



SAAB

CO-BENEFITS OF TECHNOLOGY

2016 AAPA CARGO OPTIMIZATION SEMINAR

PAVEL SKOURNIK

INTRODUCTION

- Presenter: Pavel Skournik, Maritime Traffic Management, Saab
- Our Why: ***“We Make Maritime Trade Safe and Efficient Around the World”***
- Maritime Traffic Management
 - Operations in Canada, Australia, The Netherlands, Sweden, Hong Kong, USA
 - Fairway to Freeway solutions – integrated end to end solutions for ports
 - Coastal Surveillance solutions – integrated solutions for countries and coasts
- Products and solutions include
 - Port Management Information Systems - KleinPort
 - VTS and VTMIS solutions – V3000
 - AIS base stations and AIS networks - Coastwatch
 - Hydrographic and precise navigation solutions – QPS products



ARE YOU READY TO MAKE THE **WINNING MOVE?**

Managing maritime traffic requires solving immediate challenges and planning ahead. The choice of supporting tools is a strategic one. What you decide on is likely to be with you for years to come.

Saab offers a comprehensive suite of innovative products to make your maritime operations safer, more efficient and more secure. We supply proven solutions for:

- Vessel Traffic Services
- AIS solutions and networks
- Coastal surveillance
- Port and Terminal Management
- Pilot Dispatch
- Hydrography

Ports can distinguish themselves by getting cargo from ship to follow-on transport with minimal delay. In our **Fairway to Freeway** concept, Saab solutions work together to make that happen, keeping all resources optimally in play. The immediate result is a more efficient and profitable port.

The world does not stand still, and neither does Saab. Thanks to our thinking edge, we have a unique ability to stay ahead of technological, operational and environmental developments. Let our staff apply their broad maritime expertise to deliver a comprehensive solution to meet your specific needs. Contact us at marinfo@saabgroup.com or visit us at saab.com/maritime.

www.saab.com



WHAT IS HAPPENING AT THE PORT/TERMINAL ?



