IT solutions for logistics

Features of processing various types of cargo and transport in the SOLVO' single digital port ecosystem

Maxim Maximov,
Commercial Director

About Solvo

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.

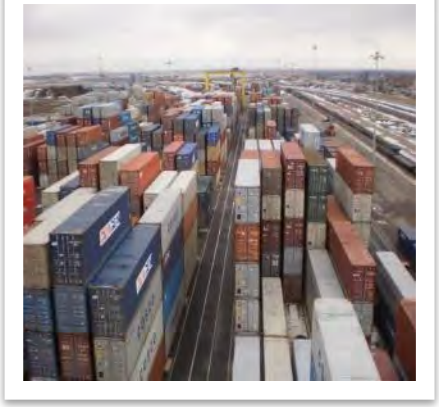
26 years experience

24/7/365 support

5 offices worldwide

400+ projects

Business core areas



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.

SOLVO
IT solutions for logistics

Multinational brands – SOLVO customers

400+
projects

Lifting Global Trade..
APM TERMINALS

msc
MEDITERRANEAN SHIPPING COMPANY

موانئ دبي العالمية
DP WORLD

CMA CGM

globalports

Trans Container

TiL Terminal Investment Limited SA

HHLA

Atria

GRIMALDI LINES

ULS
UNIVERSAL LOGISTICS SERVICES

AB InBev

PEPSICO

MARS

Unilever

DPD

GRUPO INDUKERN

Carlsberg

ROYAL CANIN

Solvo solutions portfolio

Solvo.TOS.Cargo

Containers, Bulk,
Break Bulk and Ro-Ro,
mixed cargo

- *Ro-Ro*
- *Break Bulk, Bulk (fertilizers, grain, pellets);*
- *Goods packed in bags and boxes (sugar);*
- *Construction materials;*
- *Sawn material, round timber;*
- *Metals (ferrous and non-ferrous);*
- *Food, including perishable food;*
- *Paper (rolls, pallets) and pulp;*
- *Metal waste, machines;*
- *Warehouse inventory*

Solvo.TOS platform

KPI Module

VBS Module

GOS Module

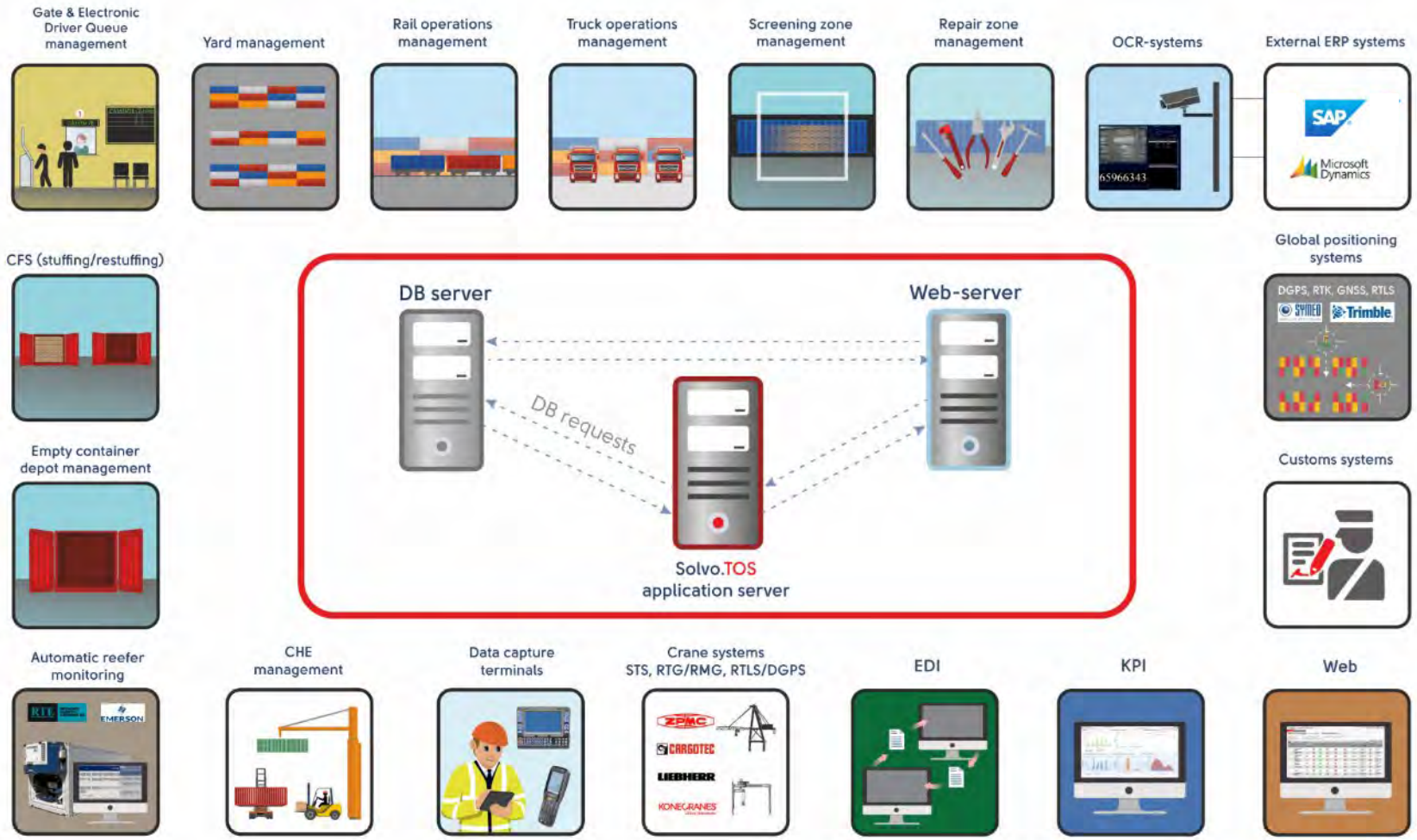
The system is creating for every cargo type dedicated business rules, with precise definition of what can be done with them, by whom and when.

