Part of TOC EUROPE

TECH TOC SEMINARS

The rise of TMT: a perfect match of innovation and growth of the North Italy container hub of Trieste

OPERATING SMARTER: THE CASE STUDIES

Rotterdam, *12th June 2018 - Session 14:45-16:00*

Marco Fehmer
DSP CEO

Roberto Menis
TMT General Manager

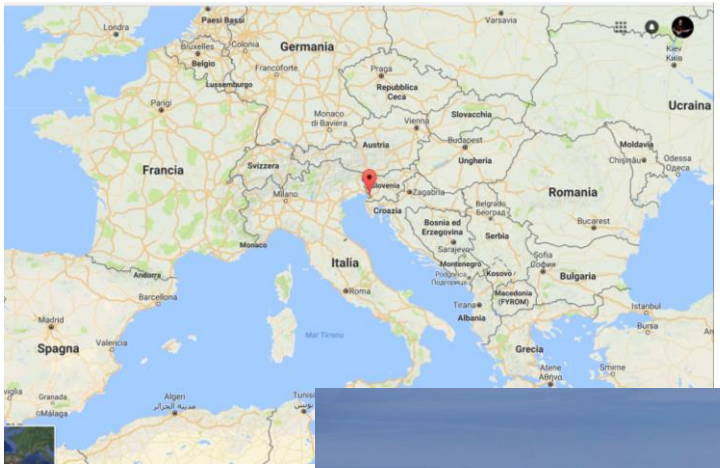
DSP | data and system planning

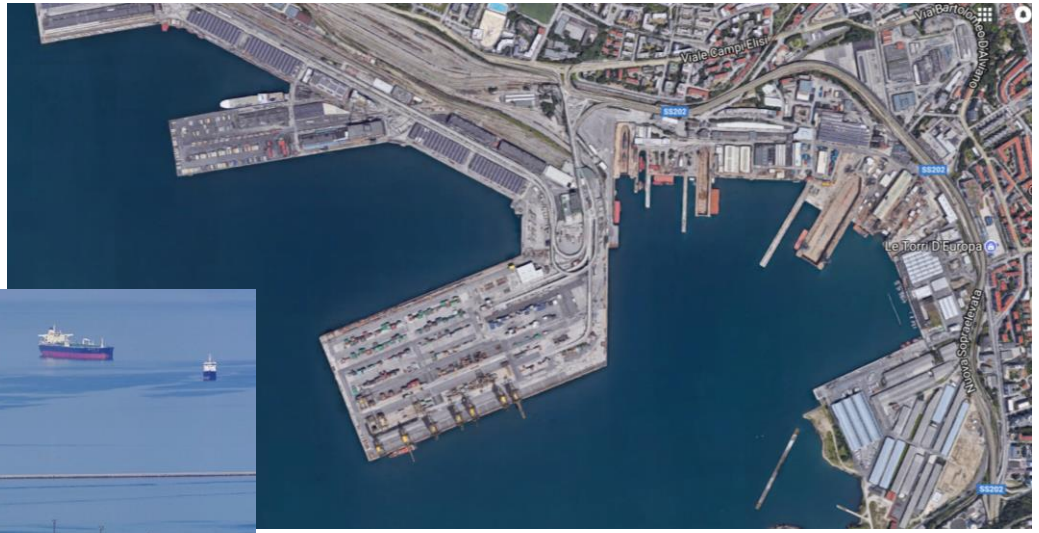
TRIESTE MARINE TERMINAL
OUR NETWORK YOUR SUCCESS

Part of TOC EUROPE

TRIESTE MARINE TERMINAL
OUR NETWORK YOUR SUCCESS

TECH TOC SEMINARS





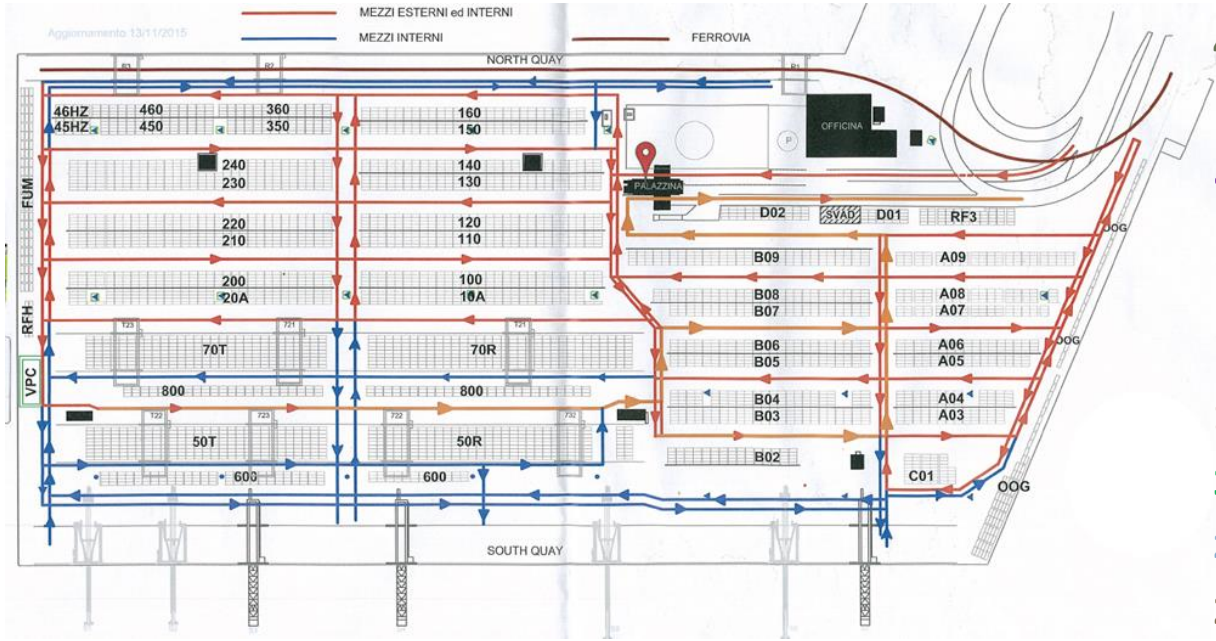
DSP

Part of TOC EUROPE

TRIESTE MARINE TERMINAL

OUR NETWORK YOUR SUCCESS

TECH TOC SEMINARS



770 mt berth

400.000 sqm yard

18 mts natural draft

7 Post Panamax Quay Cranes

1 mobile crane

10 RMGs

12 **RS**

30 ITV

235 reefer plugs

2500 sqm covered CFS

