SOLVO
THE SMARTER ALTERNATIVE

TRANSPORT EVENTS

11th Southern Asia Ports, Logistics and Shipping 2016 Sri Lanka

COLOMBO INTERNATIONAL MARITIME CONFERENCE - CIMC
SOUTH ASIA : PROPELLING GLOBAL TRADE

Efficient management of container, break-bulk, Ro-Ro terminals and warehouses using information technologies

Dan Pershin,
Head of Marketing, SOLVO

About SOLVO

Who we are:

SOLVO – one of the leading providers of high-end supply chain execution solutions to help optimize port, terminal and warehouse logistics .

Years active:

20

Number of employees:

145

Number of completed projects:

207 (end of 2015)

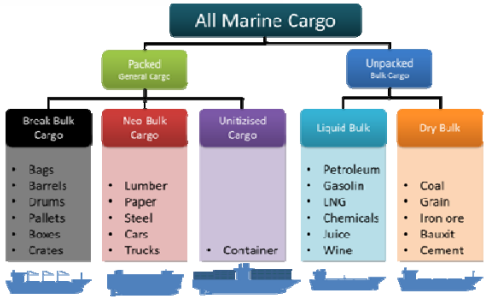
Among customers:

APM TERMINALS, globalports, CMA CGM, Terminal Investment Limited SA, DPD, PEPSICO, AB InBev, Pfizer, Carlsberg, ROYAL CANIN, TOYOTA