Solvo.Yard

Palletized and piece loads

Solvo.WMS
warehouse management

Solvo.TOS structure

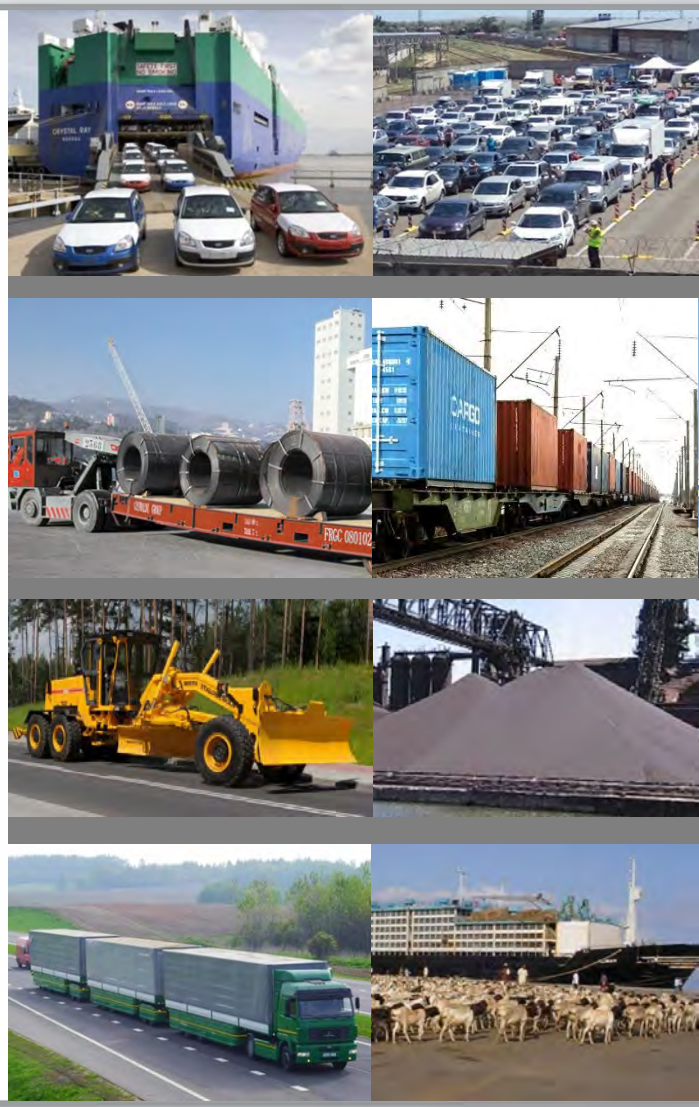


Solvo.TOS can manage the handling of various types of cargo

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

- Containers
- Bulk goods (fertilizers, grain, pellets, etc.);
- 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;
- Ro-Ro

The system creating for every cargo type dedicated business rules: time and order of work need to be done, people and equipment need to be involved to perform the work.



Cargo characteristics processed by Solvo.TOS

- Package type;
- Weight;
- Quantity;
- Dimensions (length, width, height), marking (label);
- Markers.

- VIN number;
- Color;
- Model;
- Dimensions (length, width);
- Weight;
- Type.

