

Top-5 cost-effective information technologies to manage container terminals, ports and warehouses.

16th Intermodal Africa Exhibition and Conference. Mombasa, Kenya

LEV AISPUR
HEAD OF SALES DEPARTMENT (TOS), SOLVO LLC

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:

21

Number of employees:

145

Number of completed projects:

207 (end of 2015)





First Container Terminal
St. Petersburg, Russia



Muuga Container Terminal
Tallinn, Estonia



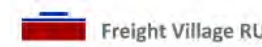
Universal Logistic Services
Tashkent, Uzbekistan



Logistica-Terminal
St. Petersburg, Russia



Modul
St. Petersburg, Russia



Freight Village, Kaluga
Kaluga, Russia



Ust-Luga Container Terminal
Ust-Luga, Russia



Bronka Port
St. Petersburg, Russia



TLK Yuzhno-Uralskiy
Chelyabinsk, Russia



Vostochny Stevedoring Company
Nakhodka, Russia



Ust-Luga Commercial Sea Port
Ust-Luga, Russia



TransContainer Group
Novosibirsk, Russia



Novorossiysk Commercial Sea Port
Novorossiysk, Russia



Baltic Stevedoring Company
Baltiysk, Russia



Novoroslesexport
Novorossiysk, Russia



Brooklyn-Kiev Port Company
Odessa, Ukraine



NORILSK NICKEL

Norilsk Nickel terminal
Murmansk, Russia



Aktau Sea Commercial Port
Aktau, Kazakhstan



Riga Container Terminal
Riga, Latvia



Rusmarine Group of Companies
St. Petersburg, Russia



Container Terminal St. Petersburg
St. Petersburg, Russia



Ilyichevsk Container Terminal
Ilyichevsk, Ukraine



«Sea port of Saint-Petersburg»

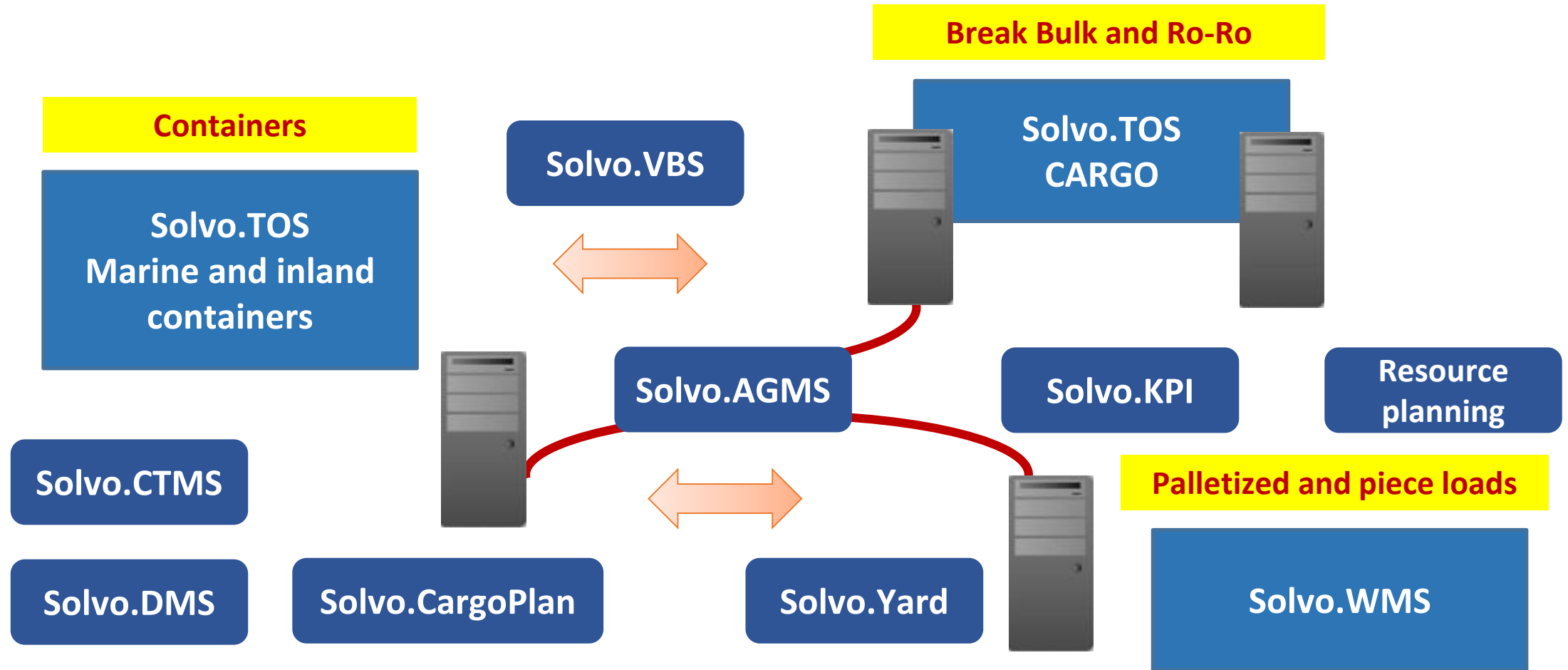
Sea Port of Saint Petersburg
St. Petersburg, Russia