About SOLVO

Developed first WMS and TOS in the Pos-Soviet space in the 1990s

70% of all container in Russia is processed by Solvo.TOS



Solutions for container, break-bulk, Ro-Ro and multi-purpose

20 years

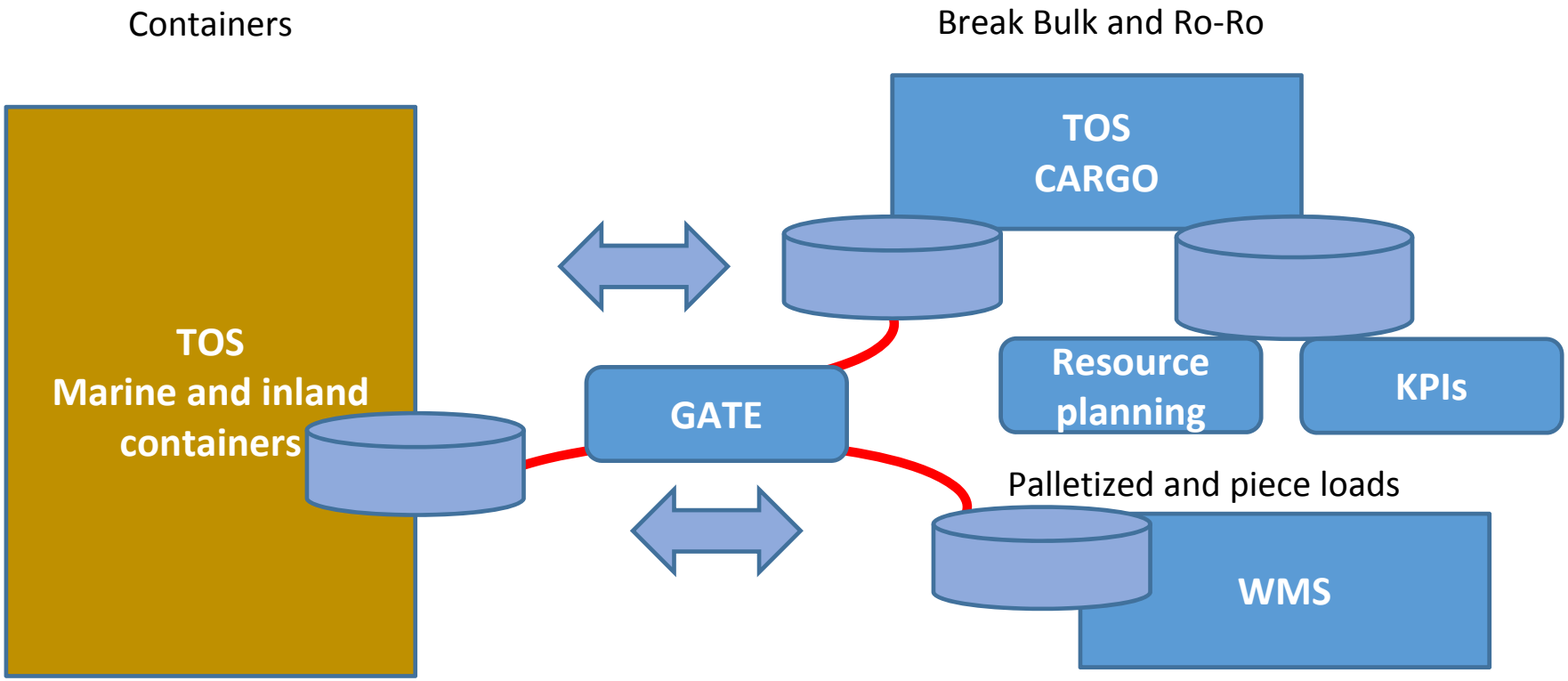
200+ projects

50+ worldwide partners

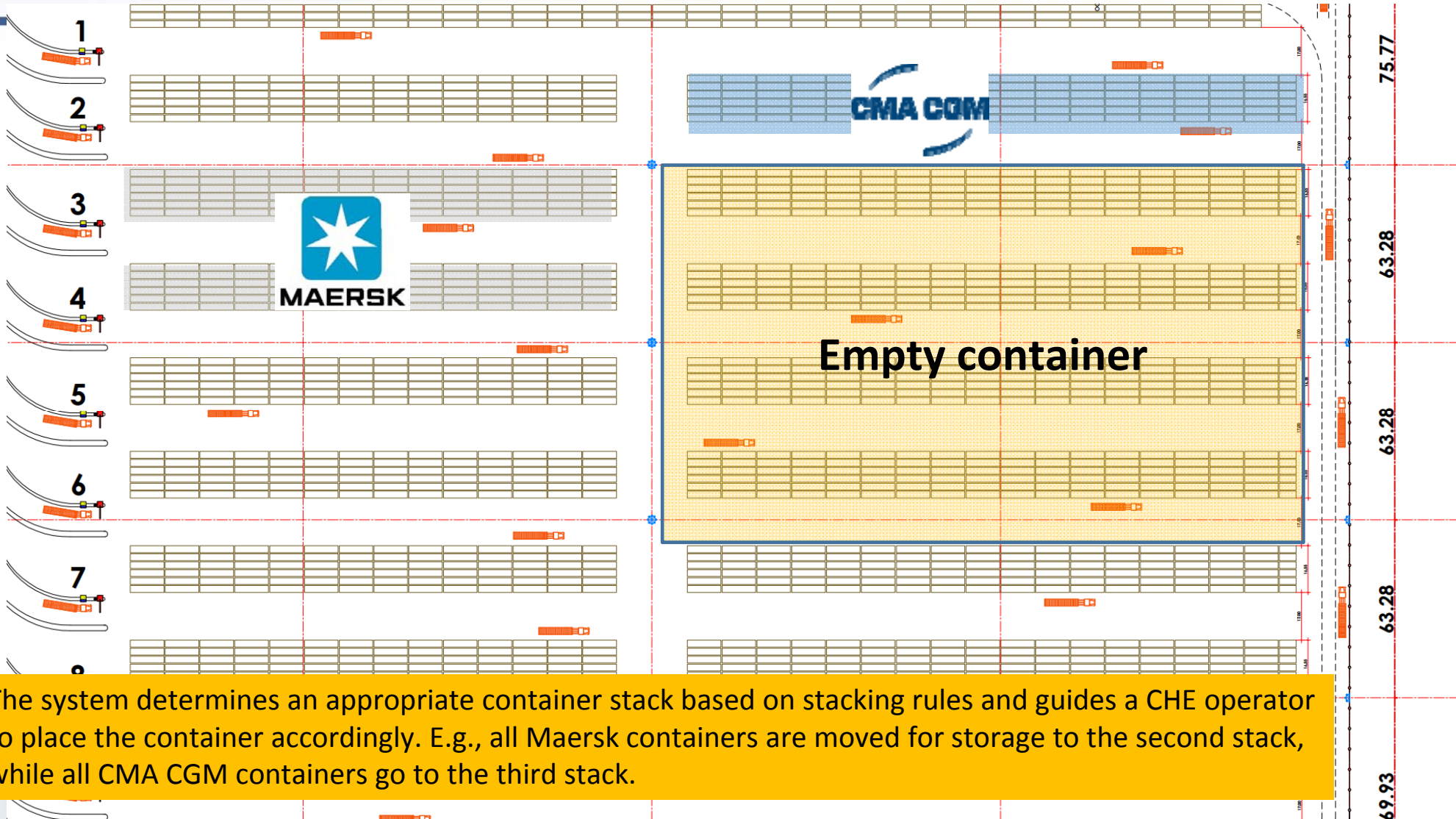
International certification

+

Solvo IT systems



Dynamic stacking rules

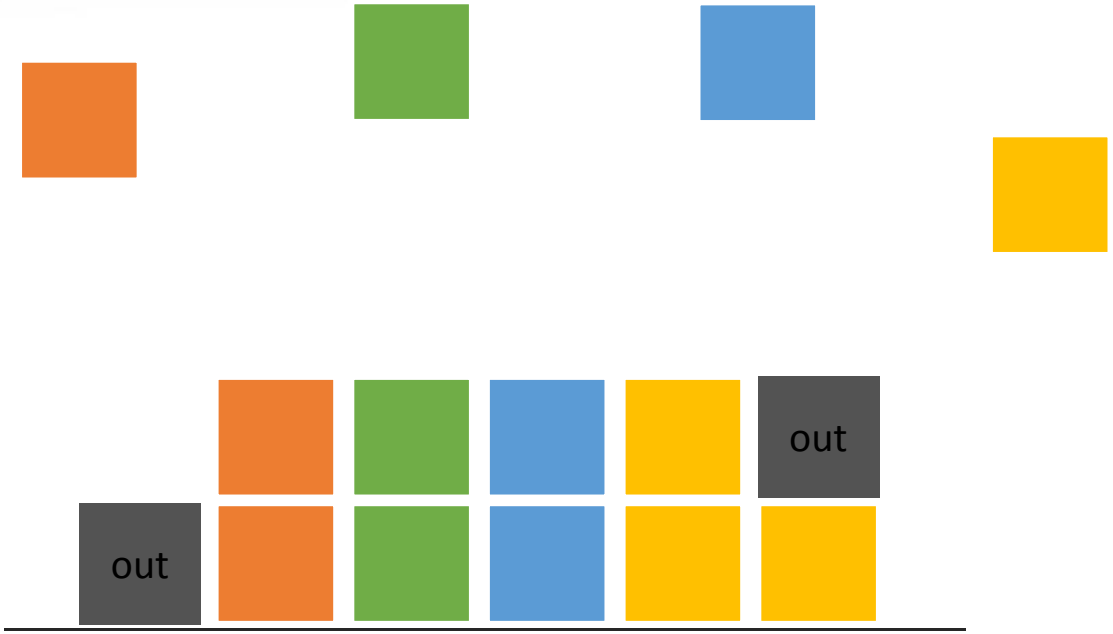


The system determines an appropriate container stack based on stacking rules and guides a CHE operator to place the container accordingly. E.g., all Maersk containers are moved for storage to the second stack, while all CMA CGM containers go to the third stack.

Dynamic stacking strategies

The specific location in a stack is chosen by the system in accordance with stacking strategies. For example, unoccupied locations at the lowest tier are taken first.

Housekeeping and reduction of rehandles

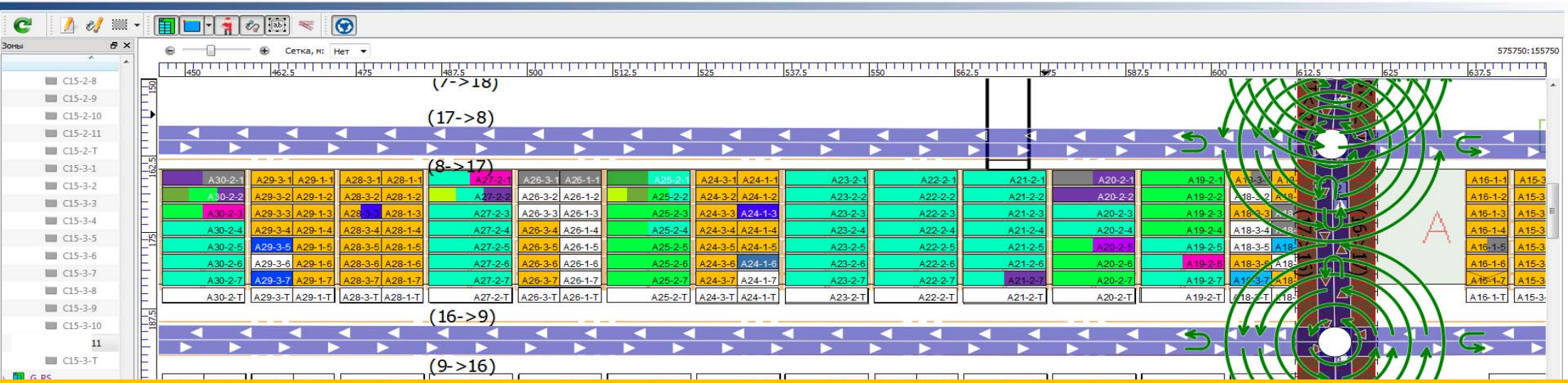


Number of rehandles reduces on average by 25%

A reduction in the amount of moves is achieved thanks to:

