



PORT FLOW OPTIMIZATION

Streamlined operations - one interface of secure information flow
between vessels and all port actors

Anders Berg
Senior Manager – Maritime Solutions
+46 733 66 9111
anders.berg@unikie.com

WE ARE UNIKIE



Technology for secure realtime processes and consulting for related demand.

We bind together three global macro trends – IoE, 5G and AI.

We enable the use of **continuous situational awareness** for autonomous mobility, **augmented operational assistance**, and process management.

GOALS 2024

REVENUE 100 + M€ 1000 + EMPLOYEES

BUSINESS UNITS

AUTOMOTIVE & MOBILITY

INDUSTRY 4.0

SECURE COMMUNICATIONS

45 M€

REVENUE (2021)

+150%

EMPLOYEE GROWTH (2021)

500+

GLOBAL CLIENTS

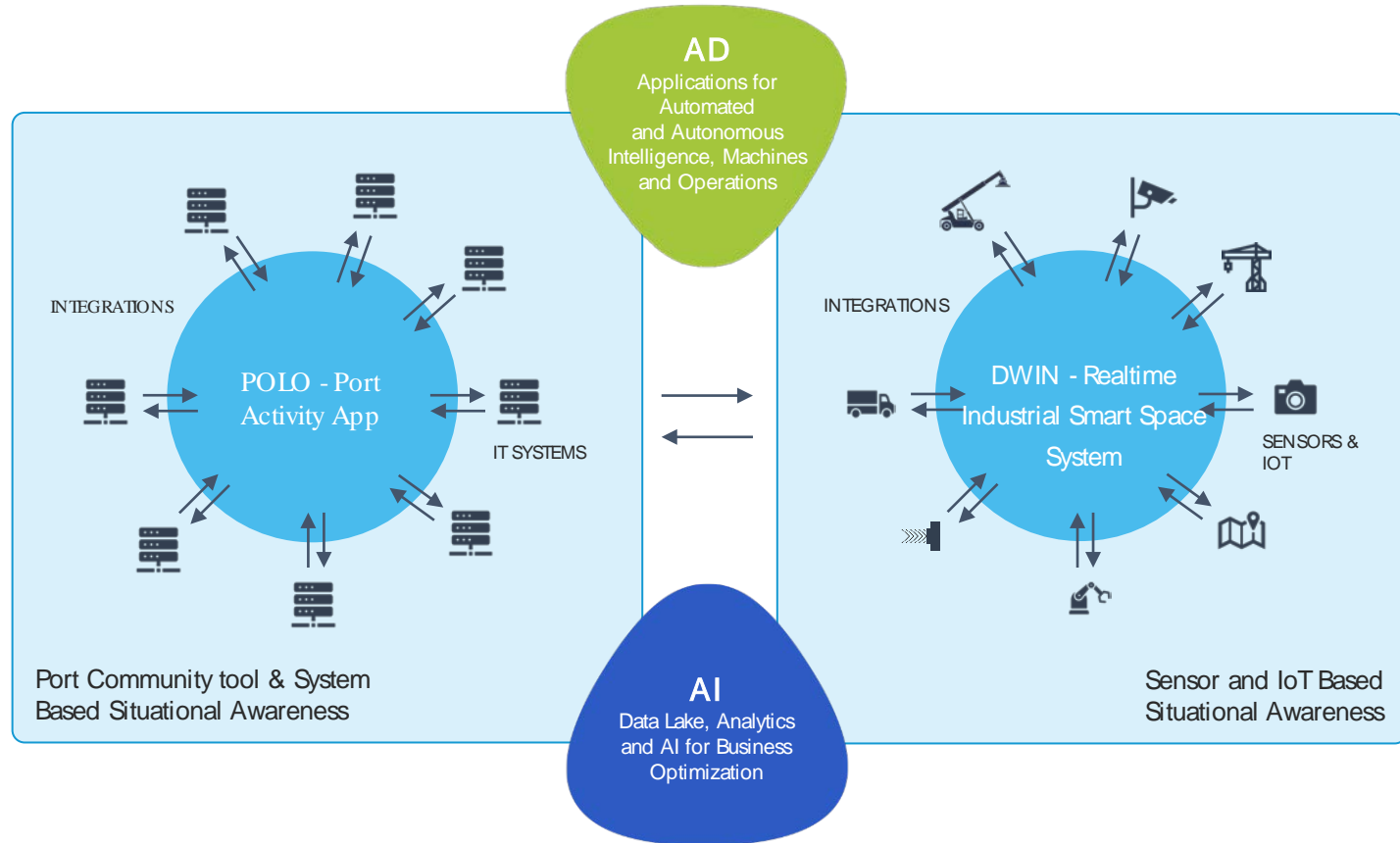
60+

