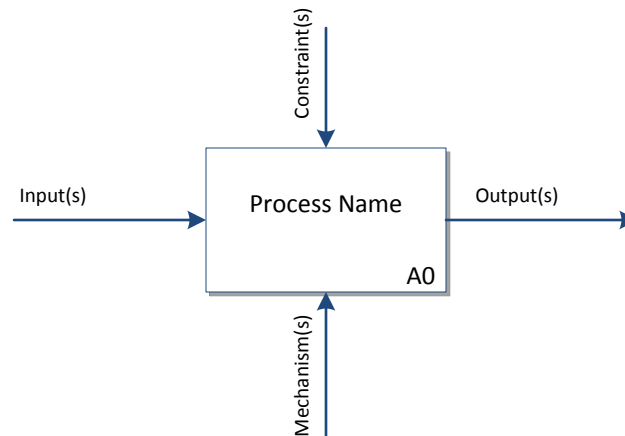


## SEABOARD MARINE – WAREHOUSE OPERATION

February 14<sup>th</sup>, 2011.

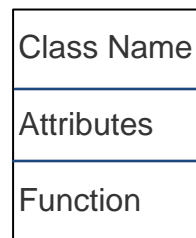
To model the AS-IS Model for the Seaboard Marine Warehouse Operation, we utilized the IDEF0 Model or Integration Definition for Function Modeling.

This method is used to model decisions, actions and activities. It is conformed the following way:

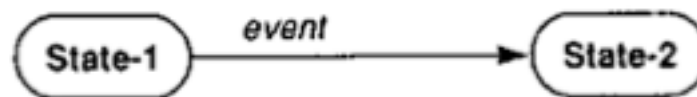


The OMT technique views system development in the following stages: system analysis, system design, implementation design and implementation. To capture the various perspectives of the organization two types of OMT models will be used describe the system:

i) The object model describes the static state of a system's objects and their relationships.



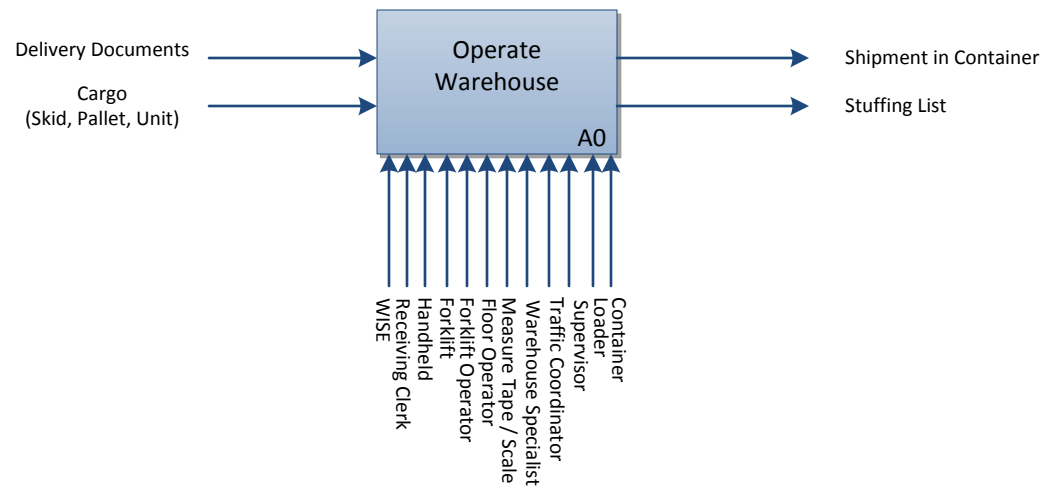
ii) The dynamic model describes the state transition (from creation to end) of objects within the system and the triggers that initiate the transitions.



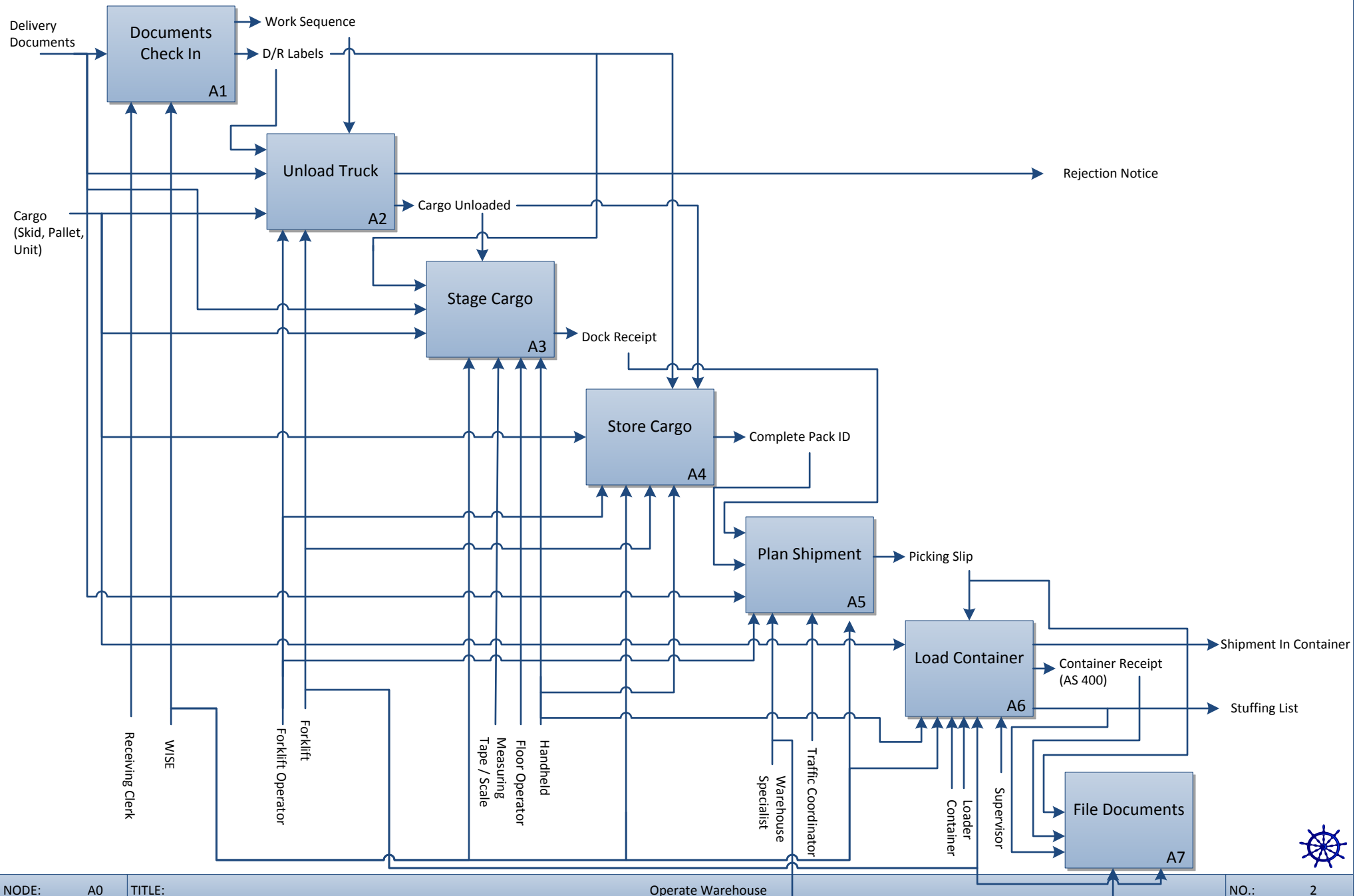
## Index

- Activity Model
- Object Model
- Dynamic Model
- Glossary
- Operational Definitions