- Address-based storage at the yard
- Dynamic stacking rules and strategies.
- Forecasting of container arrival/departure
- Housekeeping instructions

Layout viewer and editor

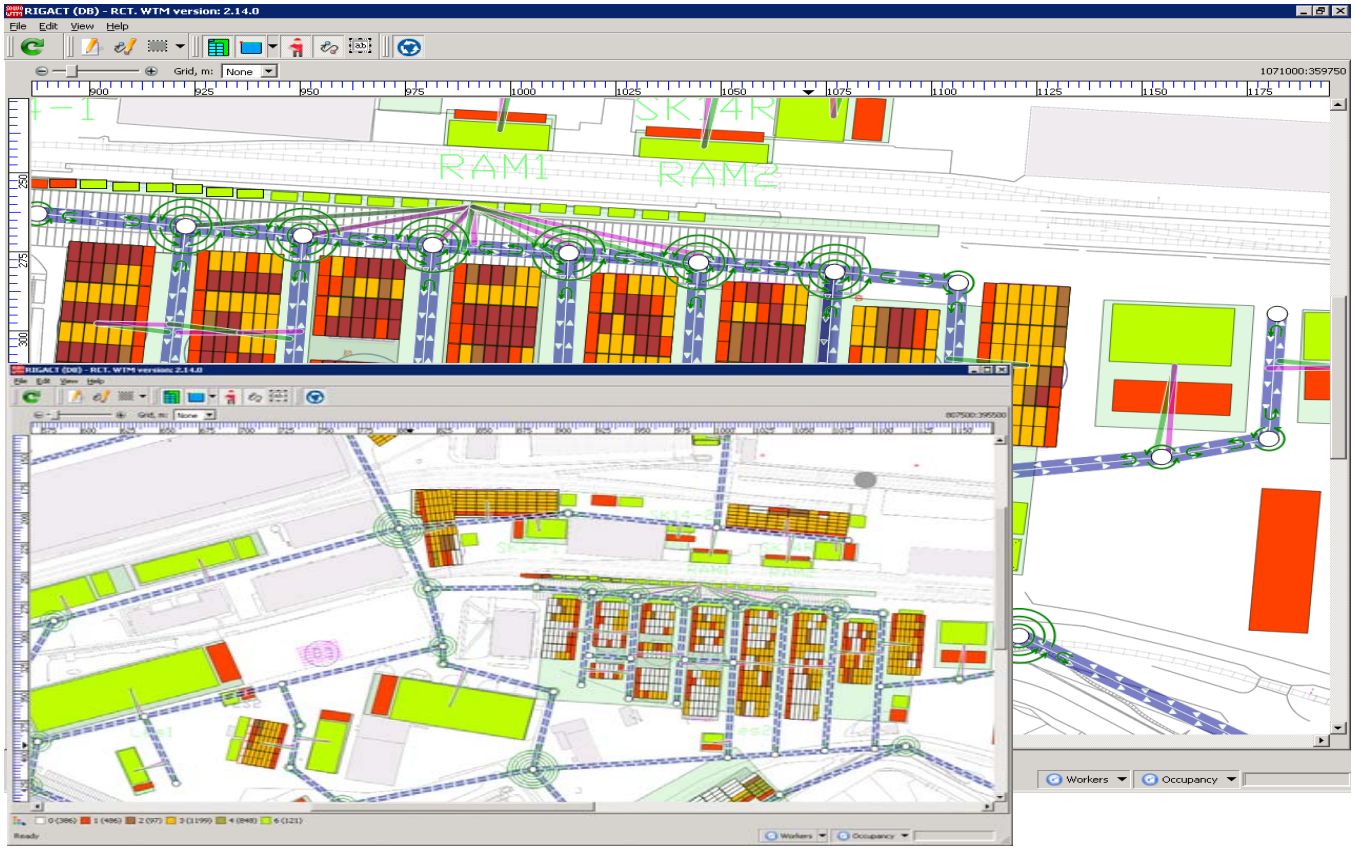


The container terminal layout can be viewed and managed in real time using a built-in interactive layout viewer and editor allowing to:

Fully describe the multilevel topology: establish a tree of terminal location, group and zone occupancy

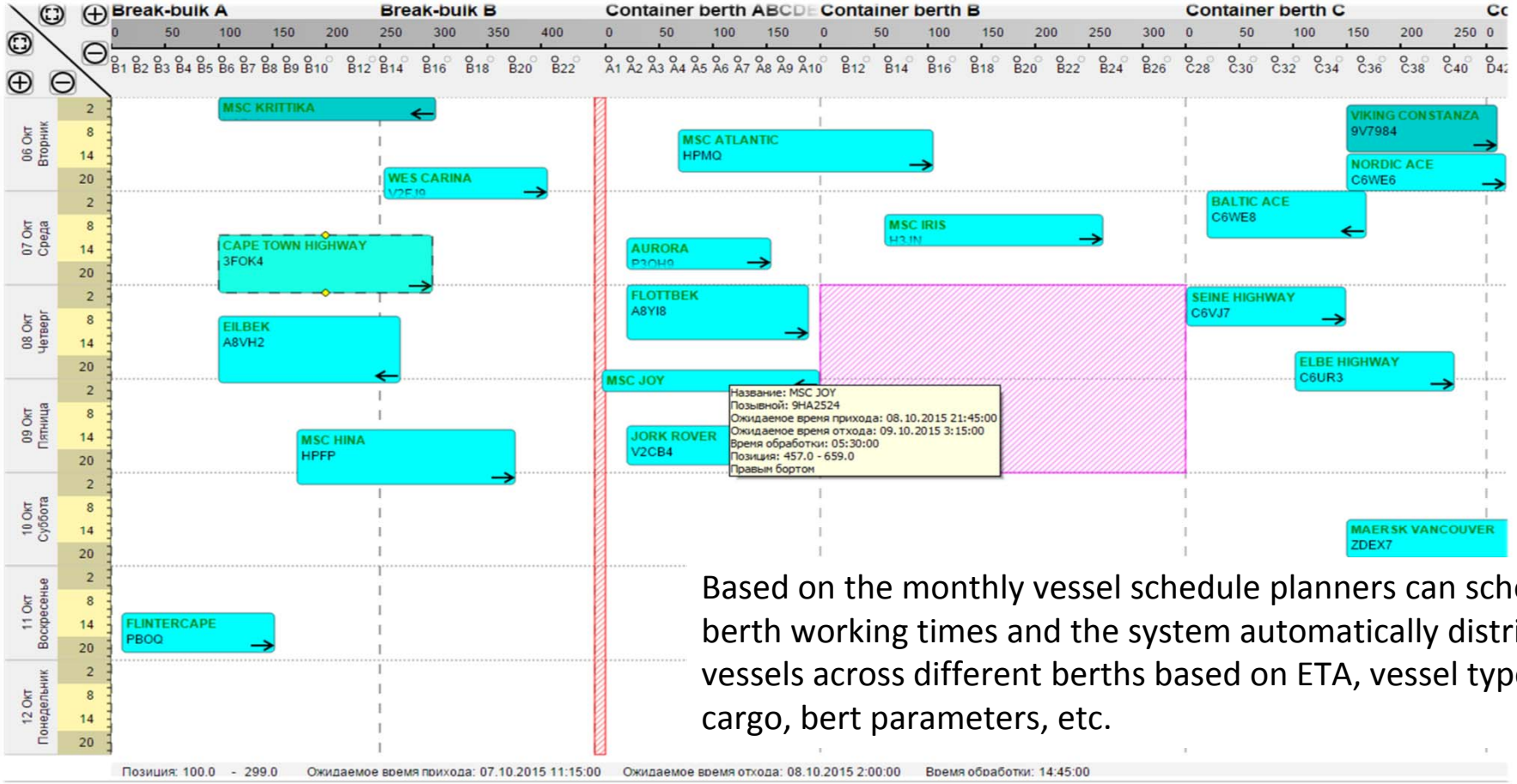
- Display, edit the position of terminal objects
- Monitor the actual level of terminal occupancy in real time
- Monitor worker movements in the terminal in real time
- Find various objects in the terminal layout and much more