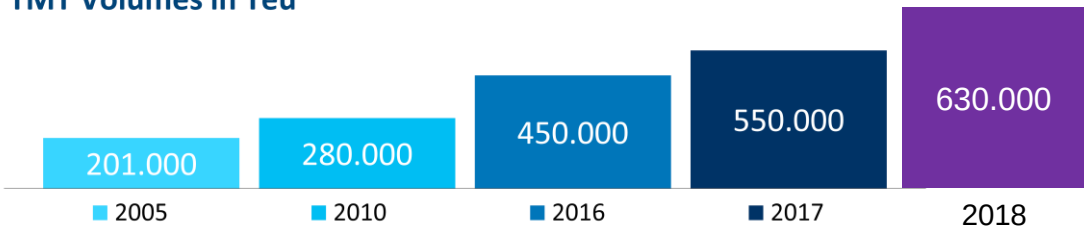
7.000 Trains capacity per year

250 direct employees

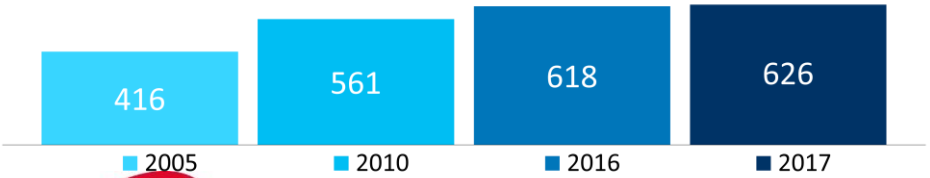
DSP

The growing trend of TMT

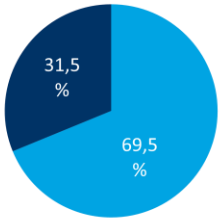
TMT Volumes in Teu



Vessels operated

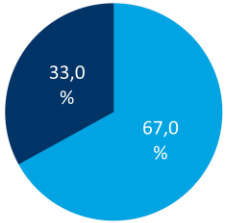


2015



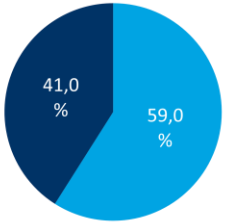
Truck 69,5%
Rail 31,5%

2016



Truck 67%
Rail 33%

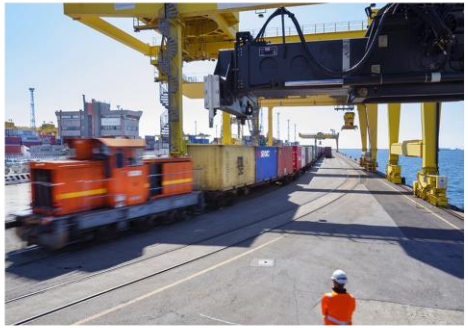
2017



Truck 59%
Rail 41%

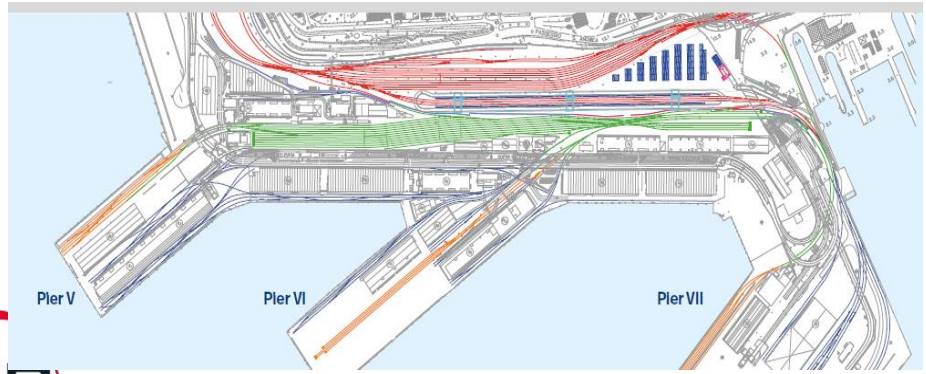
Intermodal facility

The rail infrastructure inside the terminal

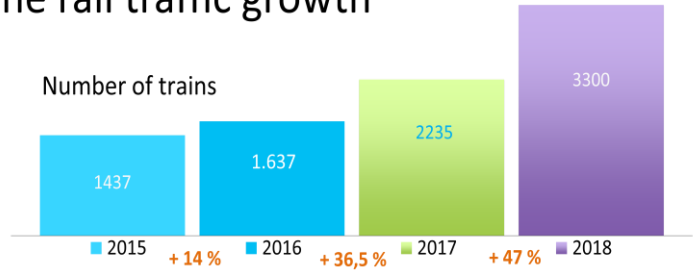


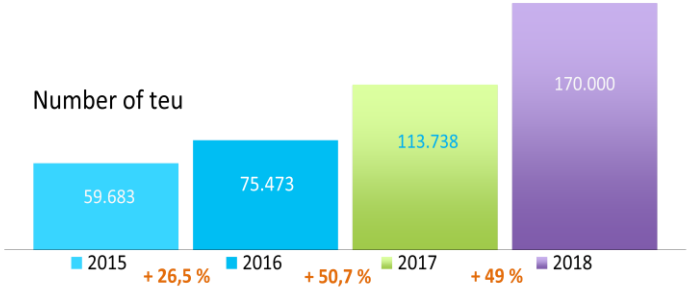
5 rail tracks by 600 meters each

2 dedicated cranes for operations



The rail traffic growth





PORT of TRIESTE rail shunting area - 2018

PRESENT UTILIZATION: 8.600 trains per year