Agents & Port Community



Traffic Management



Pilot Scheduling



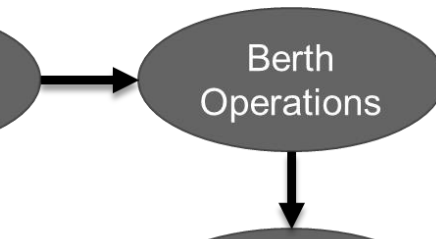
Tug Scheduling



Port Services Planning



Vessel Operations



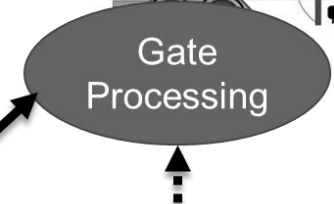
Berth Operations



Apron to Storage



Storage



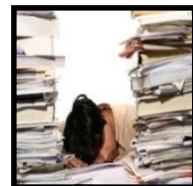
Gate Processing



Cargo & Dangerous Goods



Warehouse Management

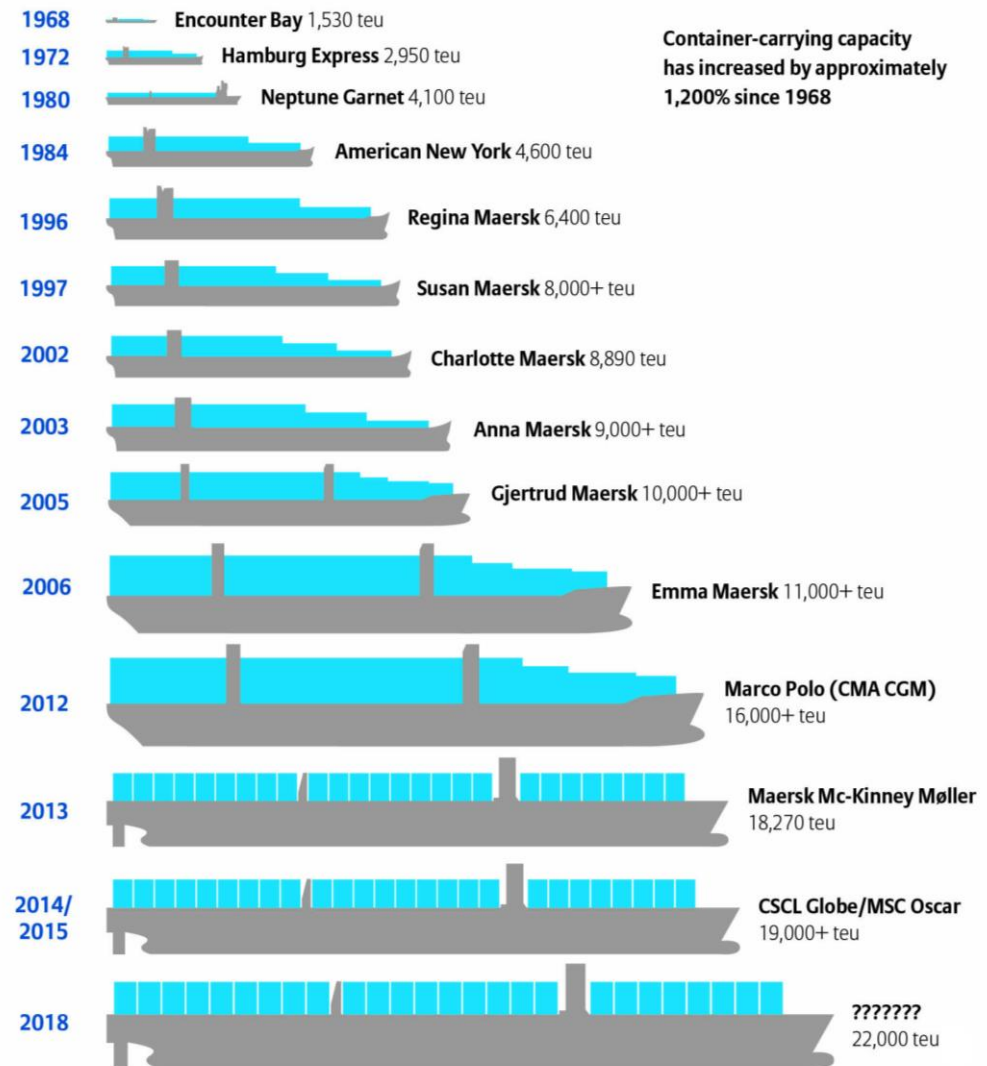


Billing & Accounting



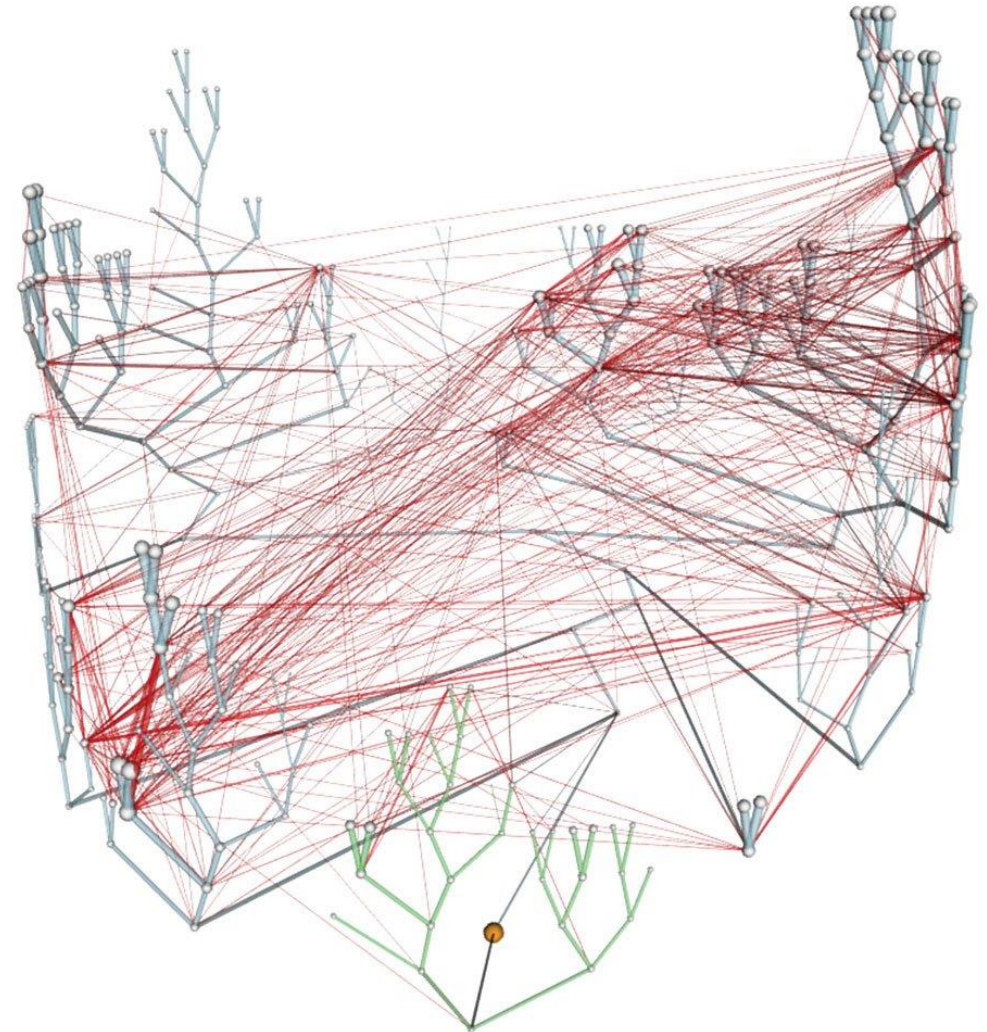
CHANGES TAKING PLACE IN THE INDUSTRY

- Globalization
- Bigger ships
- Rising cost of infrastructure development
- Regulations (VGM)
- The environment, especially emissions (CO2)
- New levels of security along with new threats
- The world economy affecting the import/export balance



OTHER COMPLEXITIES

- Volume of Information
- Various types of users
- Information Dispersed
- Different Information Formats
- Different views of information (data, graphical)
- Dispersed locations of input and reporting
- Extensive Reporting (Detailed, General, Formal)



INFORMATION DUPLICATION

- Paper, carbon copy, fax, notes
- White boards
- Magnetic boards
- Rulers
- Sticky notes
- Cargo manifest
- Agent request, confirmation
- Service providers, request, confirmation, change



CHALLENGES

- **Silos of Information**
- **Independent processes between departments and groups**
- **Need to communicate and share accurate data**
- **Have to operate in more efficient & timely way**