CHE/MHE routing and pooling



- The system analyzes the available data about the road network of the terminal and builds the optimal route for a CHE;
- The entry of road data is carried out through the roads editor function - part of the Real-time terminal layout viewer and editor;
- The user defines the key check-points, permitted turns and delays.
- The user can also then set the availability of a stack for processing from a selected road.

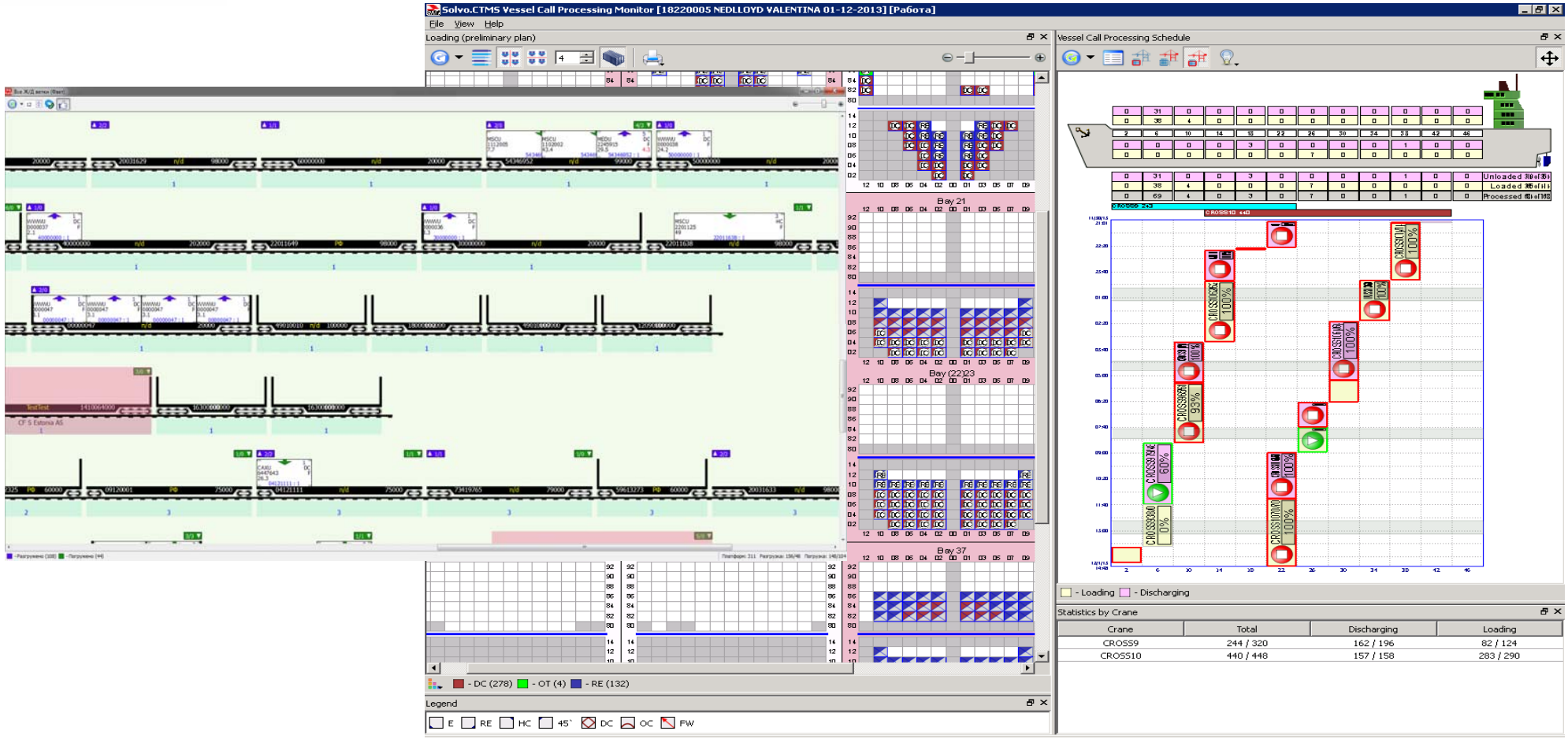
Berth planning



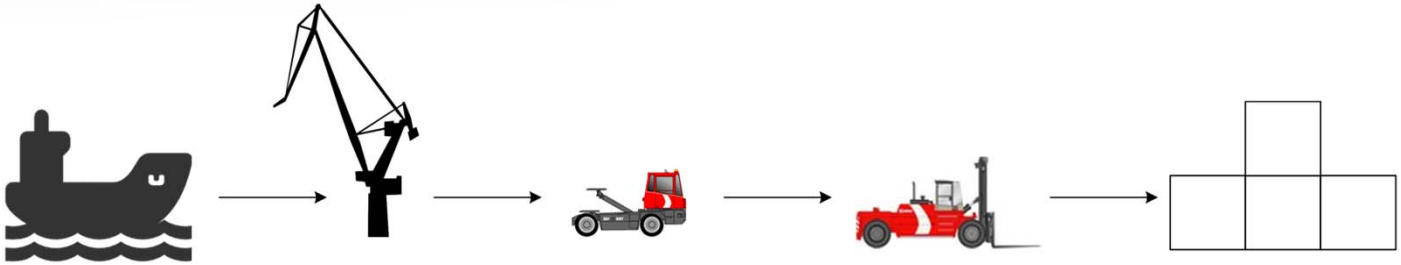
Based on the monthly vessel schedule planners can schedule berth working times and the system automatically distributes vessels across different berths based on ETA, vessel type, cargo, bert parameters, etc.