CAPACITY: 11.600 trains per year (13.200 in 2019)

The intermodal network

HUNGARY
TMT BRANCH OFFICE (Budapest)
Budapest: 10-14 trains/week A-B

SOUTH GERMANY
TMT BRANCH OFFICE (Munich)
Munich: 5 trains/week A-B
Burghausen: 2 train/week A-B
Ludwigshafen, Koeln, Leipzig
connected via Munich

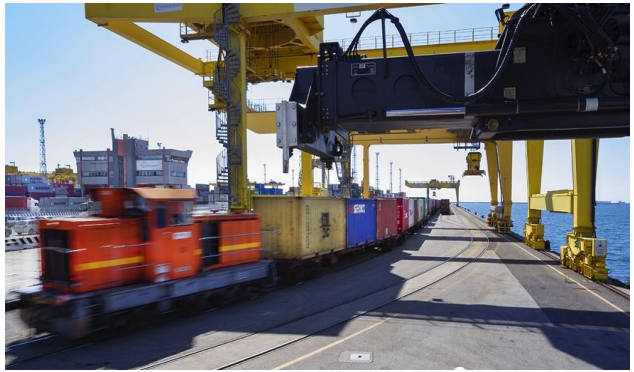
AUSTRIA
Salzburg: 2 trains/week A-B
Graz: 1-2 /week A-B
Villach: 7 trains/week A-A
Linz: 7 trains/week A-B
Wien: 7 trains/week A-B
Wolfurt: 7 trains/week A-B

SLOVAKIA (MSC dedicated)
Dunajská Streda: 3 trains/week A-B

CZECH REPUBLIK (MSC dedicated)
Ostrava: 1-2 trains/week A-B
Paskov: 3 trains/week A-B

ITALY
Verona: 3 trains/week A-A
Milano: 2 trains/week A-B

Ready to grow



PREPARATION
- UPGRADING OF 4 STS CRANES (2015-2017)
- +12 NEW REACH STACKERS (2017)
- NEW T.O.S.: NAVIS N4 (2017)
- +78 NEW DIRECT WORKERS (2017)

