



EFFICIENTFLOW

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12.12.2019



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EfficientFlow – two corridors in the Central Baltic





Project Facts

- 4 572 902 euro budget
- Central Baltic focus
- Involving private, public and academic sector
- Co-financed by the EU Interreg Central Baltic programme - 3 429 6767 euro
- Project duration: March 1, 2018 – November 30, 2020



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STM
EFFICIENT
FLOW

Partnership



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EfficientFlow User Group

Gävle-Rauma corridor

- Terminal operators: Yilport in Port of Gävle and Euroports in the Port of Rauma
- Rail operators: Green Cargo in Sweden and VR in Finland
- Ship operators: Unifeeder, Seago, MSC, and more

ScanMed corridor Stockholm-Turku

- Ship operators: Viking Line, Tallink-Silja, Finnlines and Birka Line (Eckerö Group)
- Pilots: Stockholm Pilots, Turku Pilots,
- VTS: Finnish and Swedish VTS (Representing all users of the fairway)



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Project Goals

- Aim: Develop and improve flow of goods in the Port of Gävle and Port of Rauma and passengers in the corridor Stockholm – Turku
- Project approach: Improve efficiency through information sharing within the Sea Traffic Management concept including connection to the hinterland (road, railway)
- Goal: Improved corridors and nodes with regard to time and cost efficiency, safety and environment
- MAKING STM HAPPEN



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Port Flow Optimisation

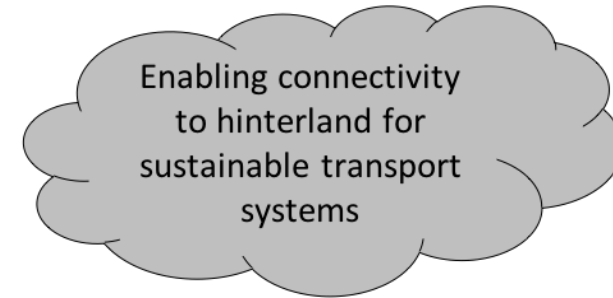
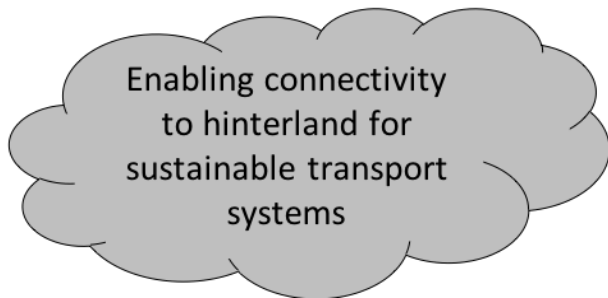


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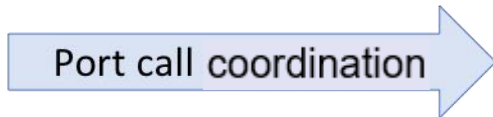




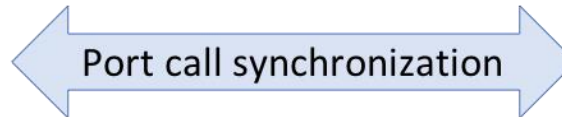
Ships and Ports Need to be Connected!



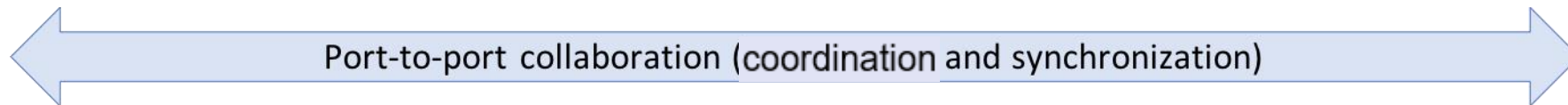
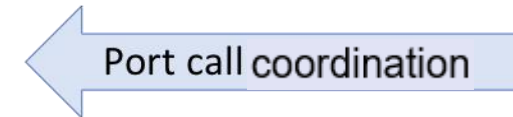
Connected ports
(origin)



Connected ships
coordination



Connected ports
(destination)



