European case studies

-

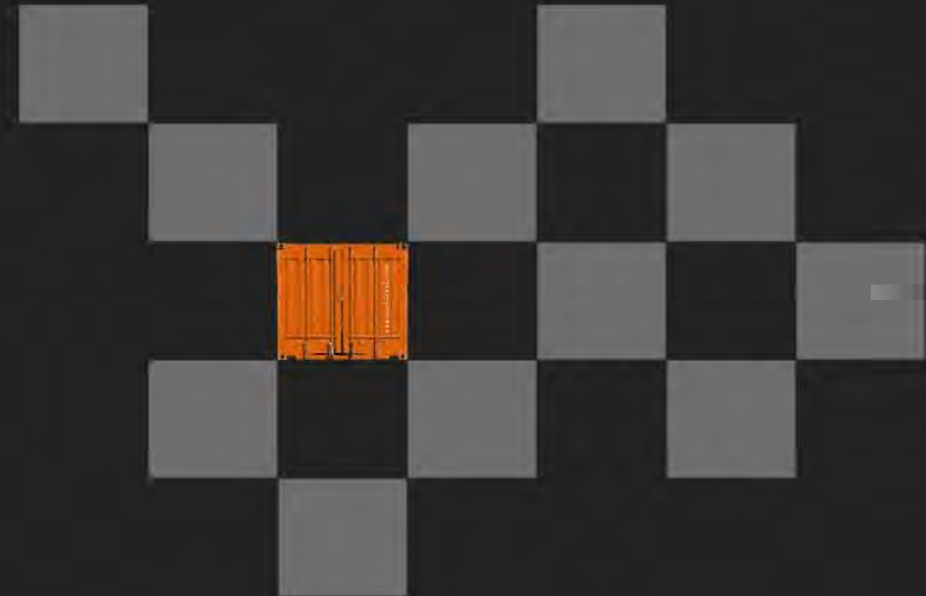# get more out of existing resources
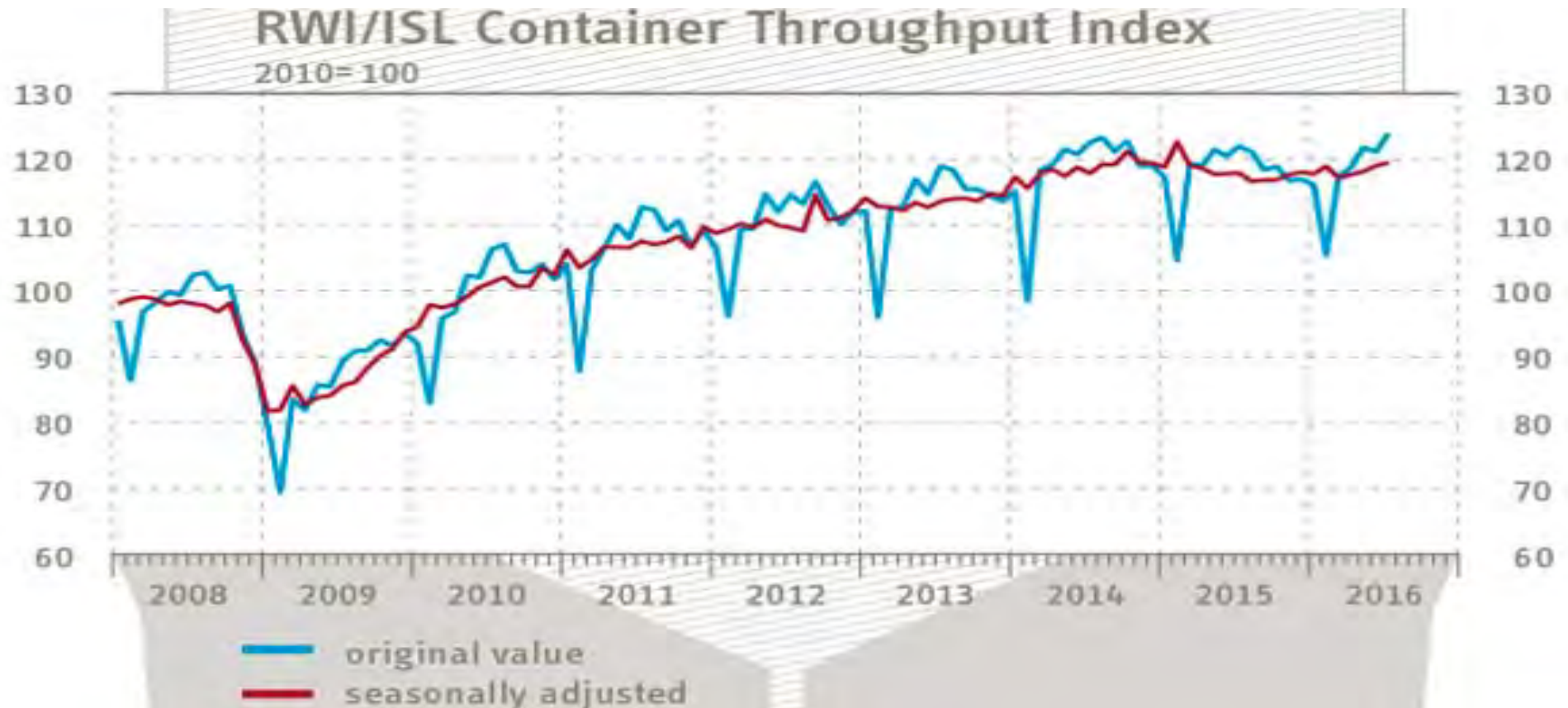
Holger Schuett