Support of Complex Technological Chains

Vessel operations

Breakbulk

3PL

Bulk

Ro-Ro on MAFI

CFS

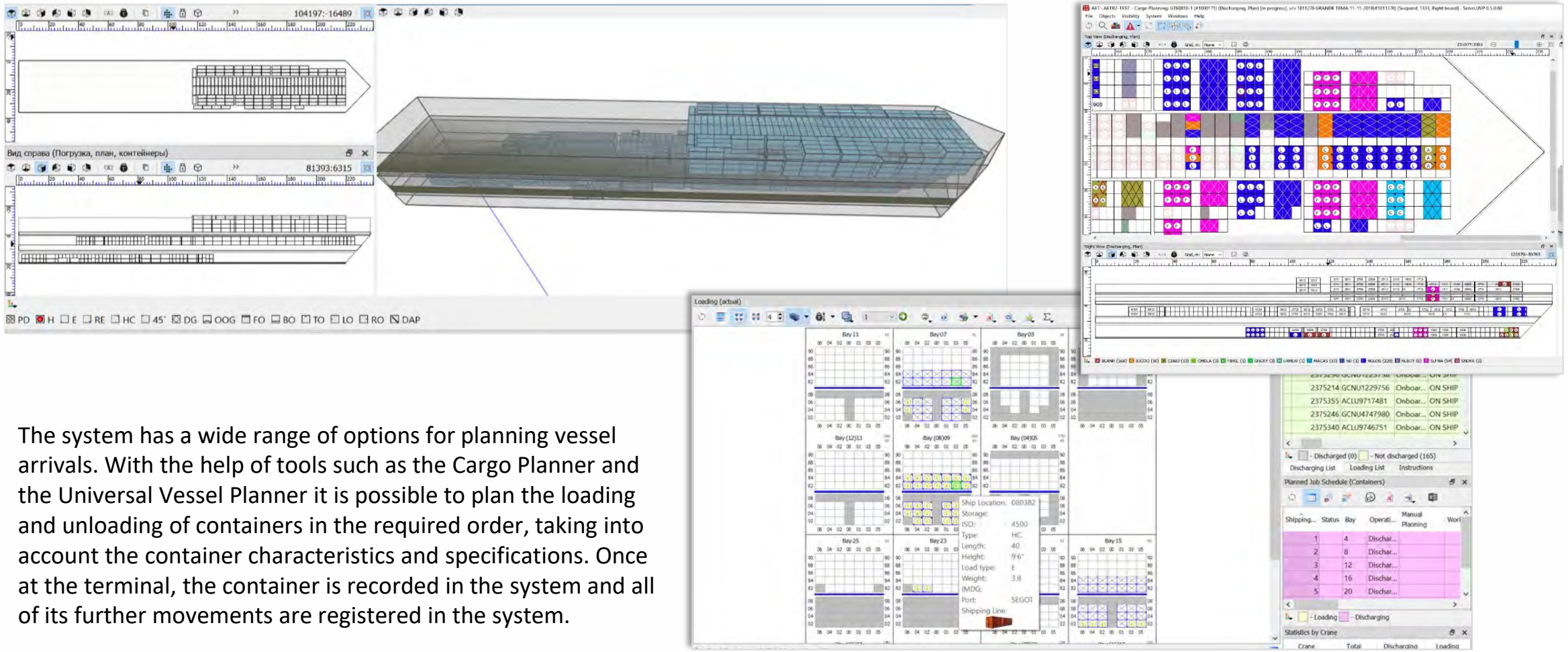
Vehicles

Containers

Rail operations

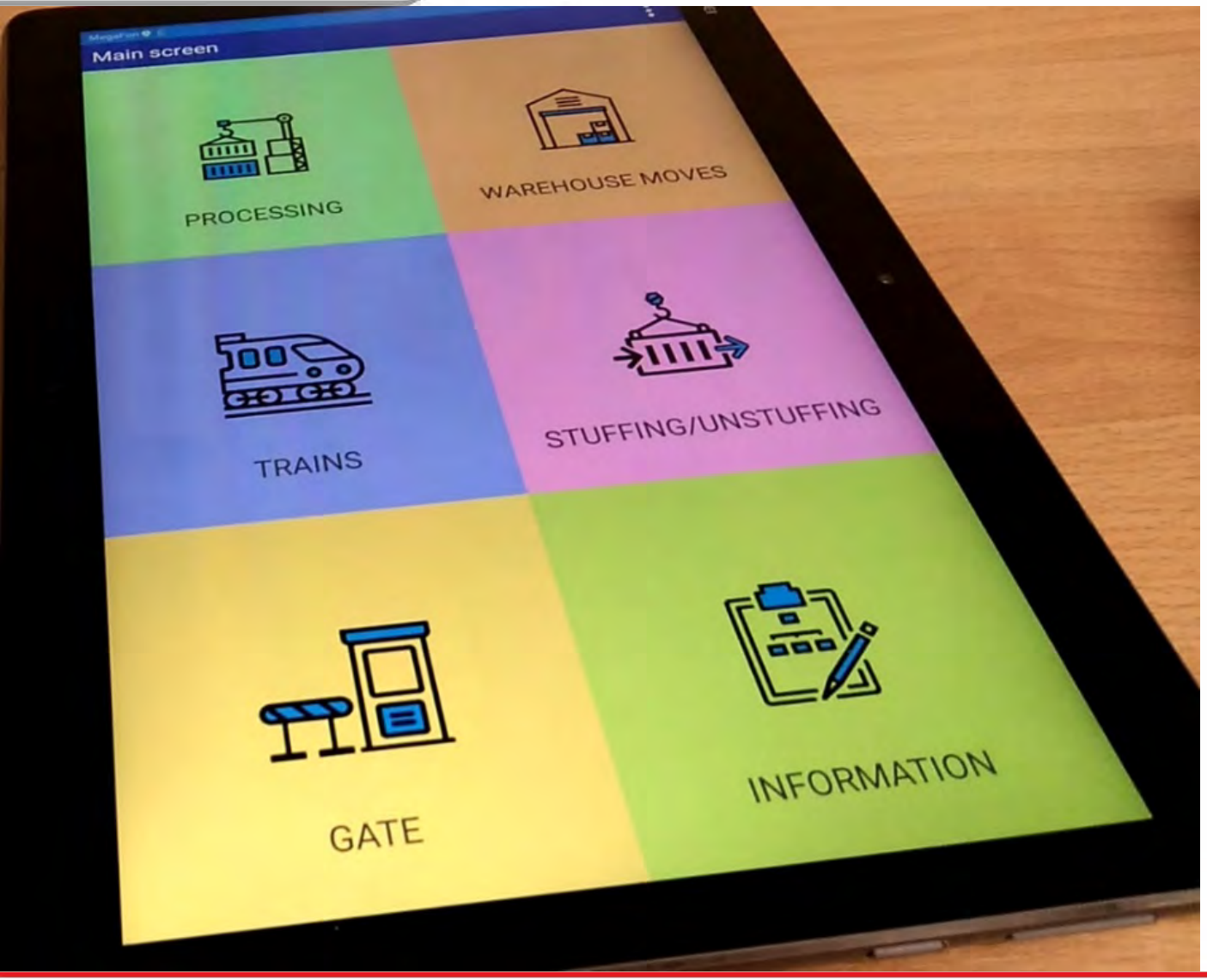
Gate operations

Advanced Vessel planning capabilities



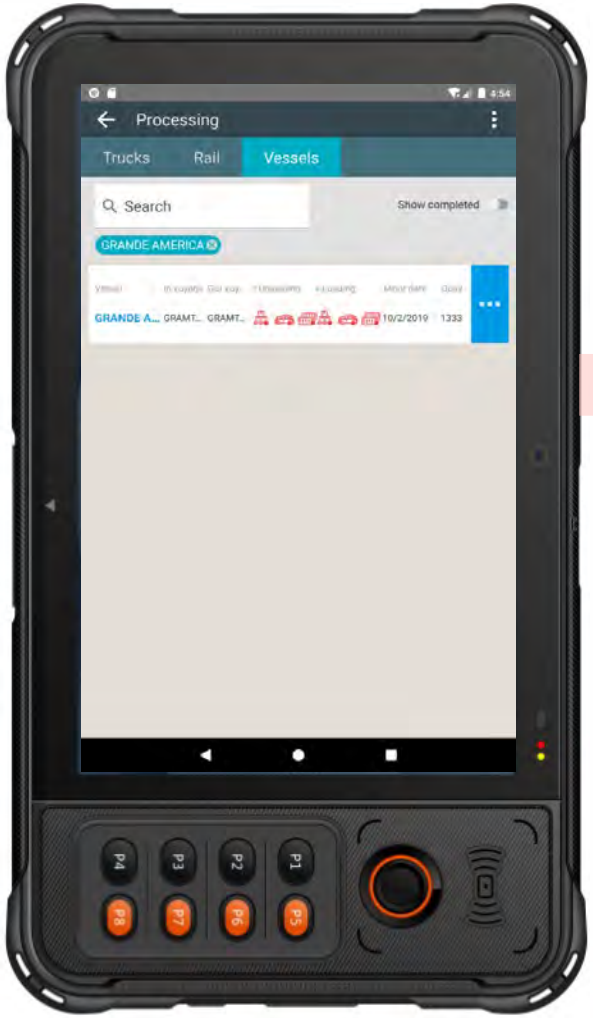
The system has a wide range of options for planning vessel arrivals. With the help of tools such as the Cargo Planner and the Universal Vessel Planner it is possible to plan the loading and unloading of containers in the required order, taking into account the container characteristics and specifications. Once at the terminal, the container is recorded in the system and all of its further movements are registered in the system.