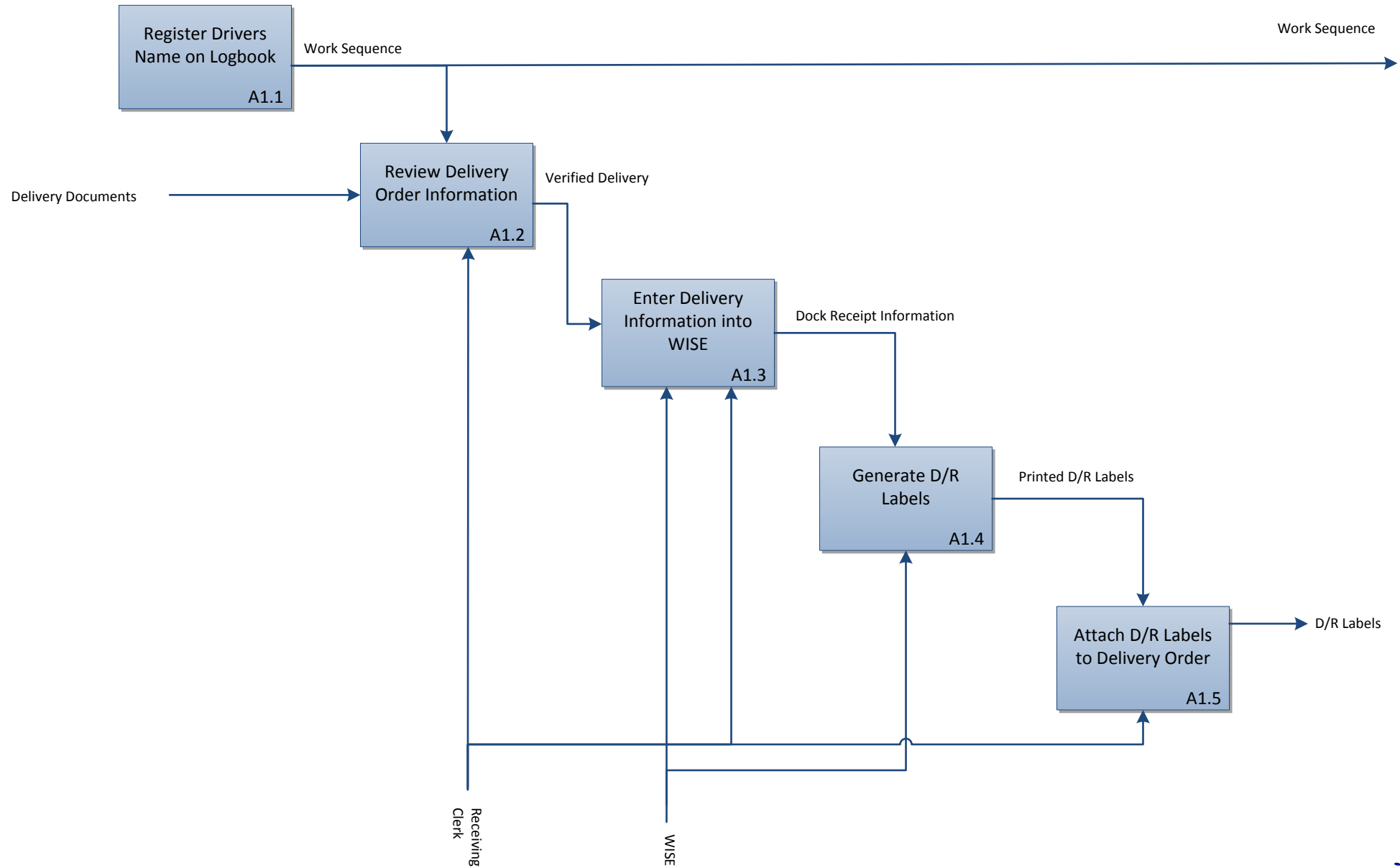
# SEABOARD MARINE - PROCESS FLOW FOR THE LCL WAREHOUSE OPERATION



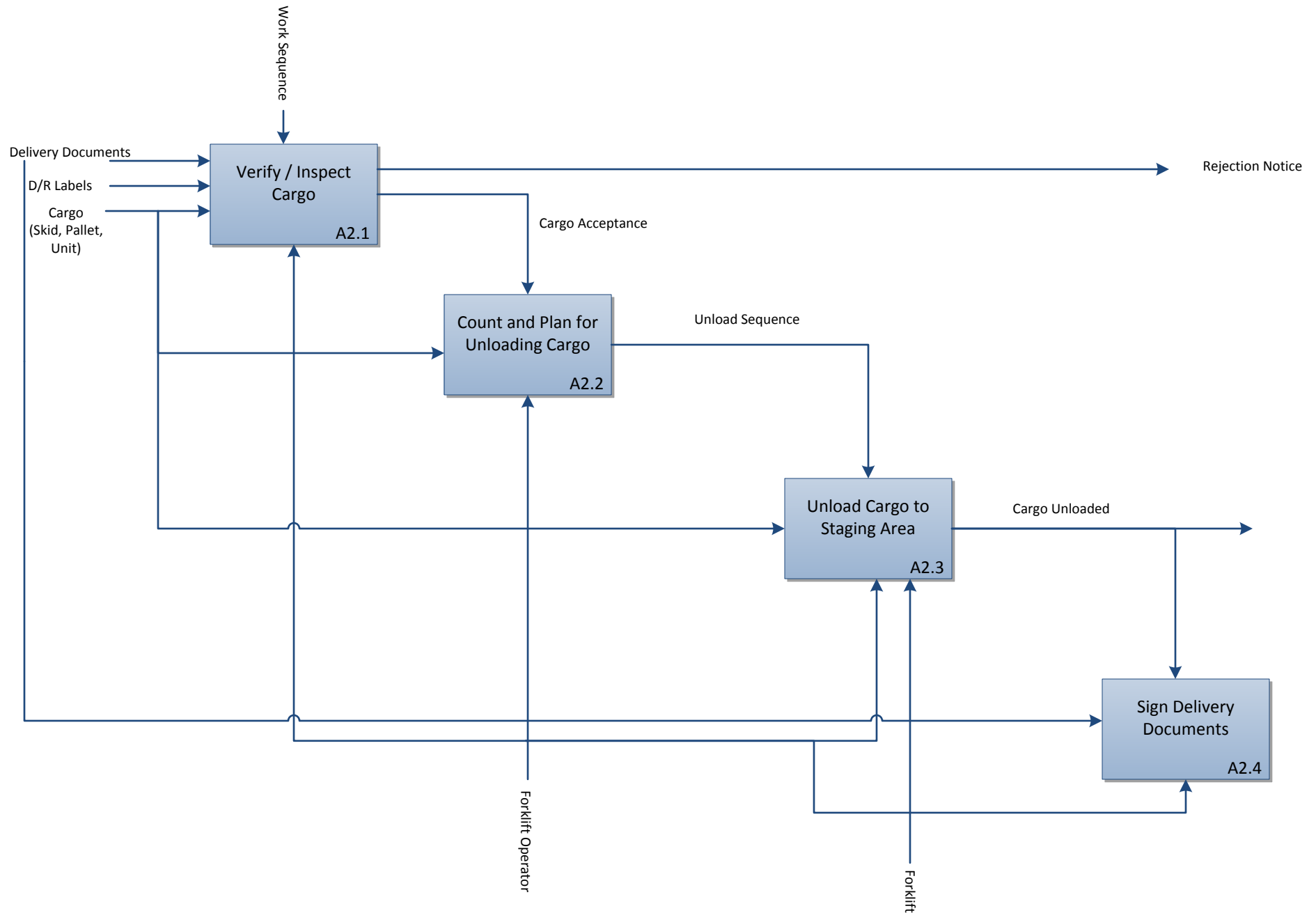