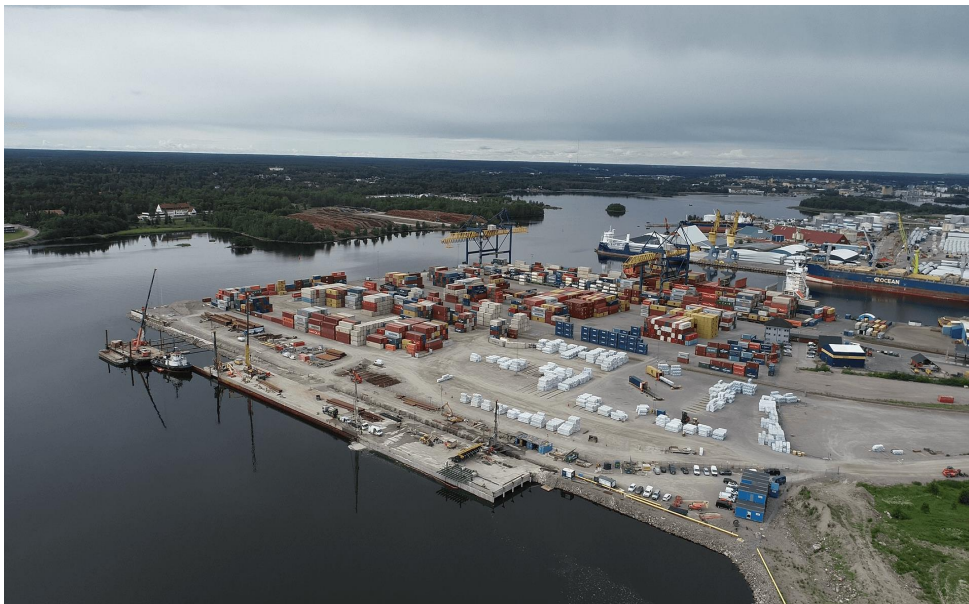
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In Gävle and Rauma

- Port Call Synchronisation, Port Call Coordination
- Information sharing with hinterland connections (e.g. rail)
- Automated pilot ordering and pilot administration in Gävle





Port of Gävle and Port of Rauma

- Implementing STM!
- Port Call Coordination – Information sharing between port call actors such as: agents, terminals, tugs, pilot administration, port authorities etc.
- Port Call Synchronization – Connecting vessels to the ports
- Introducing: Hinterland!
- Bonus: More automated pilotage ordering/planning function



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Traffic Flow Optimisation – Interaction in Confined Waters





ScanMed corridor Stockholm-Turku

- Implementation of flow management services in the Stockholm-Turku corridor
- Optimizing route planning by information exchange ship-to-ship and ship-to-shore