EMPLOYEE NET PROMOTOR SCORE



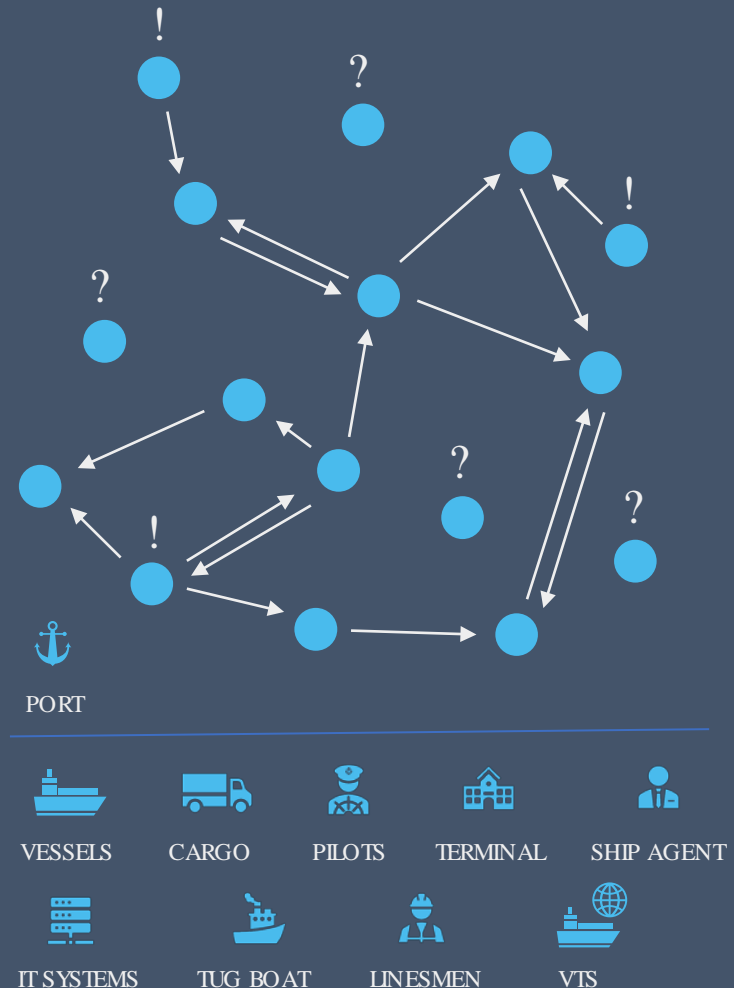
Finland (HQ),
USA, Germany,
Sweden,
Poland, Estonia,
France

UNIKIE'S SOLUTIONS FOR PORTS



THE CHALLENGE IN EFFICIENT PORT FLOW

- Various IT systems used, multiple points of unaligned information with no or limited data transfer
 - Vast amount of information and communications back and forth between different actors
 - No centralized place or accessibility to reliable information
 - No comprehensive communication system across all parties and ability to react to unexpected events
- Lack of information and shared situational awareness
- **Despite the digitalization investments, major part of ports still have significant amount of manual or otherwise inefficient processes in use**