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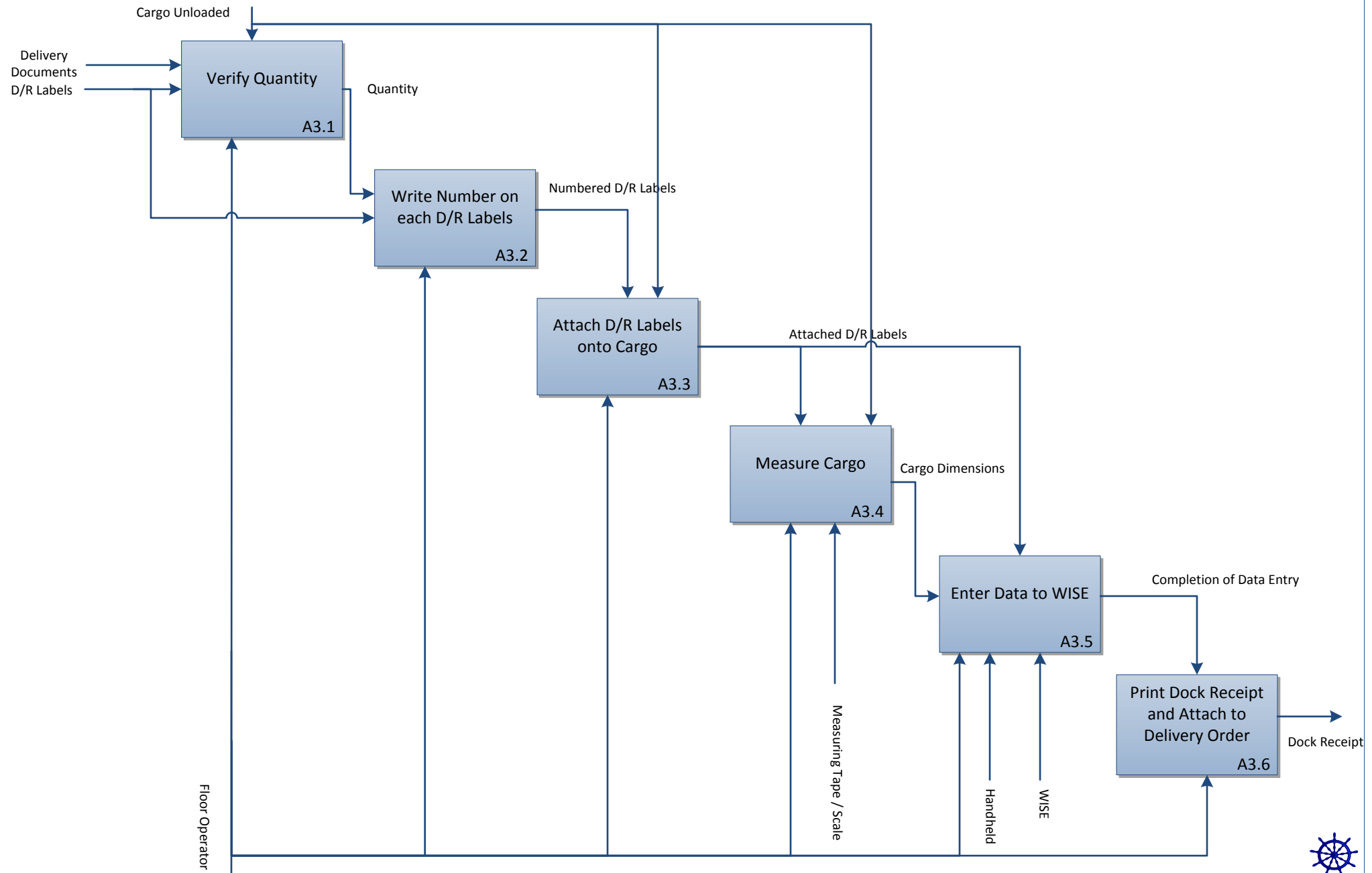
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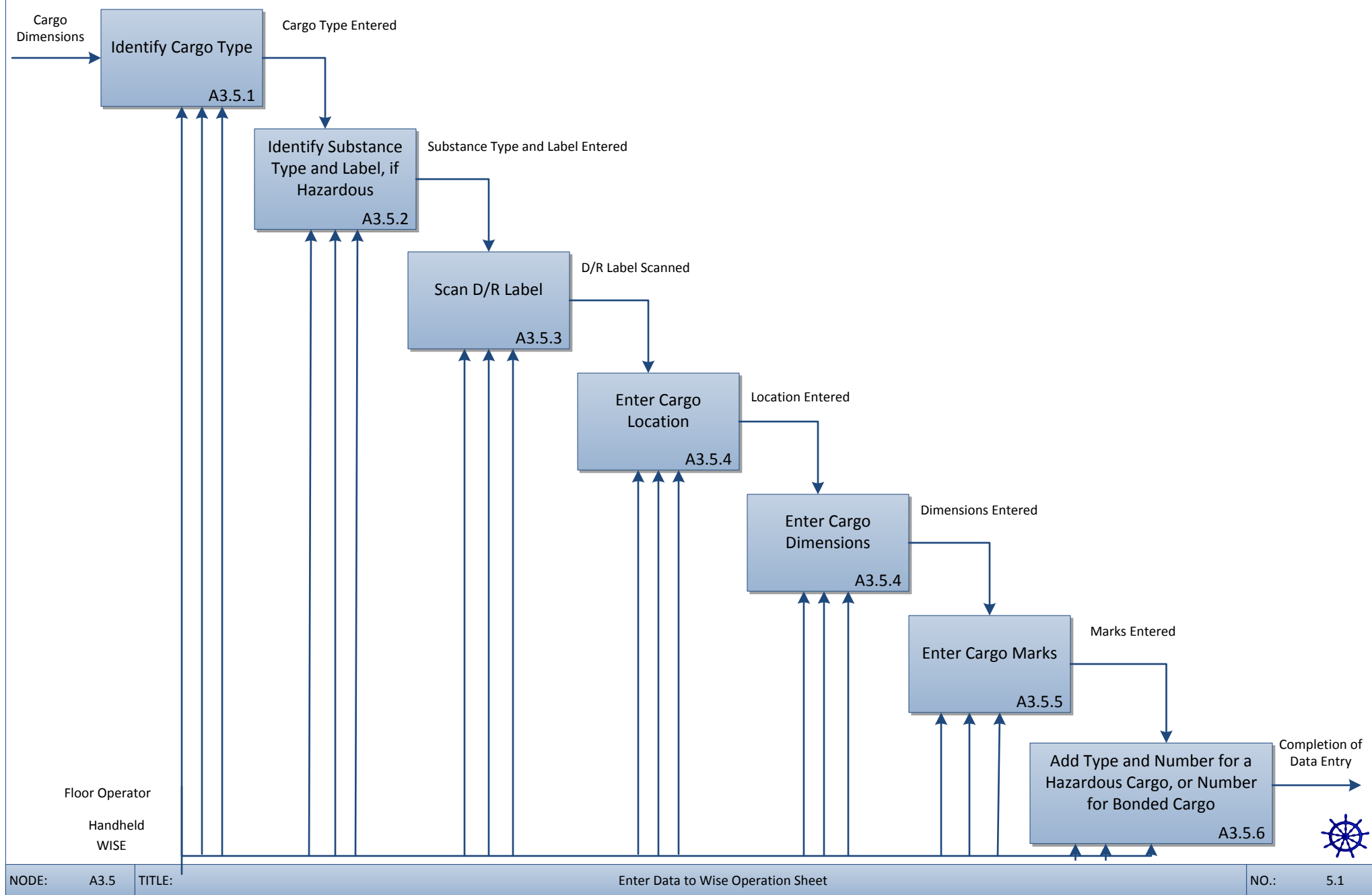