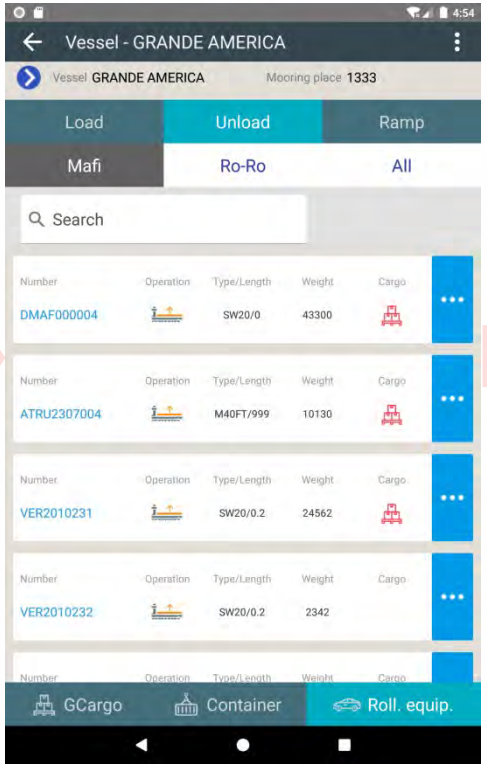
Interfaces for mobile devices

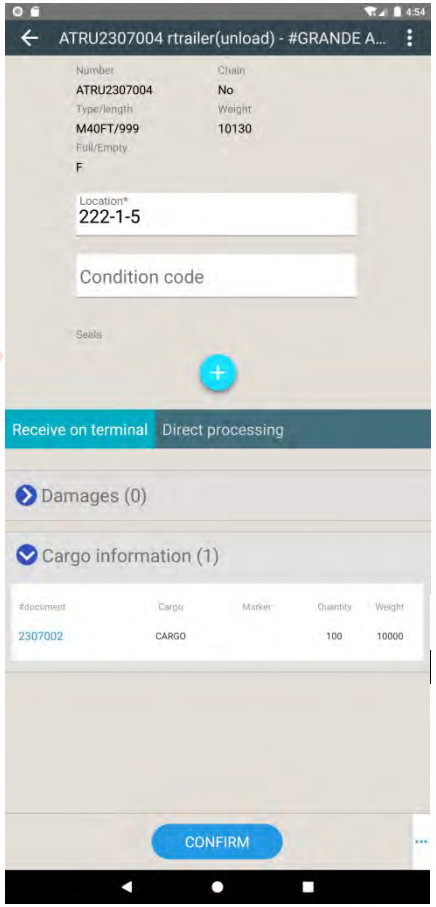


- Acceptance of different types of cargo from vessel, truck and rail;
- Registration of truck visits, vessel calls, train visits;
- Registration of different yard operations;
- Photo-fixation of damages, choosing the type of damage from the list, adding comments;
- Scanning features;
- Registration of internal operations (Inspection, Repairs, Customs operations).