ISL Applications GmbH

Colombo International MAartitime Conference – CIMC

11th South Asia, Ports Logistics& Shipping 2016

Colombo, September 21st – 23rd 2016

RWI/ISL Container Throughput Index
2010 = 100

original value
seasonally adjusted

The Container Index has improved to 119.8 points in July from119.3 (revised) in June. It confirms the upward trend of world trade illustrated by the Container Index since March 2016. It is now slightly below the level reached at the turn of the years 2014/15.

RWI/ISL Container Throughput index
- *81 ports worldwide*
- *~ 60 % of worlds throughput*
- *available 6 weeks in new month*
- *www.isl.org → news*

ISL Applications GmbH

Founded 2010 as ISL's commercial subsidiary

Holger Schütt
CEO, Prof. Dr.- Ing.

Horst-Dieter Kassl
CTO, Dipl.-Ing.

ISL – Institute of Shipping Economics and Logistics (R&D)

- founded 1954
- private foundation
- suited in Bremen & Bremerhaven
- some 45 employees
- research based consultancy institute in maritime logistics

More than 25 Years Simulation Experience

1989 1991 1993 1995 1998 2000 2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2016

Products rebranding:
CAPS
SCUSY
ViTO

Development funded by   European Union   Land Bremen   Bremerhavener Gesellschaft für Investitionsförderung und Stadtentwicklung mbH b!s

Optimisation and Simulation – References (selected)

ASEAN Terminals, Philippines

Bromma, Singapore

Centerm Terminal, Vancouver, Canada

CSX, Jacksonville, USA

DP World, Australia

EUROGATE, Germany

HHLA, Hamburg , Germany

HPA Hamburg Port Authority, Germany

HIT, Hong Kong

JadeWeserPort, Germany

Cargotec / Kalmar Industries, Finland

CMSA ICTSI, Manzanillo, Mexico

MCT, Gioia Tauro, Italy

MTL, Hong Kong

Noell Crane Systems, Germany

NTB, Bremerhaven, Germany

Port of Tacoma, USA

PORTEK International Ltd., Singapore

PSA International, Singapore

Red Sea Gateway Terminal, Jeddah, KSA

SPIA ICTSI, Columbia

Tata Consultancy Services, India

TecPlata ICTSI, Buenos Aires, Argentina

Terminal Investment Ltd, Netherlands

TotalSoftBank, Korea

TPT, South Africa

Warsteiner Brewery, Germany

How to improve terminal's efficiency
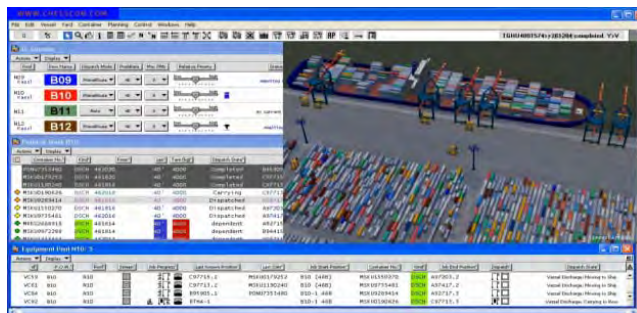
TOS
Control system

Process automation
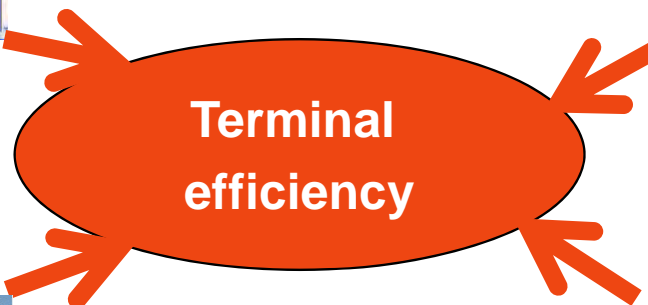
Equipment

The first ALV of KMI

Terminal efficiency

Terminal staff

Terminal's productivity is driven by

- The equipment

- The control system (TOS)

- The processes

Terminal Automation (processes as well as equipment) prepares for optimised operation, but more than ever very skilled control staff is required.

