Digital Container Shipping Association

Event naming convention and Structure 1.0

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INTRODUCTION

Through the years Track & Trace solutions have become a common service in the container shipping industry. However, due to misalignment of terminology and ways of working each carrier have designed their own events, which are published on their webpage.

To align this across the industry the DCSA has developed a Naming Convention, which sets the standard for naming as well as understanding of customer facing Track & Trace events.

PURPOSE

Two primary purposes have been defined for the DCSA Event Naming Convention for Track & Trace:

To ensure equal interpretation of events published through carrier owned Track & Trace portals.

To ensure that business needs are adequately reflected in the development of data and interface standards for Track & Trace.
High-level customer T&T events

Depending on the shipment at hand the multimodal life cycle of a container will go several events across five overall phases. Each phase can repeat itself depending on the need for additional transport legs. The events in the below overview can take place in a number of different contexts. The DCSA Naming convention ensures, that the context and understanding of all events are interpreted equally across the industry.

<table>
<thead>
<tr>
<th>Pre-shipment Empty</th>
<th>Pre-ocean Laden</th>
<th>Ocean Laden</th>
<th>Post-ocean Laden</th>
<th>Post-shipment Empty</th>
</tr>
</thead>
<tbody>
<tr>
<td>Booking</td>
<td>Stuffing</td>
<td>Load</td>
<td>Transportation document surrendered</td>
<td>Load</td>
</tr>
<tr>
<td>Load</td>
<td>VGM</td>
<td>Departure</td>
<td>Shipment release</td>
<td>Gate-out</td>
</tr>
<tr>
<td>Gate-out</td>
<td>Shipping instructions</td>
<td>Load</td>
<td>Load</td>
<td></td>
</tr>
<tr>
<td>Departure</td>
<td>Load</td>
<td>Arrival notice</td>
<td>Gate-out</td>
<td></td>
</tr>
<tr>
<td>Arrival</td>
<td>Gate-out</td>
<td>Pilot disembarked*</td>
<td>Arrival</td>
<td></td>
</tr>
<tr>
<td>Gate-in</td>
<td>Departure</td>
<td>Arrival notice</td>
<td>Gate-in</td>
<td></td>
</tr>
<tr>
<td>Discharge</td>
<td>Arrival</td>
<td>Arrival at Vessel Traffic Service*</td>
<td>Discharge</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Gate-in</td>
<td>Arrival at Pilot Station*</td>
<td>Stripping</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Discharge</td>
<td>Arrival at berth*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*: Events marked in red are added to create operational context. These are not included in the customer facing events and will be defined by DCSA during 2020.
The DCSA Event Naming Convention
Event structure

The terminology used in the Event Naming Convention is based on three primary categories of terms, Journeys, Parameters and Values.

Structure introduction

The structure leverages the journey types agreed upon in the IBP 1.0. This means that a separate syntax exists for the Equipment Journey, Transport Journey and Shipment Journey.

For each journey a separate syntax exists. The syntax is a combination of parameters.

Each parameter can take a number of values. Each combination of values will generate a unique event.

All elements including the journeys, parameters and values have been defined. This means that for each combination of values, an implicit definition exists.

### TERMINOLOGY

- **EventClassifier**
- **TransportMode**
- **EventType**
- **FacilityType**

### EXAMPLE FROM THE TRANSPORT JOURNEY

- **Planned**
- **Rail**
- **Arrival**
- **Inland terminal**
Presentation of structure

The structure is separated into three specific syntaxes based on the already agreed upon journeys.

The journeys

**Equipment Journey**
The structure of the Equipment Journey governs the naming and understanding of events, which are driven by physical occurrences related to the equipment in question.

**Transport Journey**
The structure of the Transport Journey governs the naming and understanding of events, which are driven by occurrences in the general transport of a shipment. The Transport journey includes all customer relevant events carried out by one or more modes of transport.

**Shipment Journey**
The structure of the Shipment Journey governs the naming and understanding of events, which are driven by occurrences in the documentation flow tied to a shipment. A Shipment can consist of FCL/LCL and move on CY/CY or CFS/CFS (or combination thereof) basis.
Event Structure – Equipment Journey

The structure of the Equipment Journey governs the naming and understanding of events, which are driven by physical occurrences related to the equipment in question.

<table>
<thead>
<tr>
<th>PARAMETERS</th>
<th>VALUES</th>
</tr>
</thead>
</table>
| Event Classifier | • Planned  
• Estimated  
• Actual |
| Event Type | • Load  
• Discharge  
• Gate in  
• Gate out  
• Stuffing  
• Stripping |
| Empty indicator | • Empty  
• Laden |
| Transport Mode | • Vessel  
• Barge  
• Truck  
• Rail |
| Facility Type | • Depot  
• Customer location  
• Port terminal  
• Inland terminal  
• Container Yard  
• Container freight station |
Event Structure – Transport Journey

The structure surrounding the Transport Journey governs the naming and understanding of events, which are driven by occurrences in the general transport of a shipment. The Transport journey includes all customer relevant events carried out by one or more modes of transport.

PARAMETERS

Event Classifier

Transport Mode

Event Type

Facility Type

VALUES

- Planned
- Estimated
- Actual

- Vessel
- Barge
- Truck
- Rail

- Arrival
- Departure

- Depot
- Customer location
- Port terminal
- Inland terminal
- Container Yard
- Container freight station
- Border crossing
Event Structure – Shipment Journey

The structure of the Shipment Journey governs the naming and understanding of events, which are driven by occurrences in the customer facing information flow tied to a shipment.

PARAMETERS

- Shipment Information Type
- Event Type

VALUES

- Booking
- Shipping instruction
- VGM
- Shipment release message
- Transportation document
- Arrival notice
- Dangerous Goods Declaration
- Out-of-Gauge Declaration
- Received
- Confirmed
- Issued
- Approved
- Submitted
- Surrendered
- Rejected
- Pending approval
Combination rules

As each structure can be used to combine a large number of different events a set of rules are necessary to ensure, that no combinations create illogical events. For this reason a set of combination rules have been made to remove such event combinations.

**Equipment combination rules**
- Stuffing and Stripping can only occur at Customer Location or Container Freight Station.
- Stuffing will always happen in relation to an Empty or partly laden container – Stripping will always happen in relation to a Laden.
- Vessel can only interact with a Port Terminal
- Laden equipment can not be combined with a Depot
- Gate-in and gate out cannot be done by a vessel or barge.

**Shipment combination rules**
- Booking can only be received, confirmed, pending approval or rejected.
- Shipping instructions can only be received, confirmed, pending approval or rejected.
- VGM can only be received, submitted or rejected
- Shipment release message can only be issued
- Transportation document can only be issued or surrendered
- Arrival Notice can only be issued
- Dangerous Goods Declaration can only be received, approved, pending approval or rejected.
- Out-of-Gauge Declaration can only be received, approved, pending approval or rejected.

**Transport combination rules**
- Vessel can only interact with a Port Terminal
Definitions of T&T events

The Track & Trace Event Naming Convention is supported by a document containing definitions of all elements in the Naming Convention.

Structure introduction

Each of the elements within the event structure has been defined to ensure alignment of understanding across the industry.

All of the terms in the document have been defined in the context of customer facing Track & Trace. This means that some terms may have a different definition in a commercial or operational context.

These definitions can be found in the Event Naming Convention – Definitions document. The document can be found on www.DCSA.org.
Suggested improvements

The DCSA is always interested in feedback, which can increase the quality of published work and drive standardization and digitalization going forward.

If you have any feedback or inputs, go to our webpage under “Contact”.

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