Interfaces for mobile devices



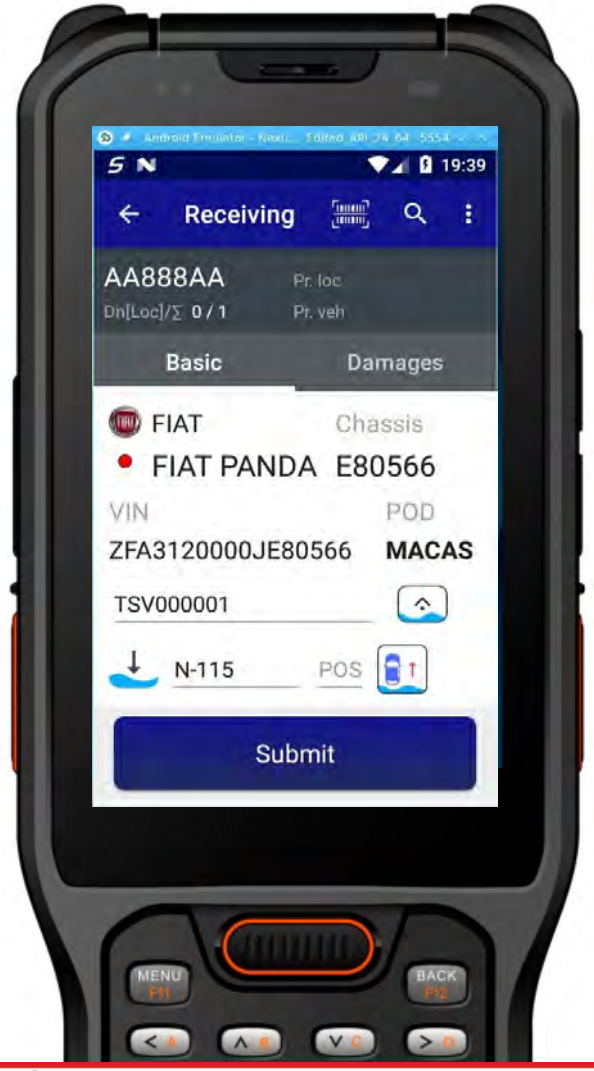


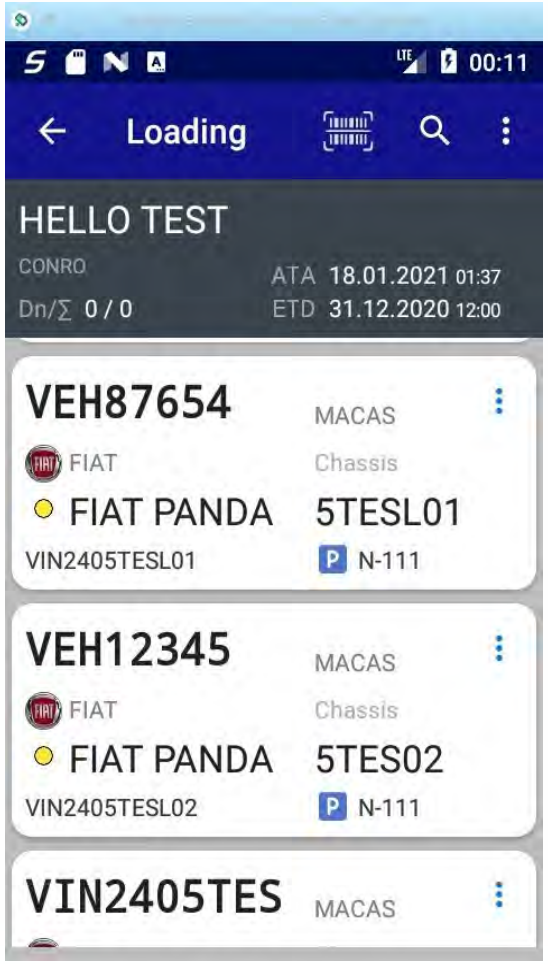


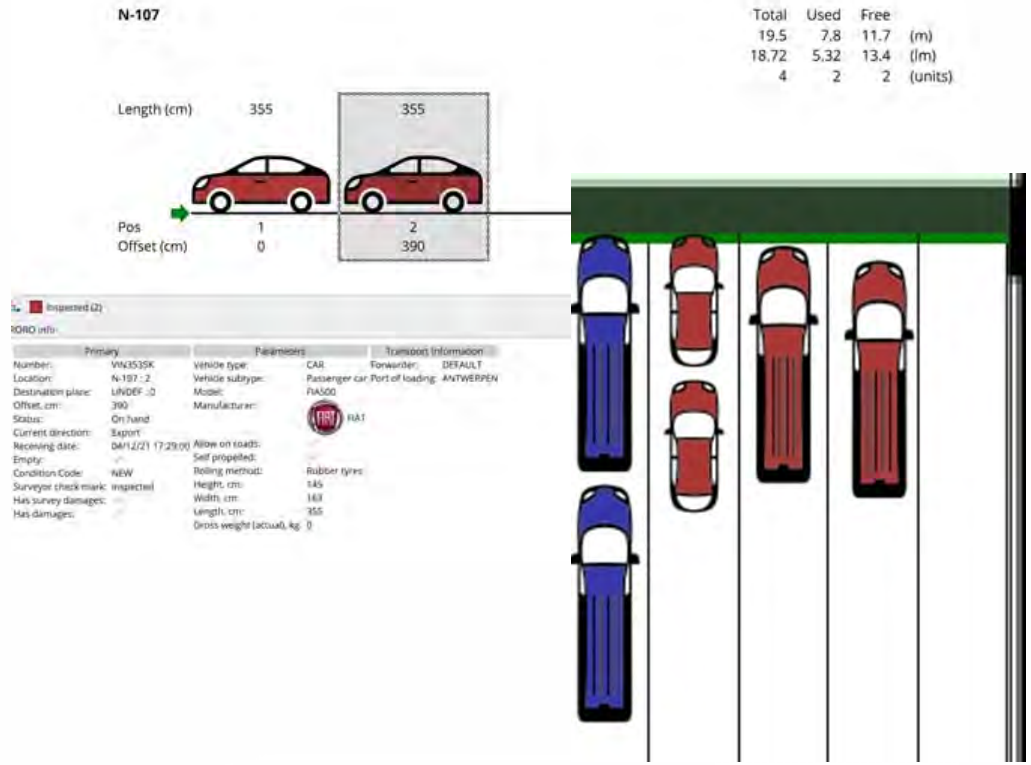
Cargo acceptance is performed by the tallyman using a radio terminal (tablet) in real time during cargo operations.

Solvo.TOS can handle vessel unloading in a variety of formats, including **unloading of loose general cargo** or **unloading of Mafi trailers**.