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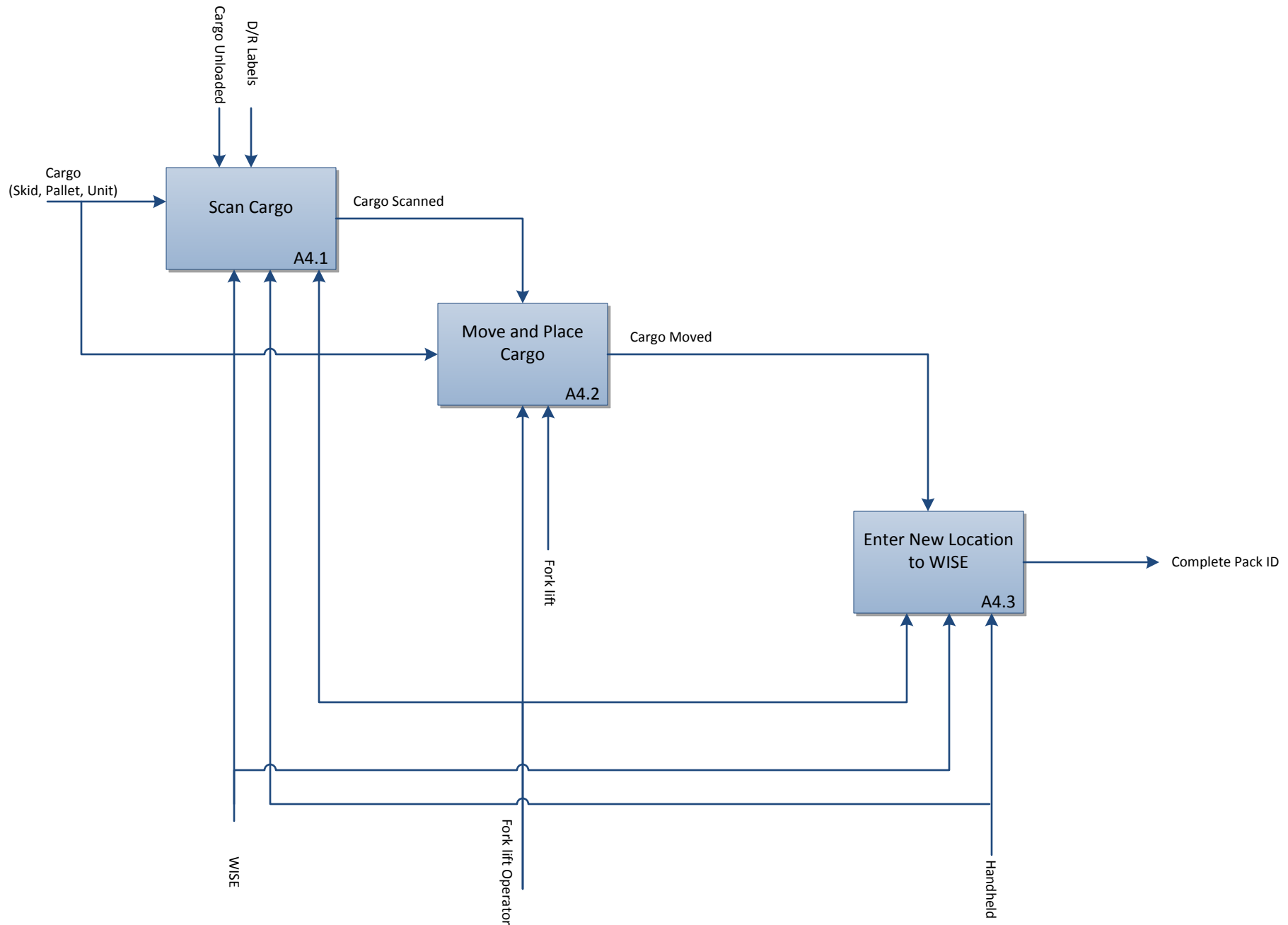




