Port Call Digitalization – How it helps your port.

Marlin SmartPort™
Today’s Webinar

- How digital is my port?
- What is port call digitalization?
- The financial benefits of port digitalization
- How can my port move forward?
Housekeeping

- Please Mute Your Mic
- Please let us know if you want to ask a question in the chat box and what your question is about
- We will invite audience members to ask questions at the end
- We are recording the webinar
ION at a Glance
Powering Data-Driven Decisions

Delivering the power of data-driven decision-making

Technology leader with a history of innovation

Aligning offerings to select growing E&P and adjacent markets

50+ years in business

30+ years in software business

23 years on the NYSE (ticker: IO)

$450B E&P market

500 employees

10% revenues invested in R&D

500 patents
Successfully deployed in 140 locations globally
Marlin
Temporal and Spatial Situational Awareness

Gantt Chart w/ Map
- Time-sliding
- Cloud enabled, multi-user

Inputs
- Moving objects via AIS/GPS
- Relevant IoT data
- Weather / Waves & Currents
- GIS remote sensing
- Regulatory rules
- Operational plans & observations

Output
- KPI Dashboards
- Route Optimization
- Audit/Playback
How Digital is My Port? Feedback from UK Harbour Masters

- How do your needs compare to this feedback from UK Harbour Masters?
- Survey sent out early May
- 10 ports organizations provided full responses
- We are happy to forward the survey to anyone that wants to add to our database
- Questions followed a simple track:
  - Why do you want to spend money on digital solutions?
  - What systems do you have at present?
  - What do you want to get from a digital solution?
  - What would stop you adopting a digital solution?
Q1: What are your **top 3 key drivers** for investment in new digital technology.
Q2: What technology tools do you already use, tick all that apply?
Q3: What are the top three tools that you would like to use?

- 50%: Replace whiteboard with a digital solution
- 60%: Billing System
- 30%: A digital channel model for optimizing vessel access to the port
- 40%: A piloting tool to improve effectiveness of the pilot team/reduce accident risks
- 20%: A digital port asset model to manage tenants and shore side building more efficiently
- 20%: A vehicle management tool to control vehicle traffic in the port
- 40%: A documentation system to improve the workflow for CERS, IMO and other key forms
- 50%: An improved ETA system to manage incoming vessels more effectively
- 40%: Autonomous vessel tools
Q4: What is the single biggest barrier to the adoption of digital solutions?

- We do not need to change existing working practices: 22%
- Budgets - we do not have the funds to introduce new systems: 67%
- Our Board do not support digital developments: 0%
- There is not a solution that addresses my needs: 0%
- I do not have the capacity to review what is available on the market: 11%
Key Survey Take-aways

- Ports are looking for new tools that improve efficiency and cut costs
- Those tools take existing analog processes and digitalize them
- The biggest barrier is budgetary
- 6 out of the 9 key drivers can be addressed by Port Call Digitalization
  - Reduce back office operating costs
  - Reduce costs by improving efficiency
  - Increase efficiency in cargo handling
  - Increase QHSE standards
  - Regulatory / audit trail requirement
  - Share data more effectively with Port Community
- 4 out of the 9 tools selected can be delivered by Port Call Digitalization
  - Whiteboard
  - Billing and accounting
  - Documentation
  - ETA
What is Port Call Digitalization?

- Port Call Digitalization means taking port processes and making them digital
- Digitization is taking data and making it digital
- Putting it simply – moving from paper to data
- The term also covers a number of initiatives that are coming online
  - IALA Standard 211
    - Port call message format for standardizing time stamps
    - Fits within the IMO Common Maritime Data Structure
  - Port Collaborative Decision Making – Port CDM
    - To enable enhanced coordination and just-in-time port call operations through collaboration and data sharing
The Financial Benefits of Port Call Digitalization

• Saves time and money
  – Only input data once
  – Reduces error
  – Improves efficiency

• Captures and timestamps all billable events with a full audit trail

• Supports clear QHSE and Audit practices

• Opens transparency of processes for the whole port community

• Makes the port more attractive to shippers and shipping lines as they can see the whole of their supply chain
Port Call Digitalization and the post-COVID port

“We will never go back to the way we were”

Port Call Digitalization enables:
- Remote working
- Data sharing among the whole port community
How digital is my port?

- The Port Collaborative Decision-Making maturity model
  - A useful tool for self assessment
    - Port Call Messaging Format
    - Audit document in preparation

1. The Capabilities to share PCMF timestamps established
2. PCMF sharing platform established
3. PCMF data shared among core port call actors
4. PCMF data shared with outside actors
5. PCMF data shared among all port call actors
6. Port Collaborative Decision Making Principles utilised
7. Continuous Improvement processes implemented
How Can My Port Move Forward?

- Decide what your priorities are:
  - Most UK ports want to digitize their data
  - The survey feedback highlighted that priorities include port call management, improved vessel ETA information and optimizing the financial admin process

- For most ports digitizing core data is the essential first step
What is digital data?
Pre-arrival – setting up the port call

Look-up by:
Name
IMO
MMSI
What is a digital whiteboard?

Vessel Arrival
Standard timestamps and shared data

The Port Call

UN Locode:

Timestamps:
Where can you go after you digitize?

Further Enhancements

- Once data is held in a **digital** format it can be shared with other systems to solve problems
  - Digital channel model
  - Smart berthing
  - Port asset management
Montrose Port Authority CEO: “We are on a journey to become one of the smartest ports around and Marlin SmartPort is a major leap forward for Montrose Port Authority, replacing highly manual port operation procedures, with an efficient, integrated digital system. We have seen an immediate value from the system and are looking forward to expanding further.”
• Question and answers
Powering data-driven decisions