Forwarder send an EDI message to the terminal operator which is automatically processed by TOS.
E.G COPARN - transport order booking. The message contains preliminary info about the arriving containers and vehicles.

Integrated load/discharge planning applications



Resource planning

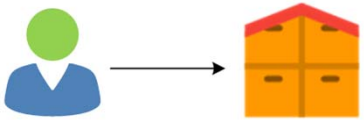


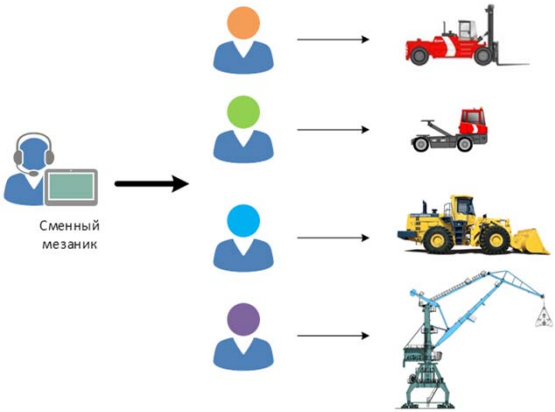
Day-shift planning

Shifts

Work-orders

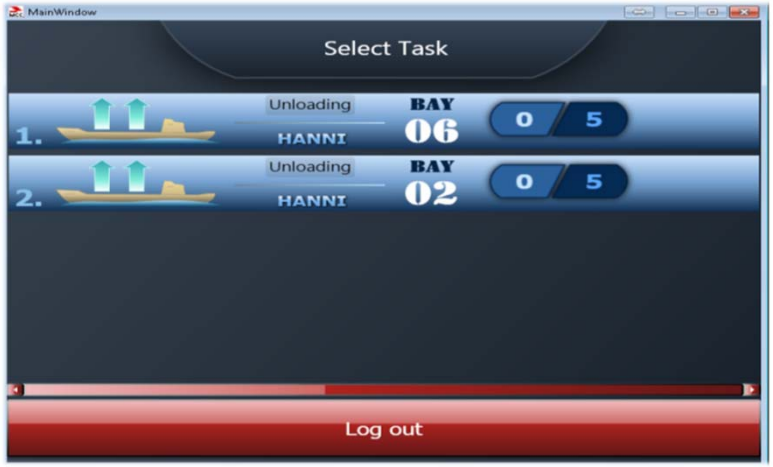
Resource allocation and control





Workstations for CHE operators

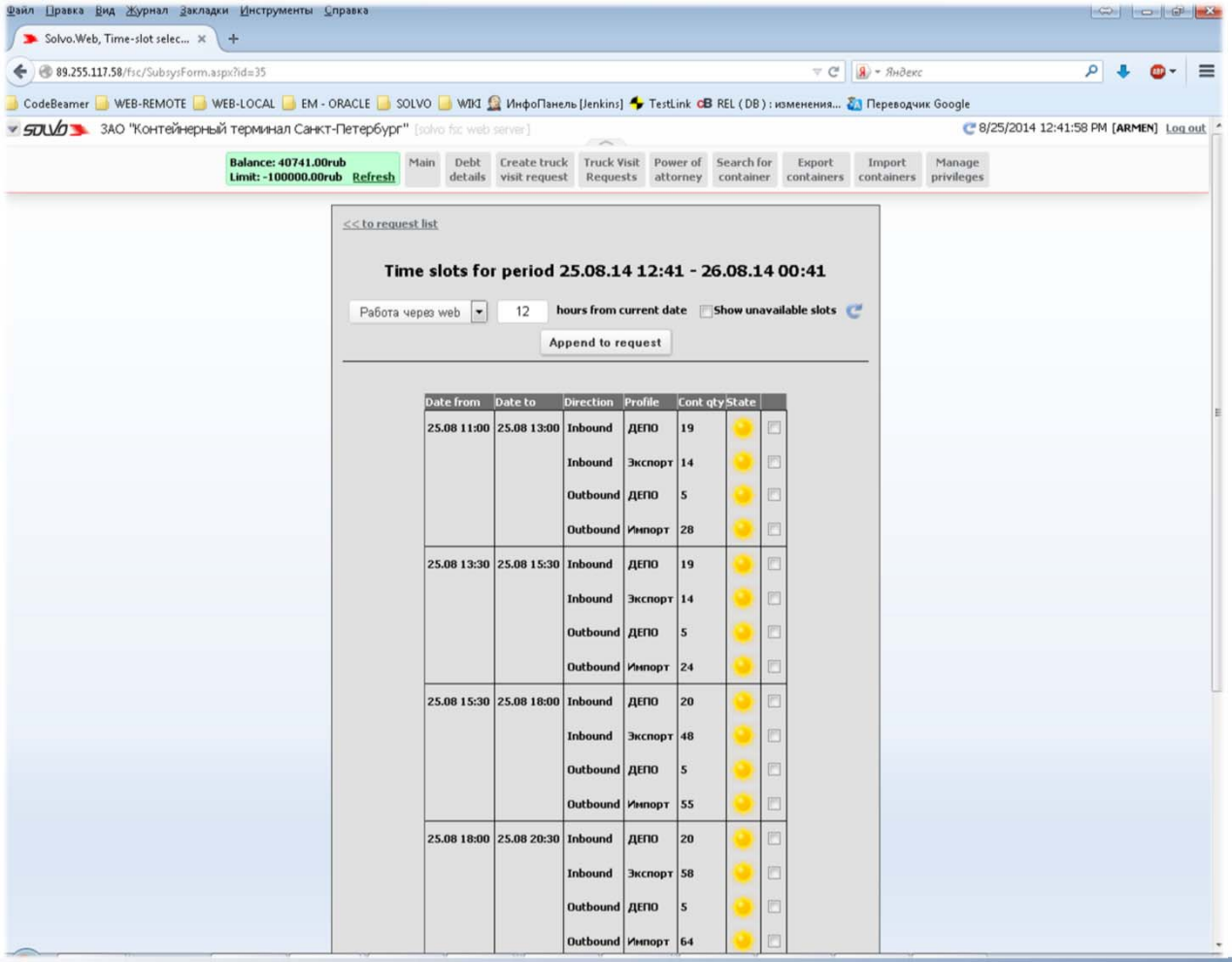
STS operator's workstation



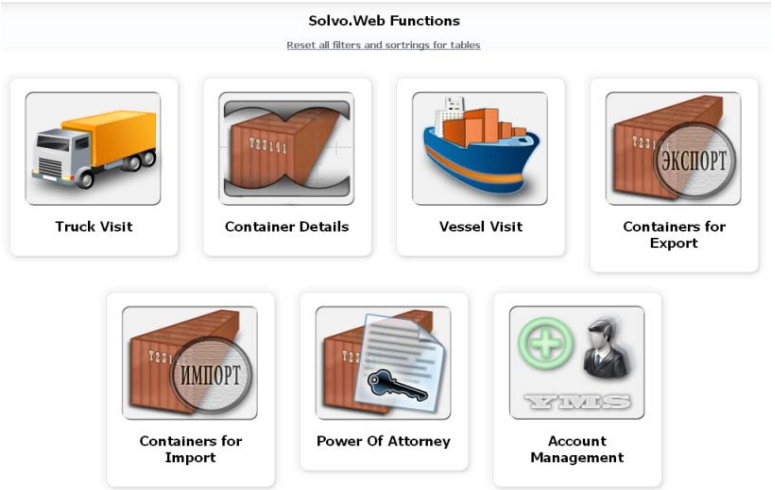
Increased productivity for STS

5%

Truck scheduling and truck visit requests



The remote access allows to grant remote access to the System via the Internet (or local terminal network) e.g. for viewing reference information about terminal operations/ orders/vessel calls, etc. and is available to the shipping line agents and forwarders.