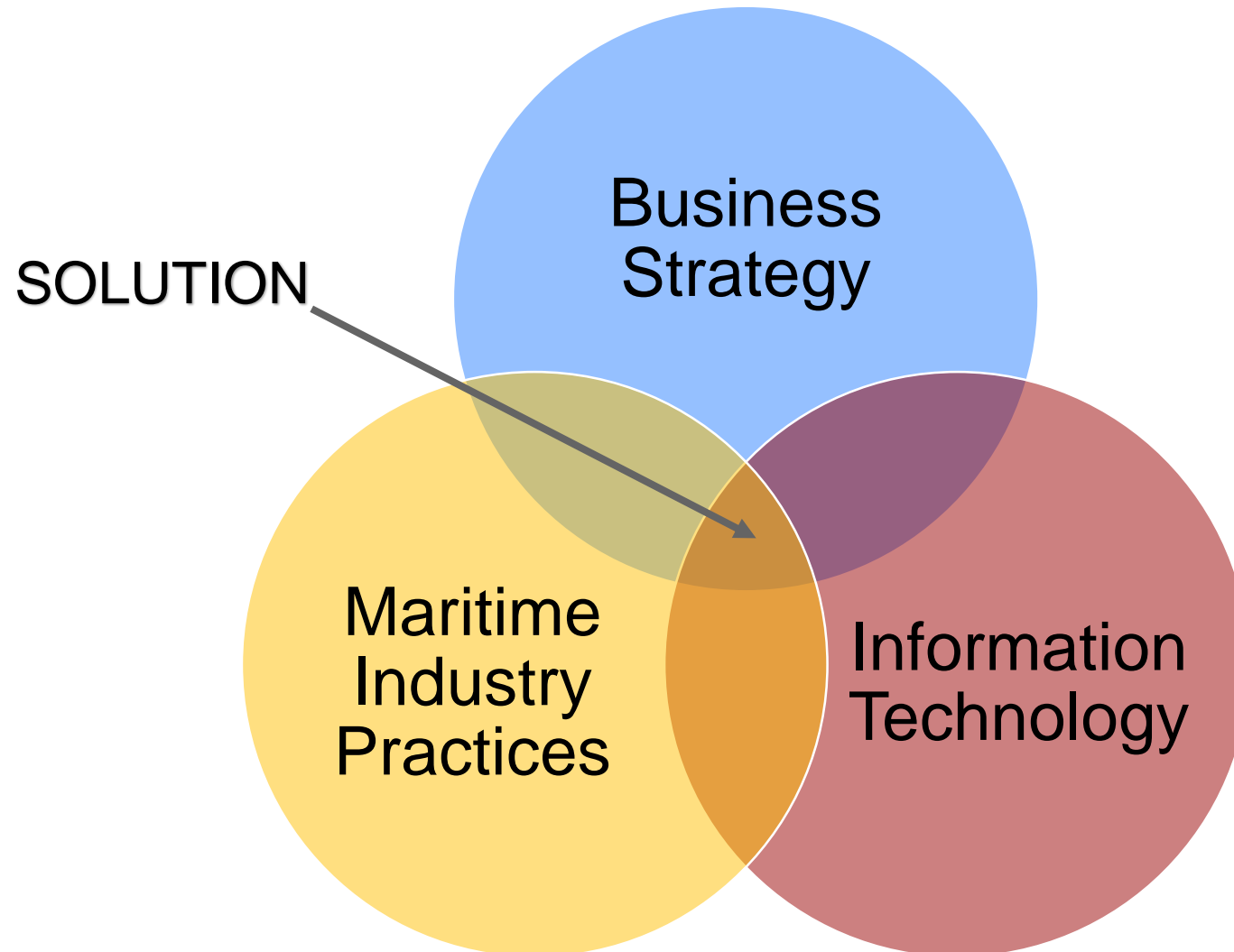
GOALS

What do you want to achieve ?

- Cost efficiency,
- Improved customer service,
- Increase traffic capacity,
- Regulatory demands,
- Expansion,
- Modernisation

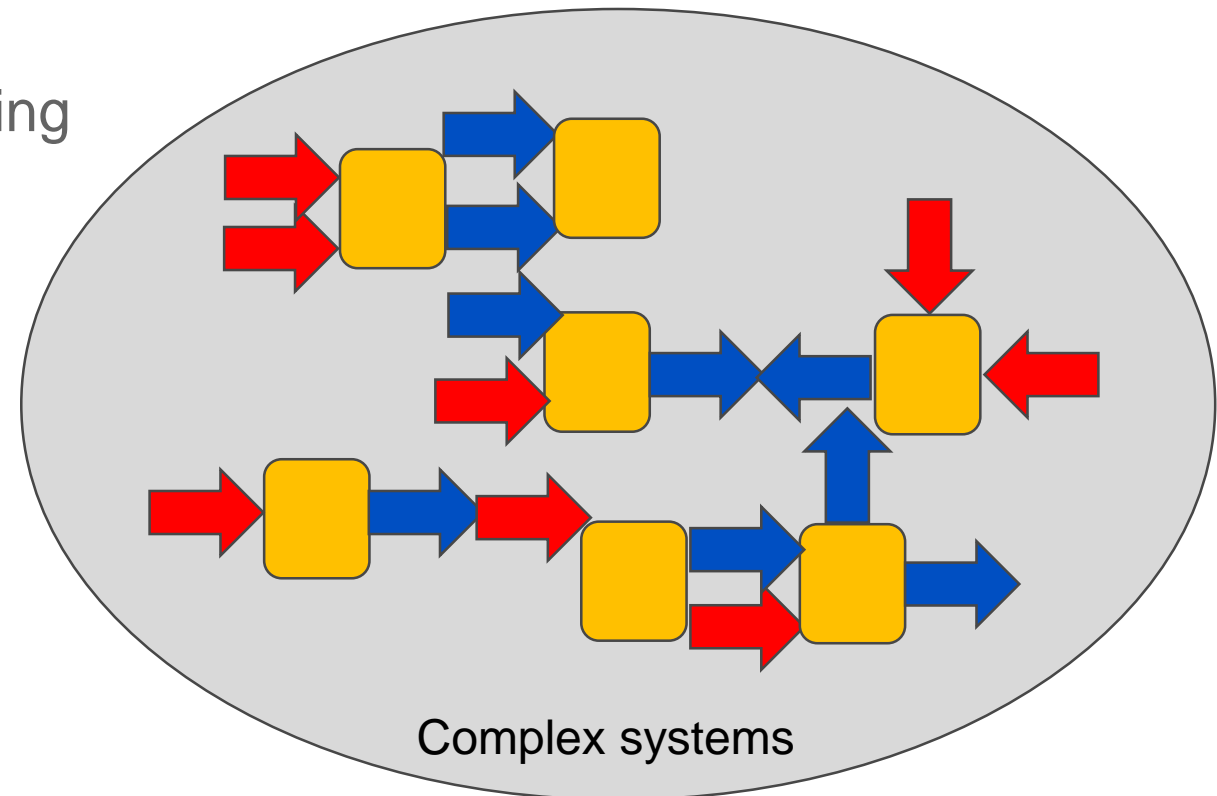
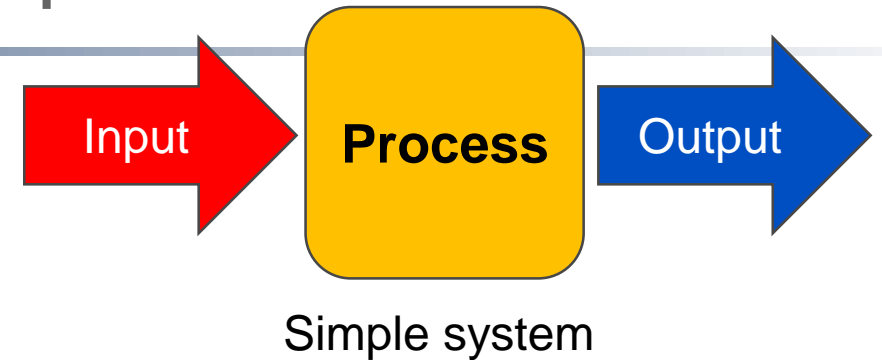


