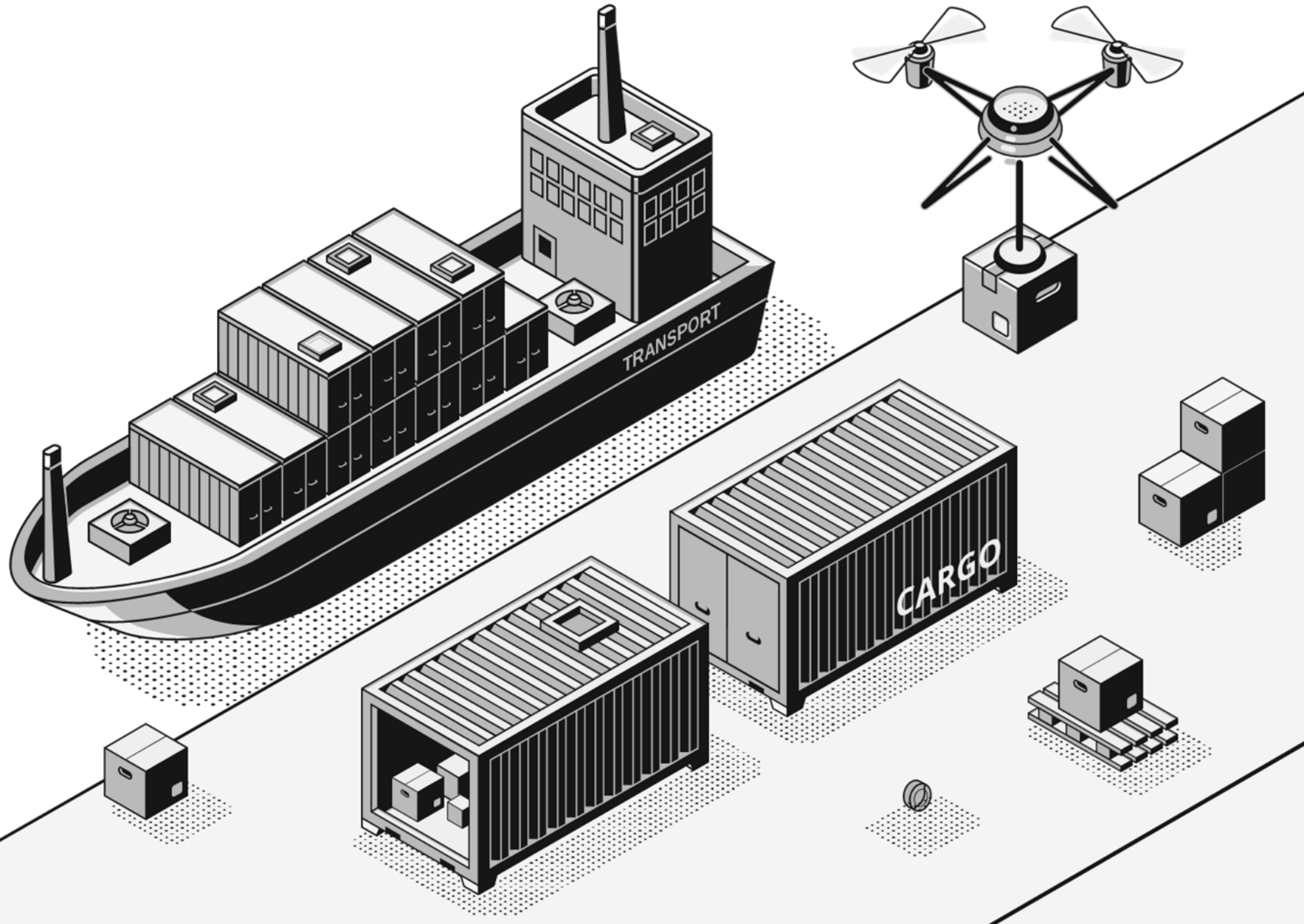
# Digital Container Shipping Association

## 34th UN/CEFACT Forum

London, October 2019



# The DCSA in one view

Representing over 70% of the container shipping industry

DCSA

## SUPERVISORY BOARD

**ANDRÉ SIMHA**
CIO
MSC

**RAJESH KRISHNAMURTHY**
SVP IT & Transformations
CMA CGM

**ADAM BANKS**
CITO
Maersk

**NORIAKI YAMAGA**
MD Corporate & Innovation
ONE

**MARTIN GNASS**
MD Information Technology
Hapag-Lloyd

## 5 FOUNDING MEMBERS

CMA CGM

Hapag-Lloyd

MAERSK

msc

ONE
OCEAN NETWORK EXPRESS

## 4 NEW MEMBERS

EVERGREEN

HMM

YANG MING
YANG MING MARINE TRANSPORT CORP
陽明海運股份有限公司

ZIM

## MANAGEMENT

**Thomas Bagge**
MD and CEO

Over the past twelve years, Thomas has been involved in various transformation activities in Maersk covering people, process and technology.

**Henning Schleyerbach**
COO

Henning has spent more than 20 years at Hapag-Lloyd, leading various international projects and strategic initiatives. His broad experience in the industry, ranging from IT to customer relations, makes him the natural driver for digital transformation as COO of DCSA.

