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
WHAT IS HAPPENING AT THE PORT/TERMINAL?

- Agents & Port Community
- Traffic Management
- Pilot Scheduling
- Tug Scheduling
- Port Services Planning
- Cargo & Dangerous Goods
- Warehouse Management
- Billing & Accounting
- Vessel Operations
- Berth Operations
- Apron to Storage
- Storage
- Gate Processing
- Intermodal Transfer
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?

SOLUTION

Business Strategy

Maritime Industry Practices

Information Technology
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.
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

CDM (collaboration)

COP (information)

System of Systems (data)

Reports and Interfaces (communication)
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 ?