IS THERE A SOLUTION?



PORT/TERMINAL SYSTEMS CONCEPT

- Think about it as a system of systems.
- A process has inputs & outputs
- When you have many parts it gets complex
- Issues to deal with in complex systems thinking
 - Are the outputs what I want?
 - Are there unintended consequences?
 - Are the inputs going to the right parts of the system?
 - Which parts could be more efficient?



INTEGRATED SYSTEM

If I put two or more things together the result should be better than the parts alone

Visit Management

Resource Management

Cargo Management

Billing Management

Property Management



INTEGRATED COMMUNICATION

- EDI and other 3rd party interfaces
- Email and other messages
- Customs or regulatory needs reporting
- Management & Customer reporting
- Web interface for General Public, Shipping lines, Agents, Service Providers

NEXT STEP IN EFFICIENCY

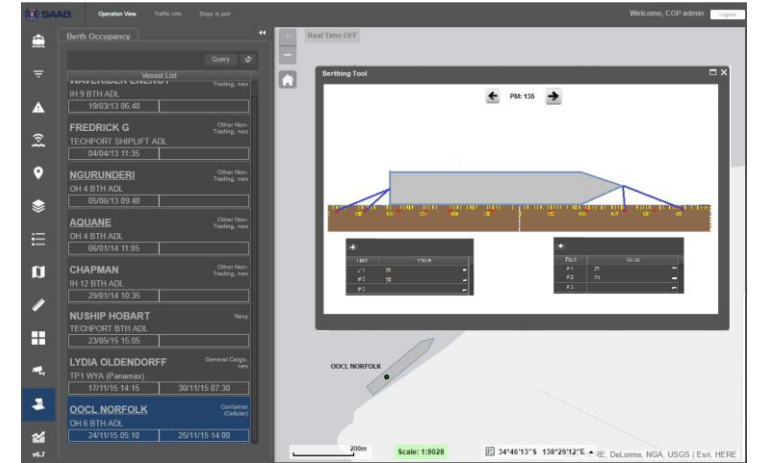
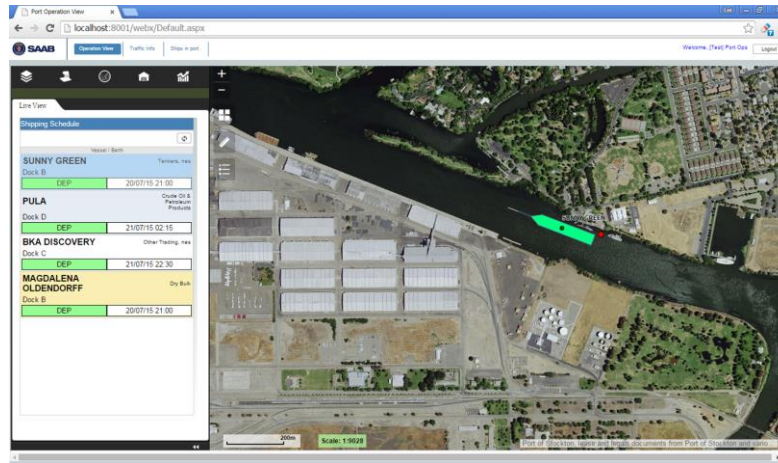
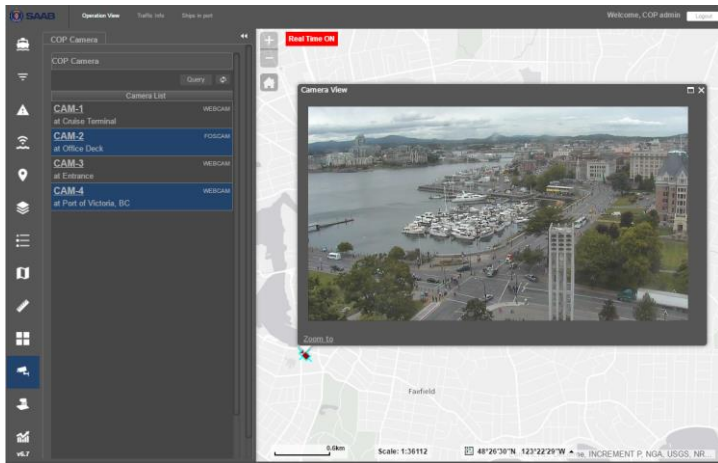
Collaborative Decision Making (CDM) is an approach for making better decisions that:

- Brings the **right people** together,
- Enables them to work collectively from a **common picture with better information**,
- In order to develop a **shared understanding and mutual commitment**,
- And ultimately **improve both the safety and efficiency** of operations.

Running Log Time	Type	Description	Updated By
2015/09/29 15:45	Schedule	[Test] VTSO changes: Invoicing Body, Schedule Time	[Test] VTSO
2015/09/30 11:04	Schedule	[Test] VTSO changes: Schedule Time	[Test] VTSO
2015/09/30 11:20	Schedule	[Test] VTSO changes: Schedule Time	[Test] VTSO
2015/09/30 12:03	Schedule	[Test] VTSO changes: Sch Time: 2015-09-30 03:00	[Test] VTSO
2015/09/30 12:04	Schedule	[Test] VTSO changes: Sch Time: 2015-09-30 16:15	[Test] VTSO
2015/09/30 12:12	Pilotage	Service Confirmed	[Test] Pilot Company
2015/09/30 13:53	Schedule	[Test] VTSO changes: Sch Time: 2015-09-30 19:15	[Test] VTSO
2015/09/30 14:31	Pilotage	Service Confirmed	[Test] Pilot Company
2015/09/30 14:36	Schedule	[Test] VTSO changes: Sch Time: 2015-09-30 19:30	[Test] VTSO
2015/09/30 14:48	Pilotage	Service Rejected, Reason: No pilot available until 20:15	[Test] Pilot Company
2015/09/30 14:49	Stevedore	Service Rejected, Reason: Loader is broken. Back to work at 19:45	[Test] Stevedore SCRUTT
2015/09/30 14:50	Schedule	[Test] VTSO changes: Sch Time: 2015-09-30 21:30	[Test] VTSO
2015/09/30 15:44	Schedule	[Test] VTSO changes: Sch Time: 2015-09-30 21:45	[Test] VTSO
2015/09/30 15:44	Pilotage	Service Confirmed	[Test] Pilot Company
2015/09/30 15:45	Stevedore	Service Confirmed	[Test] Stevedore SCRUTT
2015/09/30 15:47	Boatmen	Service Confirmed	[Test] Boatman JML