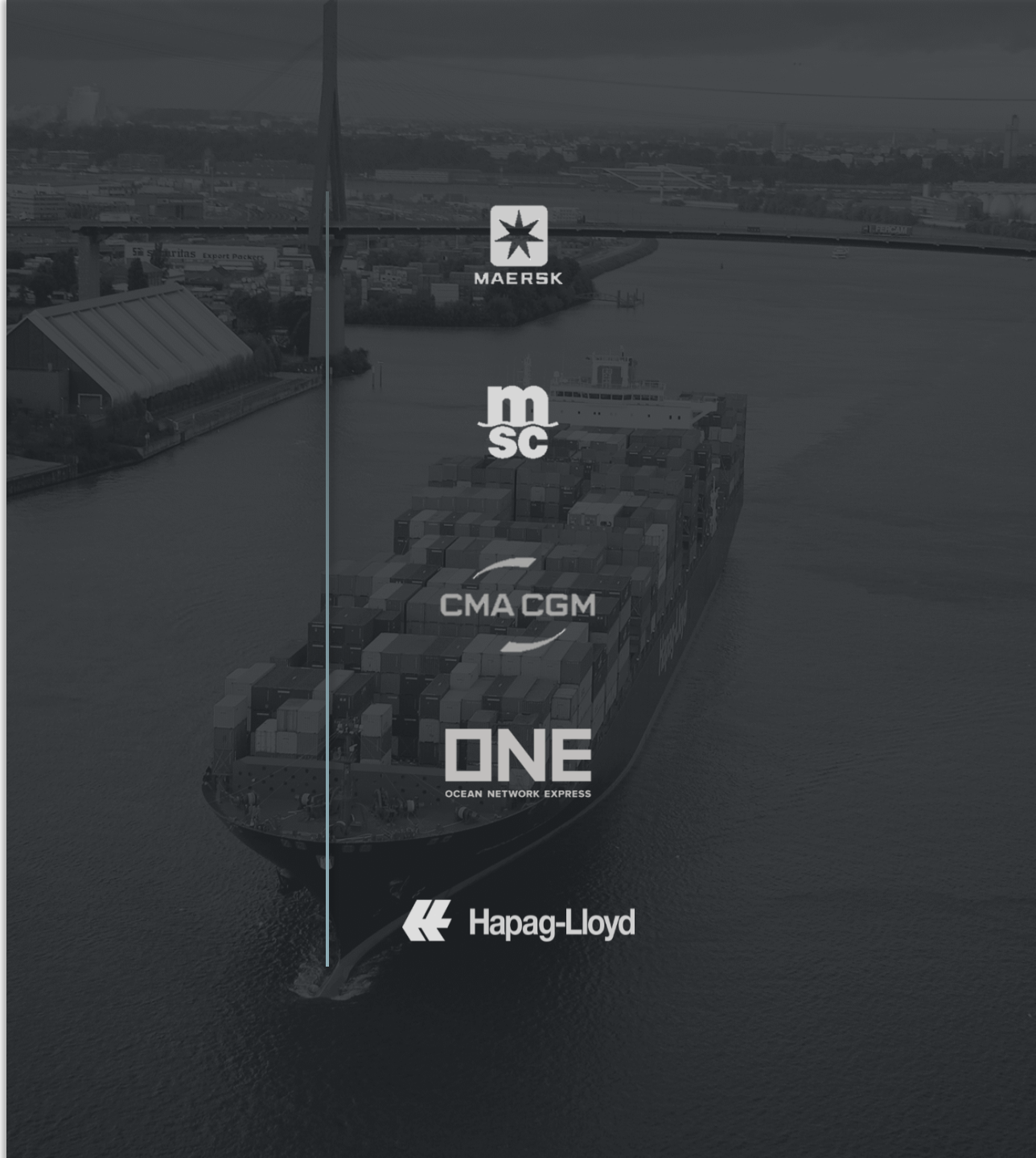
# About DCSA

Established in April 2019, the Digital Container Shipping Association focuses on developing standards for IT and Business processes

April 2019

## A new governing body is born

CMA CGM, ONE, Hapag Lloyd, MSC and Maersk establish the Digital Container Shipping Association



# Key objectives of the DCSA

Identified key objectives are not met by any of the existing governing bodies, thus it required the establishment of a new governing body

- Represents the container shipping industry
- Develops standards for IT and business
- Efficient, safe and secure operations
- Simplifies and harmonizes the value chain
- Explores innovative and disruptive technologies



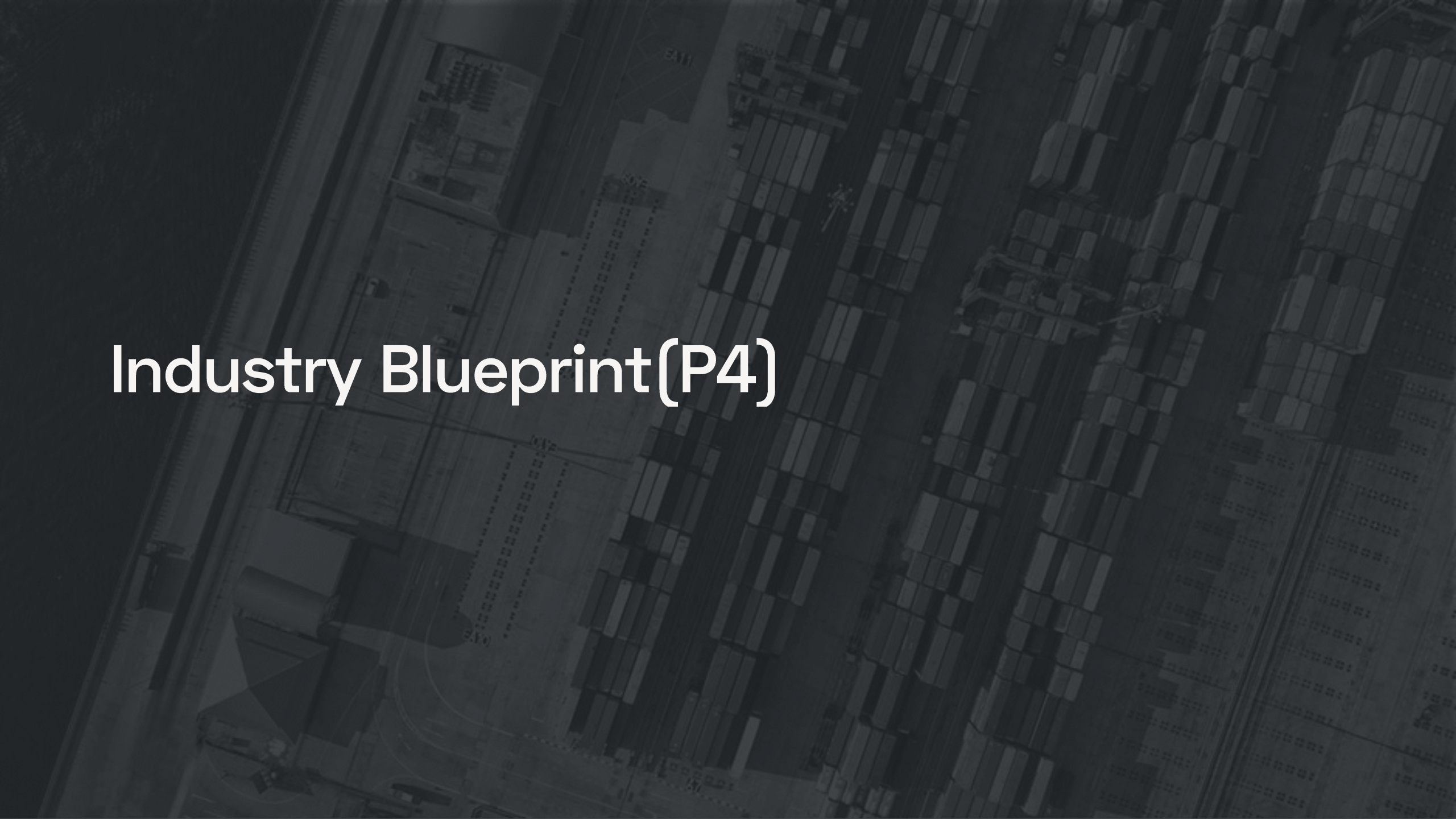
 

# Standardization

Open standards rely on a broadly consultative and inclusive group

- Reduced operational cost
- Increased interoperability
- Greater reliability
- Increased productivity
- Greater scalability