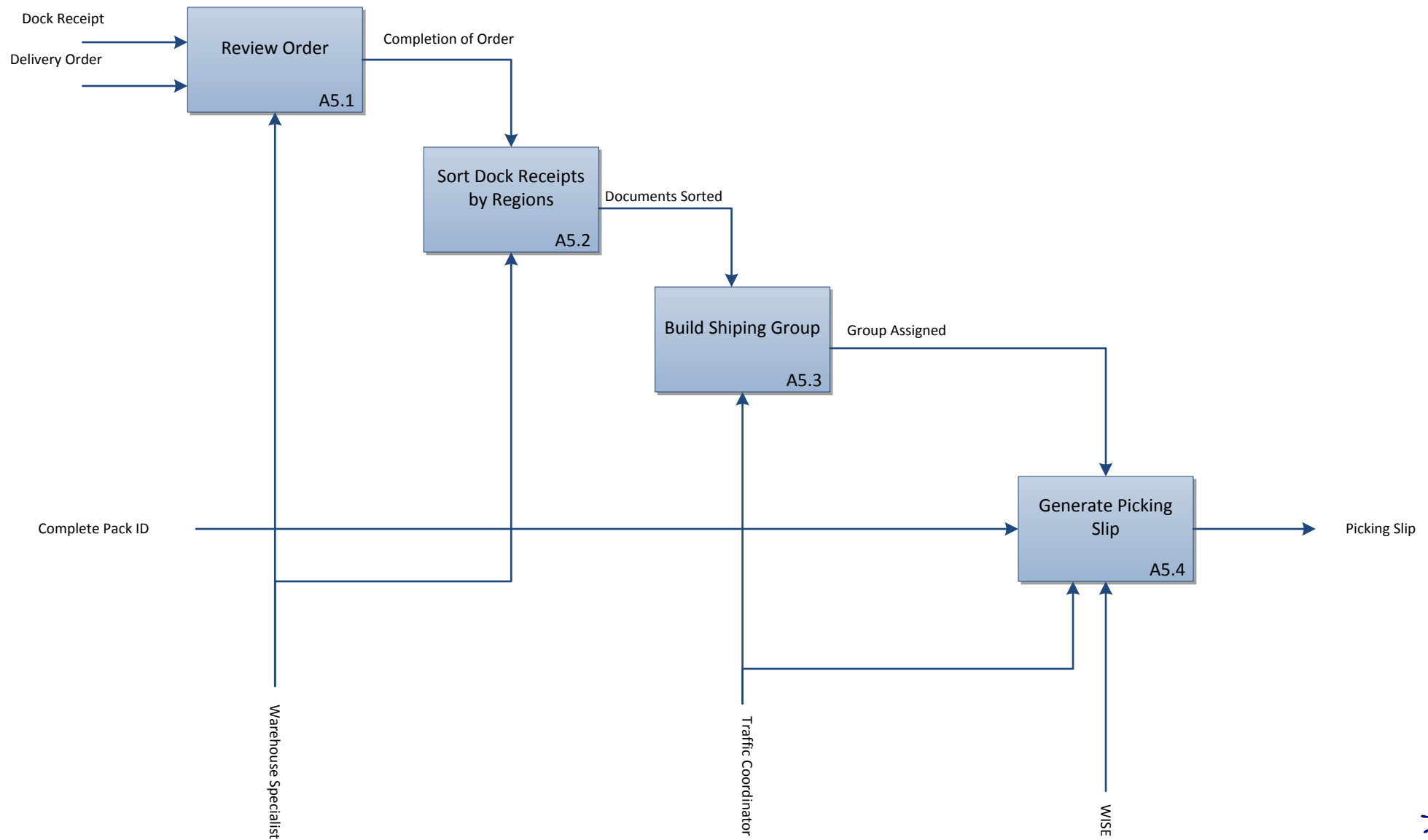
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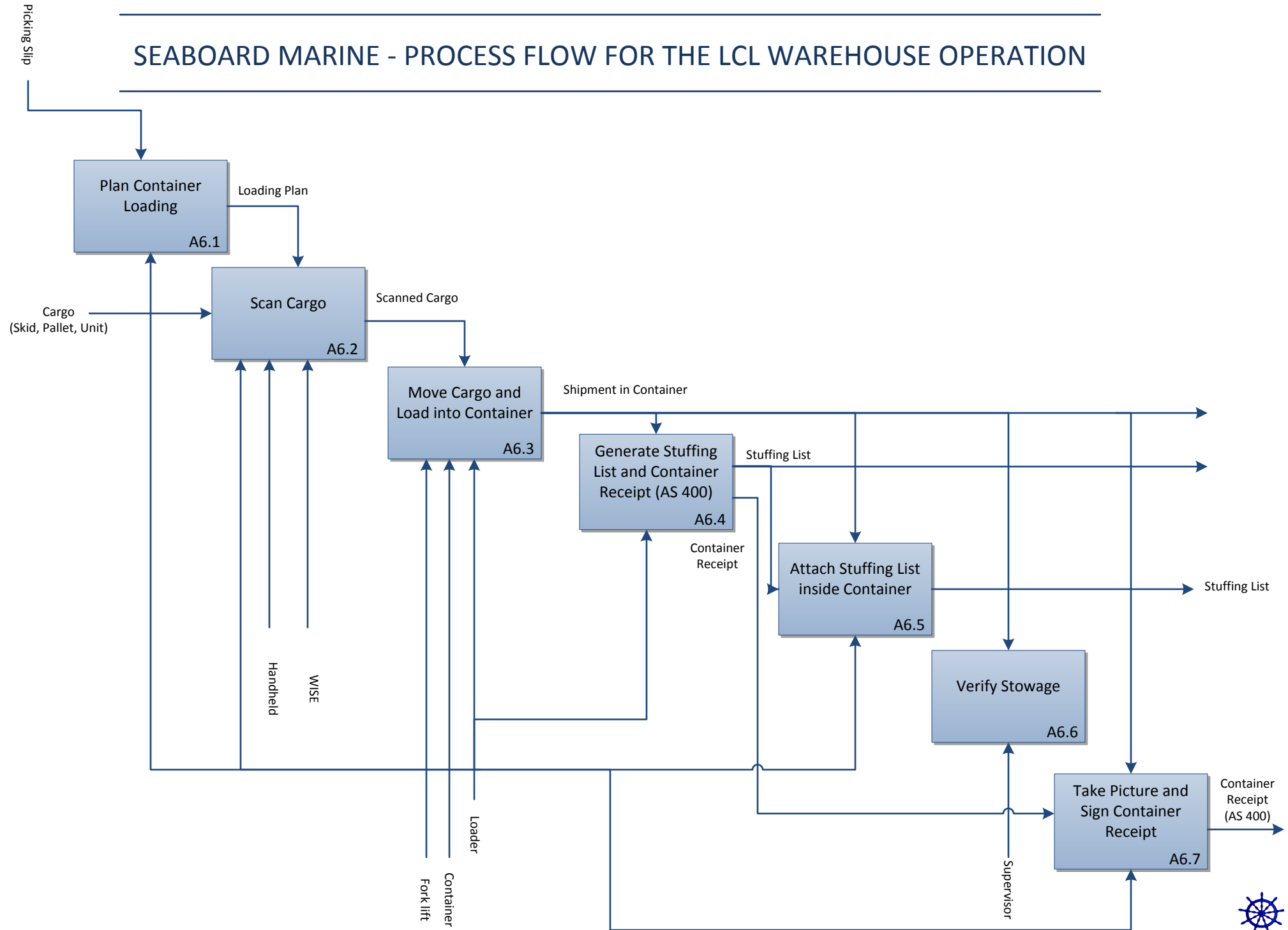
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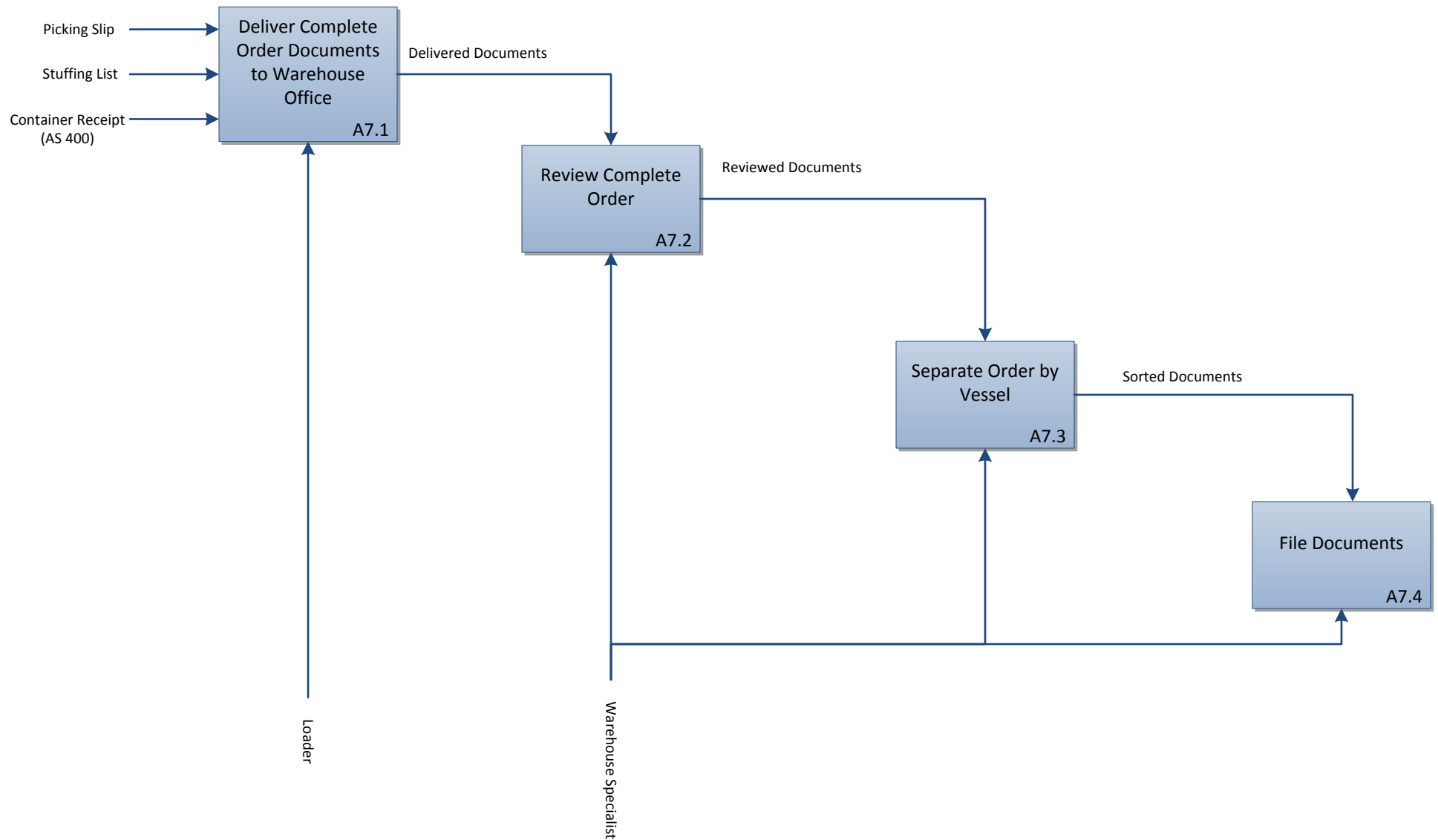