Service Type	Service Desc	Service Company	Status	Decline Reason	Serv
JOLANTA (DRY BULK)					
DEPART FROM STORMONT 5		10/01/2015 05:30	AGENT: JOHN BURKE & CO. LTD.		CHANGE LOG
PILOTAGE	DEP FROM STORMONT 5 TO SEA	BELFAST LOUGH PILOTAGE SERVICES LTD	Declined	Pilot only available from 07:00	
BOATMEN	DEP FROM STORMONT 5	D. FERRAN & SONS	Confirmed		
STEVEDORE	DEP FROM STORMONT 5	(Own Use Stevedore)	Requested		
BLACK WATCH (CRUISE)					
ARRIVE TO STORMONT 2		09/30/2015 21:45	AGENT: JOHN BURKE & CO. LTD.		CHANGE LOG
PILOTAGE	ARR FROM SEA TO STORMONT 2	BELFAST LOUGH PILOTAGE SERVICES LTD	Confirmed		
BOATMEN	ARR TO STORMONT 2	JOHN MCLOUGHLIN & SON	Confirmed		
STEVEDORE	ARR TO STORMONT 2	SCRUTTONS NORTHERN IRELAND LTD	Confirmed		
NORWEGIAN STAR (CRUISE)					
ARRIVE TO STORMONT 4		10/01/2015 07:00	AGENT: JOHN BURKE & CO. LTD.		CHANGE LOG
PILOTAGE	ARR FROM SEA TO STORMONT 4	BELFAST LOUGH PILOTAGE SERVICES LTD	Requested		
BOATMEN	ARR TO STORMONT 4	JOHN MCLOUGHLIN & SON	Requested		
STEVEDORE	ARR TO STORMONT 4	(Own Use Stevedore)	Requested		