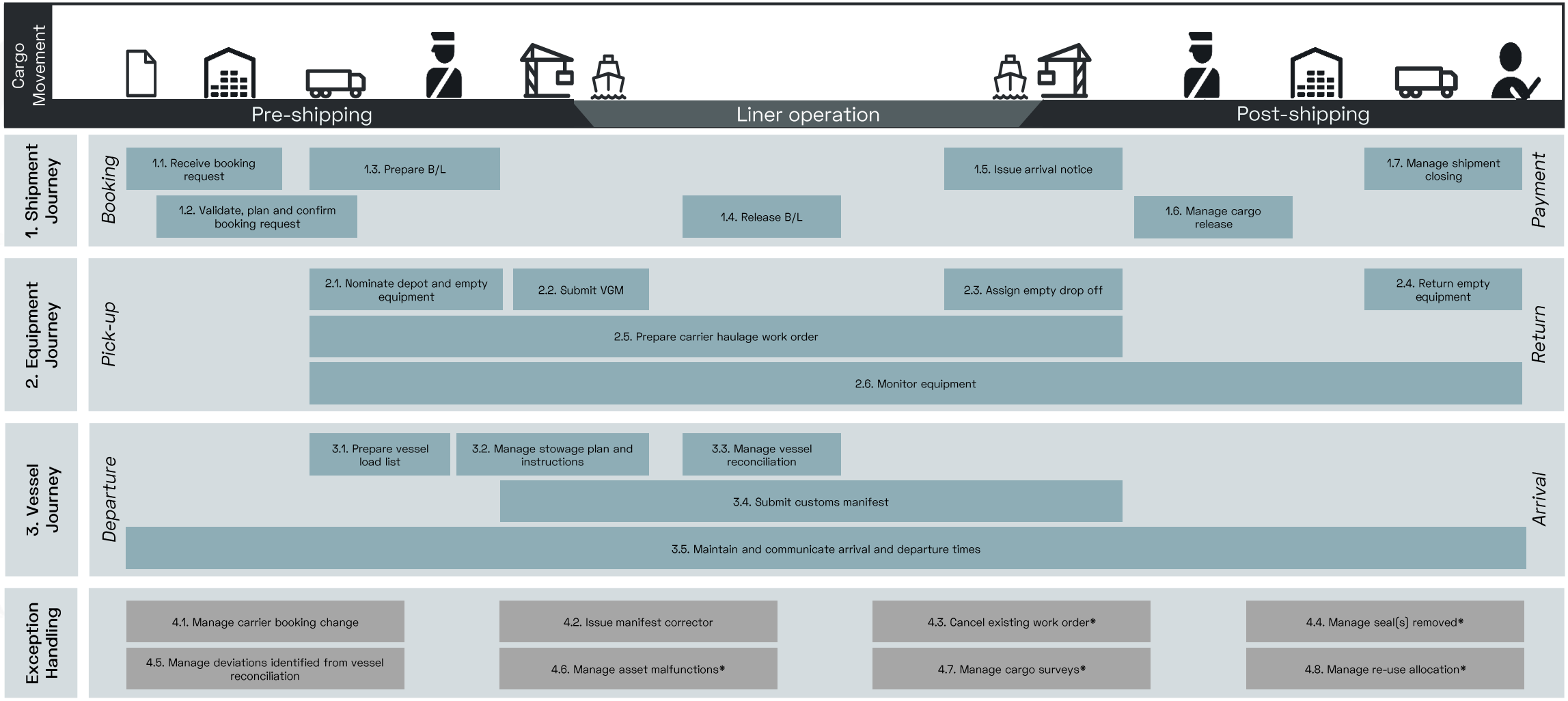

 



# Industry Blueprint(P4)

# Level 1 Process Depiction

Level 1 (Carrier Booking-to-Container Return), Level 2 journeys (Booking-to-Payment, Pick-up-to-Return and Departure-to-Arrival) and Level 3 processes documented within the Industry Blueprint are listed below.

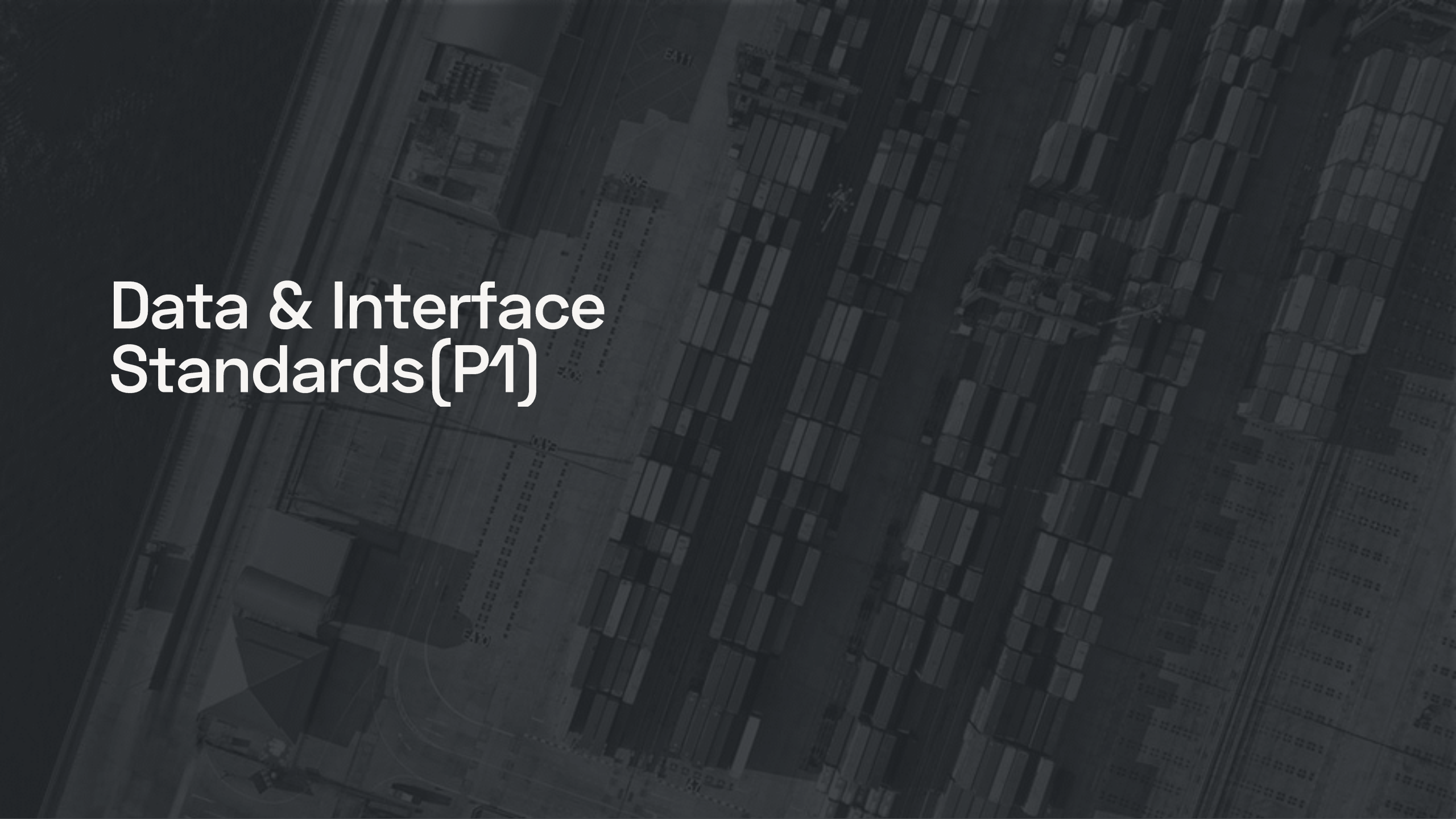





*: These processes have not been mapped on level 3 in initial Industry Blueprint 1.0