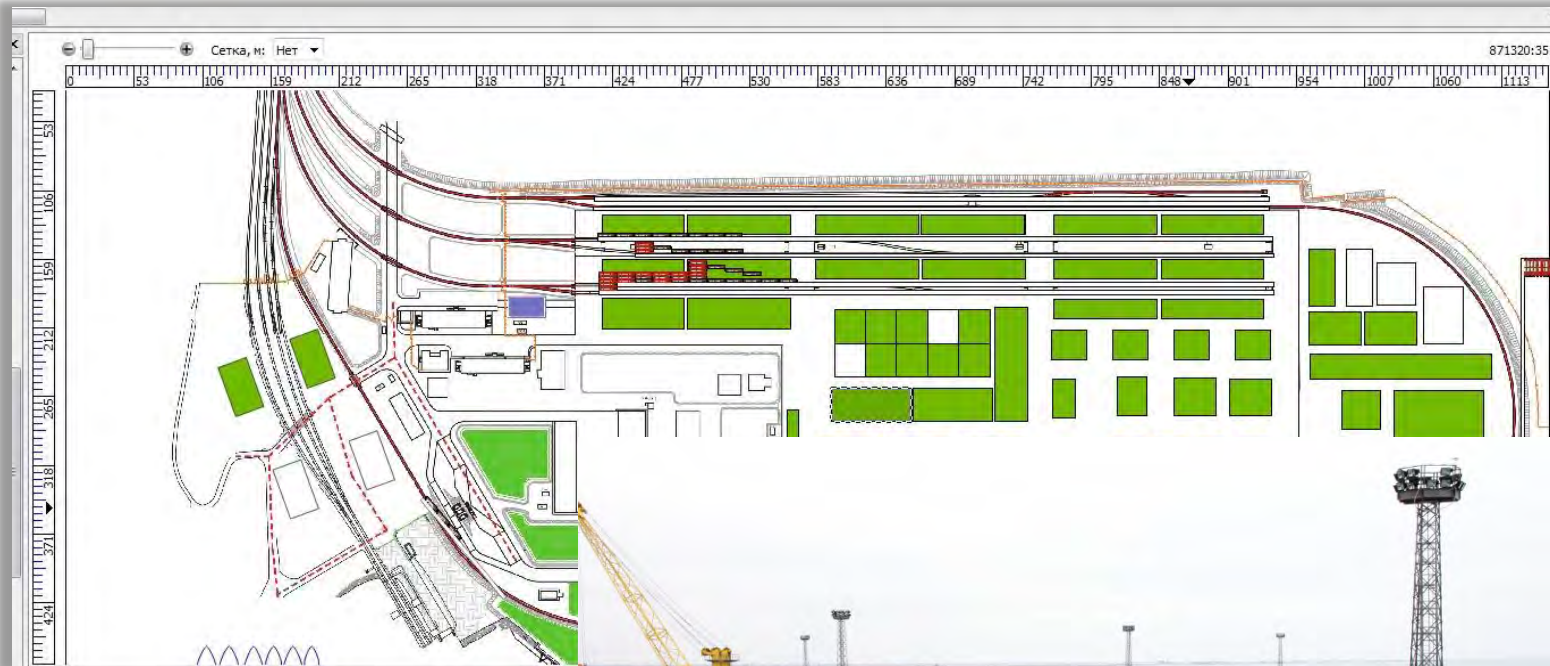
Cargo types



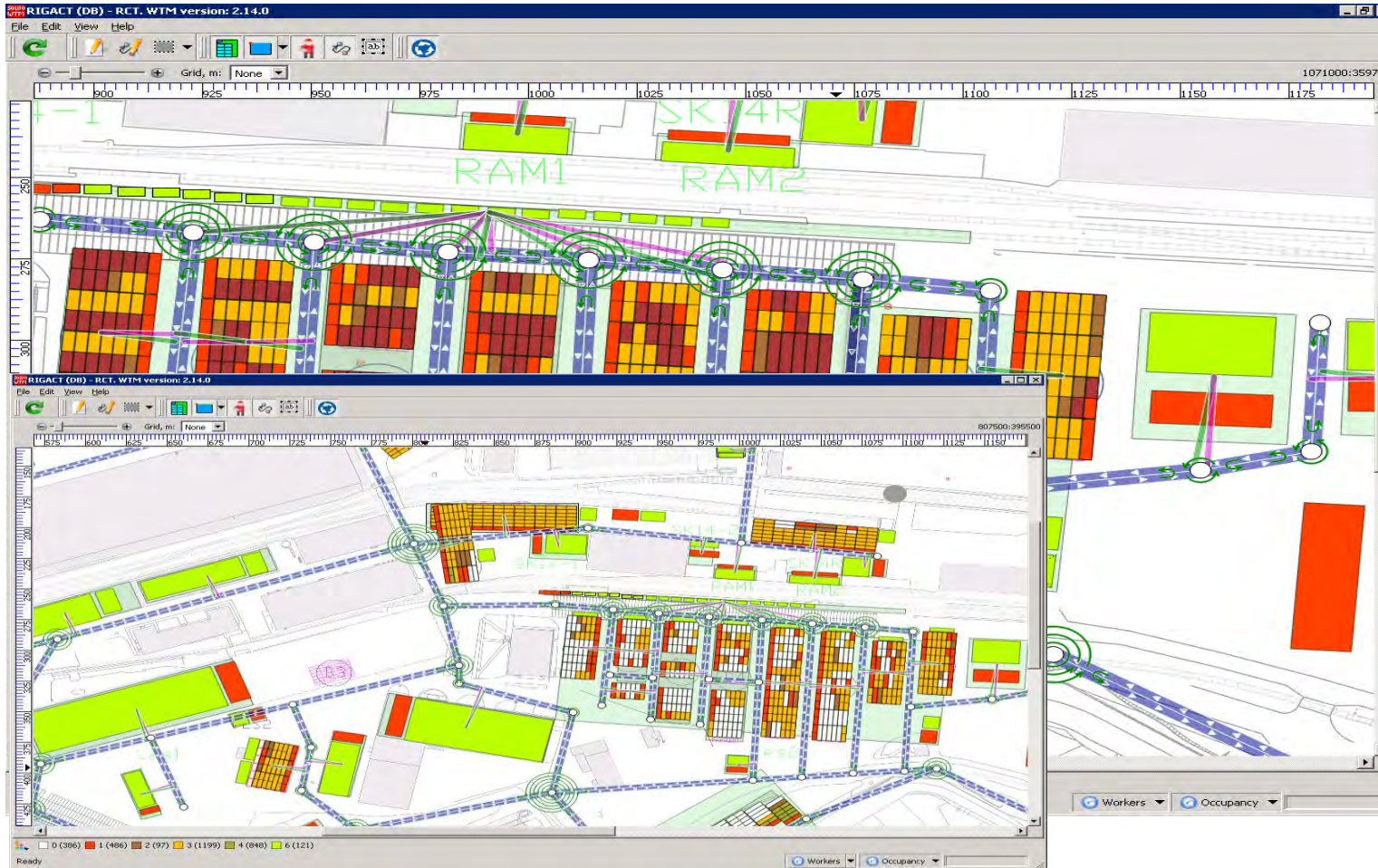
SOLVO.TOS handles wide range of cargo types:

- ✓ Containers
- ✓ Break-Bulk
- ✓ Project Cargo
- ✓ Bulk
- ✓ Ro-Ro
- ✓ Livestock



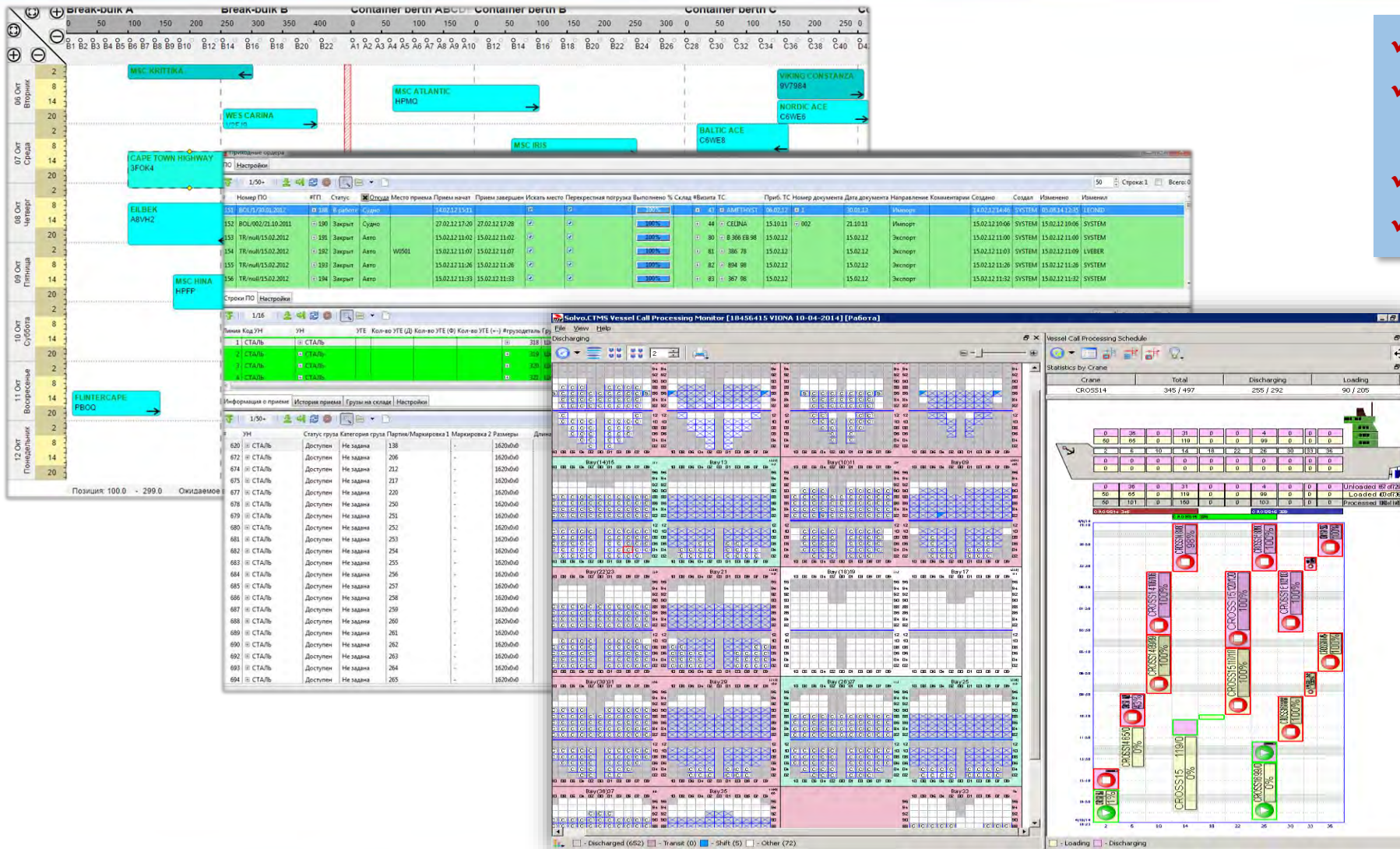


- ✓ Customizable yard layout viewer and editor
- ✓ Rules and strategies
- ✓ Yard operations, including:
 - Loading / discharge
 - Track and trace of load status changes
 - Relocation
 - Screening
 - Weighing
 - Storage
 - Stuffing / Unstuffing