Flow management obstruction-Totals Stockholm-Åland-Turku

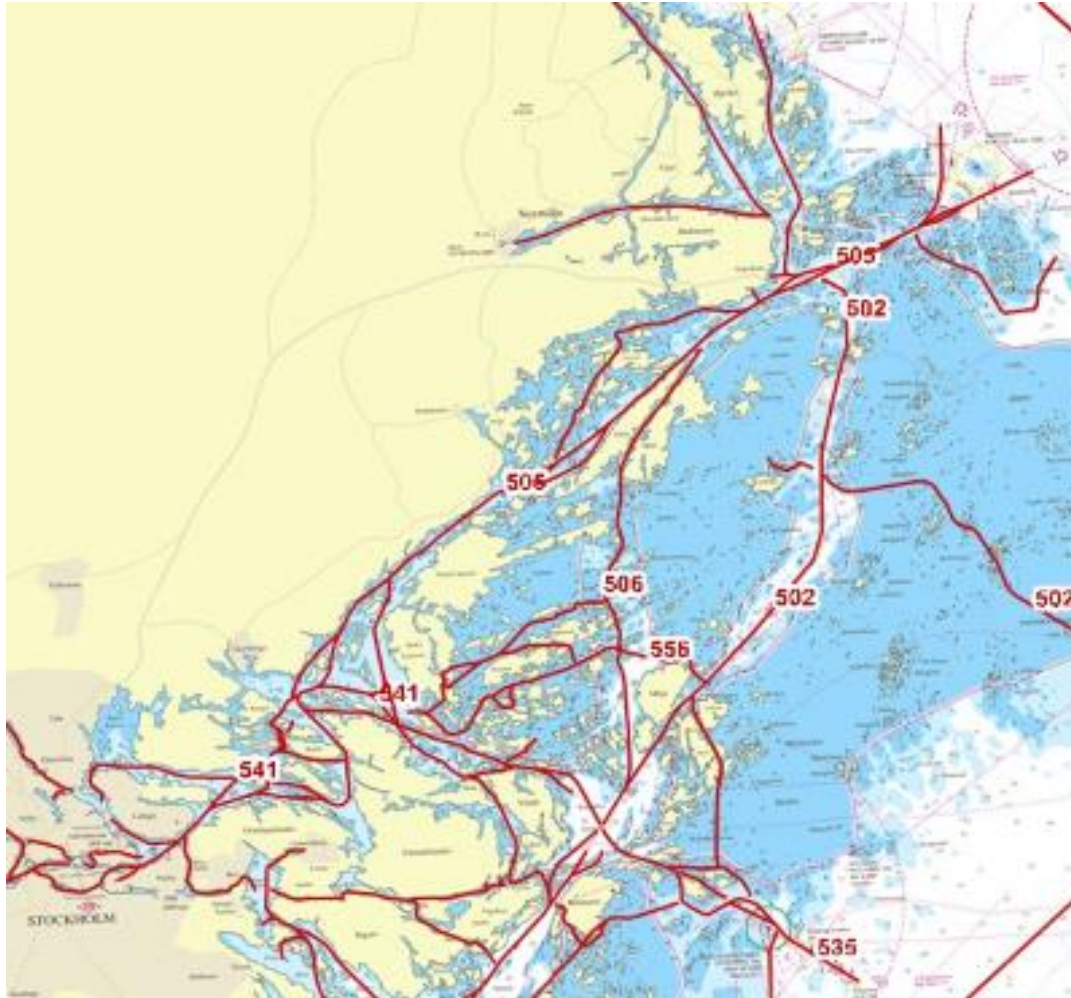
7 places where meeting is prohibited

18 places where meeting should be avoided

11 places where choose of fairway is a way of separating ships solving meeting problems



Stockholm entrance



Passage of 50 M or more
Narrow winding fairways
No-Meeting Zones
Speed restriction Zones
Timetable Traffic
Ice conditions
Leisure crafts
Local sea transportation
Sensitive shores