Core process

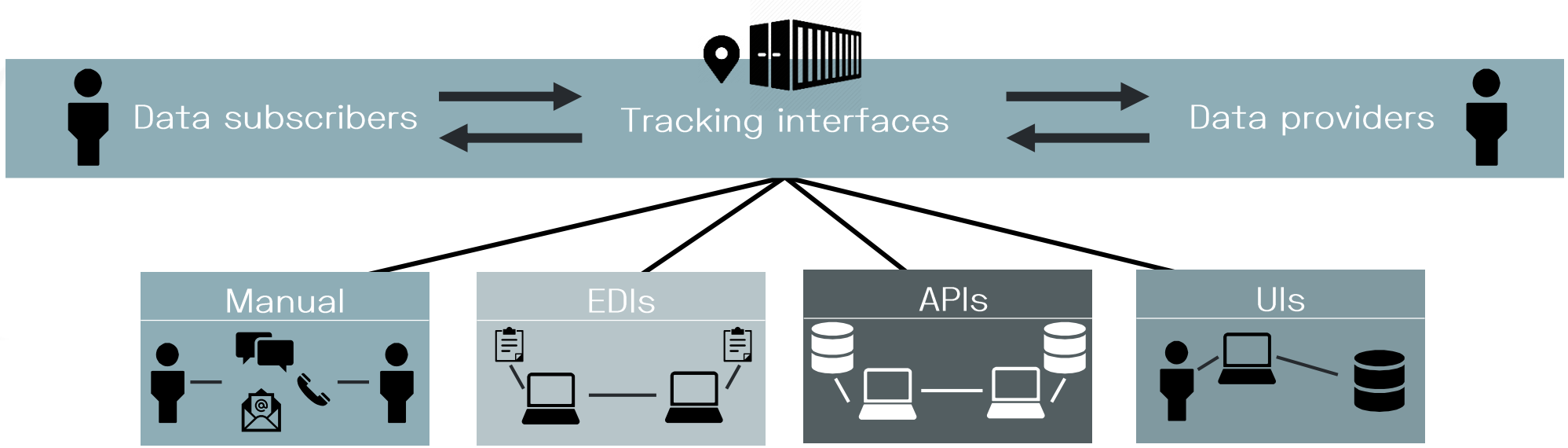
Exception process (Not aligned with the "Cargo movement" diagram)



# Data & Interface Standards(P1)

# Data & Interface Standards: Tracking 2019

How can standardization support the flow of information channelled through tracking Interfaces across the industry?




**PROBLEM:**
Tracking data not defined the same way, causing breakdowns, confusion and tailormaking

**SOLUTION:**
Standardize tracking requirements and data definitions across the industry

**REQUIREMENT:**
Stay technology agnostic, legacy and new solutions should be able to adopt

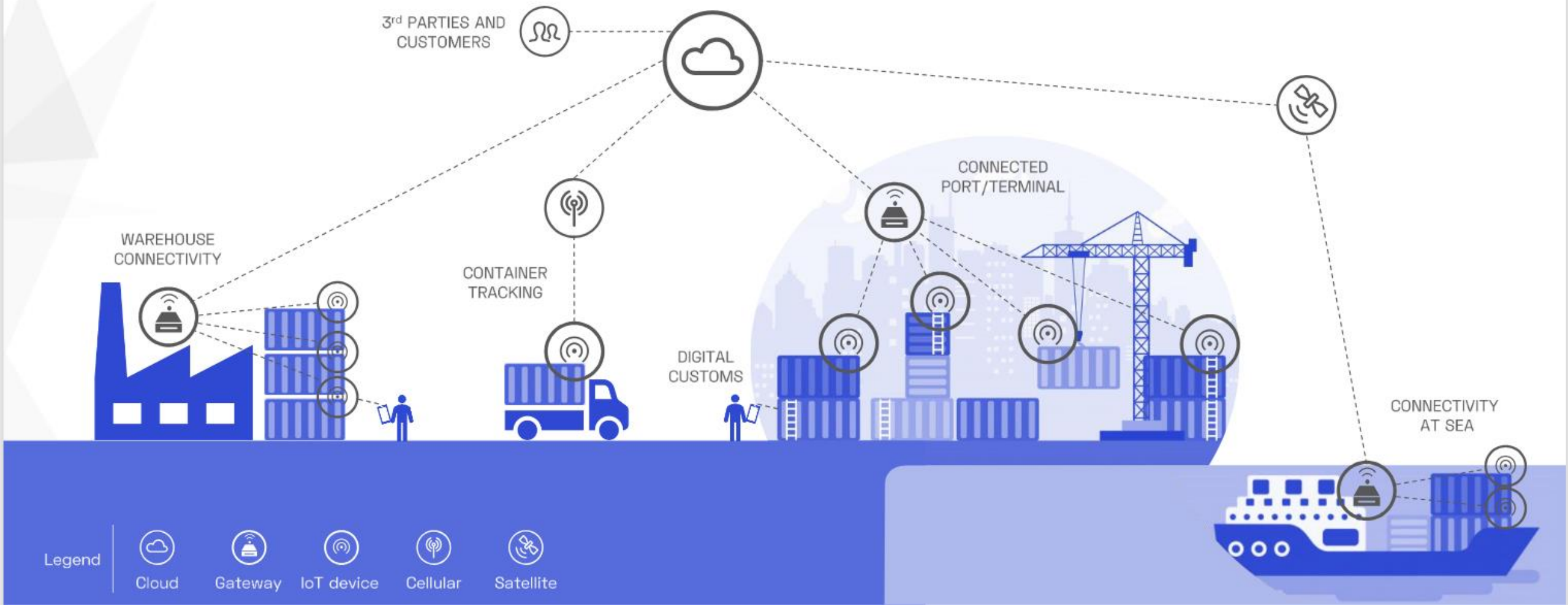
| Project 1 Data & Interface Standards – Targets 2019 | |
|---|---|
| Tracking Standards | Publish industry standards for tracking, focusing on information requirements and data definitions |
| Standardization Review | Review existing standards and initiatives, secure reuse of standards whenever applicable |
| Information Model | Select reference information model for the industry, secure standardized data definitions and rules |