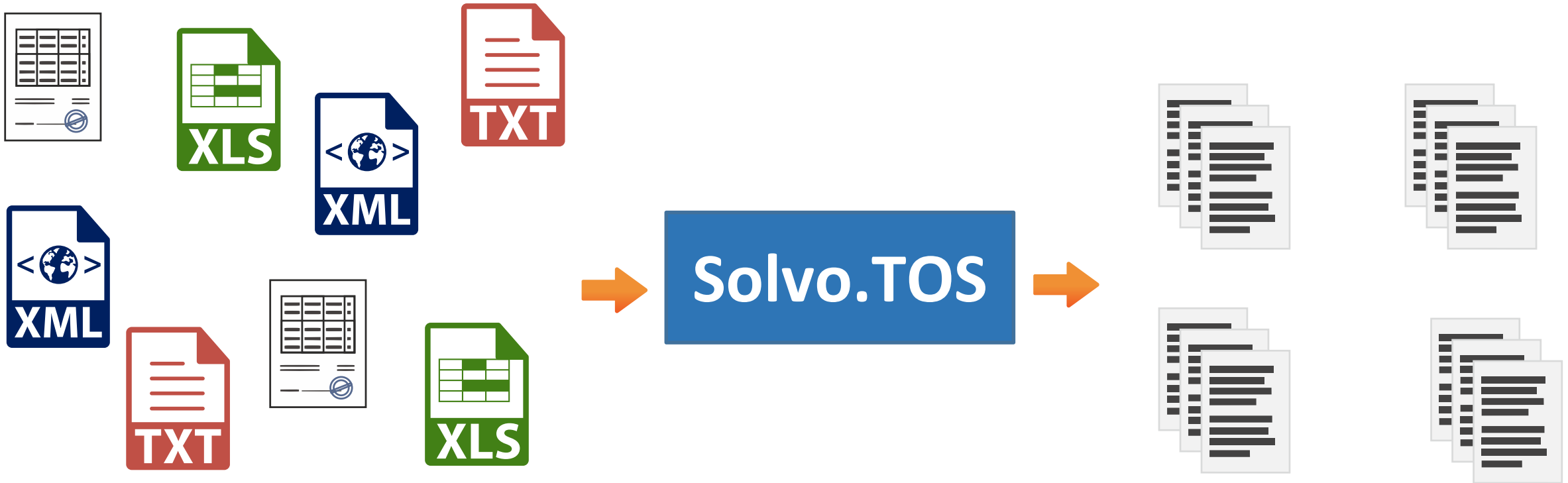


- ✓ The system analyzes the available data about the road network of the terminal and builds the optimal route for a CHE
- ✓ The entry of road data is carried out through the roads editor function - part of the *Real-time terminal layout viewer and editor*
- ✓ The user defines the key checkpoints, permitted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

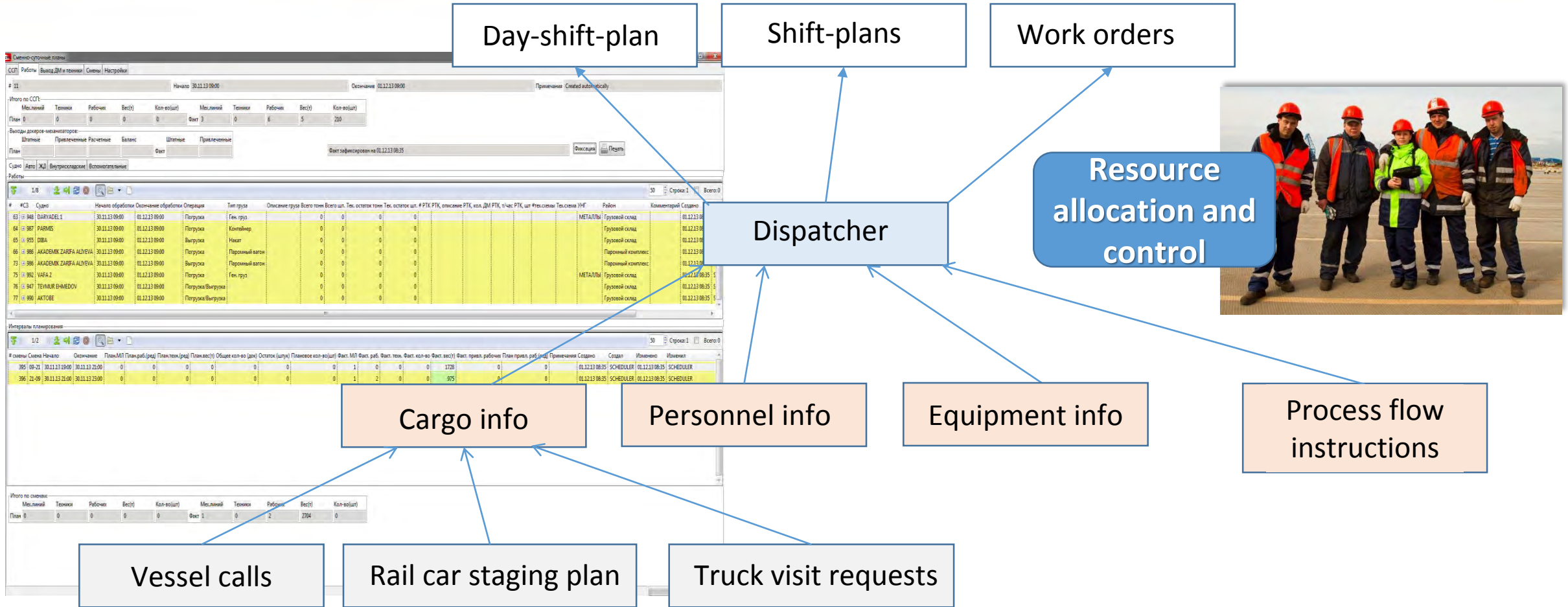
Vessel management



- ✓ Berth planning
- ✓ Graphic vessel profile and bay-planner
- ✓ Vessel loading / unloading
- ✓ Crane operator's workstation



Forwarder send an EDI message to the terminal operator which is automatically processed by TOS