Gate optimization

MainWindow

CONTAINER TERMINAL SAINT-PETERSBURG

11:52

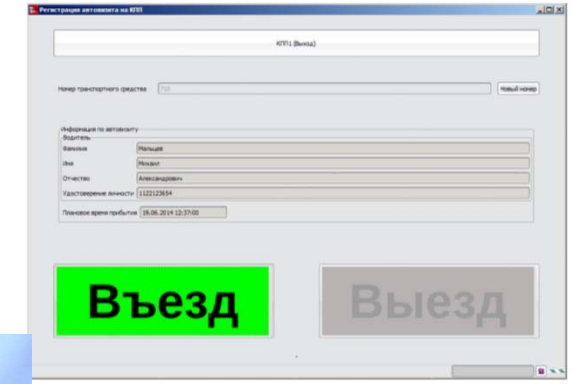
Processing

Time slot	Status
11:00 - 13:00	Processing
13:30 - 15:30	Standby

plate number	window	Status
B088PK98	2	Processing
B351PT178	3	Invitation

Standby

plate number	duration	plate number	duration	plate number	duration
B782OK178	4 min.	B638BO178	28 min.		
K499HT190	4 min.	A844CO35	32 min.		
B969MM178	8 min.	У027СР78	32 min.		
H790PP178	8 min.	B457TP98	36 min.		
M597MC178	12 min.	B072EO178	36 min.		
T706XY47	12 min.	O932PT178	40 min.		
K049TB17					
У687КЕ78					
B070OE17					
H356TC17					
B935BP17					
B156CB17					

