

# How a Unified IT Ecosystem Allows the Port to Cope With the Growing Cargo Turnover and Effectively Interact With Other Participants in the Logistics Chain

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The Terminal Operating System  
**Solvo.TOS** allows **to reduce**  
operational **costs** of cargo terminal  
**from 5 to 35%**  
and **to increase** customer service level  
of the terminal

## Who we are:

**SOLVO** is an international leading vendor of TOS, WMS and YMS solutions and systems integrator on the global markets.

We are a leading provider of high-end supply chain solutions to help and optimize the logistics and all cargo handling.



## Our approach:

**Not just development and implementation.** We have the largest expertise in automating storage logistics and are ready to work on a turnkey basis, taking risks. We are a leading firm in providing quality and value to our customer.

**Ready for new challenges.** We take on the most complex and specific projects that are beyond the power of others.

**Work for result.** Any project that we carry out, we bring to the end.



**26 years experience**



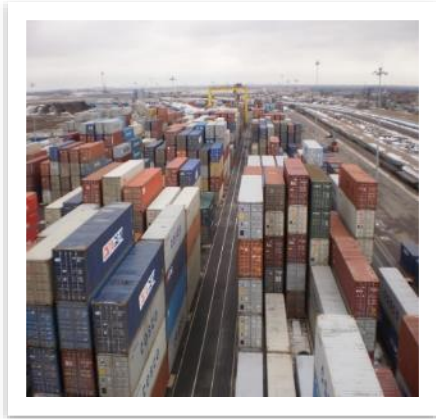
**24/7/365 support**



**5 offices worldwide**

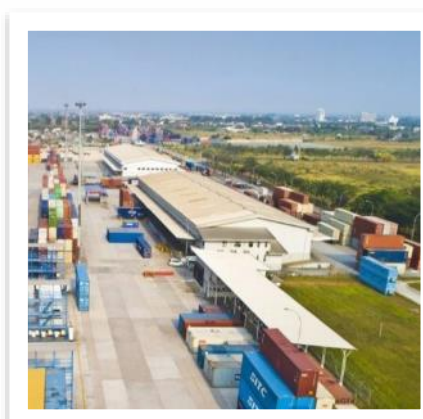


**400+ projects**



## Solutions for ports and terminals

A leading Terminal Operating System for ports and terminals. An ultimate set of solutions for managing just any type of cargo: container, break bulk, Ro-Ro, general cargo, etc., including extra solutions as the VBS, AGMS, VGM.



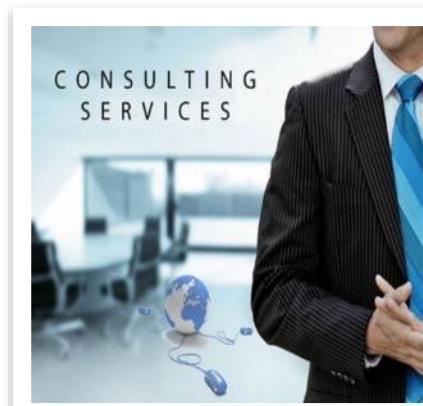
## Solutions for managing yard

YMS helps to manage all the operations at the yards, including allocation and storage of different types of cargo, housekeeping, reefer and empty containers management, CFS management etc. Providing procurement of gate-entry/cargo pick-up permits for truck-drivers, trucks and cargo forwarders/transport companies.



## Solutions for warehouse logistics

One of the leading software providers of SCE software. Solutions range from WMS to WCS, Yard, Billing, KPI and more for all verticals: production, retail and distribution, 3PL and pharmaceuticals.



## Consultancy in logistics and system integration

Logistics and Management consultants, including specializations for Project Management, Optimization, Engineering, Design and Procurement.

As well as training, seminars, webinars and other educational events.

**400+**  
projects



## Problems with the capacity

Where to put the cargo?