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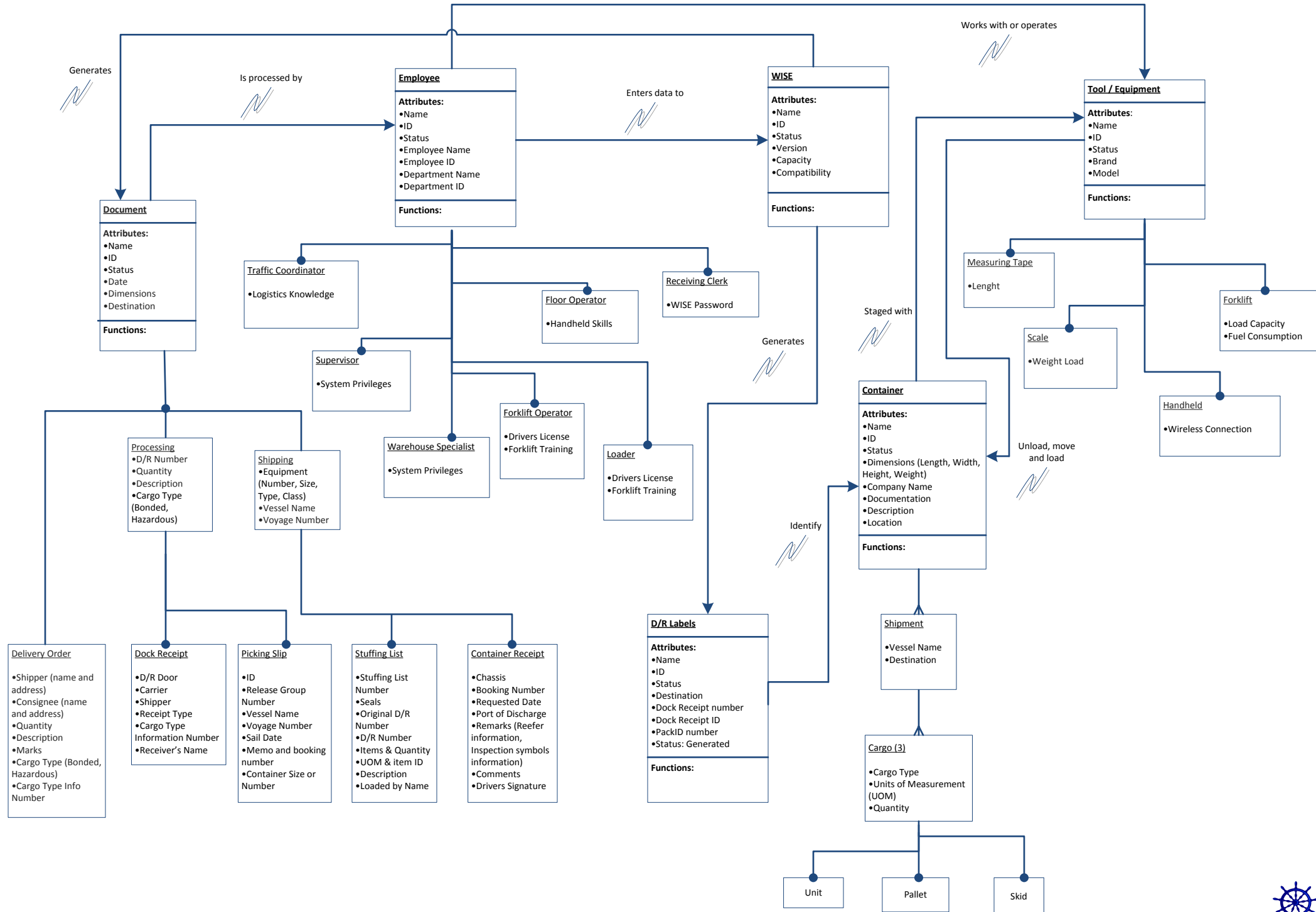
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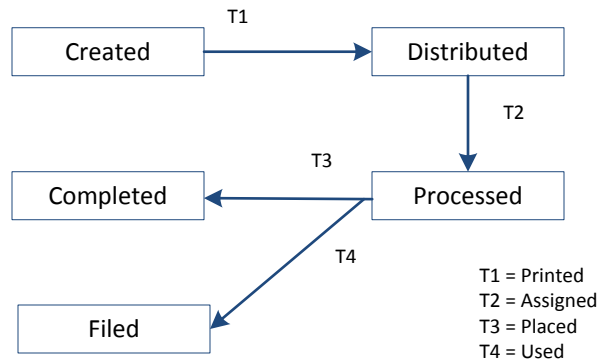