The last sentence within the Singapore Maritime Gallery (opened 09/2012):

„ It is man making the difference"

Learning from the huge ones
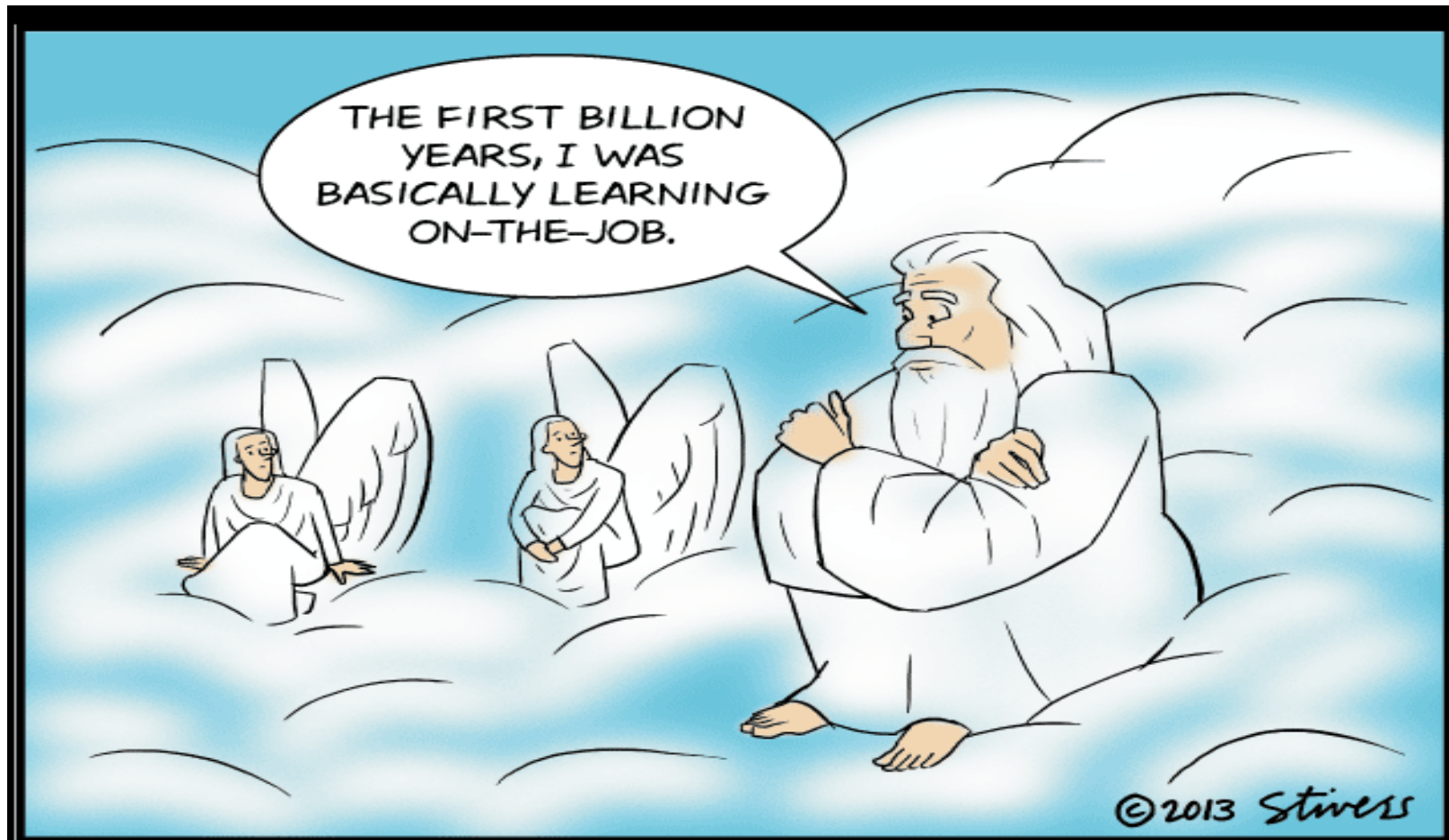
Vessel simulator

- train your control staff (as shipping lines do)