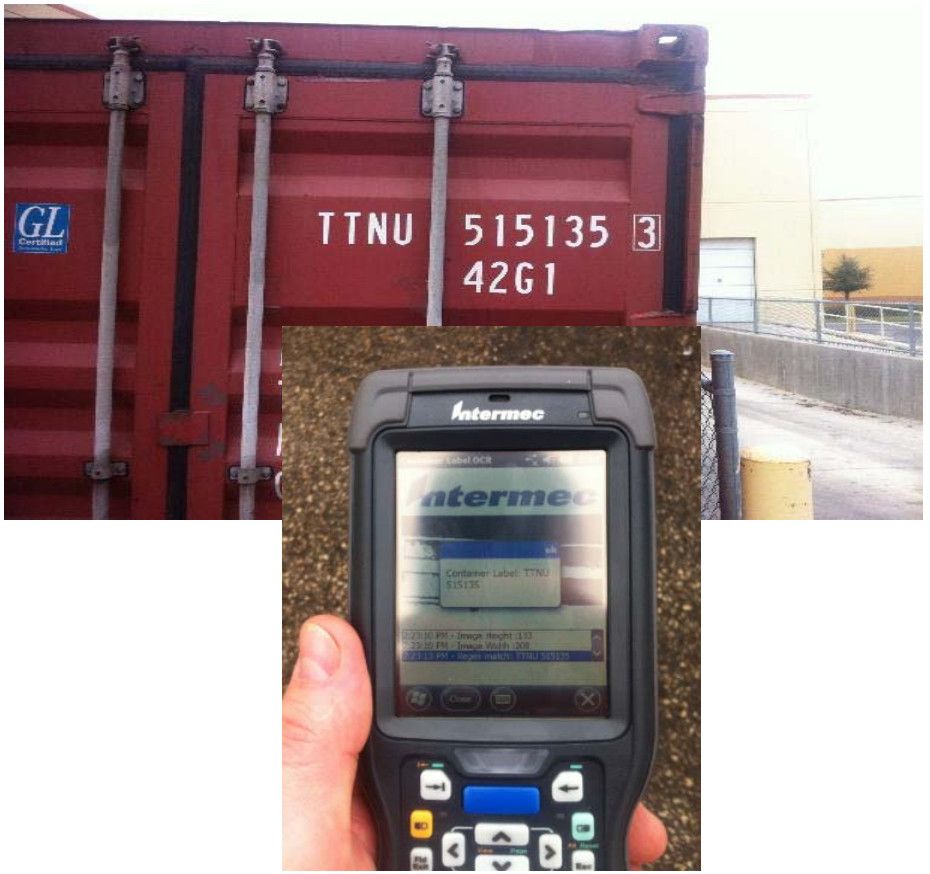


Entry **Exit**

7% Reduction of rehandles

30% Truck turnaround time is reduced

Automated identification: containers

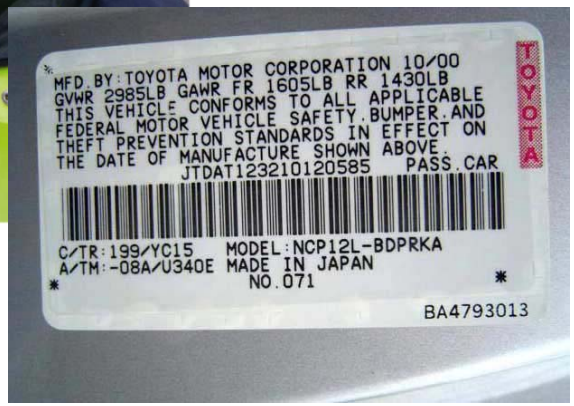


Automated identification: break-bulk and Ro-Ro

C2487

C2487

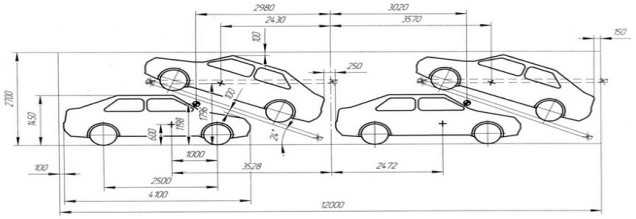
Automated identification: Ro-Ro

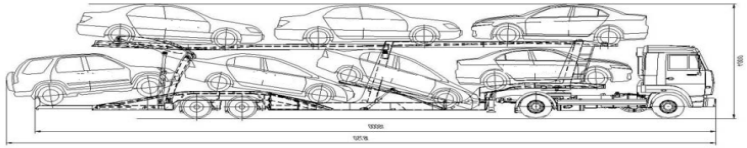


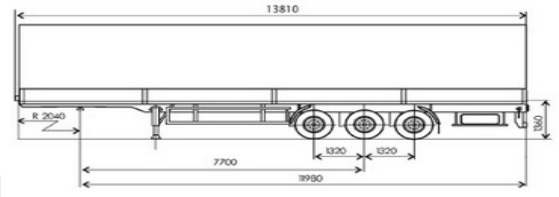
- RDT
- Paper

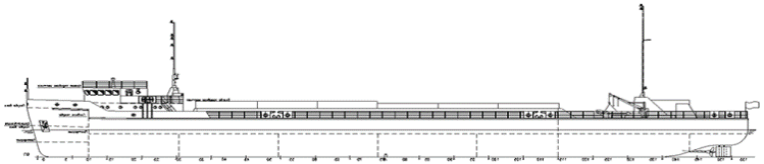
When receiving a tally indicates a load, zone, gang and slot. Vin-number ID is available for Ro-Ro and new automobiles.

CFS operation





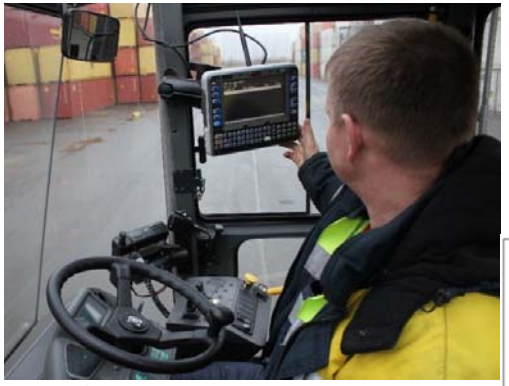




Container Weighing

Weighing management

Automated container delivery



Weighing registration

23.07.2014 10:48:20

Адрес:

Телефон:

Факс:

Экспорт

Акт взвешивания N WGT000055 от 10.12.2014 20:39

Клиент: ООО «Альянс» Договор N АСТ-002/11 от 02.03.2011 Заявка N БИ 11/04/11 от 11.04.2011

Контейнер: SUDU5275268 Тара: 4500 кг Пломбы: 0070487

Тип размер: 40 RE

Прибыл на терминал 04.12.2014г., на платформе 89652304 (транспорт прибытия)

Общий вес контейнера с грузом: 32 140 кг.

Взвешивание произведено на весах RS 104

Представитель ОАО «Владивостокский морской торговый порт»: (ФИО, подпись)

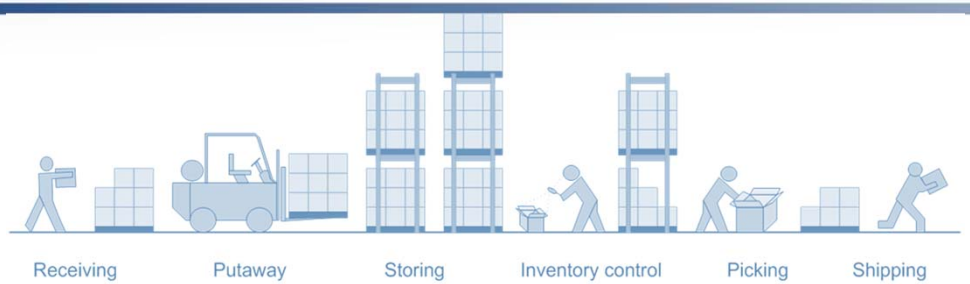
Представитель получателя: (ФИО, подпись)

Creation of weighing documents

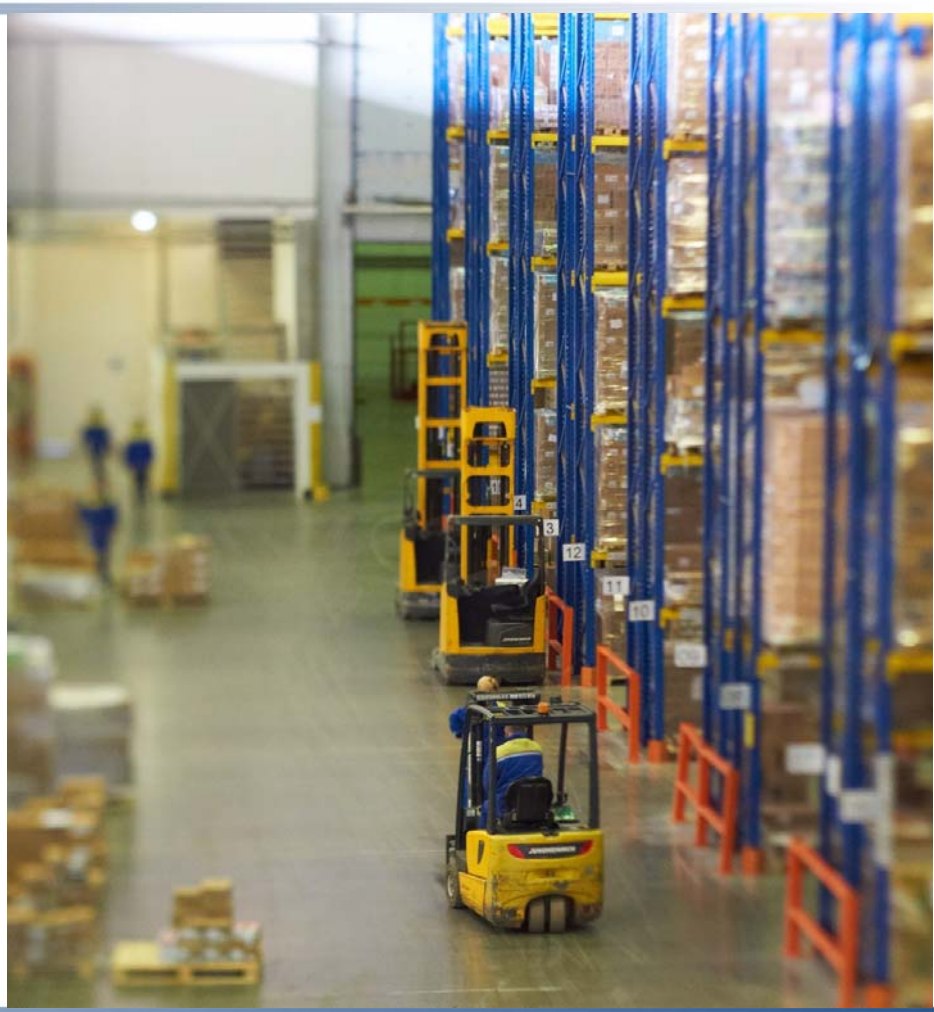
TOS disables vessel container loading without VGM