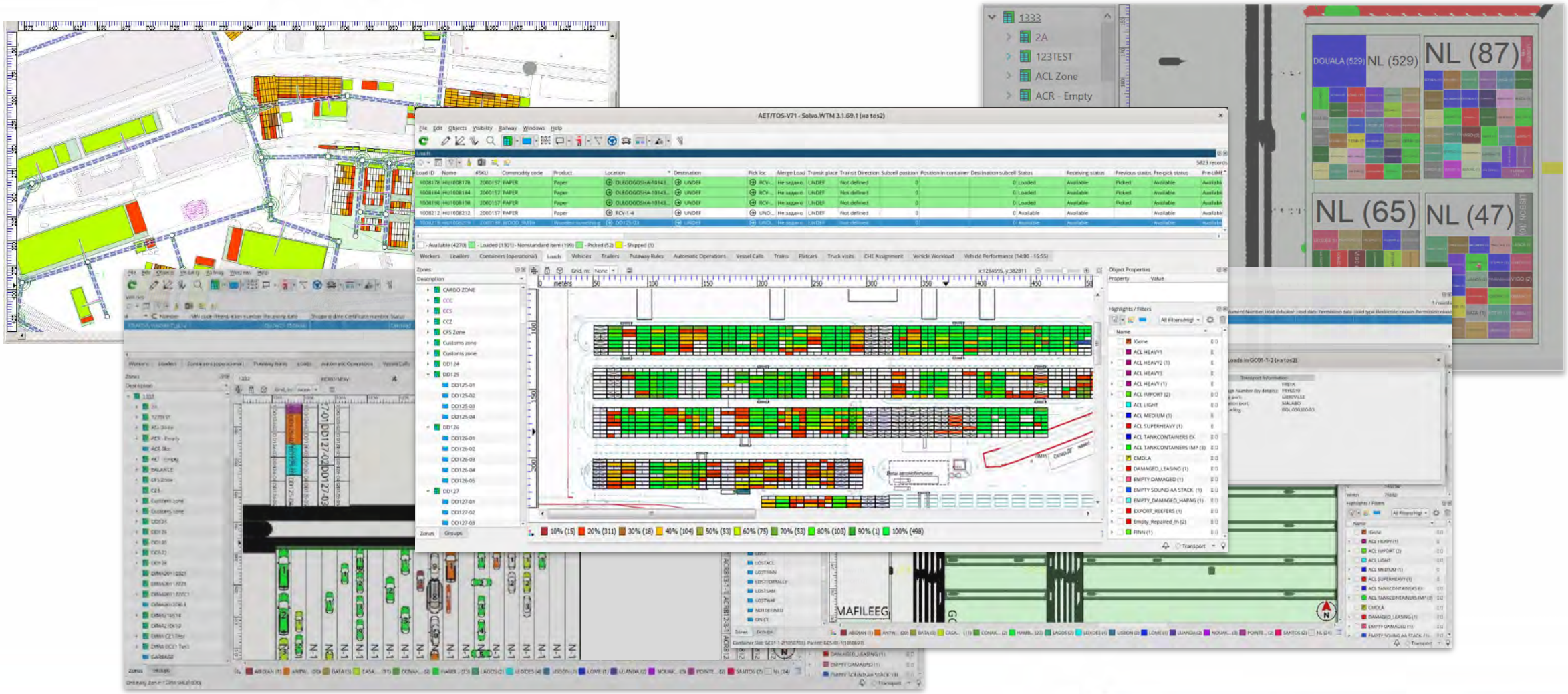
Interfaces for mobile devices







Graphic terminal layout viewer and editor

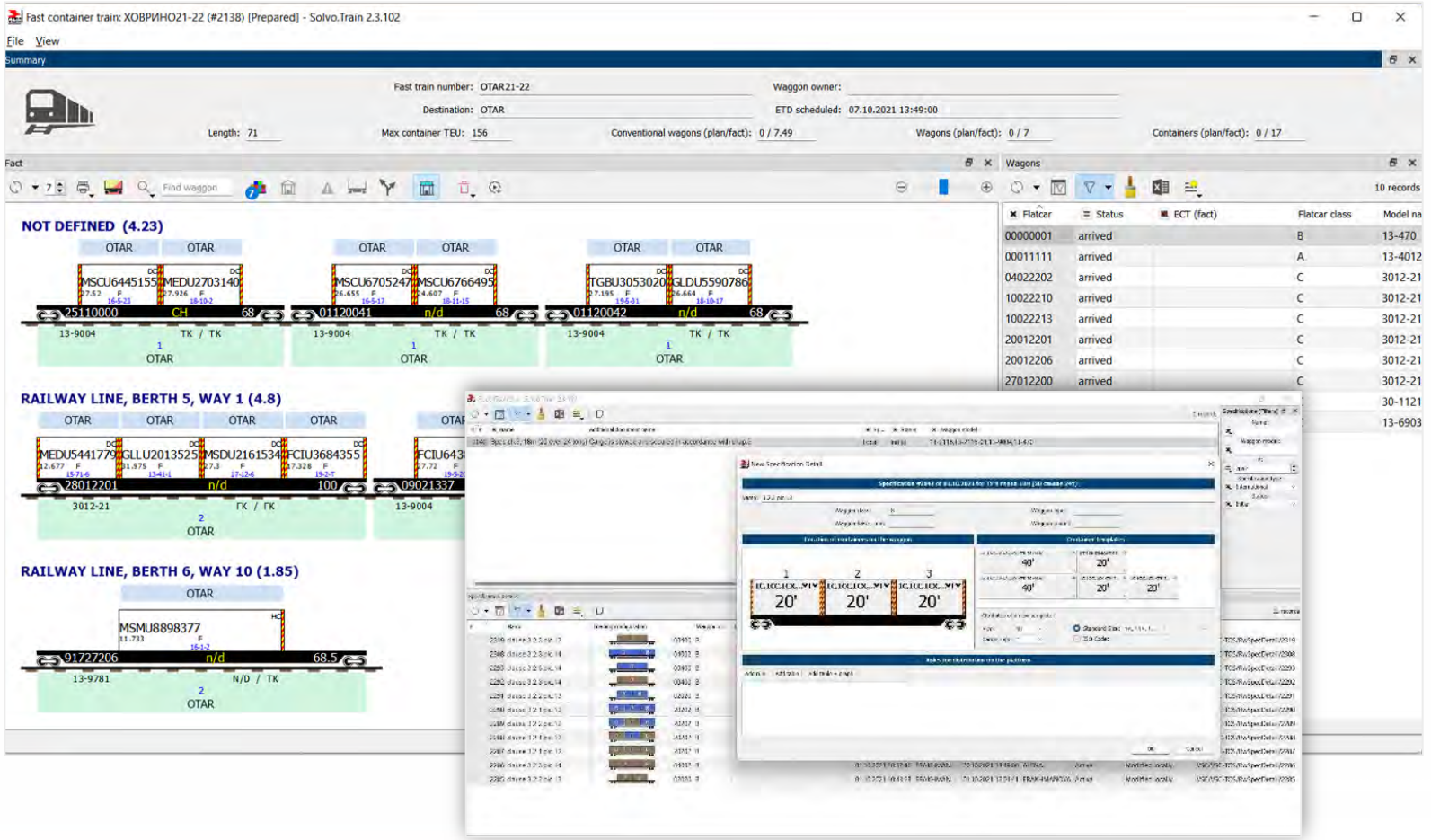


Improving cargo handling on the railroad

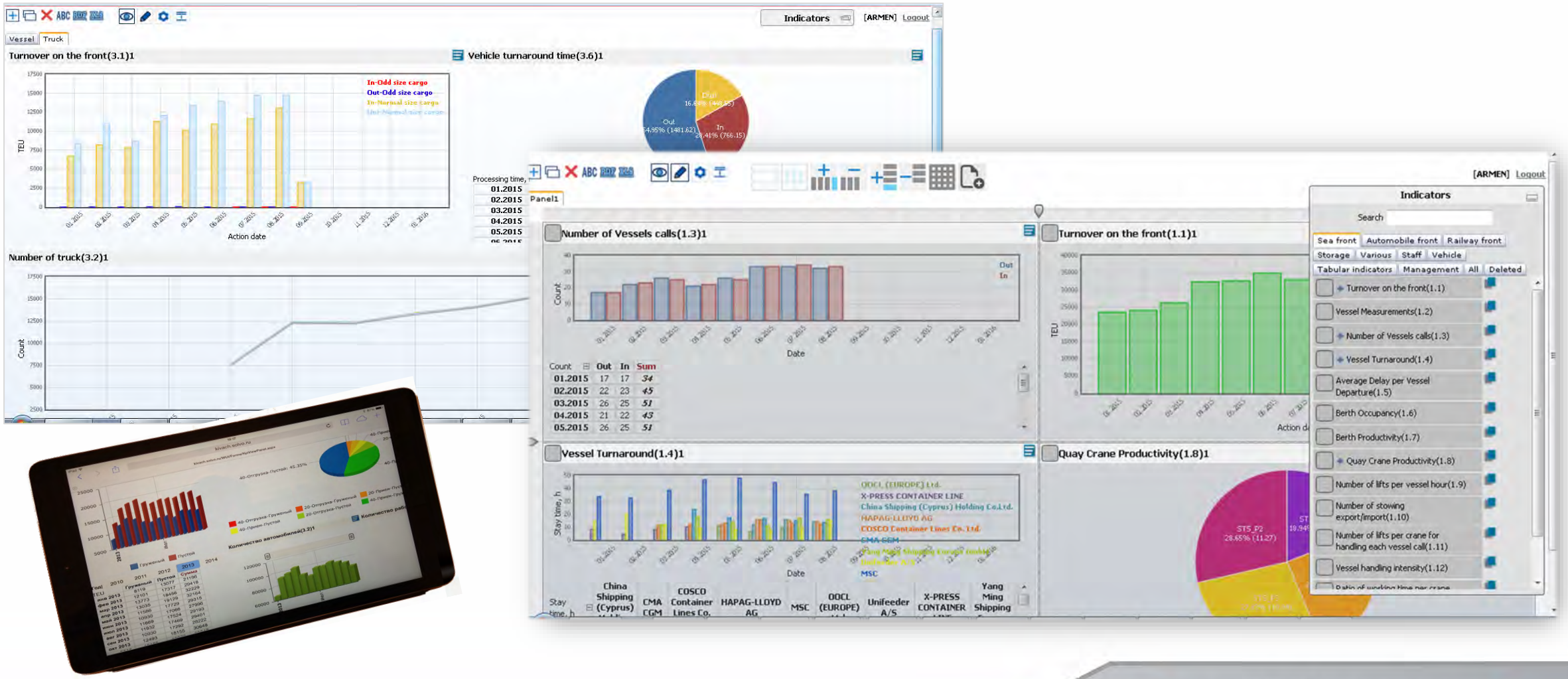
The system enables to automate:

1. Planning of rail car staging.
2. Registration of rail consignment notes.
3. Registration of rail car arrival/departure.
4. Loading/discharging planning.
5. Train and cargo inspection.
6. Train loading and unloading.

- Automatic planning of rail car staging increases personnel productivity.
- Reduced number of errors when creating rail car plan.



Key performance indicators



Implementation efficiency

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.

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The Solution is Here!