## Problems with the productivity

Where to get additional equipment and labor

## Problems with the efficiency

Why we have to make a lot of lifts and stowage

## Problems with the control

How to find the cargo at the yard

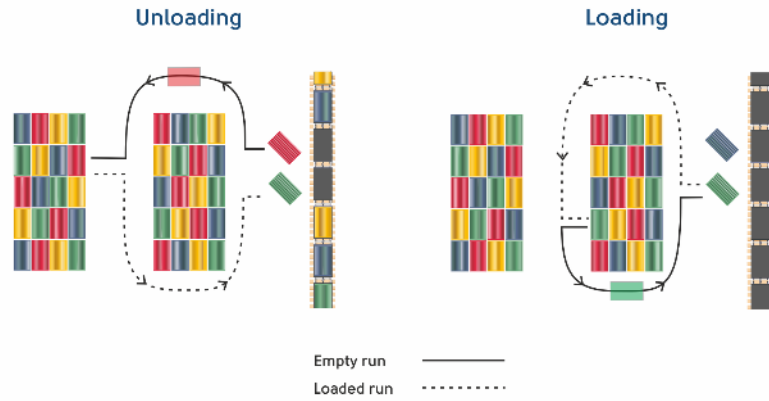
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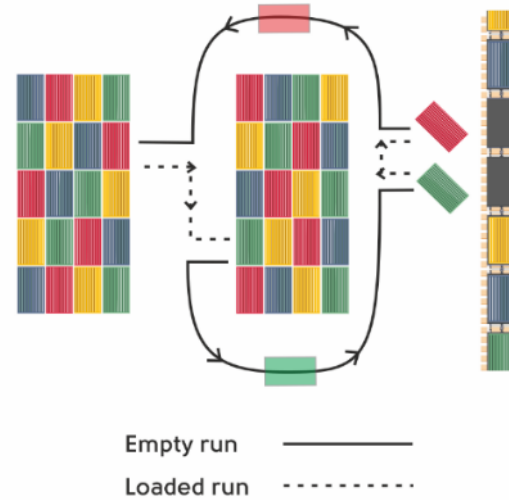


**5%**  
**efficiency**

That means if turnover of your container terminal is 1.0 M TEU per year you've got 50 000 STS moves for free