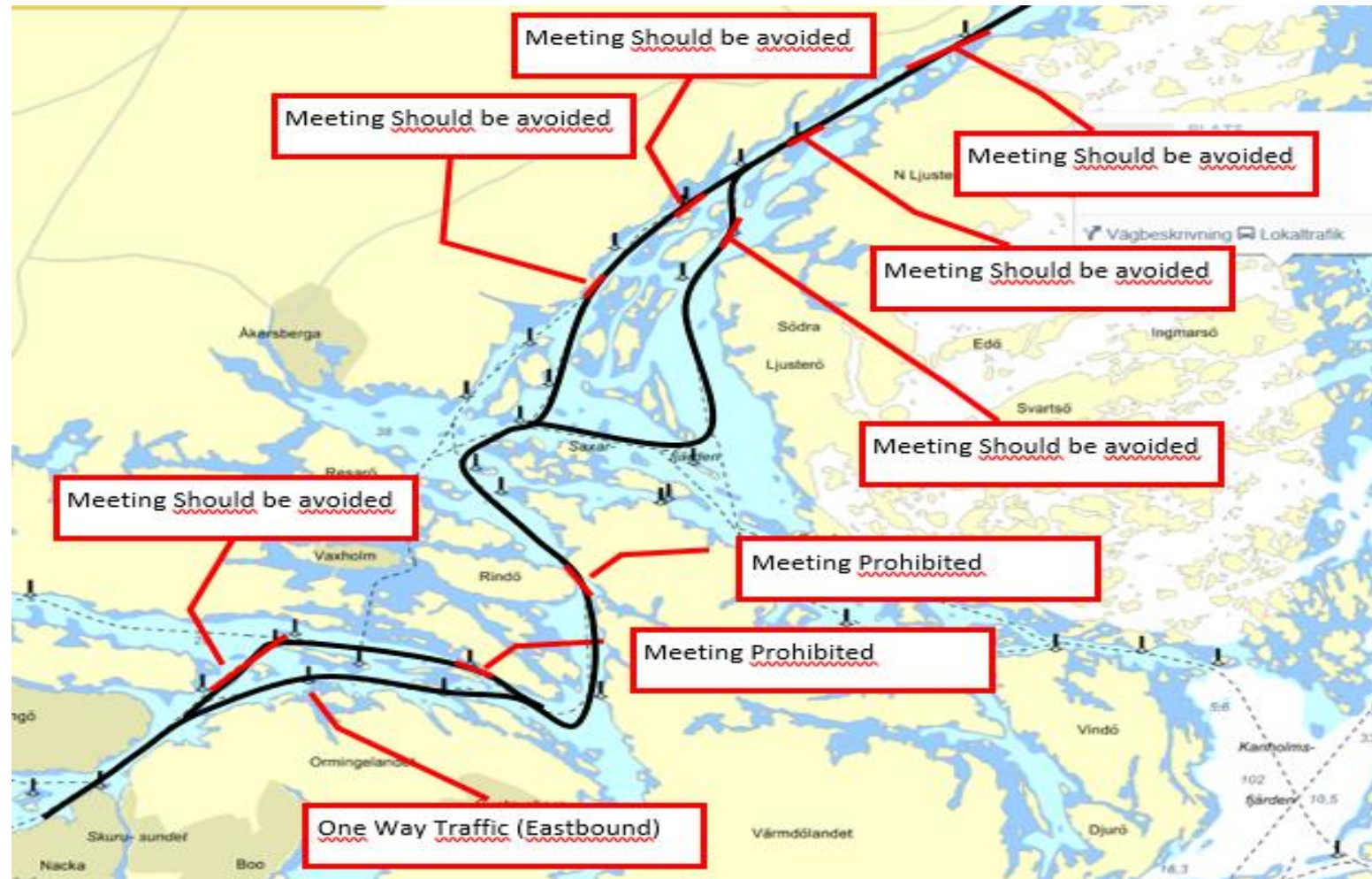


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Smarter Tools for Interactions