Reference Simulationszentrum HSB 130416

Crane simulator

- train your control terminal staff (as you do with crane drivers)
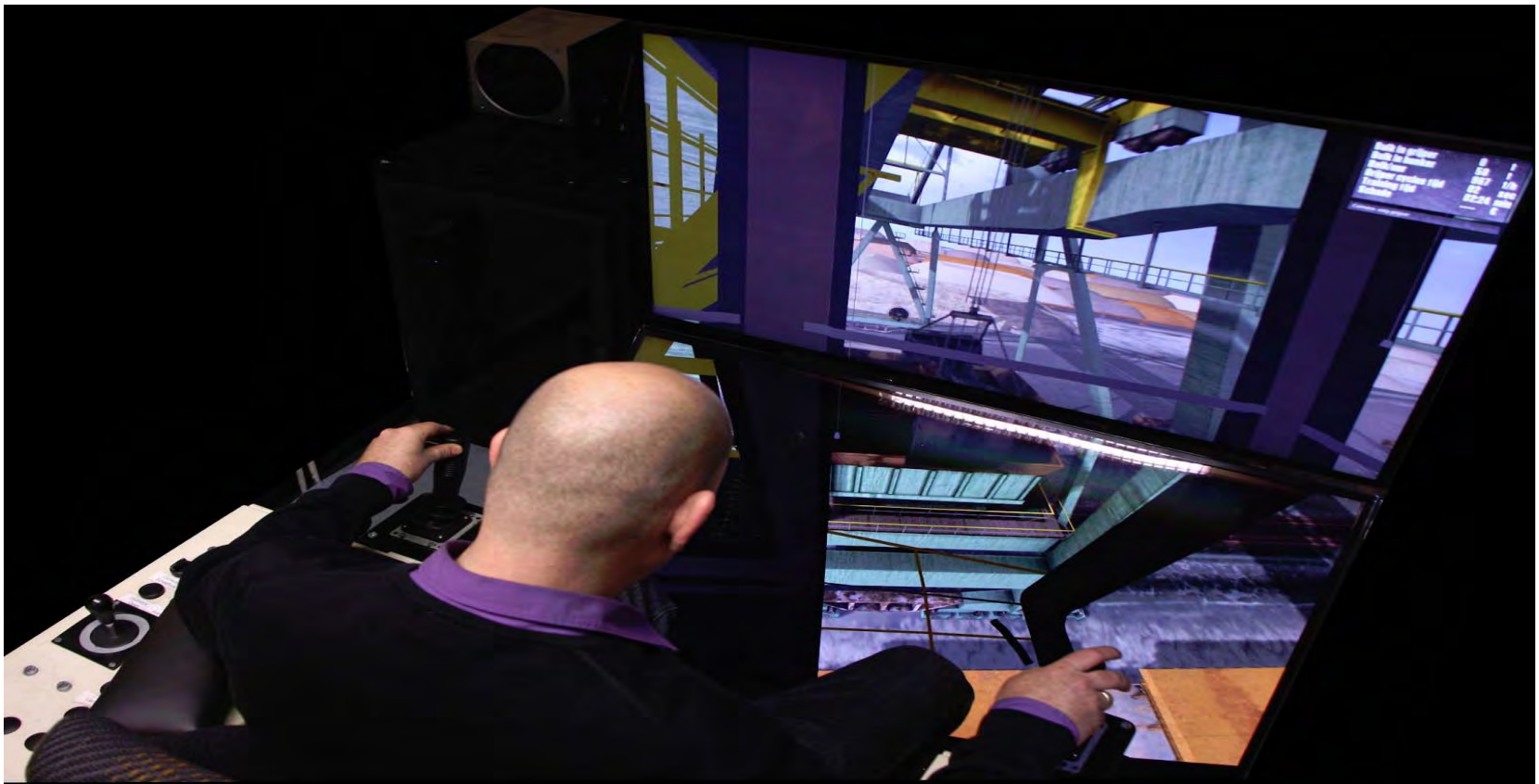
Learning from the huge ones
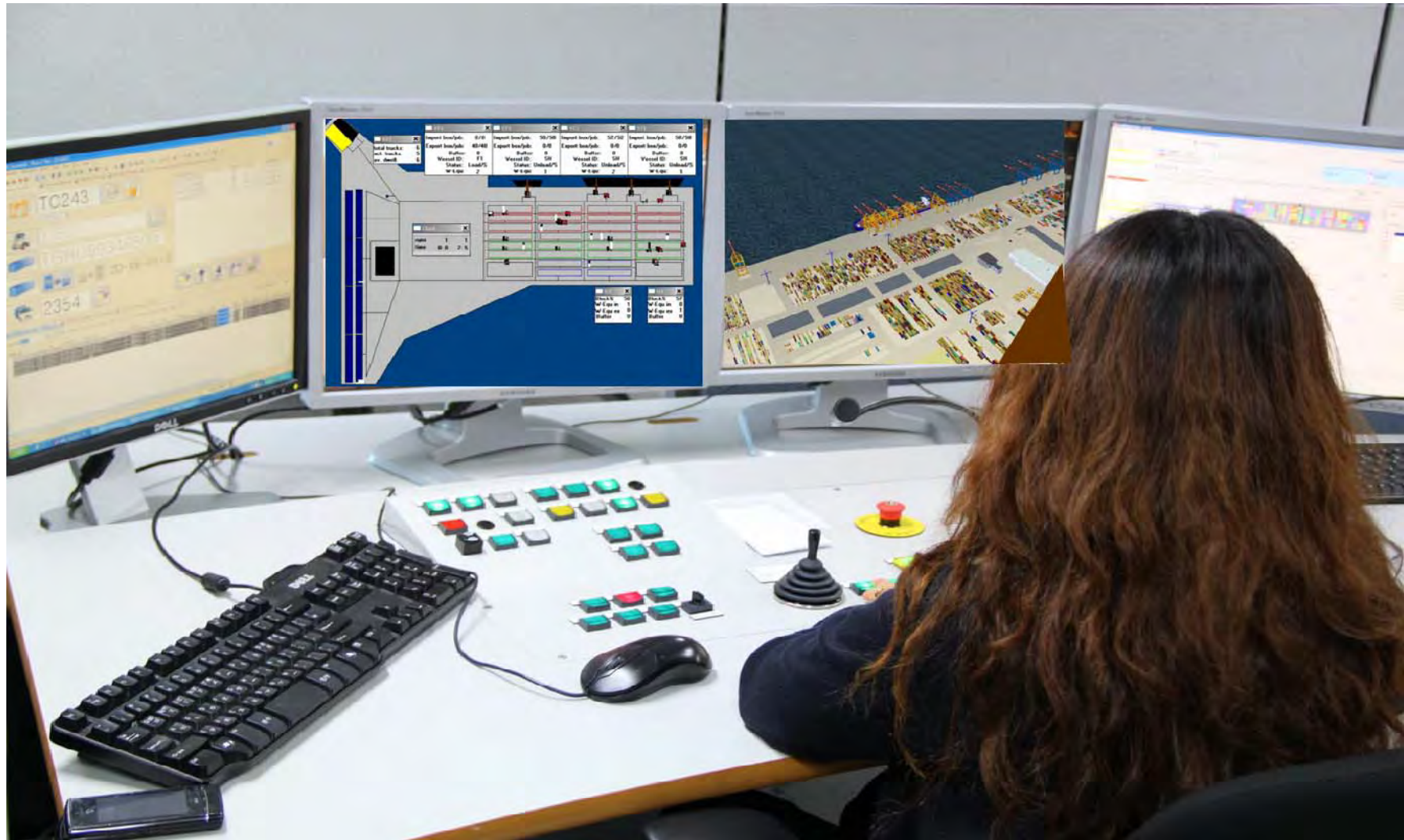
The main mission of CHESS**CON** VIRTUAL TERMINAL
what you can do with CHESS**CON**