# Portfolio 2020

# IoT network connectivity model

Ensuring a connectivity model for smart containers in all stages of the container shipping process

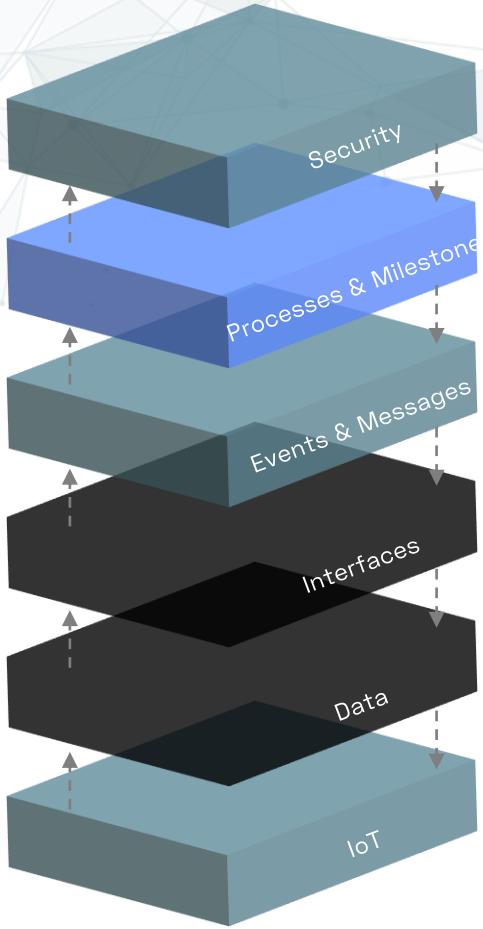


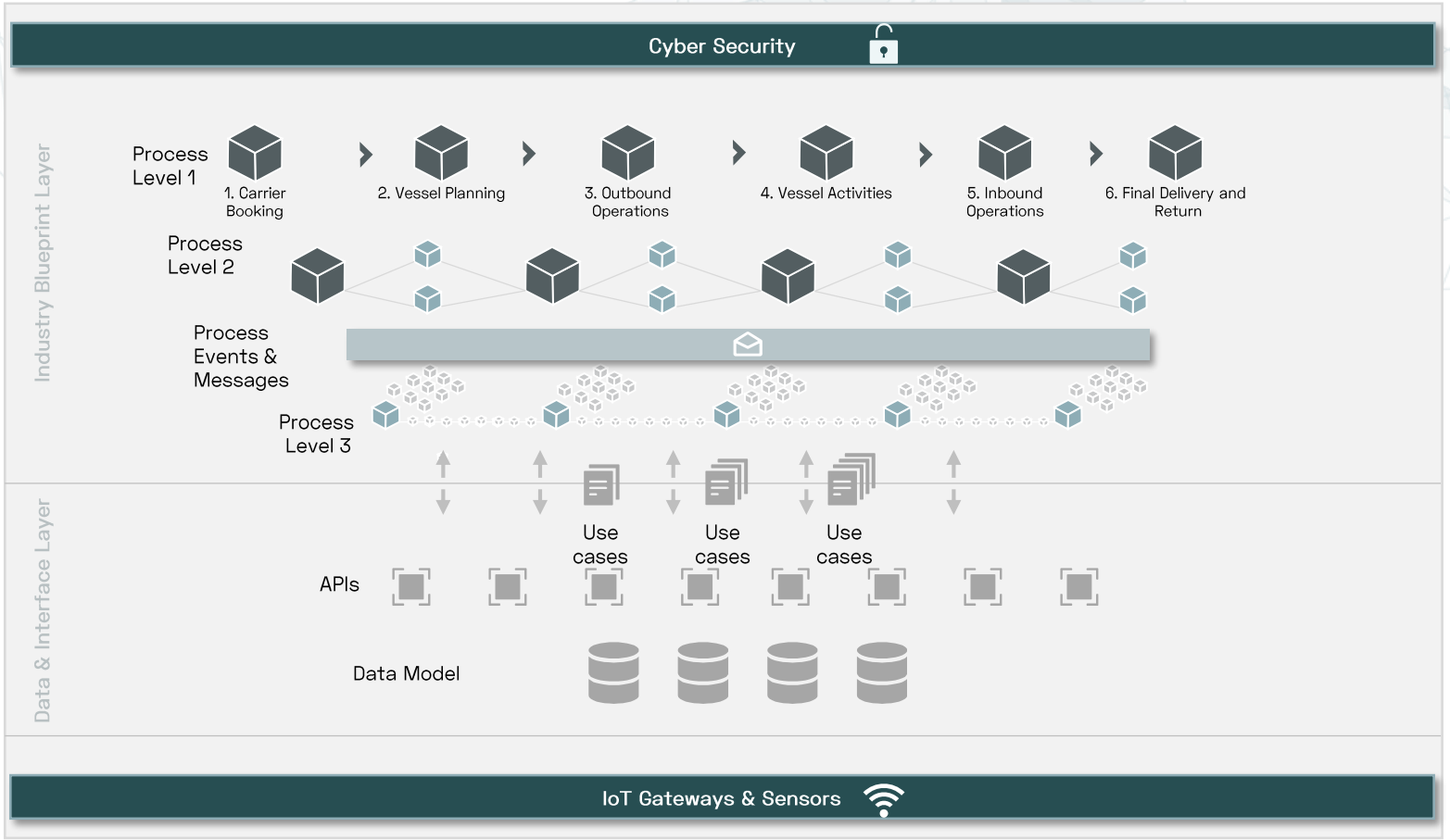

 

# Deep dive

# Links Between DCSA Proposals

The Industry Blueprint is the top layer of the framework of DCSA standards. The Industry Blueprint enables standards to be driven from a business perspective through the definition of use cases for which standards of other layers can be mapped and defined.

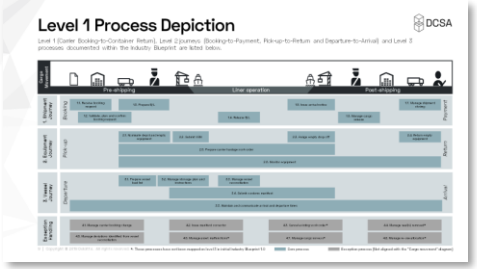


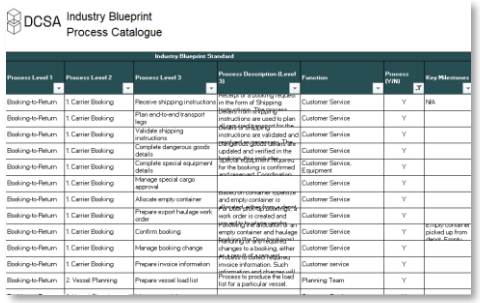
# Industry Blueprint 1.0 Documents

The Industry Blueprint 1.0 consists of a series of process maps, however a number of documents have been created to support the use and value of the maps. These documents should be seen as supporting elements, which can further increase understanding and insights gained from the process maps.. Published on dcsa.org August 29, 2019



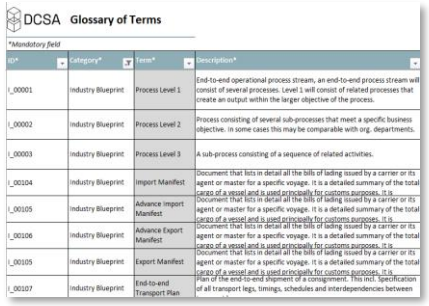

## Industry Blueprint 1.0 Process Maps

The process maps are the backbone of the Industry Blueprint 1.0. The multi-layered model allows the reader to drill down into each process to increase the level of detail.