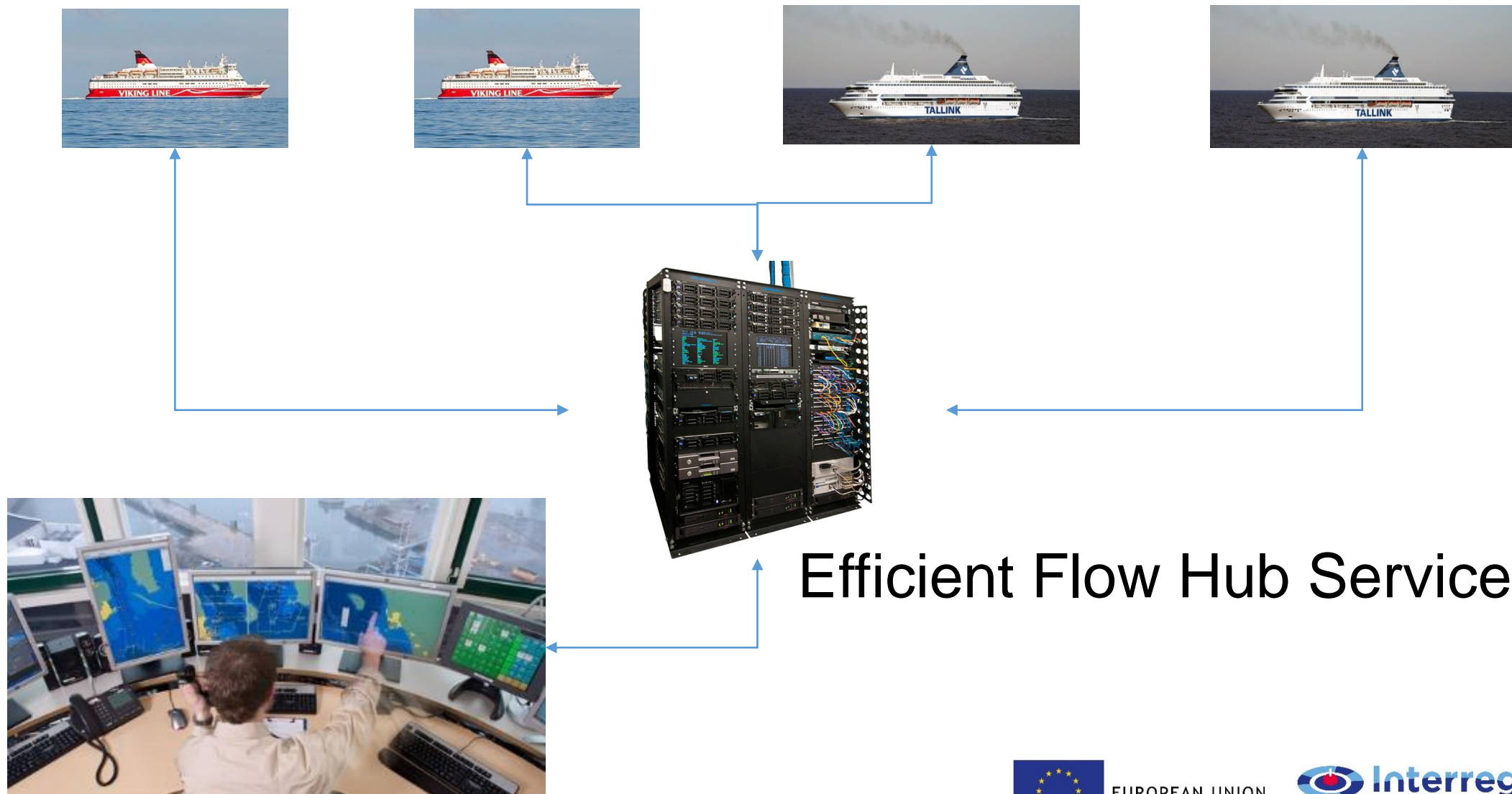


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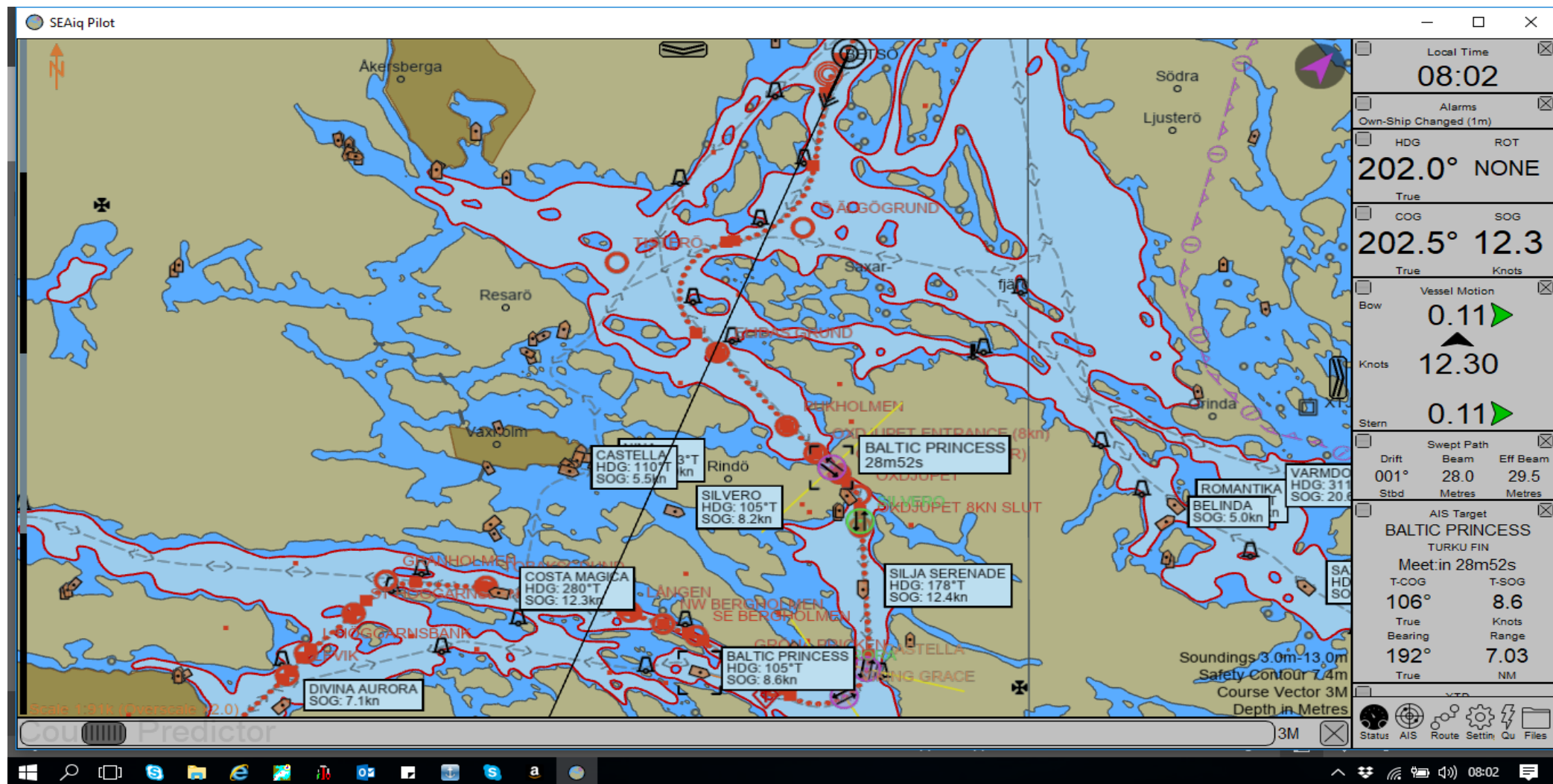