Emulation:

- use your Terminal Operation System (TOS)
- use your software interfaces
- but use a **Virtual Container Terminal**

TOS

switch
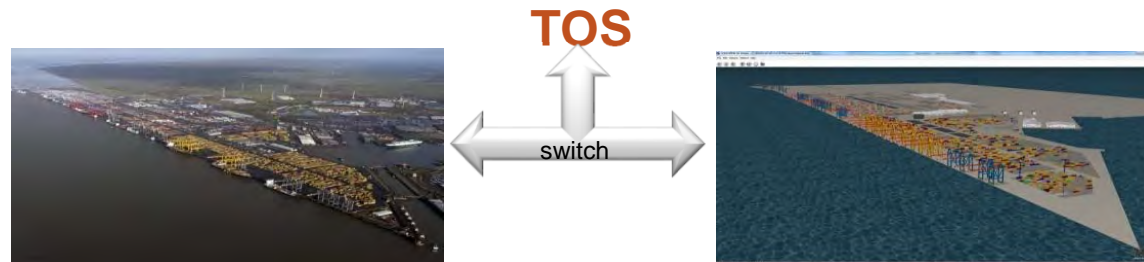
This is state of the art (at least at Greenfields)

→ But what are the next steps?

CHESSCON Shift Preview

0 step:
day to day work
use the TOS
~~to plan the next shift~~

1 step:
shift planning finished

CHESS**CON** Shift Preview

2nd step:
Import planning state
automatically

Development funded by:

Bremerhavener Gesellschaft
für Investitionsförderung
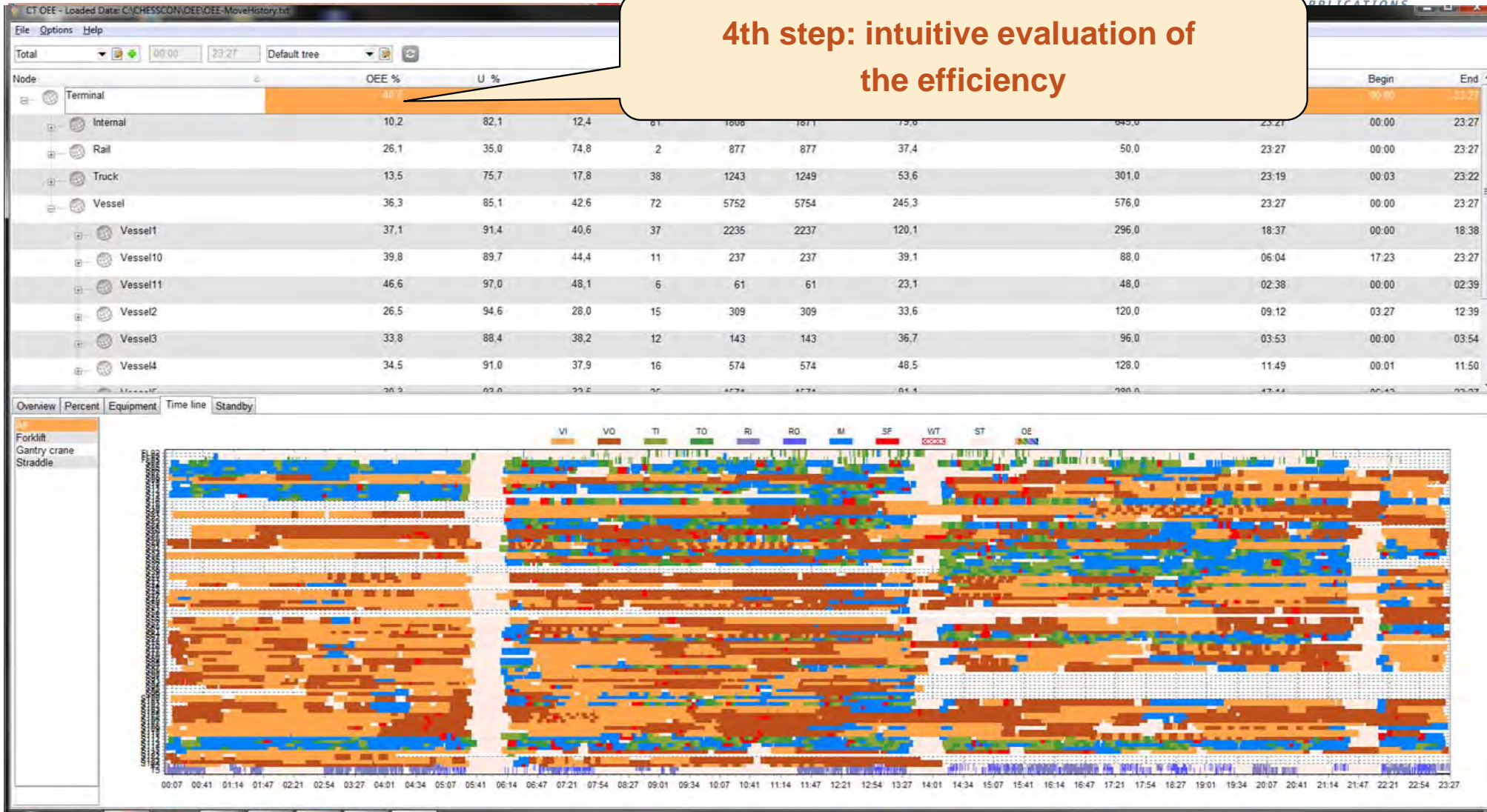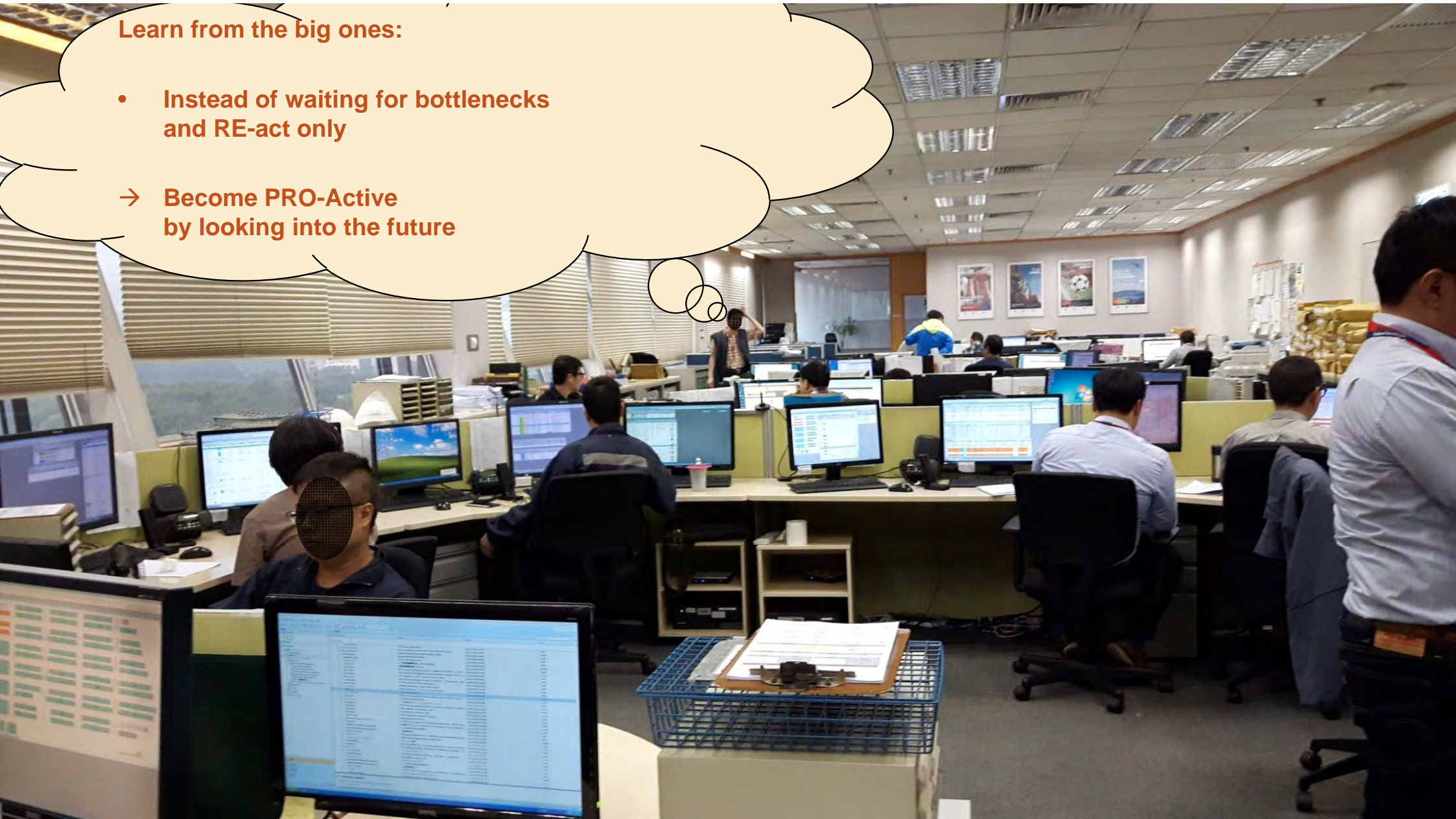und Stadtentwicklung mbH