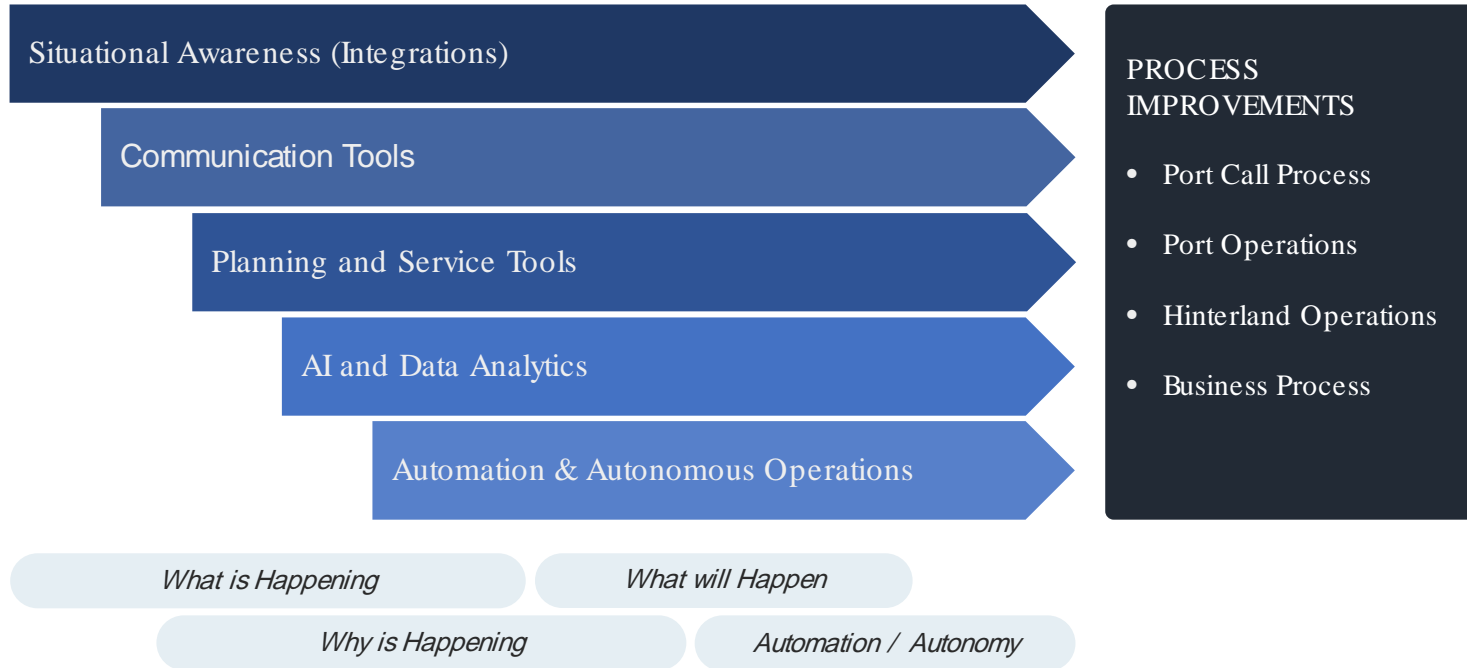
UNIKIE POLO – VIRTUAL OPERATION ROOM



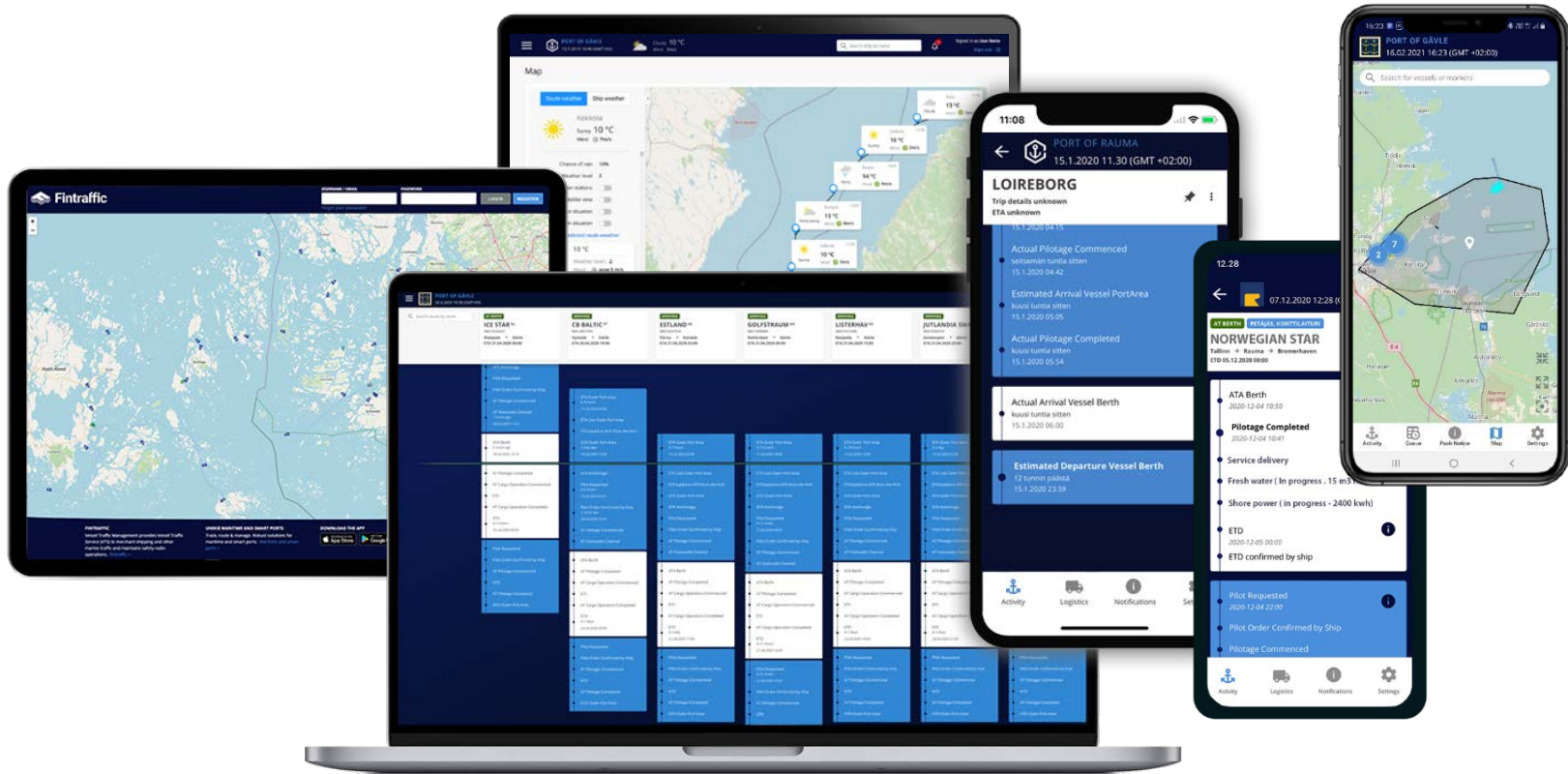
Platform for data sharing, enhanced collaboration, and common situational awareness