# SEABOARD MARINE – OBJECT MODEL FOR THE LCL WAREHOUSE OPERATION

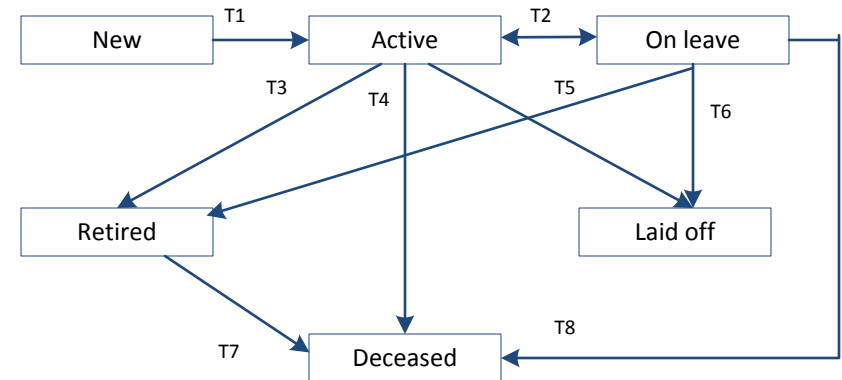


# SEABOARD MARINE – DYNAMIC MODEL FOR THE LCL WAREHOUSE OPERATION

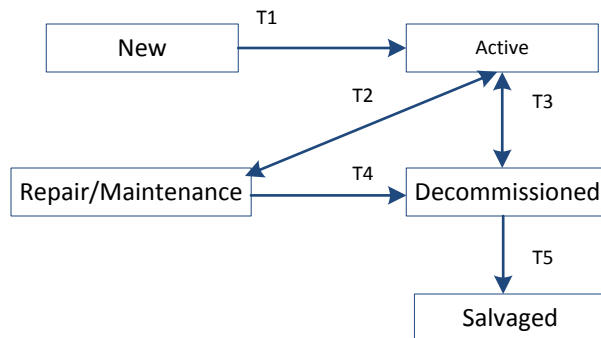
## Document



## Employee



## Tool / Equipment



T1 = Assigned  
T2 = Malfunctioned /  
Restored  
T3 = Broken / Repaired  
T4 = Irreparable  
T5 = Not required

T1 = Assigned  
T2 = Authorized  
T3 = Withdraw  
T4 = Accident or Disease  
T5 = Withdraw  
T6 = Fired  
T7 = Accident or Disease  
T8 = Accident or Disease

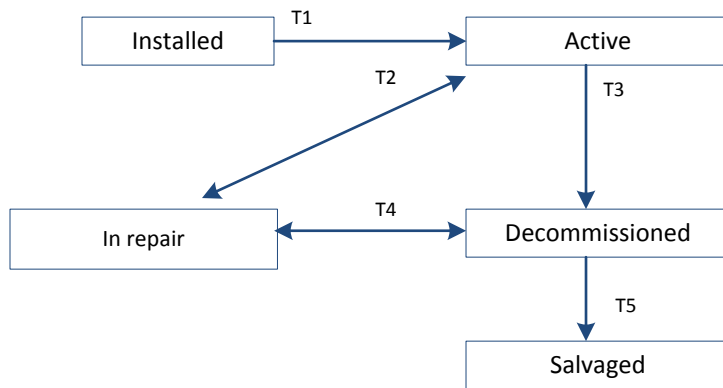


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# SEABOARD MARINE – DYNAMIC MODEL FOR THE LCL WAREHOUSE OPERATION

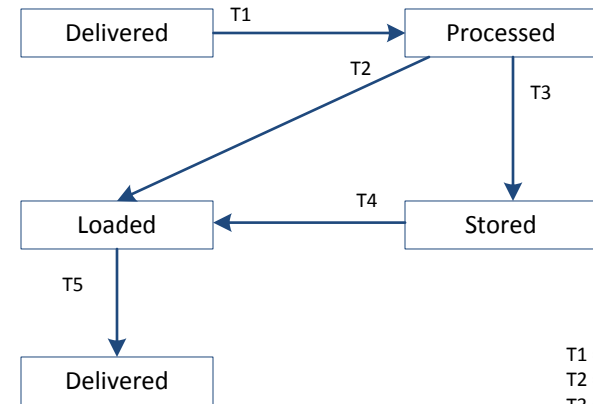
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## WISE



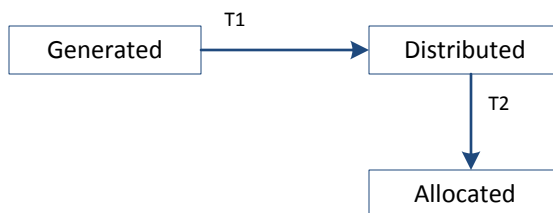
T1 = Assigned  
T2 = Authorized  
T3 = Withdraw  
T4 = Accident or Disease  
T5 = Withdraw

## Cargo



T1 = Unloaded  
T2 = Labeled  
T3 = Picking Slip Printed  
T4 = Picking Slip Printed  
T5 = Shipped