NEXT STEP



A **COMMON** view of everything happening, planned or that has happened

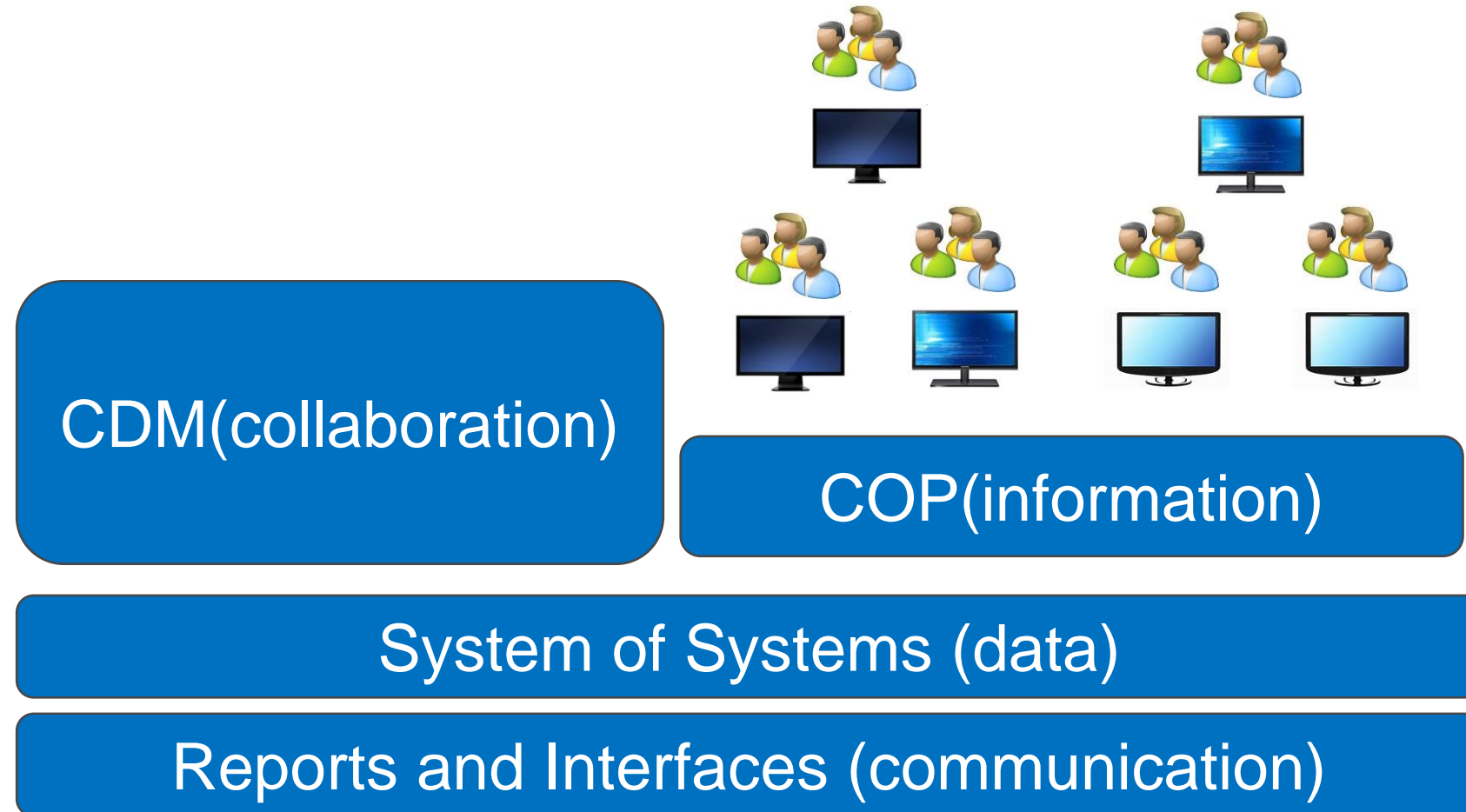
HOW

- Presented on the web
- Presented on a map
- Presented in layers
- Feeds from other systems

WHY?

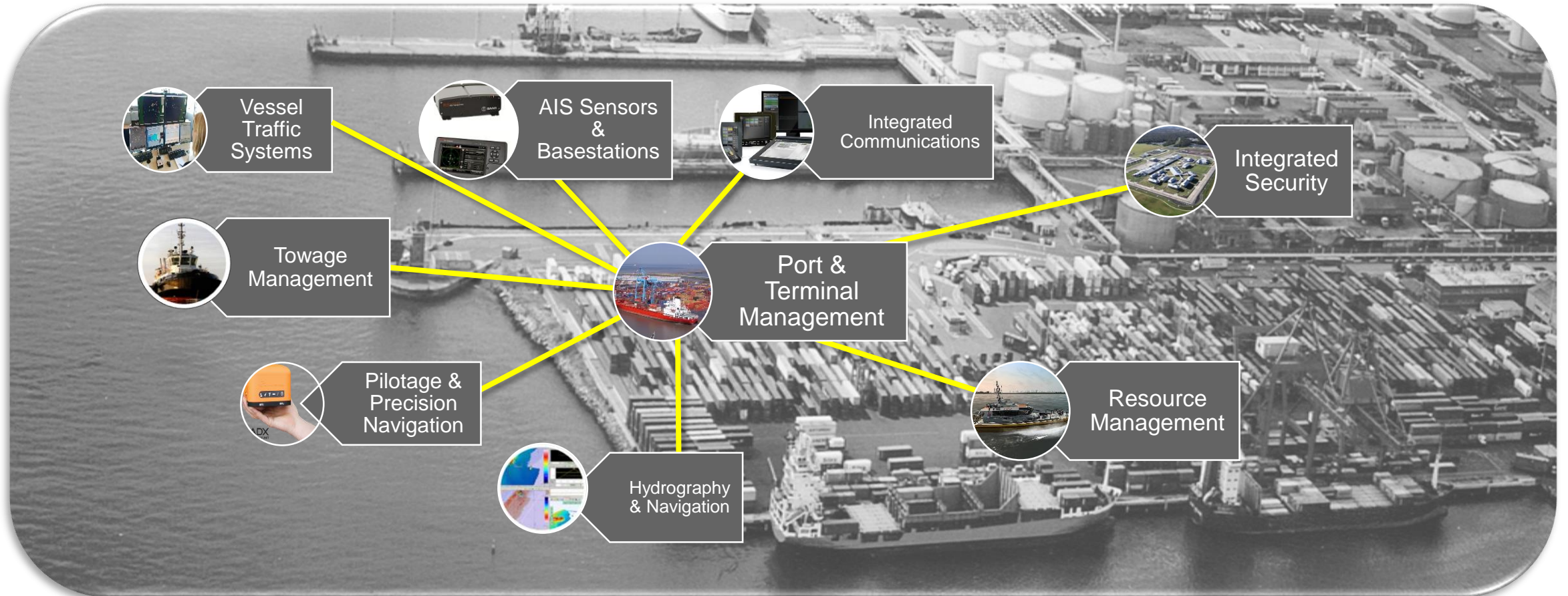
- Anyone who has access can see it on any computer or device
- Every piece of information is located geographically, for context
- Layers can be switched on or off to show what you need to see
- To get the best collected representation of reality

SIMPLE VIEW OF ADVANCED SITUATION



FAIRWAY TO FREEWAY CONCEPT

Fully integrated maritime enterprise solutions for ports and terminals



BENEFITS

- Better data leads to better decisions
- Integrated view and role based control of the entire process
- Everyone in the Port community has the accurate, timely information they need
- Ports can streamline operations and grow without the need for additional staff and business infrastructure

USE CASE VIDEO



QUESTIONS ?