- **Virtual operation room** for port operations. Replaces complicated and manual port flow processes with automated and digitalized processes.
- Creates one centralized place for up-to-date Situational Awareness data, offering full visibility over the whole port operation process and schedules
- Integrates existing systems and data sources, both public and private, and taking full advantage of the existing systems

FASTEST EVOLVING DIGITALIZATION PLATFORM FOR PORTS

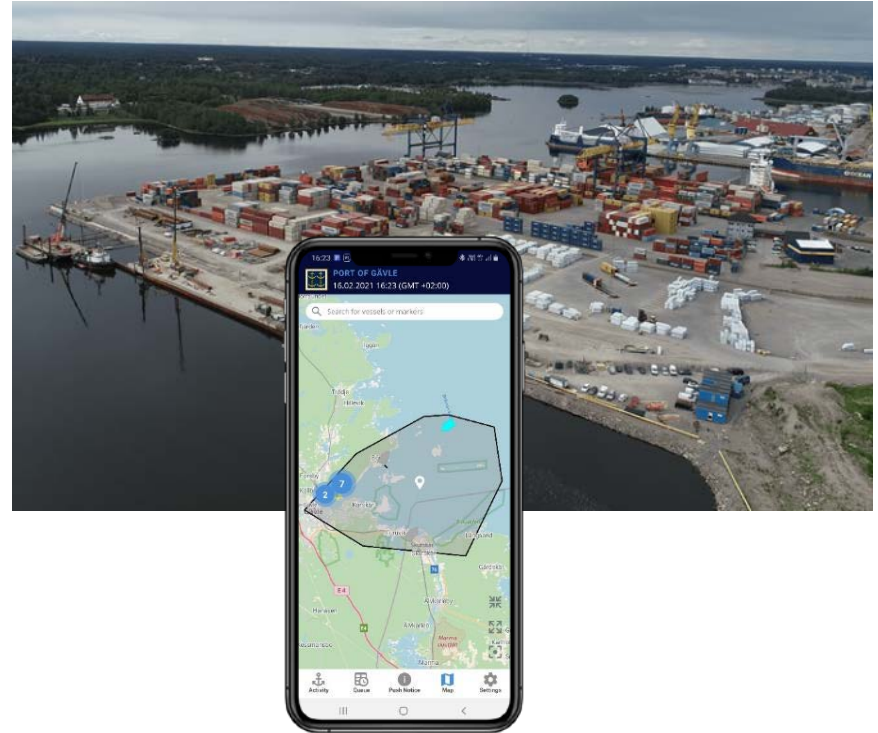


UNIKIE POLO – WEB & MOBILE

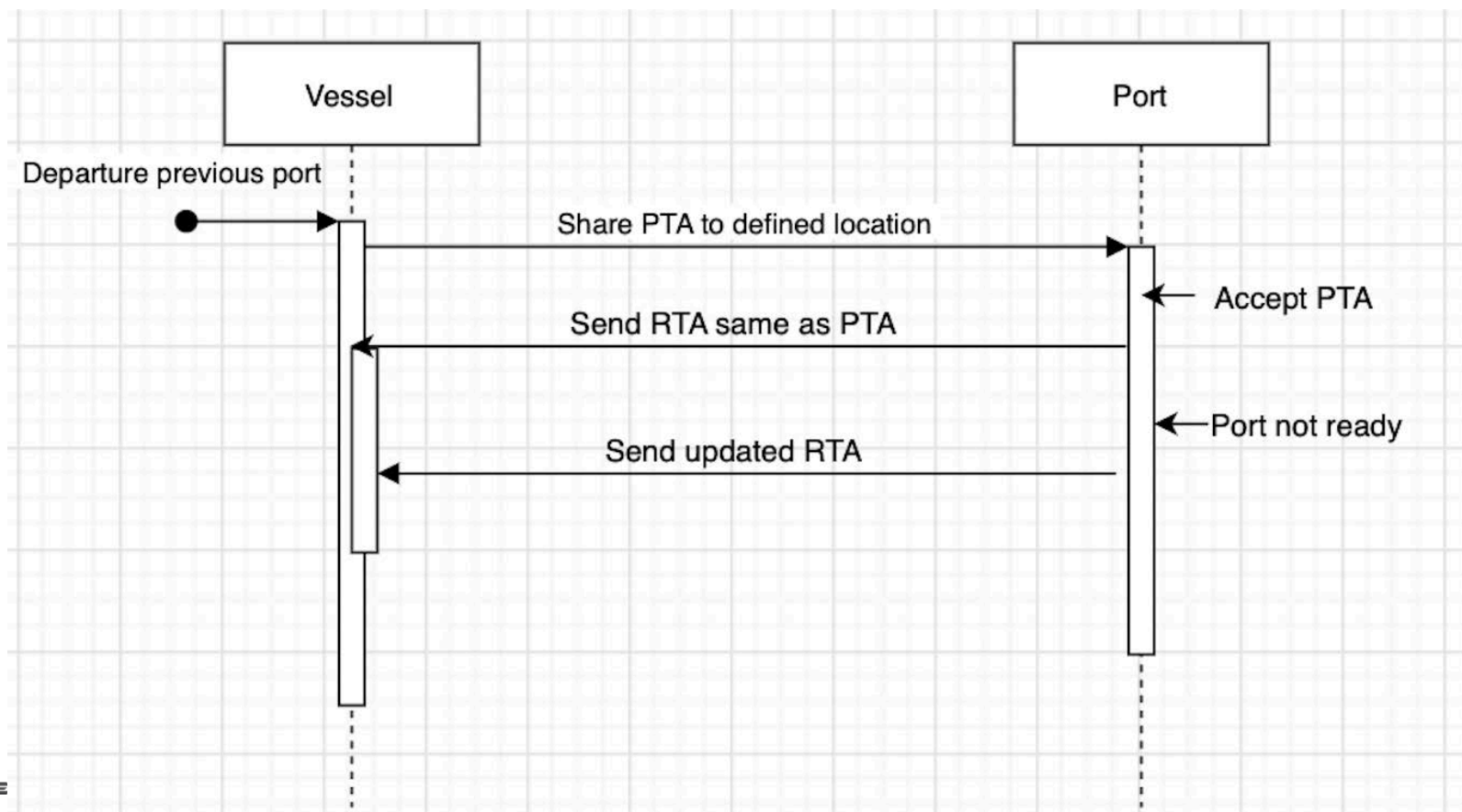


SETUP EXAMPLE - PORT OF GÄVLE

- Integrated systems
 - Maritime Single Window (MSW)
 - Pilotage planning system (Fenix/ SMA)
 - Cargo operations (Yilport)
 - Shiplog, “Live ETA”
 - AIS (Several Sources)
 - SMA/ VIS, vessels with VIS capabilities, communicating ETA and RTA
 - Weather forecasts and data (Global Weather Corp.)



JiT – Ship to Shore – Easy?