Solvo.TOS blocks delivery and loading of container onto the vessel without VGM data

WMS features



- Real-time load registration and monitoring
- Automated receiving
- Guided putaway
- Storage optimization and warehouse layout visualization tools
- Inventory control
- Advanced replenishment and order picking technologies
- Lot tracebility

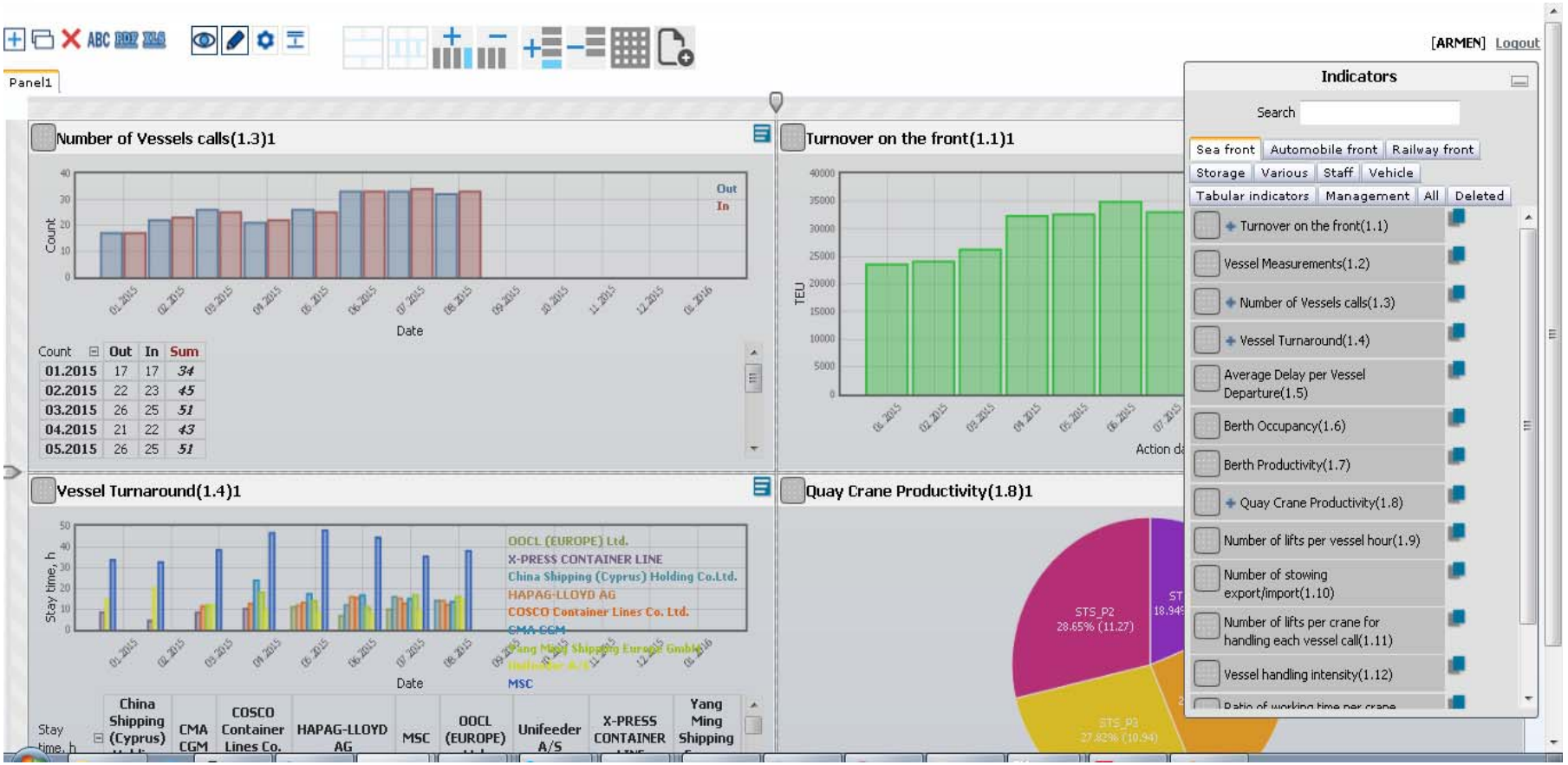


RFID: “Smart shelves”

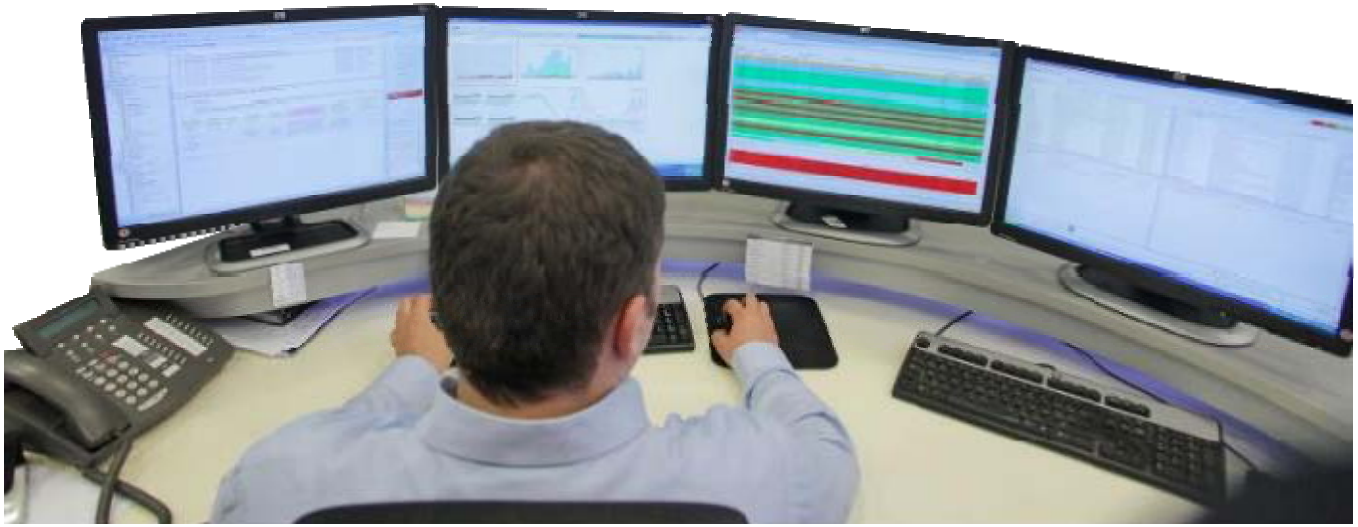
“Smart shelves” or racks equipped with RFID antennas.

- Racks are made from a special dielectric material to shield from radio signals.
- **Smart shelf technology makes it possible to automatically record staging and load grabbing events in the WMS, while freeing up the hands of the operator.**

KPI dashboards



Thank you for your attention!



The smarter alternative

www.solvosys.com

Our stand: #14