Job number	Job type	Status	Algorithm depending	Cont. # in MS Cont.	# in DS Container	Length	Accessibility	Container type	Cargo type	Source	Tier	Destination	Loader	Container status	Worker	Priority	Category	Proc status	Created
8094614	Отвоз от судна	Ready		636631	0	BBBU2345672	20	0	DC	F	1	B30-3-T		Available		50	Обычная	Initial	06/24/15 13:31
8094559	Ход, работа	Suspended		636632	0	CCCU3456783	20	0	DC	F	1	C27-1-T		Available		50	Обычная	Initial	06/19/15 14:53
8094558	Ход, работа	Suspended		636632	0	CCCU3456783	20	0	DC	F	1	C27-1-T		Available		50	Не срочная	Initial	06/19/15 14:53
8094551	Отвоз от судна	Suspended		636632	0	CCCU3456783	20	0	DC	F	1	B29-3-T		Available		50	Обычная	Initial	06/19/15 14:34
8094550	Отвоз от судна	Suspended		636632	0	CCCU3456783	20	0	DC	F	1	B29-3-T		Available		50	Обычная	Initial	06/19/15 14:34
8097931	Ход, работа	Suspended		636632	0	CCCU3456783	20	0	DC	F	1	P3		Available		50	Не срочная	Initial	10/16/15 15:23
8097010	Складирование	Suspended		636008	0	TAUU2704025	20	3	DC	F	1	T4001-1-2		Available		50	Обычная	Initial	09/18/15 18:46
8094982	AP2	Suspended		635973	0	DWRU0000000	20	0	DC	F	1	MOC 01-45-47587		Available		50	Обычная	Initial	06/22/15 15:06
8094989	AP2	Suspended		635974	0	DWRU0000010	20	0	DC	F	1	MOC 01-45-47587		Available		50	Обычная	Initial	06/22/15 15:06
8093200	Работы по ЖД разгрузке	Suspended		635977	0	BEOLU0000000	20	0	DC	F	1	A07-3-T		Available		50	Обычная	Initial	05/26/15 14:51
8093199	Работы по ЖД разгрузке	Suspended		635977	0	BEOLU0000000	20	0	DC	F	1	RT2-1		Available		50	Обычная	Initial	05/26/15 14:51
8093203	Работы по ЖД разгрузке	Suspended		635978	0	BEOLU0000010	20	0	DC	E	1	A07-1-T		Available		50	Обычная	Initial	05/26/15 14:52
8093202	Работы по ЖД разгрузке	Suspended		635978	0	BEOLU0000010	20	0	DC	E	1	RT2-1		Available		50	Обычная	Initial	05/26/15 14:52
8097264	Подвоз на судно	Suspended		636028	0	TAUU2900000	40	0	RE	F	1	EREGHDFG-1-4		Available		50	Обычная	Initial	10/01/15 18:26
8102383	Работа по наряду-заданию	Ready		632351	0	MOSU0210030	40	0	HC	E									
8102382	Работа по наряду-заданию	Ready		632351	0	MOSU0210030	40	0	HC	E									
8098375	Отвоз от судна	Dependent	Previous work 'Процесс'	636273	0	EDDU3463463	20	0	DC	E									
8098374	Отвоз от судна	Ready		636273	0	EDDU3463463	20	0	DC	E									
8095434	Отвоз от судна	Ready		636273	0	EDDU3463463	20	0	DC	E									
8095433	Отвоз от судна	Ready		636273	0	EDDU3463463	20	0	DC	E									
8095646	Складирование	Suspended		632415	0	DTU12345334	20	0	DC	E									
8095656	Отвоз от судна	Suspended		638207	0	UDOU0000000	40	0	DC	F									
8095655	Отвоз от судна	Suspended		638207	0	UDOU0000000	40	0	DC	F									
8108775	Работа по вращению	Done		628696	0	ASFU2306044	20	0	RE	E									
8094210	Складирование	Suspended		628696	0	ASFU2306044	20	0	RE	E									
8109758	Работа по наряду-заданию	Canceled		628781	0	ASFU2306049	40	0	RE	F									
8109759	Работа по наряду-заданию	Canceled		628781	0	ASFU2306049	40	0	RE	F									
8093375	Складирование	Suspended		628704	0	ASFU2306050	45	0	DC	F									
8090893	Тампонажное складирование	Suspended		628705	0	ASFU2306051	45	0	DC	E									
8097374	Тампонажное складирование	Suspended		628705	0	ASFU2306051	45	0	DC	E									
8094219	Складирование	Suspended		628708	0	ASFU2306054	45	0	DC	E									
8108778	Работа по вращению	Done		628710	0	ASFU2402001	20	0	DC	E									
8092088	Складирование	Suspended		628712	0	ASFU2406003	20	0	DC	E									
8091769	Отвоз от судна	Suspended		635769	0	FCTU0000000	40	0	RE	F									
8091768	Отвоз от судна	Suspended		635769	0	FCTU0000000	40	0	RE	F									
8096107	Складирование	Suspended		635768	0	ICCU0000000	20	0	RE	F									



- ✓ Remote management of cargo handling equipment
- ✓ Optimal job distribution
- ✓ Routes with checkpoints
- ✓ Equipment sequencing
- ✓ Control job performance
- ✓ Tracking of equipment statuses

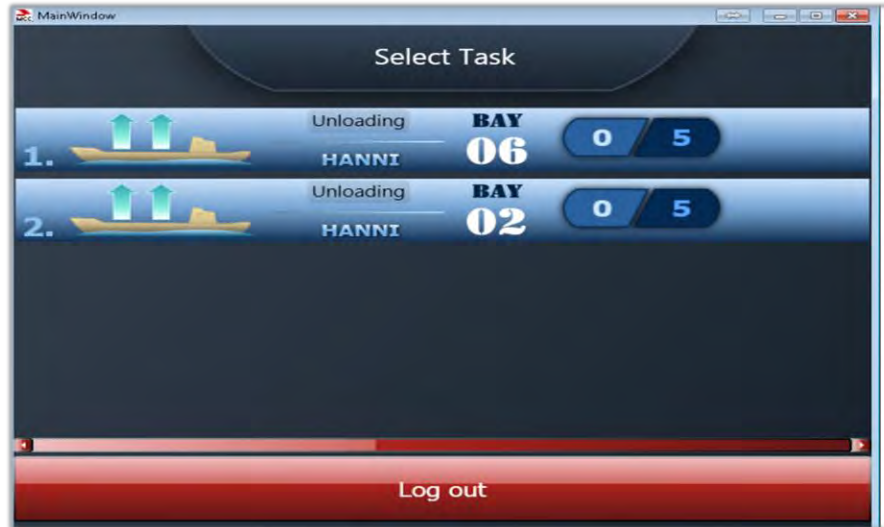
Cargo Explorer - demo license

بحث عن البصائع:

المكان المقصود	موقع	وصف
K863EK35 09-24-T	09-24-35 (3)	FESU 655613 0 45G1 40' HC F
B067CT36 09-24-T	09-24-36 (4)	CXTU 906214 8 22G1 20' HC F
A574CE36 09-24-T	09-24-36 (2)	CXTU 362191 2 22G1 20' HC F
H738EM36 09-24-T	09-24-36 (1)	PONU 014906 9 45G1 40' HC F
T898ME36 09-24-T	09-24-36 (2)	CAIU 154908 0 45G1 40' HC F
M203ME37 09-24-T	09-24-37 (2)	PACU 160878 1 45G1 40' HC F

تغيير العرض
لغة
خلق البصائع
إشعار





Increased productivity for STS: **5%**

The screenshot shows the Solvo.Web portal interface. At the top, there's a navigation menu with options like 'Main', 'Debt details', 'Create truck visit request', 'Truck Visit Requests', 'Power of attorney', 'Search for container', 'Export containers', 'Import containers', and 'Manage privileges'. Below this, a table displays 'Time slots for period 25.08.14 12:41 - 26.08.14 00:41'. The table has columns for 'Date from', 'Date to', 'Direction', 'Profile', 'Cont qty', and 'State'. Below the table is a 'Solvo.Web Functions' menu with icons for 'Truck Visit', 'Container Details', 'Vessel Visit', 'Containers for Import', 'Power Of Attorney', and 'Account Management'.

Date from	Date to	Direction	Profile	Cont qty	State
25.08 11:00	25.08 13:00	Inbound	ДЕПО	19	●
		Inbound	Экспорт	14	●
		Outbound	ДЕПО	5	●
		Outbound	Импорт	28	●
25.08 13:30	25.08 15:30	Inbound	ДЕПО	19	●
		Inbound	Экспорт	14	●
		Outbound	ДЕПО	5	●
		Outbound	Импорт	24	●
25.08 15:30	25.08 18:00	Inbound	ДЕПО	20	●
		Inbound	Экспорт	48	●
		Outbound	ДЕПО	5	●
		Outbound	Импорт	55	●
25.08 18:00	25.08 20:30	Inbound	ДЕПО	20	●
		Inbound	Экспорт	58	●
		Outbound	ДЕПО	5	●
		Outbound	Импорт	64	●

The system automatically creates time slots (duration - 2 hours) available for truck visits. Via Solvo WEB Portal cargo-forwarders can send truck visit requests to the terminal and select the available slot. Each time slot is determined by the maximum number of trucks (by category), which can be processed during the time assigned





MainWindow

CONTAINER
TERMINAL
SAINT-PETERSBURG

11:52

SOLVO
THE SMARTER ALTERNATIVE

Processing			Standby					
Time slot	Status		plate number	duration	plate number	duration	plate number	duration
11:00 - 13:00	Processing		B782OK178	4 min.	B638BO178	28 min.		
13:30 - 15:30	Standby		K499HT190	4 min.	A844CO35	32 min.		
plate number	window	Status						
B088PK98	2	Processing	B969MM178	8 min.	Y027CP78	32 min.		
B351PT178	3	Invitation	H790PP178	8 min.	B457TP98	36 min.		
			M597MC178	12 min.	B072EO178	36 min.		
			T706XY47	12 min.	O932PT178	40 min.		
			K049TB178	16 min.	B806KA98	40 min.		
			Y687KE78	16 min.	P910KX47	44 min.		
			B070OE178	20 min.				
			H356TC178	20 min.				
			B935BP178	24 min.				
			B156CB178	24 min.				

Регистрация автомобиля на МЭП

КТЛ (Время)

Номер транспортного средства

Информация по автомобилю:

Формат:

Марка:

Или:

Отчество:

Удостоверение личности:

Последнее время прибытия: 09.06.2014 12:07:00

Entry **Exit**

Reduction of re-handles: **7%**


Truck turnaround time is reduced: **30%**

Automated identification: Containers




Gate Operations

#	Visit type	Code	Entry permitted	Exit permitted	ETA	ETD	Forwarder	Vehicle number
476184	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10/13/15 00:09	10/14/15 00:09	_TJ_EXPEDITOR33	01/290GBA
476264	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	11/09/15 09:00	11/10/15 09:00	_TJ_EXPEDITOR	01/108HAA
476261	out		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	11/09/15 00:09	11/10/15 00:09	_TJ_EXPEDITOR33	01/108HAA
476515	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/23/16 18:00	03/23/16 21:00	GEO_LINE	H678ET98
476047	out		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	08/27/15 15:00	08/27/15 17:00	EXPEDITOR	AA5605MA
476418	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	01/22/16 14:41	01/22/16 16:41	_TJ_EXPEDITOR	01/103XBA
476275	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	11/11/15 00:09	11/12/15 00:09	_TJ_EXPEDITOR33	01/178SBA
476513	in/out		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/23/16 16:00	03/24/16 00:00	GEO_LINE	AA1605-3
476504	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/23/16 11:00	03/23/16 13:00	F	A2400M69
476113	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	09/16/15 09:00	09/17/15 09:00	_TJ_EXPEDITOR	01/178SBA
476486	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/21/16 11:00	03/21/16 13:00	MSC	01432NBA
476507	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/23/16 12:00	03/23/16 15:00	GEO_LINE	T649CC47
476194	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10/14/15 15:00	10/14/15 17:00	MSC	AB2391BI
476293	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	11/16/15 13:00	11/16/15 15:00	F	AA5605MA
476381	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	12/17/15 09:00	12/18/15 09:00	TEST_OOO_EXP	01/224MBA
476511	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/23/16 18:00	03/23/16 21:00	GEO_LINE	T198TX98
476419	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	01/29/16 09:00	01/29/16 23:45	MSC	01/108HAA
476467	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	02/26/16 09:00	02/27/16 09:00	GEO_LINE	T198TX98
476465	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	02/26/16 09:00	02/27/16 09:00	GEO_LINE	T198TX98
476474	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	02/29/16 09:00	03/01/16 09:00	GEO_LINE	E869PQ29
476242	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	10/30/15 15:00	10/30/15 17:00	F	AA8539-4
476479	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/03/16 15:00	03/03/16 18:00	EXP_001	01 102XBA
476445	out		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	02/11/16 09:00	02/12/16 09:00	LIVEN	01 5400BA
476506	in		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	03/23/16 12:00	03/23/16 15:00	GEO_LINE	T649CC47