CHESS**CON** Shift Preview

4th step: intuitive evaluation of the efficiency

© ISL 2016

Learn from the big ones:

- Instead of waiting for bottlenecks and RE-act only

→ Become PRO-Active
by looking into the future

Cites from NTB – North Sea Terminal Bremerhaven

a joint venture of APM Terminals and the Eurogate group

- **CHESSCON Shift Preview was developed out of our demands for a fast simulation of the current state of shift planning.**

- **Together we (NTB) and ISL Applications GmbH defined a module, which is based on operational as well as IT expertise.**

- **The result is easy to use and supports short term optimisation of the day-to-day shift planning.**

Why Shift Preview ?

→ **Terminals,**

   which today are not in the position to analyse their operation predictively,

   are living yesterday

Marc Dieterich, Operations Manager at NTB

Conclusion

Instead of investing in more and more man and machines:

Get more out of your existing resources

MAKE YOUR RIGHT MOVES!

CHESSCON
VIRTUAL TERMINAL

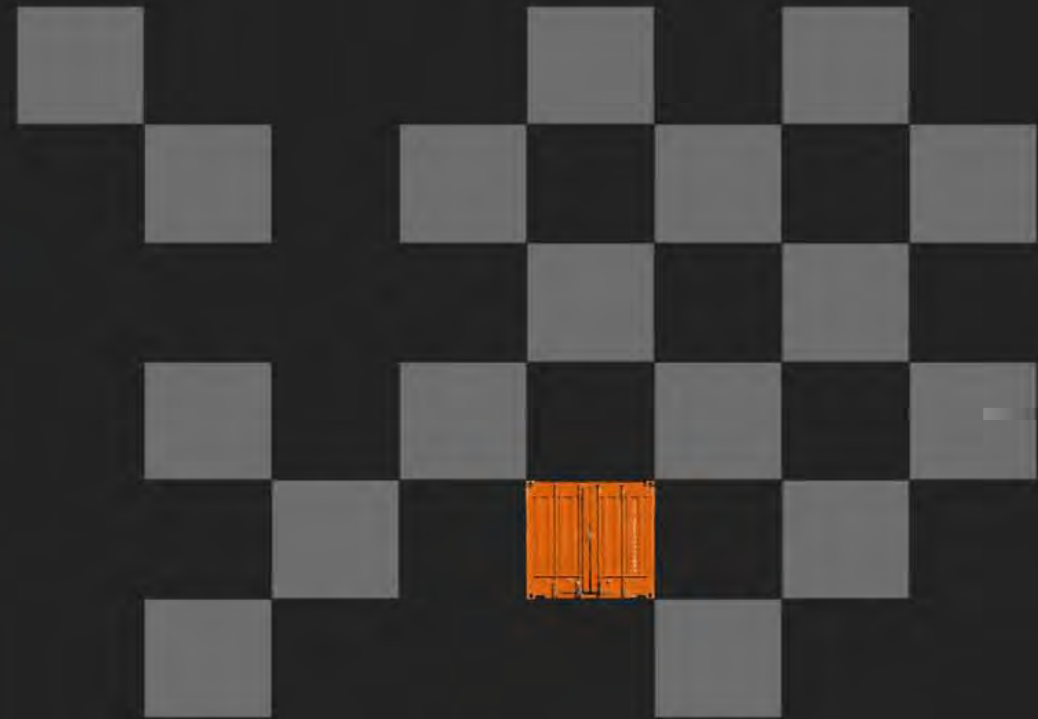WWW.CHESSCON.COM

I'm looking forward to the following discussion!

