SEA TRAFFIC MANAGEMENT – EXPLORING OPPORTUNITIES AROUND DATA FLOW FOR AUTOMATED TERMINALS

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Agenda

✓ Sea Traffic Management – Concept
✓ Port Collaborative Decision Making (CDM) - Benefits for ports and terminals.
✓ How digitalization by terminals made a difference
✓ STM Functionality in data exchange - an example of port UMEA
✓ Summary
Sea Traffic Management - A concept

From

CLASS. SOCIETIES
P&I CLUBS
BANKERS
LOCKS & BRIDGES
COASTAL STATES

FLAG STATES
SHIP OWNER
CREW
UNIONS
PILOTS
PASSENGERS
PORT AUTH

SECURITY
FREIGHT FORWARDERS
PORT STATE CONTROL
CHARTERERS
SHIP BROKERS AND AGENTS
CARGO OWNER
CITIZENS AT LARGE

To
Ships and Ports Need to be Connected!

Towards common instant information sharing
PORT CDM (Collaborative Decision Making)

VESSEL

PORT CONTROL

* Increased predictability ATA/ATB/ATC/ATD
* Improved turn-around-time
* Increased port efficiency
* Optimized use of berths/resources
* Reduced waiting/anchoring time

STCC

PORT OPERATORS
Process of Port CDM concept
Examples on how digitalization by STM made a difference

**Departure Vessel Berth**

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Ships bound for the port, planning to arrive and changes of arrival time
Sharing of time stamps - easier for time reporting
Everyone gets the information at the same time
Port-to-Port, possibility to subscribe on information
Access to more and better information
Several different sources of information i.e. transparency
Provided information types

- Port Call Message format
- Route plan exchange format (RTZ)
- Text message
- Polygon (S-100)
- Other also conceivable
Sea Traffic Management - Services
Example: Selection of Shore Centre(s) by Own-ship
STM Services – Enhanced VTS Centre

Enhanced Monitoring and Route Based Prediction
Example: Ship to Ship Route Exchange
Example: Enhanced VTS Centre to Ship - new route suggestion

Route ‘Algeciras to Casablanca’ received from service STC Lindholmen
Example: VTS Centre to Ship - new route suggestion

Vessel Carmen ‘Not Under Command’, new route suggested by Tariffa VTS
How does it work?
Maritime Cloud
Summary

- Efficient **exchange of information** between maritime stakeholders through **common standard formats**
- Connecting the maritime world in **real time**
- **Integrated** service for terminals, ships, VTS, ports and authorities
- A new paradigm for maritime **information sharing**, offering tomorrow’s digital infrastructure for maritime ports industry
- **Secure** and **authenticated** access to **authorised** parties.
EMSN (European Maritime Simulator Network) - the world’s largest commercial Ships Bridge simulator network -

- Six weeks trials at WMA – 115 Seagoing officers joined
- 13 EU Centres
- 30 "Ownships"
- 2 Shore Centres
MARITIME SIMULATION CENTRE
Thank You

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