## D/R Label



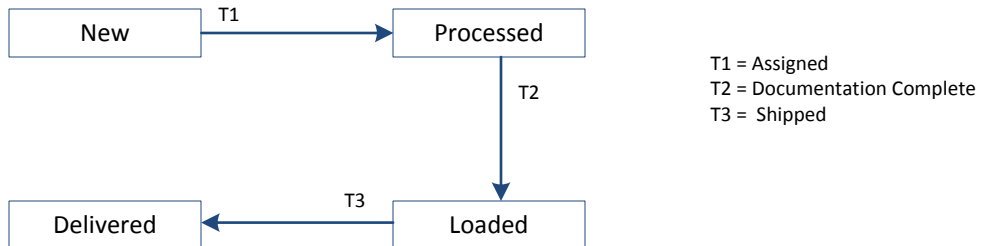
T1 = Printed  
T2 = Numered



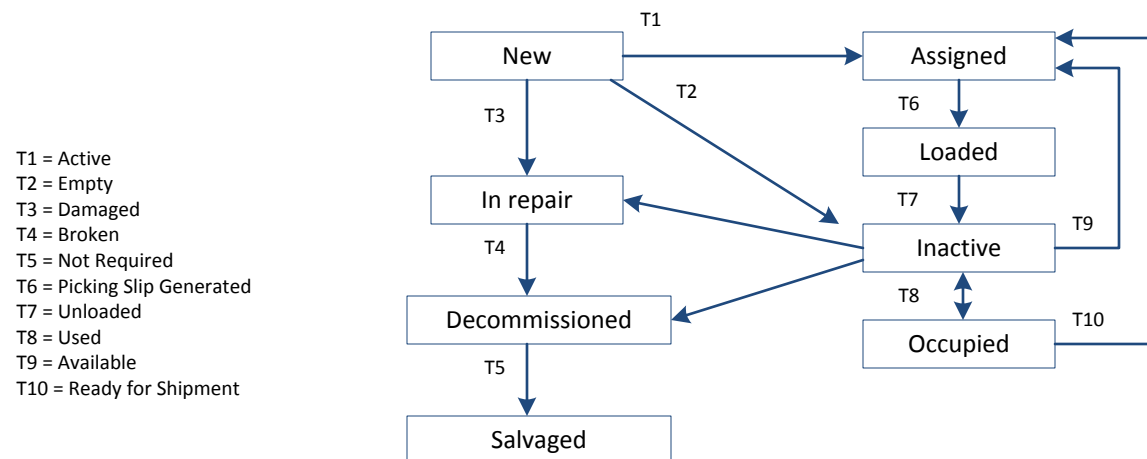


# SEABOARD MARINE – DYNAMIC MODEL FOR THE LCL WAREHOUSE OPERATION

## Shipment



## Container



## Glossary

**Delivery Documents** - Documents handed by driver that indicate the quantity, contents of the container they are delivering, where those contents are to be shipped to and any other information. For bonded or hazardous contents, these delivery documents can include, permits, numbers, or any other extra information regarding the cargo.

**Cargo** - Any skid, pallet or unit that needs to be shipped and handled by Seaboard.

**Complete Pack ID** - Complete data set of the location, information and measurements of a dock receipt entered into WISE system.

**Container** - Item used to contain, store and transport products.

**Container Receipt** - Form or document signed by driver who's taking cargo to port. Also known as AS400

**Dock Receipt** - Summary sheet enlisting the cargo, its measures and cargo type information assigned to a certain dock receipt number.

**D/R Labels** - Labels pasted to cargo that help track and identify different cargos throughout the entire process.

**Floor Operator** - Employee working on the warehouse that stages the cargo.

**Forklift** - Equipment used within the warehouse to unload, load or transport cargo.

**Forklift Operator** - Employee who operates the forklift for unloading cargo.

**Handheld** - Equipment that serves the purposes of scanning D/R Labels, entering cargo relevant information into the WISE system or keeping track of cargo movements within the warehouse.

**Loader** - Employee who operates the forklift to load cargo into containers.

**Picking Slip** - List indicating the dock receipt numbers that are to be loaded into an assigned container.

**Receiving Clerk** - Employee at the entrance of warehouse receiving incoming drivers that are delivering cargo for shipment. He registers them into WISE system to be able to print their corresponding D/R Labels.

**Supervisor** - Employee that performs supervising activities within the warehouse.

**Stuffing List** - Summary list of the contents of a container that is stuffed inside the container.

**Traffic Coordinator** - Employee that regulates communication between different divisions.

**Warehouse Specialist** - Employee working inside the warehouse office.

**WISE** - Computer software used by Seaboard Marine used to track all shipments and cargo inside and outside warehouse.



## Operational Definitions

**A.0 Operate Warehouse** - The entire process that happens within the warehouse for receiving, processing and shipping cargo.

**A.1 Documents Check In** - Operation in which the delivery documents information is entered into the Wise system to assign a dock receipt number to an order and print labels for further use.

**A1.1 Register Drivers Name on Logbook** - Each driver register himself on a logbook and a number is assigned to him, number which indicates the order of sequence in which he will be attended.

**A1.2 Review Delivery Order Information** - The receiving clerk reviews that all the information required for him to log into WISE is well indicated in the delivery documents.

**A1.3 Enter Delivery Information into WISE** - Information from the delivery documents is entered into the WISE system.

**A1.4 Generate D/R Labels** - A dock receipt number is automatically assigned by the system and corresponding labels are printed.

**A1.5 Attach D/R Labels to Delivery Order** - The printed labels are attached into the delivery documents and handed back to the driver so he can give them to the Forklift operator who will unload the cargo from the container.

**A.2 Unload Truck** - Operation of removing cargo from a container and placing into staging area.

**A2.1 Verify / Inspect Cargo** - Make sure that the contents (cargo) in the container are well wrapped and in good shape.

**A2.2 Count and Plan for Unloading Cargo** - Plan in which sequence the cargo is to be unloaded from the container.

**A2.3 Unload Cargo to Staging Area** - Place Cargo on the assigned spot for further processing.

**A2.4 Sign Delivery Documents** - Certify that the contents listed on the delivery documents were received by the warehouse.

**A.3 Stage Cargo** - Operation in which a person measures cargo and enters additional information into the system.

**A3.1 Verify Quantity** - Confirm that the amount of units stated on the delivery documents and the corresponding cargo placed on the staging area match.

**A3.2 Write Number on each D/R Labels** - Indicate in each label how many units is in how many pallets.

**A3.3 Attach D/R Labels onto Cargo** - Paste labels into cargo.

**A3.4 Measure Cargo** - Quantify dimensions and weight of cargo.

**A3.5 Enter Data to WISE** - Record cargo dimensions on the system.

**A3.6 Print Dock Receipt and Attach to Delivery Order** - All previously recorded information is printed as a summary and given to the warehouse office with the delivery documents.

**A.4 Store Cargo** - Operation of setting aside cargo for further use.

**A.4.1 Scan Cargo** - Register a cargos' bar code with handheld to indicate something is being done to it.

**A.4.2 Move and Place Cargo** - relocate cargo into new location.

**A4.3 Enter New Location to WISE** - Scan new locations' barcode with handheld to register on WISE where the cargo is now placed.

**A.5 Plan shipment** - Scheme of how cargo is going to be distributed into which containers for shipping to final destination.

**A.5.1 Review Order** - Verify that the information loaded into the system matches the information provided.

**A.5.2 Sort Dock Receipts by Regions** - Categorize papers by regions.

**A.5.3 Build Shipping Groups** - Assigned a group by indicating to which container certain dock receipt numbers will be loaded.

**A.5.4 Generate Picking Slip** - Print the summary of dock receipt (items) to be loaded into a container, indicating each dock receipt quantity and dimensions as well as location.

**A.6 Load Container** - Operation of stowing cargo into a container.

**A.6.1 Plan Container Loading** - Verify the size of a cargo to see which should be loaded first or last into the container.

**A.6.2 Scan Cargo** - Register a cargos' bar code with handheld to indicate something is being done to it.

**A.6.3 Move Cargo and Load into Container** - Place cargo inside assigned container.

**A.6.4 Generate Stuffing List and Container Receipt (AS 400)** - Print the summary list of the contents of the container, as well as the receipt the driver will sign in order to take the container to port.

**A.6.5 Attach stuffing List inside Container** - Place Summary List inside the container on the plastic envelop assigned for it.

**A.6.6 Verify Stowage** - Supervisors approves the loading operation.

**A.6.7 Take Picture and Sign Container Receipt** - A picture is taken of the contents of the container and driver signs container receipt in order to take the container to port.

**A.7 File Documents** - Categorize and store documentation.

**A.7.1 Deliver Complete Order Documents to Warehouse Office** - Copies of certain documents used within the whole warehouse operation are taken to office.

**A.7.2 Review Complete Order** - Inspect documents to verify if there are no further actions to be taken.

**A.7.3 Separate Order by Vessel** - Classify documents by Vessel.

**A.7.4 - File Documents** - Store Documents.

