Booking-to-Return	2. Equipment Journey	2.4 Return empty equipment	The process details the return of an empty container and potentially a subsequent update of equipment grade.	Empty equipment returned

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	2. Equipment Journey	2.5 Prepare carrier haulage work order	The process details the creation and issuance of a work order to a haulage vendor based on information in the booking and route plan, subsequently the work order acknowledgement from the vendor is registered by the carrier.	<p>Work order issued Empty equipment picked up from depot Empty equipment arrived at stuffing location Equipment stuffing complete Full equipment departure from stuffing location Full equipment gate in at export terminal Full equipment loaded onto vessel Full equipment discharged from vessel Gate out Full equipment from import terminal Full equipment at stripping location Full equipment stripped at stripping location Empty equipment picked up from stripping location</p> <p>Conditional milestones: Equipment loaded onto barge Equipment discharged from barge Equipment loaded on feeder Equipment discharged from feeder Equipment loaded on rail transport Equipment discharged from rail transport</p>
Booking-to-Return	2. Equipment Journey	2.6 Monitor equipment	The process covers the generation of equipment status data and the reporting of this data.	-
Booking-to-Return	3. Vessel Journey	3.1 Prepare vessel load list	The process outlines the activities to produce the load list for a particular vessel, i.e. the containers to be loaded on a specific vessel during a specific port call, and the distribution of load list to relevant stakeholders.	-

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	3. Vessel Journey	3.2 Manage stowage plan and instructions	The process outlines how the vessel stowage plan is created and transmitted to the terminal using the final Bayplan from the previous port call and the consolidated load lists for the relevant port call. Load and discharge instructions are also generated and transmitted to the terminal. Following execution, the terminal transmits load/discharge confirmation and the actual Bayplan to the carrier.	Vessel load/discharge complete Vessel operations complete Vessel departed Vessel arrived Vessel berthed
Booking-to-Return	3. Vessel Journey	3.3 Manage vessel reconciliation	The process defines the reconciliation activities following vessel departure in preparation for vessel arrival at the next port. This includes cross-checking of actual load and dangerous goods stowage against final stowage plan and the generation of a load confirmation.	-
Booking-to-Return	3. Vessel Journey	3.4 Submit customs manifest	The process covers the generation of customs manifest, the submission of this to authorities and reception of either an approval or rejection of this manifest.	Manifest submitted Manifest approved Vessel export documentation cleared Vessel departed Vessel import documentation cleared Vessel arrived
Booking-to-Return	3. Vessel Journey	3.5 Long term schedule	An updated schedule, based on the final Proforma Schedule, including specific vessel & voyage number, to be published at least 12 weeks ahead of commencement of the individual voyage. It incorporates planned dry-dockings, vessel lay bys, phase-in/out of vessels, etc.	-
Booking-to-Return	3. Vessel Journey	3.6 Coastal Schedule	The updated schedule, based on the Long Term Schedule, that will be issued prior to arrival at the first port of call in another region. Includes estimated port/terminal issues and any intended corrective actions to bring the schedule back to Long Term Schedule, i.e. port omissions, speeding up, etc. An updated schedule will normally be published if a vessel deviates more than 12 hours from LTS or from the latest published RS/CS. RS/CS can be published daily/weekly.	-

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	3. Vessel Journey	3.7 Intraregional and feeder services Schedule	The process is based on the defined Long Term and Regional/Coastal Schedules, with the difference that for Intraregional and Feeder Services an updated schedule will normally be published if a vessel deviates more than 6 hours from LTS or the latest published RS/CS, or earlier if any delay or restriction are anticipated. Due to the dynamics of feeder services operation, the part of the process for receiving comments from a VSA partner upon receiving an update to a schedule is excluded from the overall process.	-
Booking-to-Return	3. Vessel Journey	3.8 Weekly berth planning	The process defines the activities in coordinating berth availability for the vessel at the terminal between the carrier, terminal and port authority	-
Booking-to-Return	3. Vessel Journey	3.9 port call nautical services	The process defines how port call nautical services to a vessel are requested and delivered on port call arrival and departure.	-
Booking-to-Return	3. Vessel Journey	3.10 port call process	The process covers the activities and events taking place from vessel arrival at the port area until it departs.	-
Booking-to-Return	3. Vessel Journey	3.11 port call services	The process defines how port call services to a vessel are requested and delivered during a port call.	-
Booking-to-Return	3. Vessel Journey	3.12 Commercial Schedules	The process defines how point-to-point routings, port schedules, and vessel schedules are requested from customers (i.e. Shippers, Freight Forwarders, NVOCCs) to carriers.	-

Industry Blueprint – Container shipping 2023.4

Process Catalogue



Industry Blueprint Processes				
Process Level 1	Process Level 2	Process Level 3	Process Description (Level 3)	Milestones
Booking-to-Return	4. Exception Handling	4.1 Manage carrier booking change	The process covers the handling of any required changes to a booking, either as a result of a request directly from the customer or due to internal processing resulting in necessary changes. The handling of a change will have different outcomes depending on the characteristics of the change.	-
Booking-to-Return	4. Exception Handling	4.4 Manage seal(s) removed	Not defined in Industry Blueprint 2023.4 The description of the processes surrounding the removal of seals by the carrier, incl. communication with stakeholders etc.	-
Booking-to-Return	4. Exception Handling	4.5 Manage vessel reconciliation deviations	The process covers the investigation of deviations discovered as part of the vessel reconciliation and the initiation of corrections of said deviation.	-
Booking-to-Return	4. Exception Handling	4.6 Manage asset malfunctions	Not defined in Industry Blueprint 2023.4 The process covers the handling of malfunctions of active equipment. This would include possible unstuffing / stuffing if necessary.	-
Booking-to-Return	4. Exception Handling	4.7 Manage cargo surveys	Not defined in Industry Blueprint 2023.4 The process of ordering and coordinating cargo surveys.	-
Booking-to-Return	4. Exception Handling	4.8 Manage re-use allocation	Not defined in Industry Blueprint 2023.4 The process of allocating a piece of equipment to re-use instead of allocation to a depot return.	-



Thank you

Legal disclaimer



Copyright 2022 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: [License](#).

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.