Entry

Car




Vehicle number
01/290GBA

Owner
СОЮЗТРАНССЕРВИС 782

Vehicle description
MEPC

Driver



Surname
4СЛЕД-ТАЙМ-СЛОТ

First name
4

Middle name

Document type

Document data
4

Authorization number

The gate security guard makes sure the truck driver's ID and plate number are sync with the initial info in TOS. If OK the driver is permitted to enter the gate. Data comparison can be done via RDT, PC or self-service kiosk





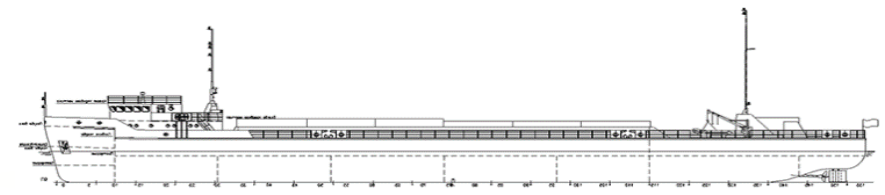
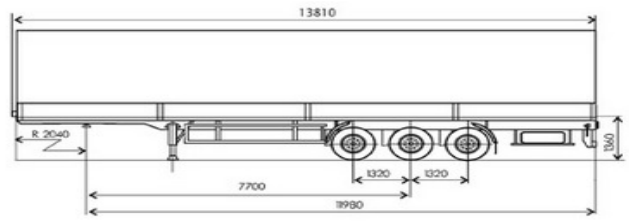
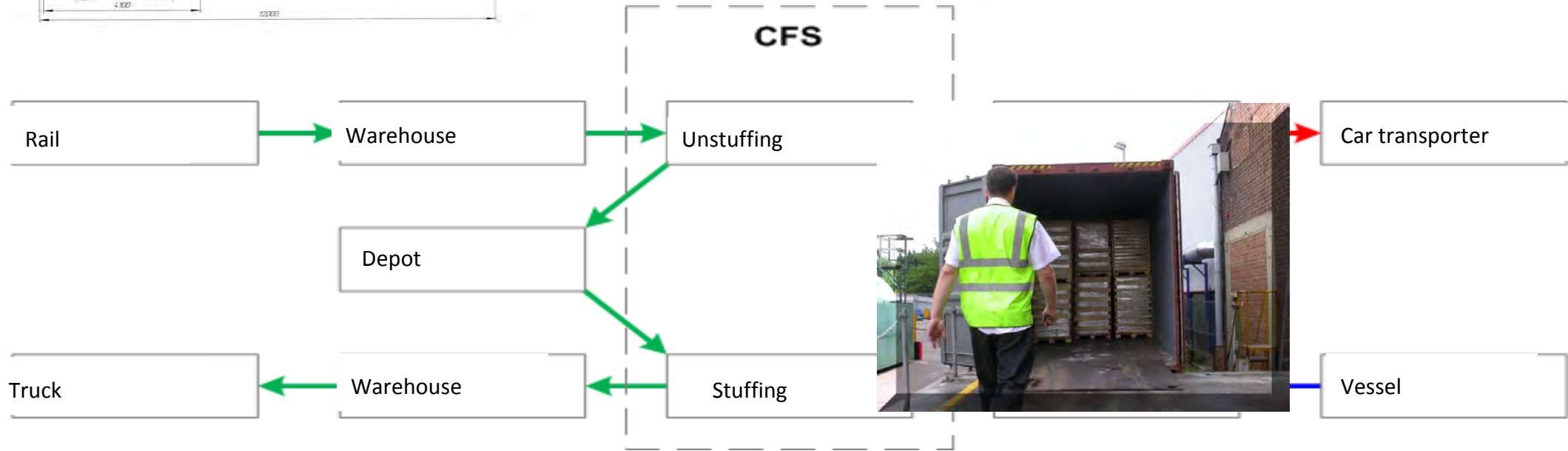
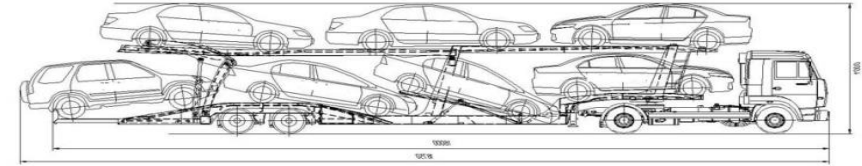
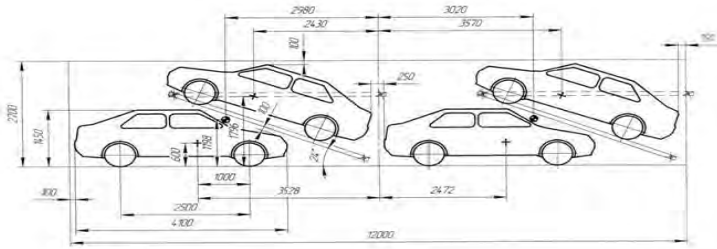
✓ RDT

