

### Introduction

- 1. Where we are today Technology wise
- 2. Current Developments
- 3. Future Plans and Possibilities



#### Available data

# Where we are (today)

#### **Data Sources**

- Maritime Single Window
- Digital Communication (Sat com. & VHF Data Exch.)
- Maritime Digital Service (IMO E-navigation)
  - Route Exchange
  - Digital Reporting
- Meteorological / Hydrological data providers
- Port Management System





#### **Utilise Data - Traffic Predictions**

- Real-Time or near real-time data
  - Radar, AIS
  - Hydrological / Meteorological
- Historical data / Intelligence data / Static data
  - Recorded real-time data
  - Incidents & logged events
  - Planned activities (Destination, ETA etc.)
  - Vessel data & Voyage data (Draft, length, etc.)
- Reference data
  - Reference routes / Pilot routes
  - Tidal tables, etc.

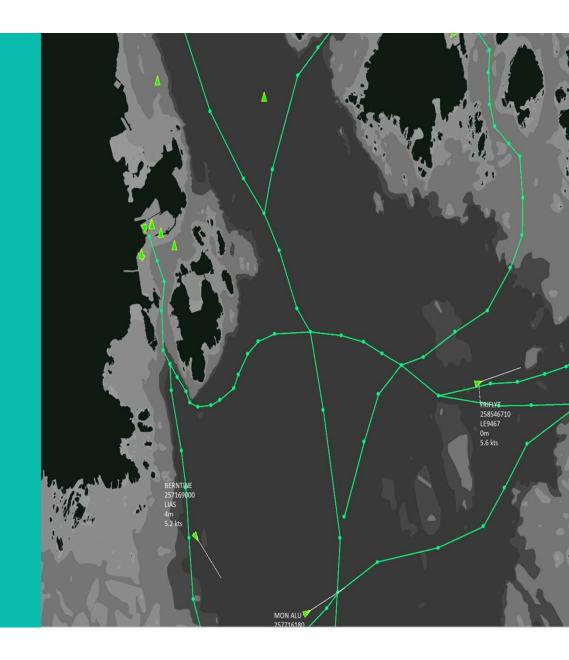


See Statement of Proprietary information



# **Predicting the Future**

- Route prediction based on:
  - Destination & ETA/ETD (reliable)
  - Reference routes
  - Normal behaviour
- Creating a combined traffic picture for a period ahead
  - Identifying bottlenecks
  - Service provision planning (pilots, tugs etc.)
  - Avoid dangerous situations





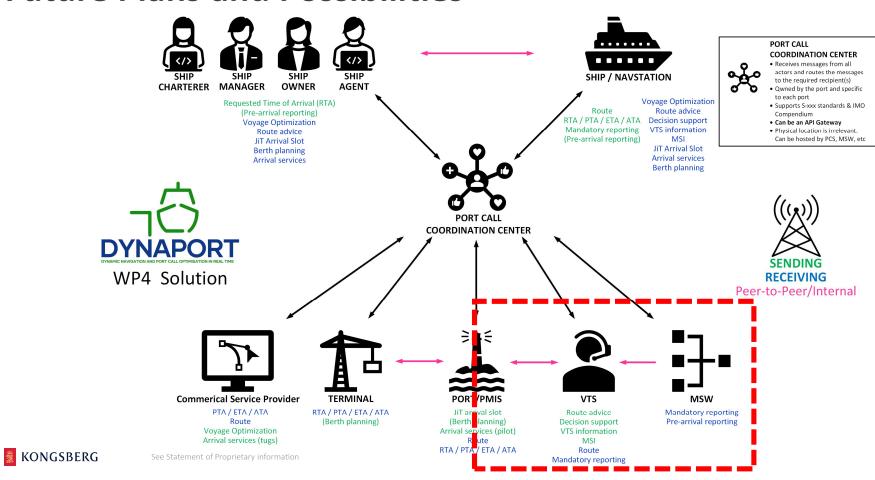
# Leveraging

- Safety
  - Congestion avoidance
  - Proactive traffic management
- Efficiency
  - Improved Operational Planning
  - Reduced dwell time
- Sustainability
  - Optimised sailing
  - Improved reporting
  - Awareness & Continuous improvement





#### **Future Plans and Possibilities**





#### **Ship Report for Dover Strait**

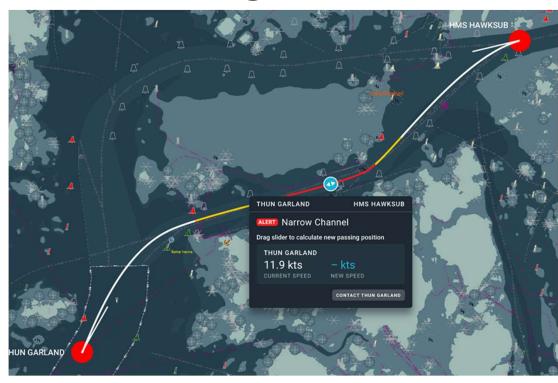
IMO Ship reporting scheme





### Richer data -> More advanced traffic management

Route exchange enables more advanced non-linear traffic prediction





# **Thank You**

Bjorn.coster@knnc.kongsberg.com