Dual cycling



Save up to  
**40%**  
empty runs



# Where we could optimize? Everywhere!

Vessels scheduling

Berth planning

Vessel planning



STS crane operator interface

Terminal tractors queue planning

Tallyman workflow

CHE scheduling

Reefer monitoring



Housekeeping and storage planning

Gate operations

Entering documents data

Rail loading planning



Empty containers depot

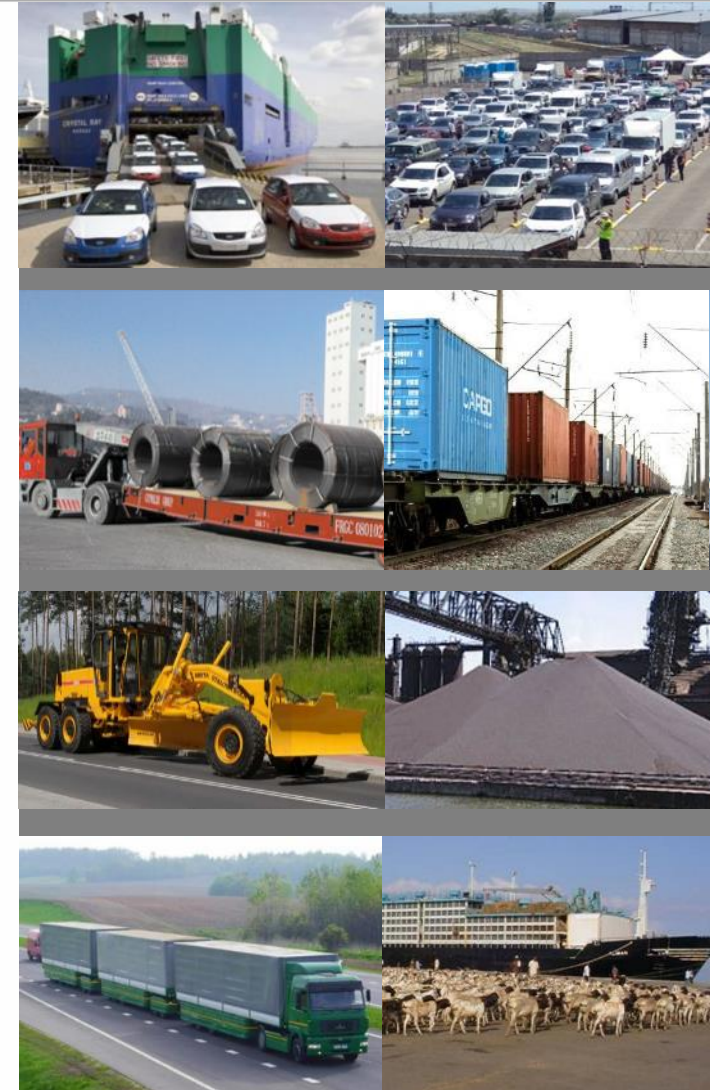
CFS and Customs inspection

# Why we are talking about unified ecosystem?

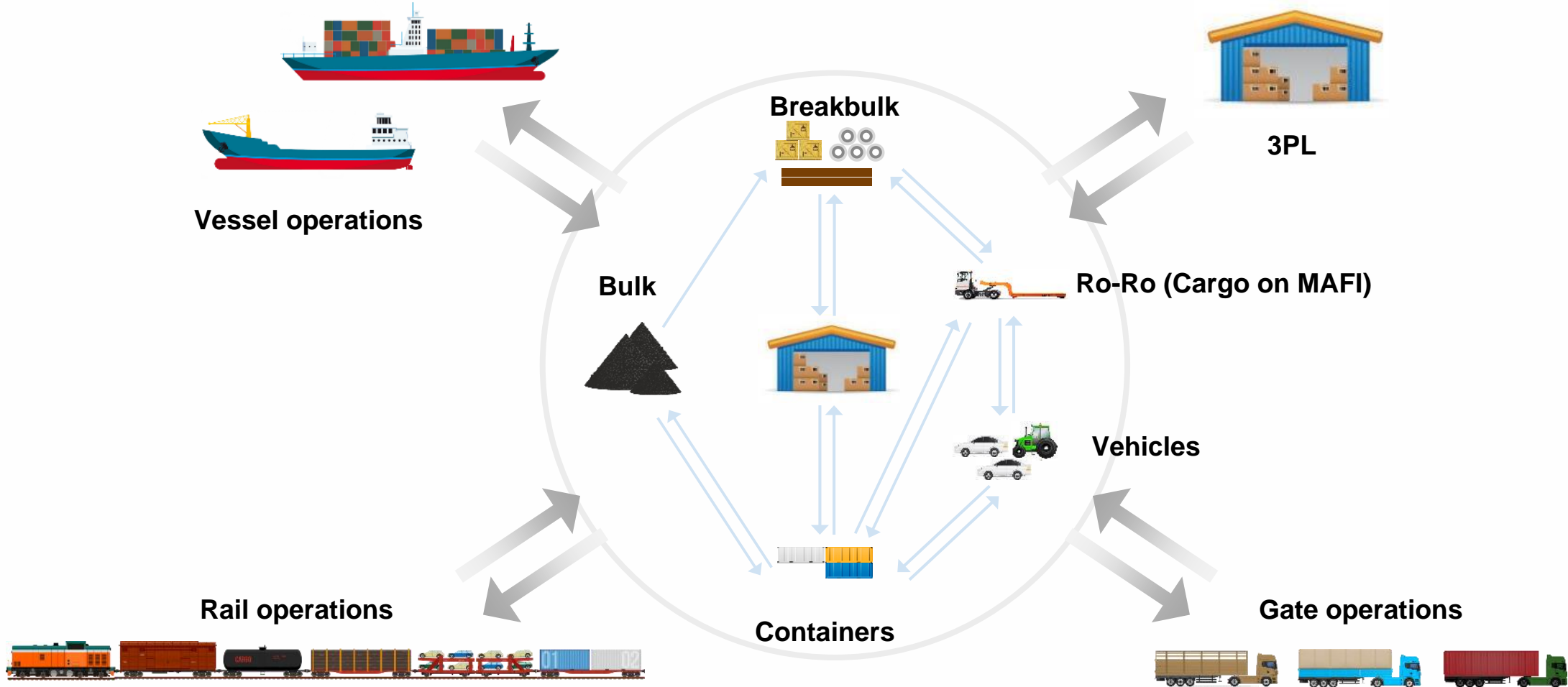
## Solvo.TOS is able to handle a wide variety of cargo types, including:

- Containers
- Bulk goods (fertilizers, grain, pellets, etc.);
- Ro-Ro
- Goods packed in bags and boxes (cacao, sugar, rice);
- Construction materials;
- Sawn material, round timber;
- Metals (ferrous and non-ferrous);
- Food, including perishable food (meat products, fruits);
- Paper (in rolls and on pallets) and pulp;
- Metal waste, machines;