✓ 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

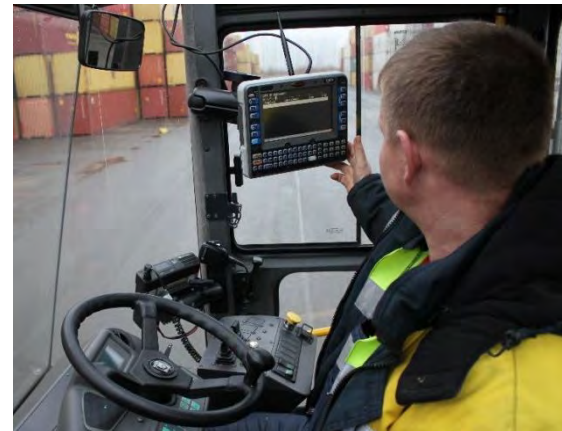




Weighing management



Automated container delivery



Weighing registration



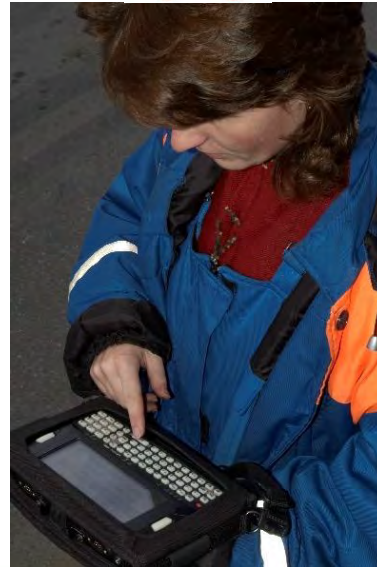
23.07.2014 10:48:20		
		Адрес:
		Телефон:
		Факс:
Экспорт: Акт взвешивания N WGT000055 от 10.12.2014 20:39		
Клиент: ООО «Альмекс»	Договор N АСГ-002/11 от 02.03.2011	Заявка N Б/Н 11/04/11 от 11.04.2011
Контейнер: SUDU5272268	Тара: 4500 кг	Пломба: 00704872
Тип размер: 40 FE		
Прибыл на терминал 04.12.2014г., на платформе 89652304 (транспорт прибытка)		
Общий вес контейнера с грузом: 32 140 кг.		
Взвешивание произведено на весах RS 104		
Представитель ОАО «Владивостокский морской торговый порт»:		Представитель получателя:
(подпись)		(подпись)

Creation of weighing documents

TOS disables vessel container loading without VGM



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

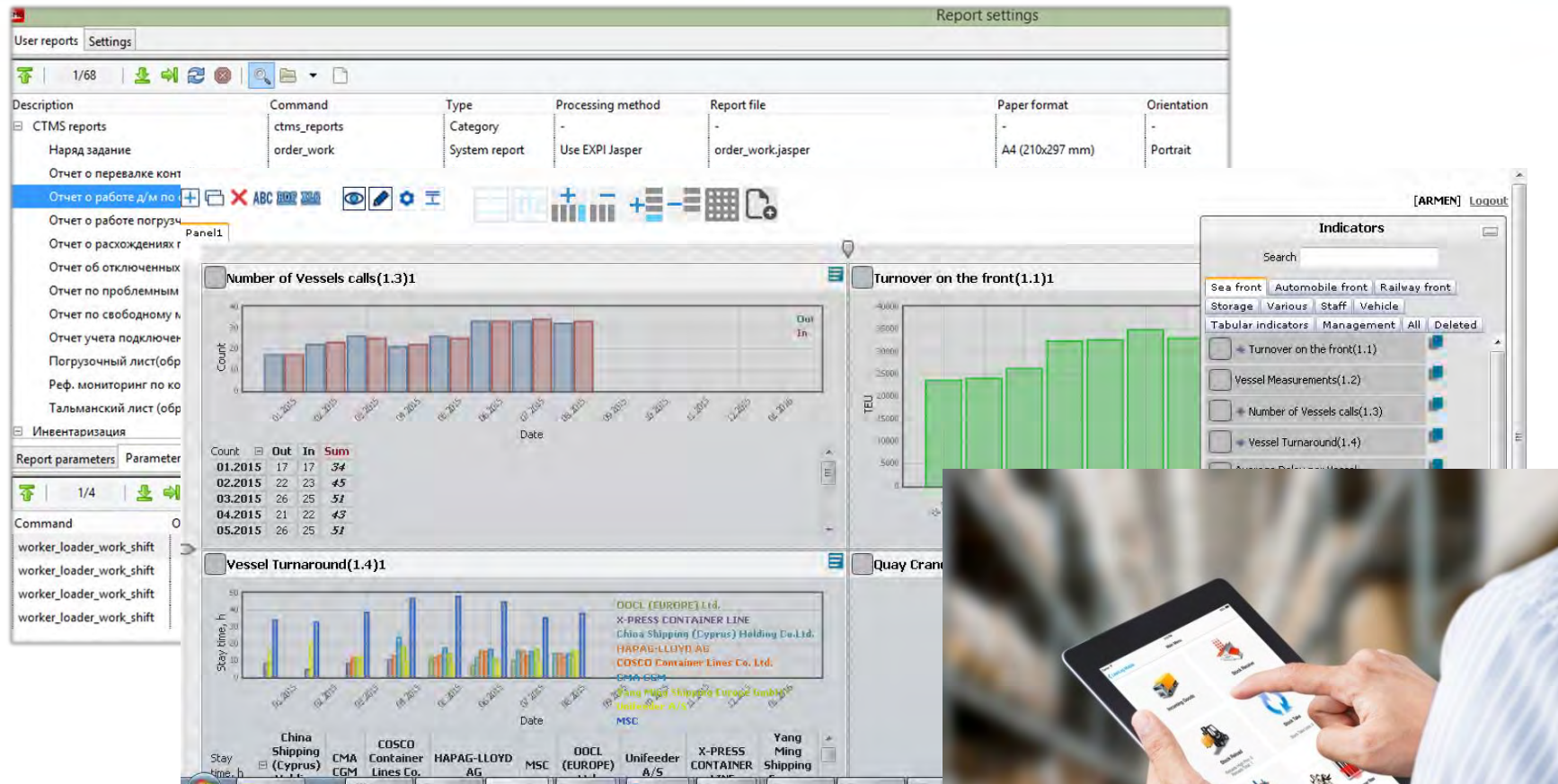


“**Smart shelves**” or racks equipped with RFID antennas:

- ✓ 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 and Reporting



- ✓ Multilingual reports
- ✓ Creating new reports using Jasper Reports tool
- ✓ Monitoring performance of the terminal using KPI dashboards



Thank you!
www.solvosys.com
Our stand: No.41