2018
- SECOND TRACK FOR THE TRML RAIL GATE
- +25 NEW TERMINAL TRACTORS
- NEW STACKING AREA

2019
- UPGRADING OF 7 RMG YARD CRANES
- TERMINAL EXTENSION:
100 METERS LENGHT X 400 METERS WIDTH

Part of TOC EUROPE

Operating Smarter TOS Migration

TECH TOC SEMINARS

Resourse Optimisation

- Trucks Global Pooling
- Increase yard usage
- Optimise equipment

Digital Control

- Live Dashboard
- KPIs and reporting
- Integrated (*one source*) datamodel
- Billing based on **TDR**

Organisation

- Control Room
- Terminal Planners
- IT department

Process Flexibility

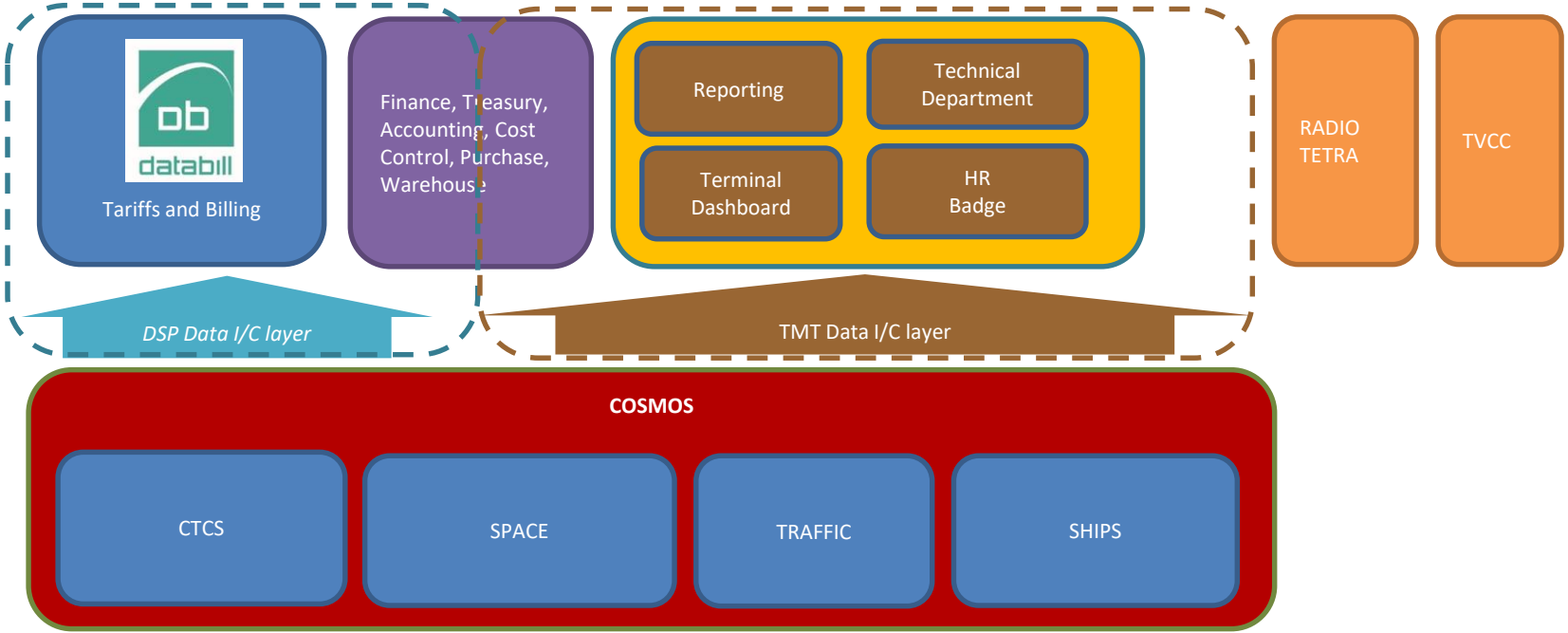
- configurable
- Open EDI
- Scalability
- Ready for automation

DSP

Part of TOC EUROPE

TOS Migration From….