## Industry Blueprint 1.0 Process Catalogue

Library of level 1 to level 3 processes contained within the Industry Blueprint including high level descriptions. Furthermore contributing carriers will have access to a cross reference to their original process documentation.




## Industry Blueprint 1.0 Glossary of Terms

The glossary is used to support the reader with definitions and explanations of the terms and expressions used in the process maps. The primary function of the glossary is to make sure, that all readers are interpreting the terms used in the same way.

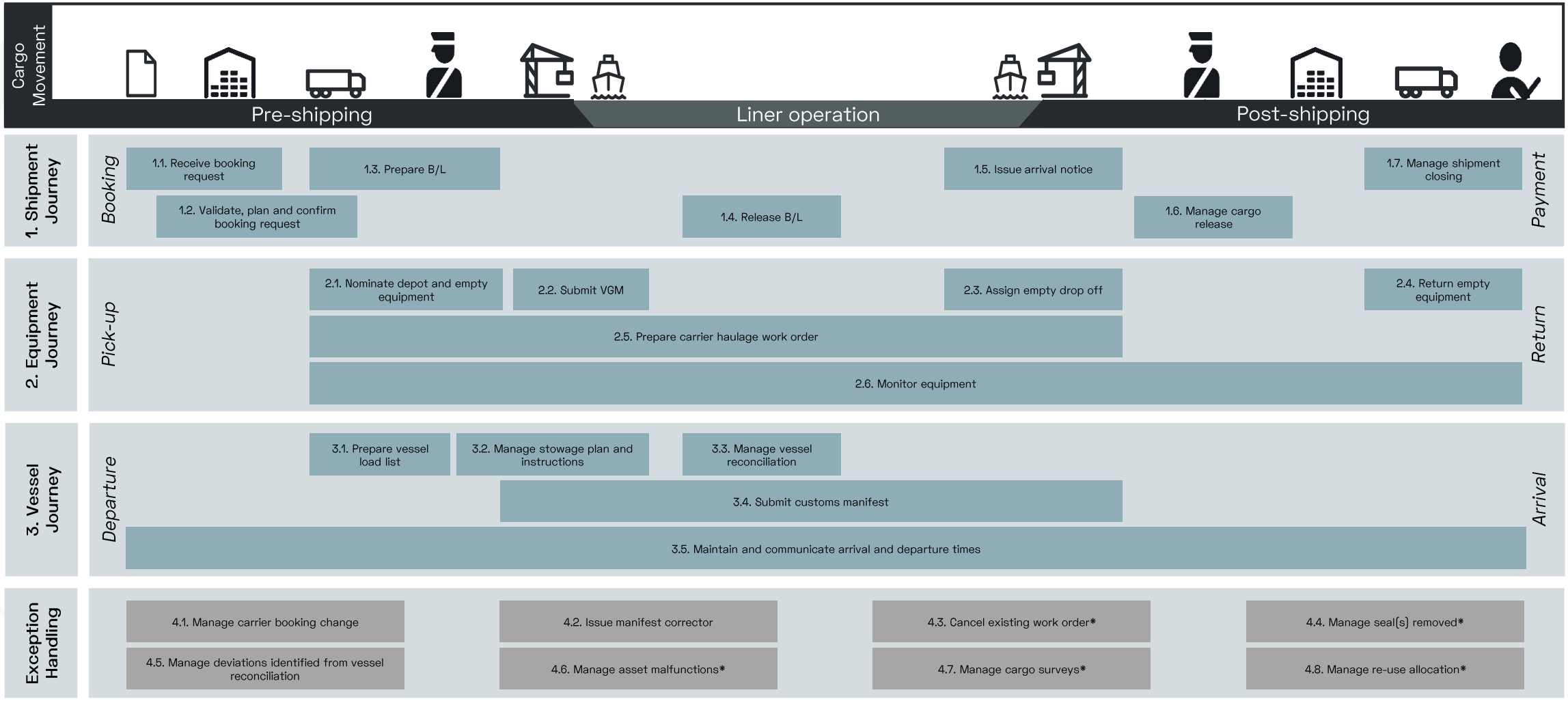

## Industry Blueprint 1.0 Reading Guide

The current document is a reading guide, which is mandatory before starting to use the Industry Blueprint 1.0. This has been created to facility proper use and understanding of the Industry Blueprint 1.0, as well as the limitations of the Blueprint.

# Level 1 Process Depiction

Level 1 (Carrier Booking-to-Container Return), Level 2 journeys (Booking-to-Payment, Pick-up-to-Return and Departure-to-Arrival) and Level 3 processes documented within the Industry Blueprint are listed below.




 *: These processes have not been mapped on level 3 in initial Industry Blueprint 1.0

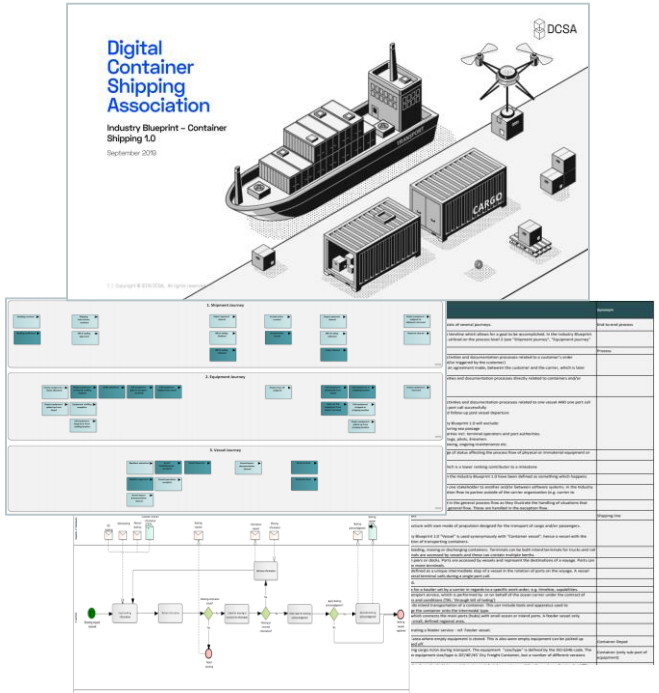
Core process

Exception process (Not aligned with the "Cargo movement" diagram)