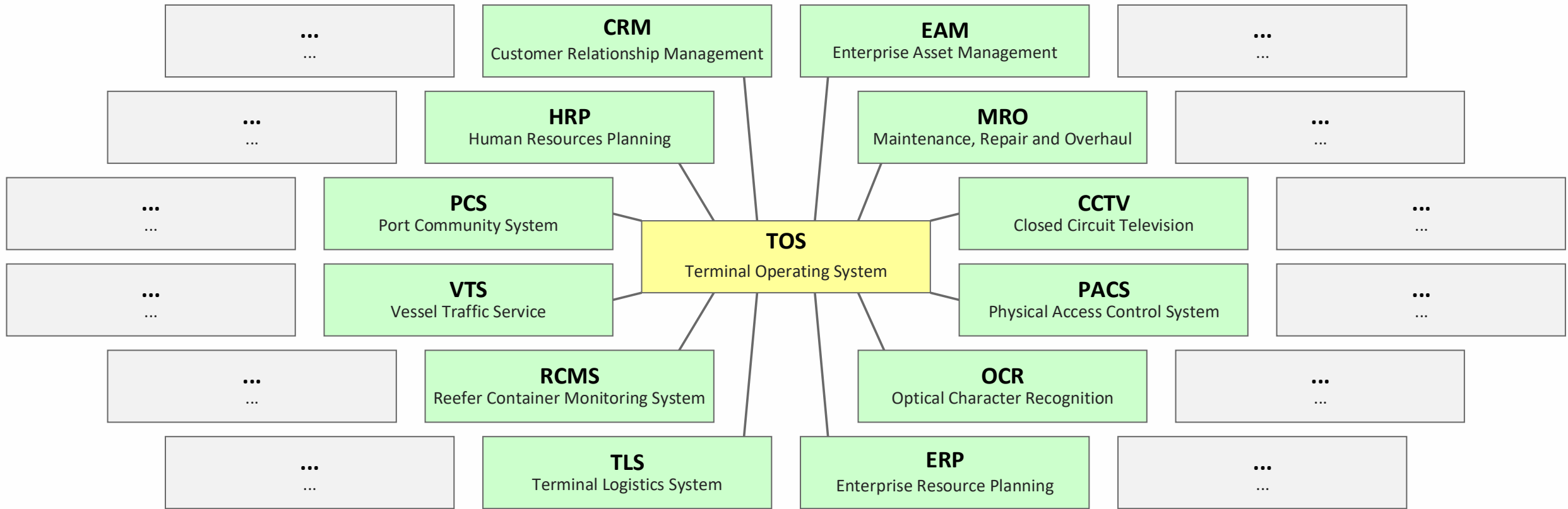
**The system** is creating for every cargo type dedicated business rules, with precise definition of what can be done with them, by whom and when.



# Why we are talking about unified ecosystem?





# Why we are talking about unified ecosystem?



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#2691890
Full | ON TERMINAL

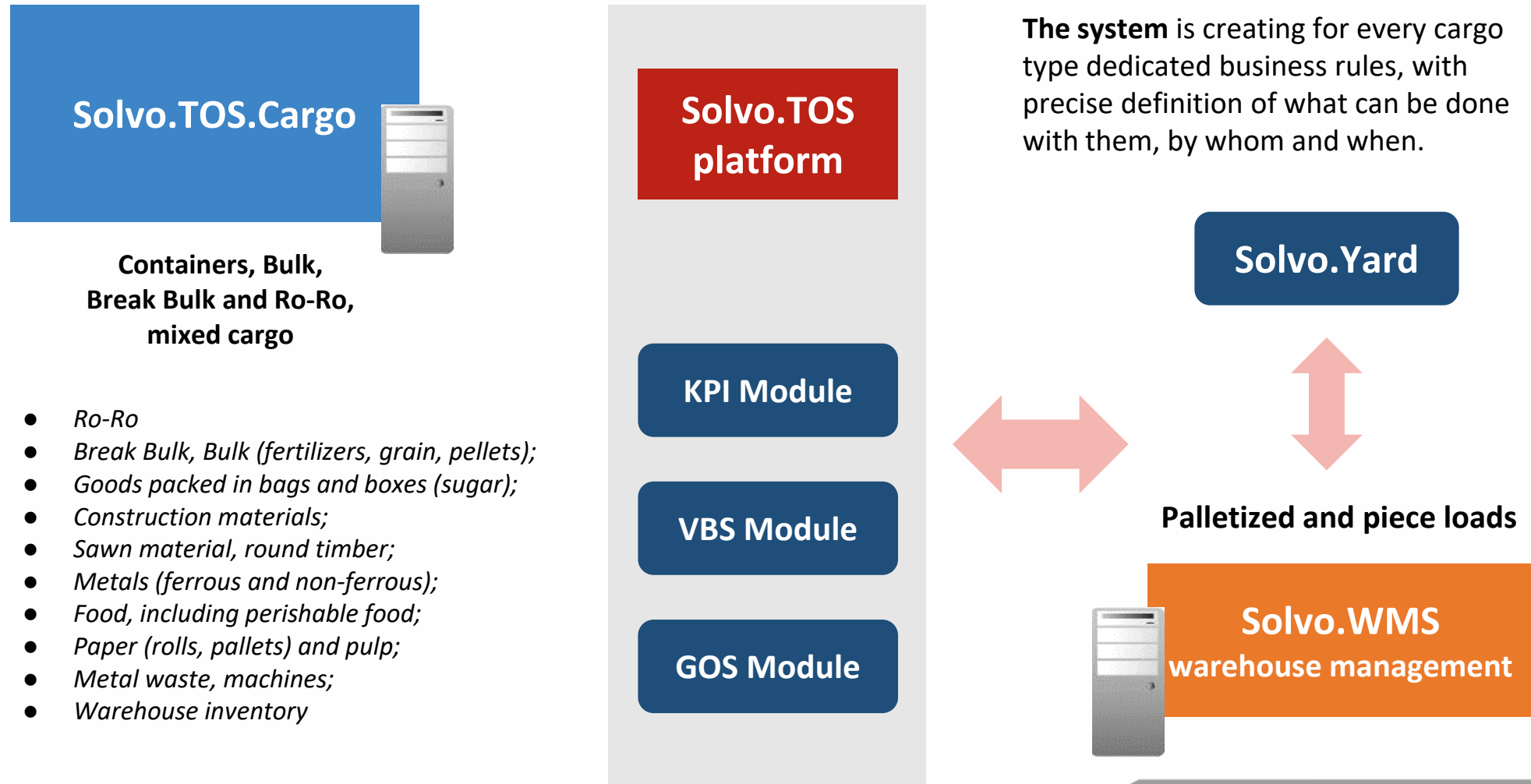
Agent <b>Grimaldi Belgium NV</b> Current direction Export	Line <b>Grimaldi Deep Sea</b> Forwarder Default	Inbound date 21.08.2020 08:21 Outbound date -		1NBR447 Gone 21.08.2020 08:20	
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Operations 7