TECH TOC SEMINARS

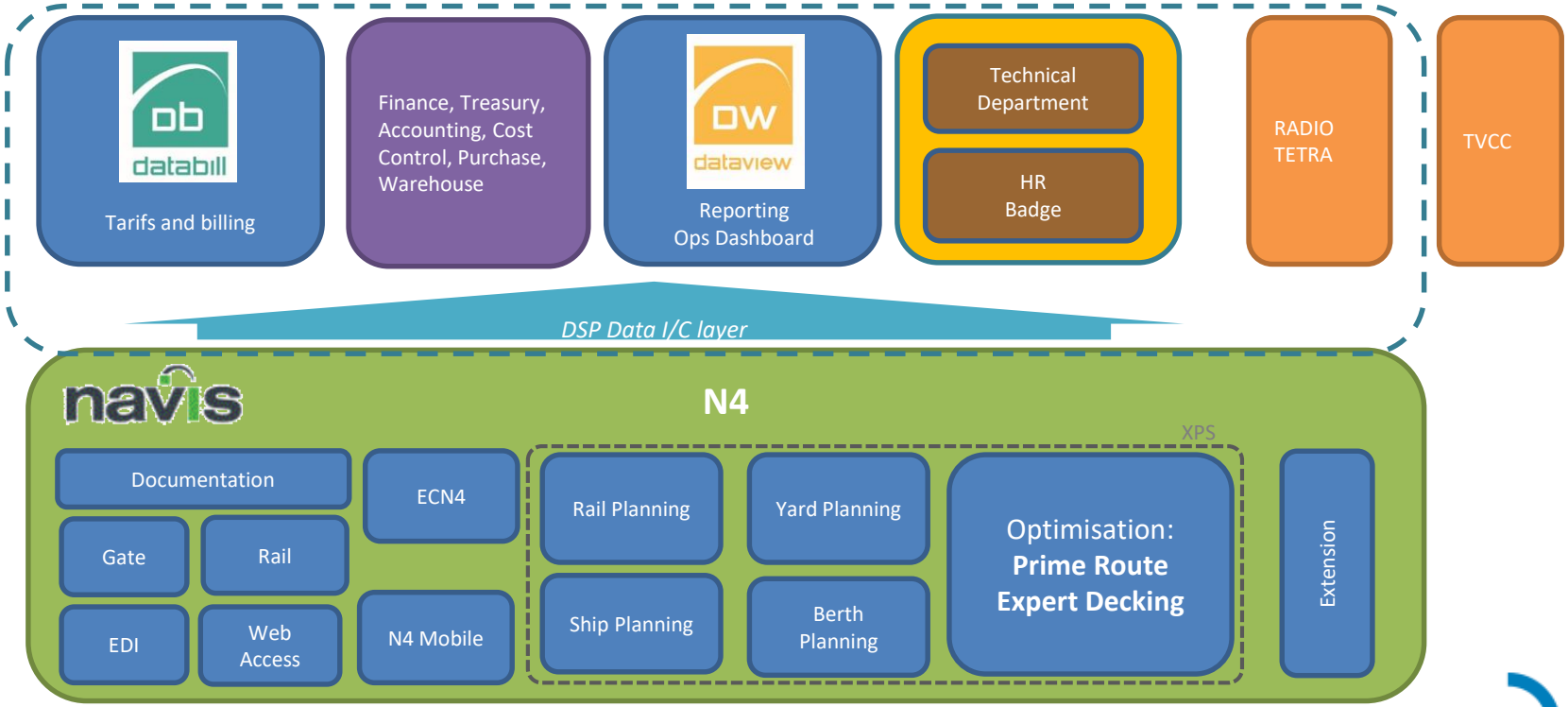


DSP

Part of TOC EUROPE

TOS Migration To….