# Process and data standards tied together?

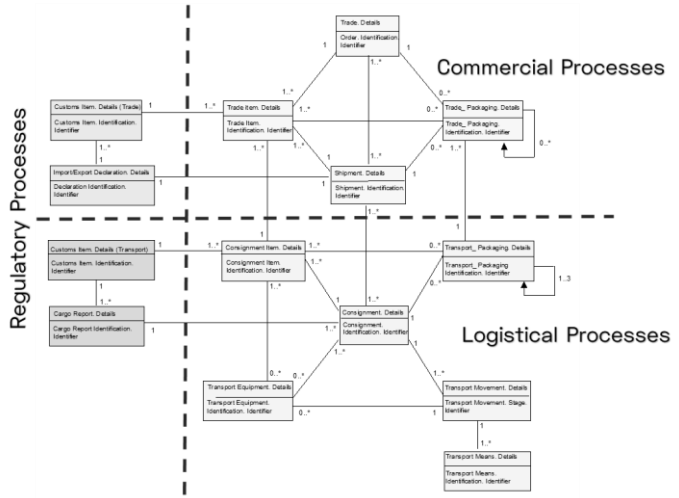
## DCSA Industry Blueprint 1.0

Shipping Industry Process Standards
launched on dcsa.org Aug 29, 2019




## UN/CEFACT Reference Data Models

EDIFACT, edi3, Smart Container etc.
open data language of global transportation




## Reference Data Standards

SMDG, BIC, IMO, ISO types etc.

Example LOC+11+RULED:139:6+PLP:72:306

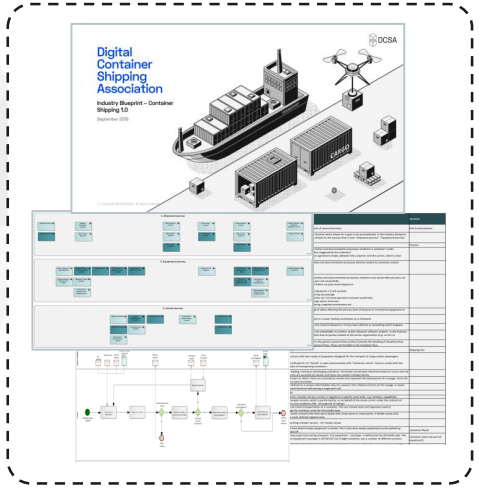
| LOC C517.3225 | | | LOC C519.3223 |
|---|---|---|---|
| UN-Locode | Company Name | Terminal Facility | Terminal Code |
| DEHAM | Buss | SCHUPPEN 81 | 81 |
| DEHAM | HHLA | HHLA Altenwerder | CTA |
| DEHAM | HHLA | HHLA Burchardkai | CTB |
| DEHAM | EUROGATE | EUROGATE Container Terminal Hamburg | EGH |
| DEHAM | LZU | LZU Leercontainerzentrum Unikai GmbH Buc | LZU |
| DEHAM | C. Steinweg | Am Kamerunkai 5 Sud-West Terminal | SWT |
| DEHAM | HHLA | HHLA Tollerort | CTT |
| DEHAM | Unikai | Unikai - UCT | UCT |

# DCSA Information Model as "translator"

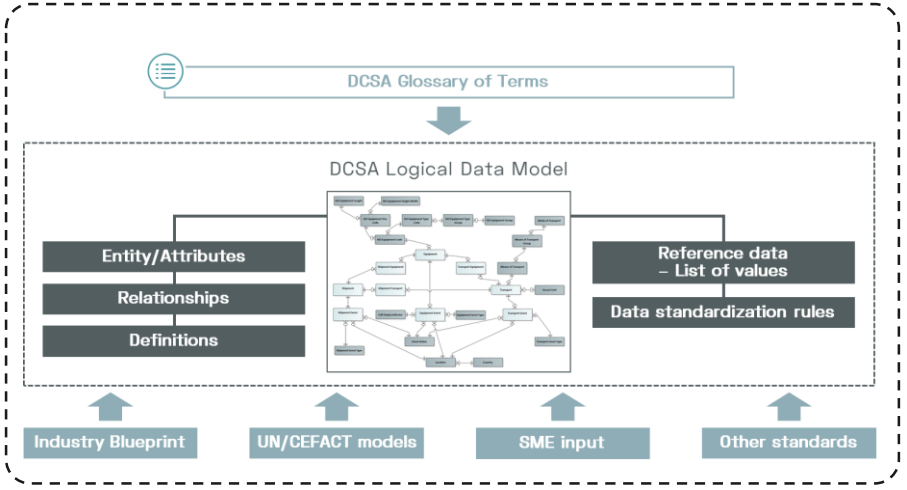
## DCSA Industry Blueprint 1.0

"Business Language"



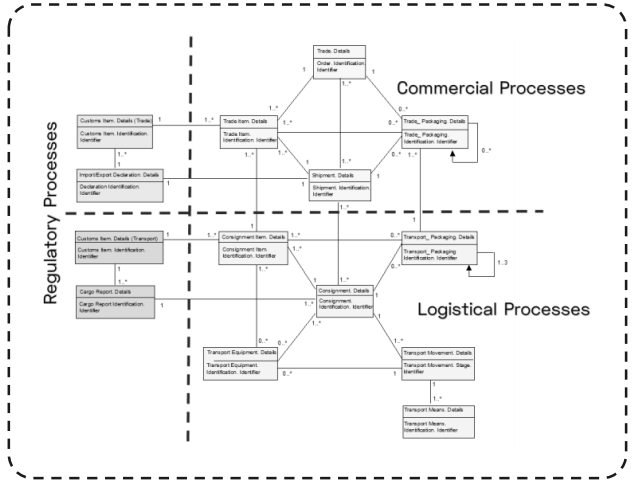

## DCSA Information Model 1.0

"Data Language" – work in progress




## UN/CEFACT Reference Data Models

DCSA IM will enable actors to map w/ shipping




## Reference Data Standards

Example: LOC+11+RULED:139:6+PLP:72:306

| LOC C517.3225 | | | LOC C519.3223 |
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| UN-Locode | Company Name | Terminal Facility | Terminal Code |
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| DEHAM | HHLA | HHLA Tollerort | CTT |
| DEHAM | Unikai | Unikai - UCT | UCT |