JiT Ship – to - Shore

Challenges:

- Format of the message between Ship and Shore (standard?)
 - RIZ
 - Calculated ETA
 - Something else
- The port?
 - Port authority?
 - Terminal?
 - Port as a hub consisting of all stakeholders (pilot, tug, linesmen etc)?
- First come first served principle
- ETA to where? Berth? Pilot Boarding? Somewhere else?
- Much focus on the vessel perspective – but don't worry! Unikie is here to highlight ports perspective and more important: Solve the challenges and lead the development of sustainable solutions

Practical solutions today for JiT concept

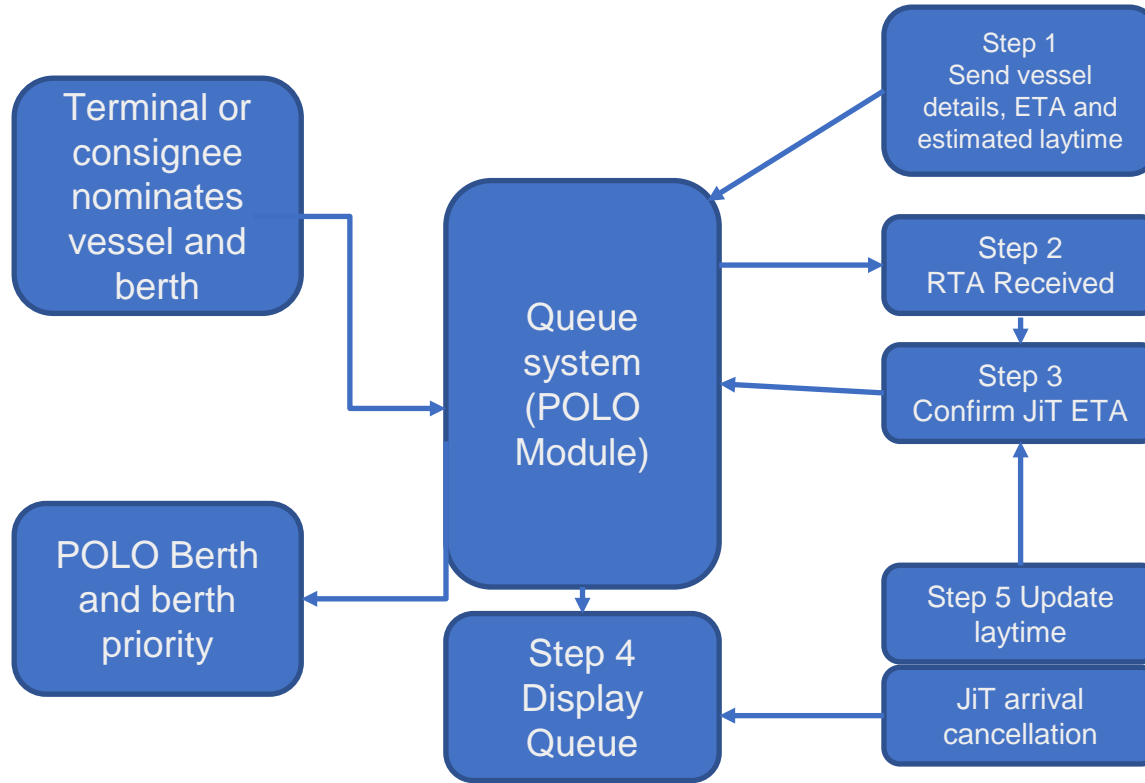
What does a port need to have in place?

- POLO (if we get to choose) but some technical ICT solution lets say (to have all information for the sake of traceability and to display the queue)
- Definition of a port area/ location where ETA is calculated to (outer port area, pilot boarding area, something else)
- Process to handle JiT and transparency – Trust!

Information needed?

- Nominated Vessel (By terminal or consignee)
- Designated berth(s) (If more than 1 make prioritization)
- Laytime window (ETA-ETD)
- ETA to defined port area/ location
- Service to double-check that said ETA is correct

JT Arrival flow chart (in real life use)



CONCLUSIONS & BENEFITS

- Fastest evolving Port Community solution
- Open platform emphasizes to co-operation and natural born ecosystem
- Designed by Ports for Ports
- Taking full advantage of existing systems, better visibility and utilization of existing data
- Streamlining and optimizing port processes, Less manual work, less miss-communication, less waiting time
- Gives full visibility to integrated systems
- Supported by authorities in Finland and Sweden Solid platform for future digitalization and automatization needs
- Increased situational awareness, improved planning horizon, optimized capacity
- Energy savings and more environmentally friendly port operations





We drive the change.

unikie.com