TECH TOC SEMINARS

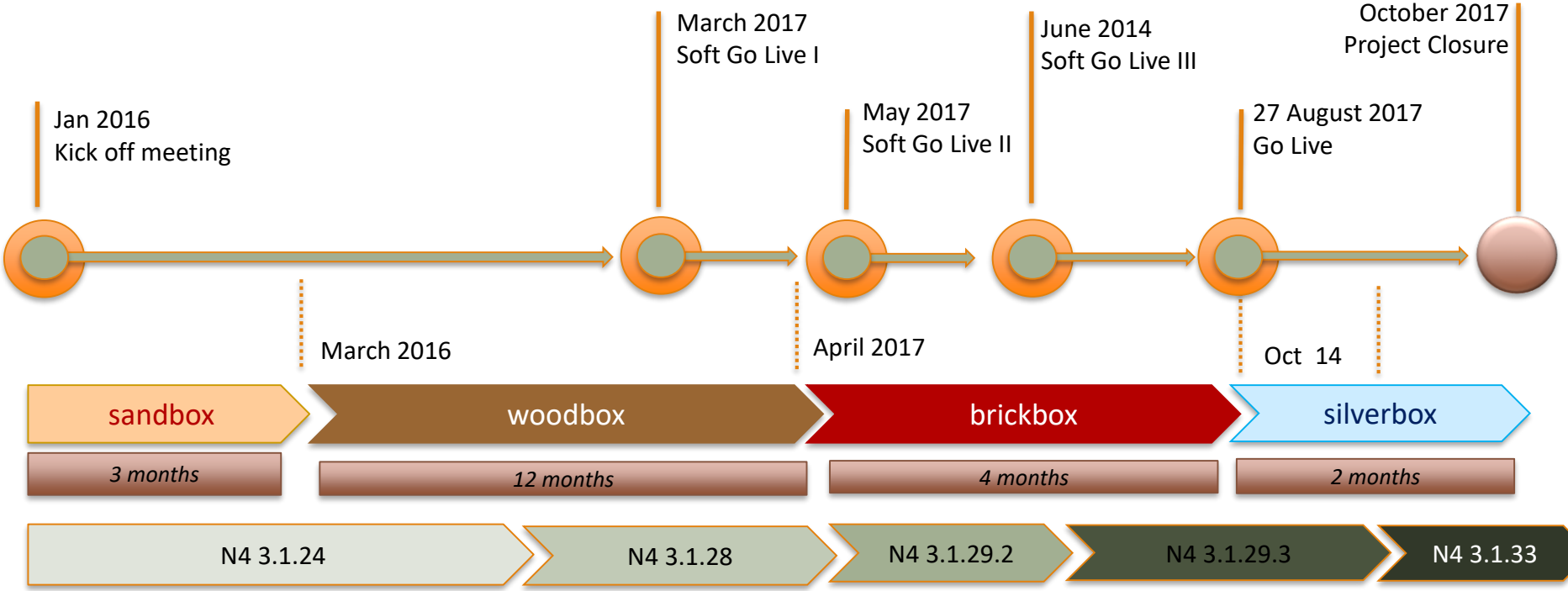


DSP

Part of TOC EUROPE

Key Milestones

TECH TOC SEMINARS



DSP

navis N4

Project Preparation

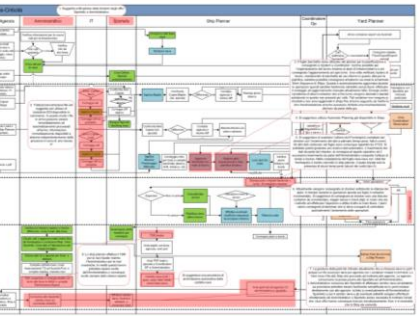
Business Process Mapping

IT infrastructure

Training

Configuration

Testing



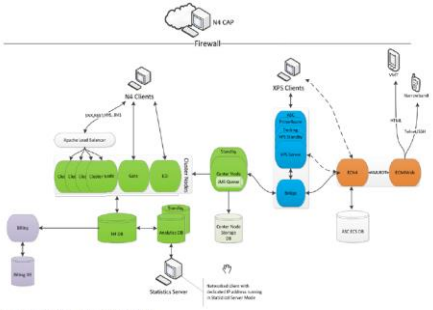
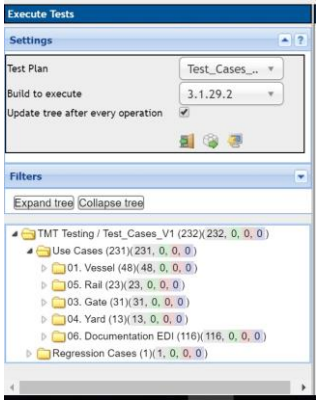


Figure 1: Hardware Overview for N4 3.1



The Go Live Chronicles

Trieste, 27th August 2017

Set Expectation

Based on experience, TMT has been asked to consider a **what if scenario** of a period of 6 weeks after go live needed to reach again and in a stable way, the current level of productivity.

For the first 6 weeks TMT has been recommended to analyse the impact of potential decrease in terminal productivity and verify berth congestion, staff availability, presence of empty shifts for system tuning, impact on SLA with Line operators:

1st week: - 40%

2nd week: – 20%

3rd week: – 15%

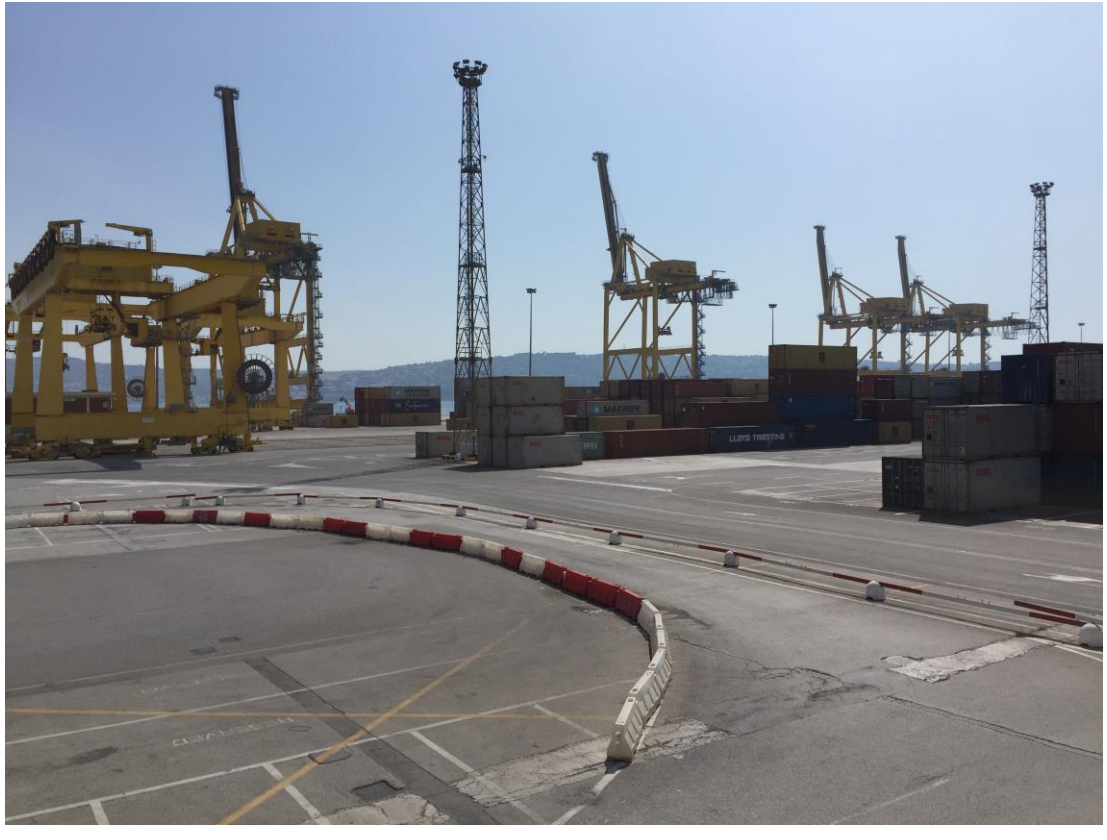
4th week: – 10%

5th week - 5%

Part of TOC EUROPE

Data Migration
Sunday morning

TECH TOC SEMINARS



DSP

Part of TOC EUROPE

Sunday night
First Vessel

TECH TOC SEMINARS

DSP

Part of TOC EUROPE

Go Live Support

TECH TOC SEMINARS

DSP

Part of TOC EUROPE

Monday morning
Gate opens

TECH TOC SEMINARS

DSP

Part of TOC EUROPE

Monday afternoon:
Up and Running

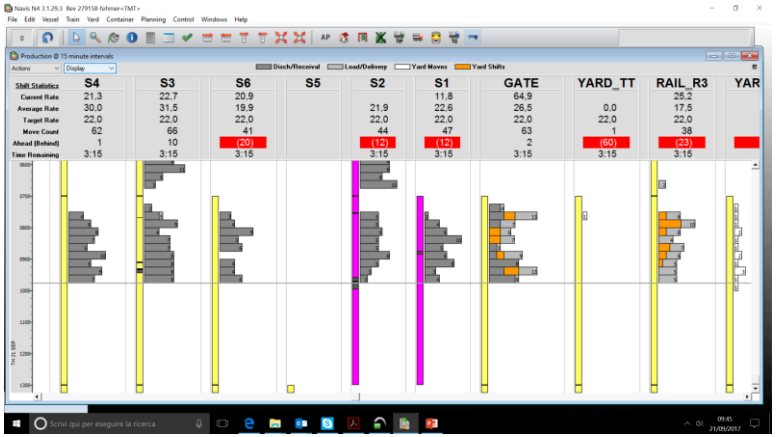
TECH TOC SEMINARS

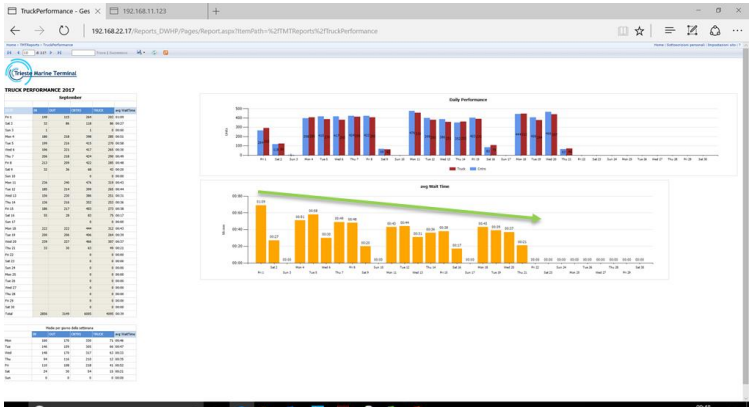
DSP

Main Results
3 weeks after go live

- More volumes with same resourses

- Decrease of external trucks turnaround time





Getting smarter and smarter

1. New Shift change procedure (hot seat)
2. Yard Shifting: prevent and manage
3. Optimise Ship planning sequencing with Quay Commander
4. Gate process and office re-organisation
5. Import segregation by B/L
6. Rail Dual cycling
7. Smooth introduction of new working model
8. New traffic typology: Ro Ro

Part of TOC EUROPE

2018 RoRo vessel calling

TECH TOC SEMINARS

Design trailer spots in the yard
Open a dedicated gate
Rent new RoRo trucks
Hire more people
Add yard clerk
Add ramp clerk