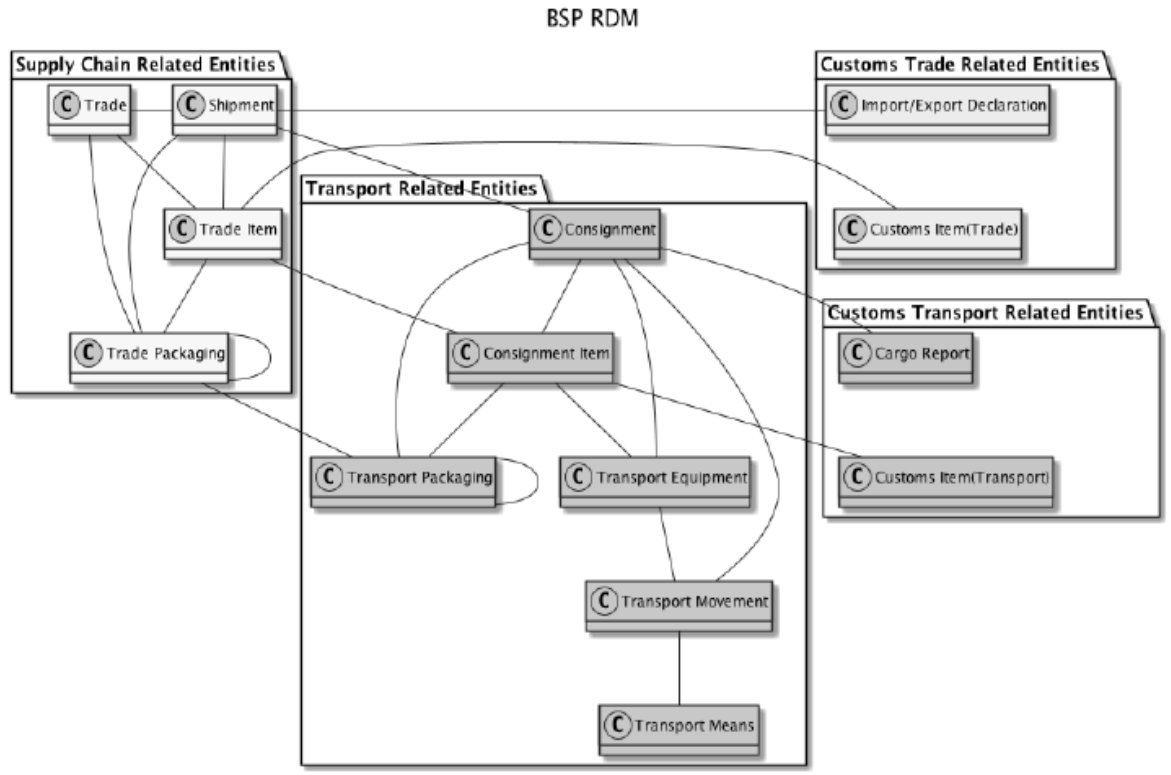

## Data & Interface Standards #1

Tracking – work in progress,

# Specific topic: Consignment vs. Shipment

Ongoing discussion on how to define shipment vs. consigment: 'Shipment' is included in the IBP 1.0, but not 'Consignment'.
IT specialists say that we 'track the consignment'. Business specialists say that we 'track the shipment'. To be resolved terms in DCSA IM 1.0




## Shipment/Delivery

A *shipment* is an identifiable collection of one or more trade items (available to be) transported together from the seller (original consignor/shipper), to the buyer (final/ultimate consignee).

- A *shipment* can only be destined for one buyer.
- A *shipment* can be made up of some or all *trade items* from one or more *sales orders*.
- A *shipment* can have only one customs *Unique Consigtment Reference (UCR)*
- A *shipment* may form part or all of a *consignment* or may be transported in different consignments.

## Consignment (Transport Service order)

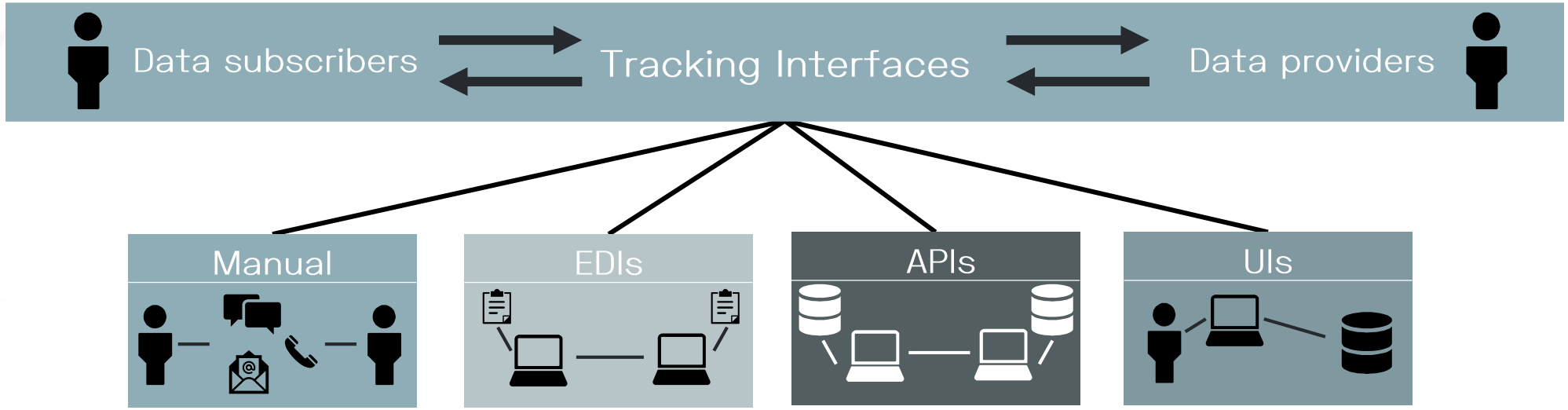
A *consignment* is a separately identifiable collection of *consignment items* (available to be) transported from one *consignor* to one *consignee* via one or more modes of transport as specified in one single *transport service contract* document.

- A *consignment* can only have one *consignor*.
- A *consignment* can only have one *consignee*.
- A *consignment* can only have one *transport service provider (TSP)*.
- A *consignment* can only have one *transport service buyer* (also *transport service consumer - TSC*).
  - The *transport service buyer* can be either the *consignor* or the *consignee*.
- A *consignment* may refer to one or more *shipments*.
- A *consignment* is made up of one or more *consignment items*.
- A *consignment* can be made up of some or all *trade items* (aggregated into *consignment items*) from one or more *shipments*.
- A *consignment* related to *transport equipment* used for the implementation of the *transport service* and contain *consignment items*.
- A *consignment* is made up of one or more *customer items* for reporting to *Customs*.
- A *consignment* can have one or more customs UCRs.

# Data & Interface Standards for Tracking

Standards needs to be technology agnostic, the upcoming release for Tracking will document data standards and interface requirements for the container shipping industry




CURRENT SITUATION:
Tracking data not defined the same way, causing breakdowns, confusion and tailor-making across parties

SOLUTION:
Standardize tracking information requirements and data definitions across the industry

REQUIREMENT:
Stay technology agnostic, tracking interfaces have many forms and formats

| Project 1 Data & Interface Standards – Targets 2019 | |
|---|---|
| Tracking Standards | Publish industry standards for tracking, focusing on information requirements and data definitions |
| Standardization Review | Review existing standards and initiatives, secure reuse of standards whenever applicable |
| Information Model | Select reference information model for the industry, secure standardized data definitions and rules |

# Thank you.

Digital Container Shipping Association