Holger Schuett, Prof. Dr.-Ing., CEO

ISL APPLICATIONS GMBH
Barkhausenstrasse 2
27568 Bremerhaven
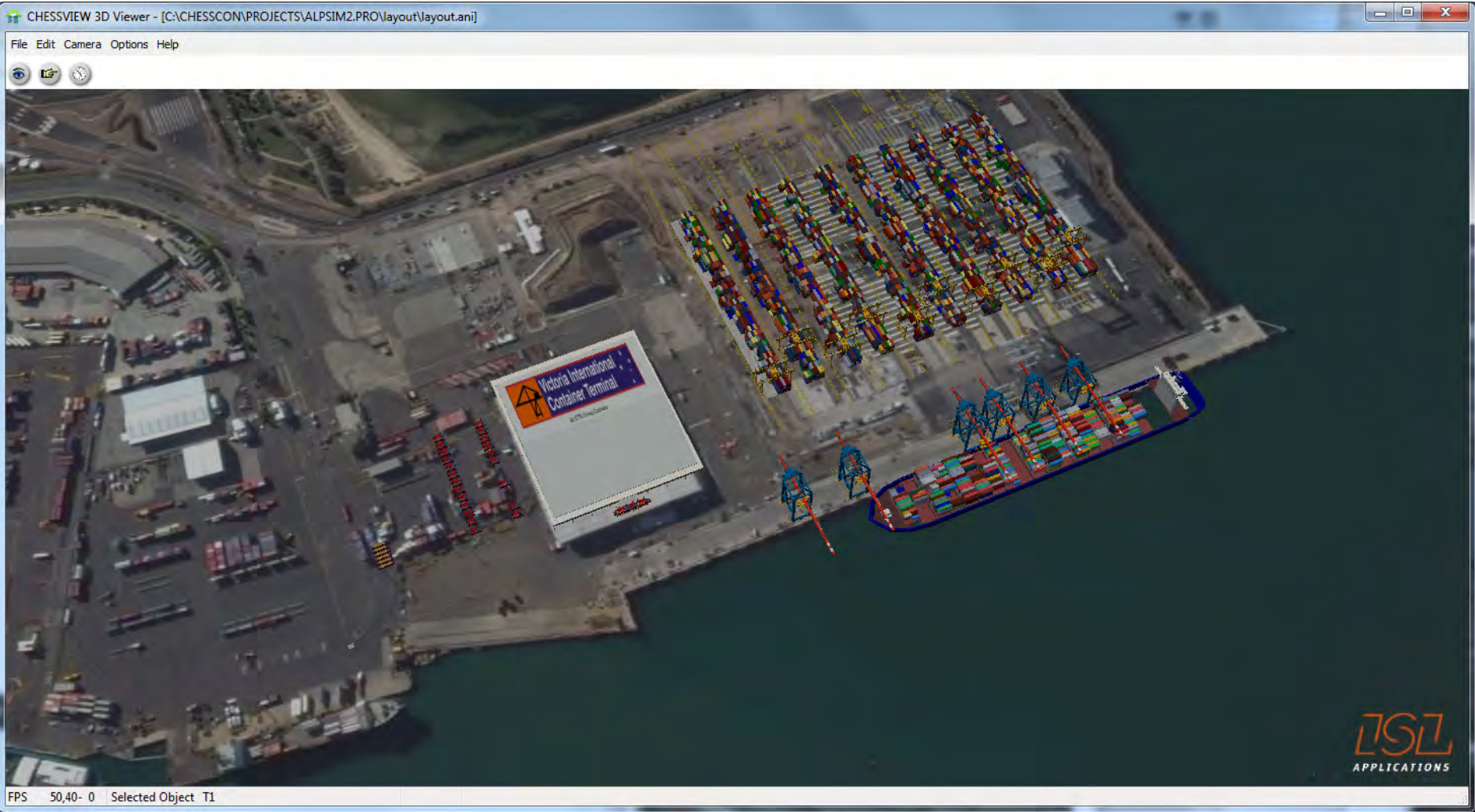Germany

P +49 471-30 98 38-38
www.isl-applications.com

ALP emulator

AOS calculating the utilisations

AOS forecasting the operation