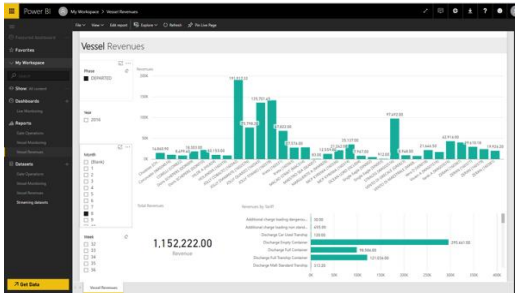
Housekeeping of RoRo LoLo traffic

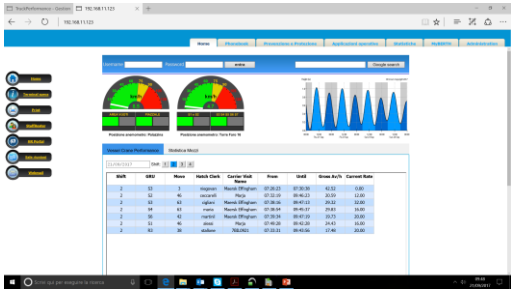
Tuning TOS, EDI, Reporting, Billing
WiFi coverage in new area
Training the people
Manage the project

Part of TOC EUROPE

One Digital Stream

TECH TOC SEMINARS





DW dataview

DSP

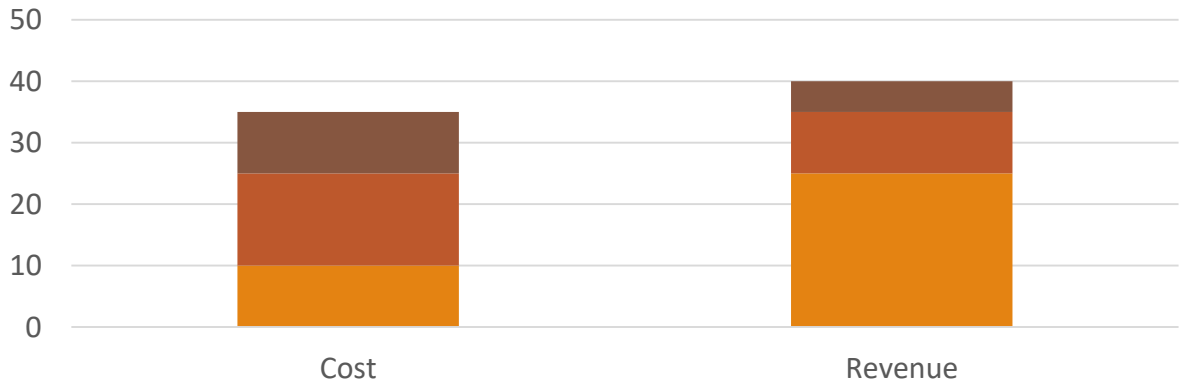
Ready for new business

operations → layout → resourses → process

sales → Handling Tarifs → storage → SLA

costs

revenue



Part of TOC EUROPE

Container Terminal
Smart growth

TECH TOC SEMINARS

Facility

Equipment

People

TOS

differentiate

automate

optimise

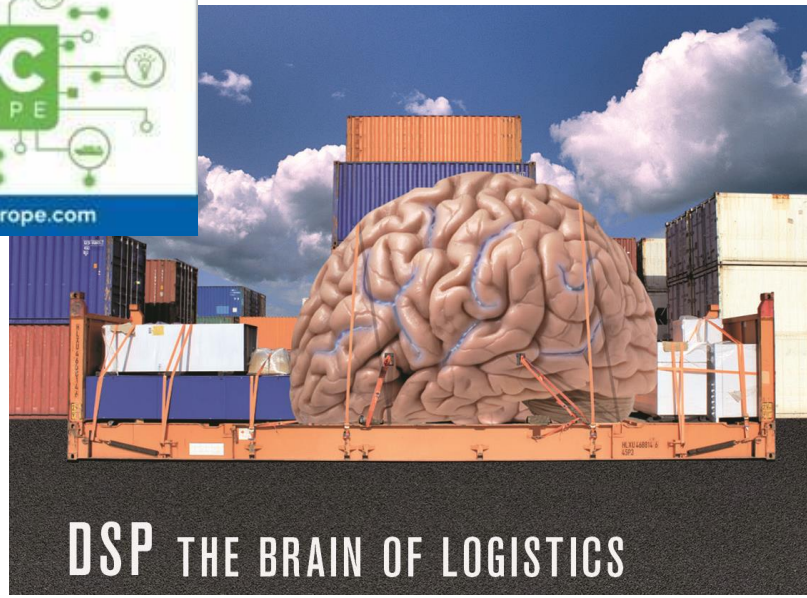
digitalise

DSP

Part of TOC EUROPE

Thank you

TECH TOC SEMINARS



Continue the conversation online #TOCEurope @TOCWorldwide TOC Events Worldwide