2281125	<b>Customs Permission</b> <small>Customs doc type: EX Customs storage type: RTO Customs status: Export</small>	Created 21.08.2020 08:45 # Document 	<span style="background-color: #4CAF50; color: white; padding: 2px;">APPROVED</span>	1067175 <b>Weighing Request</b> <small>Created 21.08.2020 08:24 # Document SW063256</small>	<span style="background-color: #4CAF50; color: white; padding: 2px;">PROCESSED</span>
2675938	<b>Reception</b>	Created 21.08.2020 08:21 # Document -	21.08.2020 08:21	2160975 <b>CMR waybill</b> <small>Created 21.08.2020 08:16 # Document CMR/CNT#2691890</small>	<span style="background-color: #4CAF50; color: white; padding: 2px;">READY</span>
1135895	<b>Truck Visit</b>	Created 21.08.2020 08:16 # Document 1NBR447	21.08.2020 06:00	1144641 <b>Truck appointment</b> <small>Created 21.08.2020 08:16 # Document IN</small>	<span style="background-color: #4CAF50; color: white; padding: 2px;">CLOSED</span>
	<b>Booking</b>	Created 11.08.2020 14:04 # Document S318893226	11.08.2020 14:04		<span style="background-color: #4CAF50; color: white; padding: 2px;">READY</span>

#2643790
Full | SHIPPED

Agent <b>ACL Belgium</b> Current direction Import	Line <b>Atlantic Container Line</b> Forwarder Default	Inbound date 27.05.2020 12:28 Outbound date 28.05.2020 14:39		AST5120   ATLANTIC STAR Closed <small>Arrival date &amp; time 26.05.2020 13:02</small>	
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## Client services

Accelerated transport (truck, rail) processing at the terminal using preliminary data and time-slotting.

Enhanced customer-relationships with online, real-time data access.

Improved control with direct commands to vehicle-mounted radio data terminals.

Complete traceability with operator and CHE driver history logging.

Superior service quality for freight owners with up-to-date container information.

## Operating costs

CHE optimization with predefined routes and proven stacking strategies.

Rational equipment labor utilization.

Elimination of unproductive moves, bottlenecks and decrease in empty runs and stowage errors.

Conservation of fuel and energy, reducing maintenance costs and increasing equipment lifespan.

## Logistics

Streamlined and optimized mechanical processes involved in cargo flow at the terminal.

Complete control over cargo flow

Maximum space utilization, increasing from 5 to 20% (depending on area type).

Locate containers faster and with higher precision.

Optimized and pre-defined cargo stacking strategies to reduce reshuffles and costly moves.





TOS



WMS



Yard

**Solvo.SCE** an integrated supply chain execution platform



KPI



Billing



Web