STM Concept & Route exchange





Smart calculations

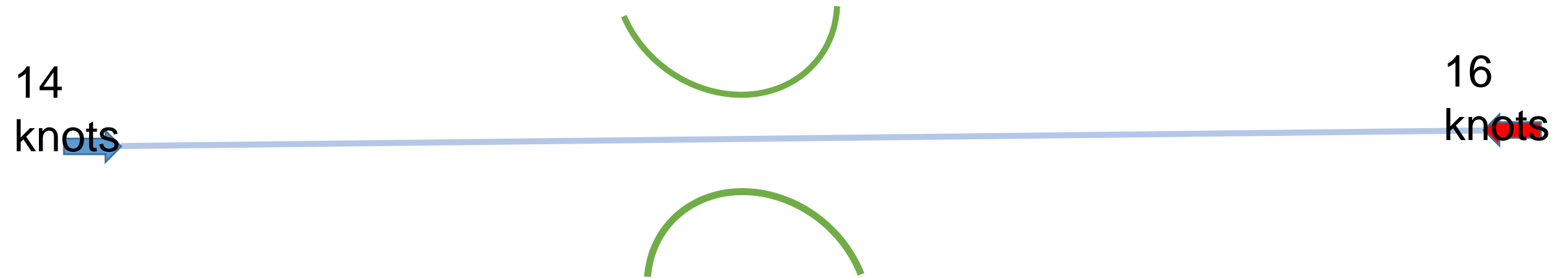


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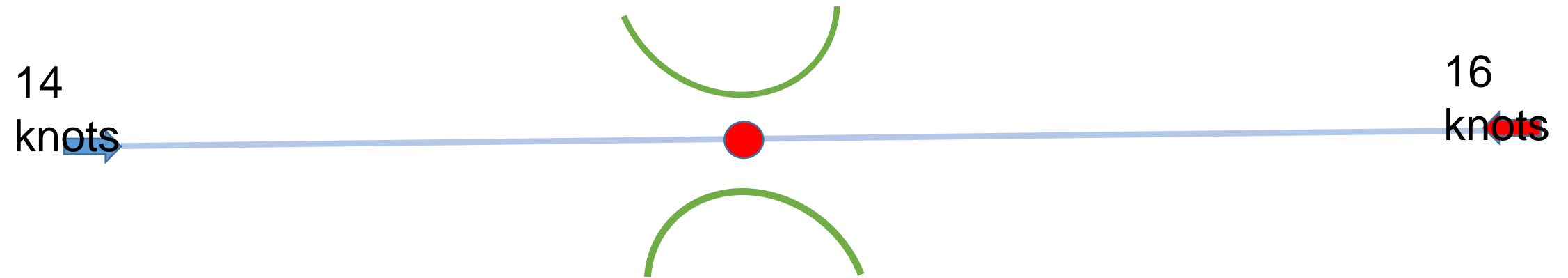


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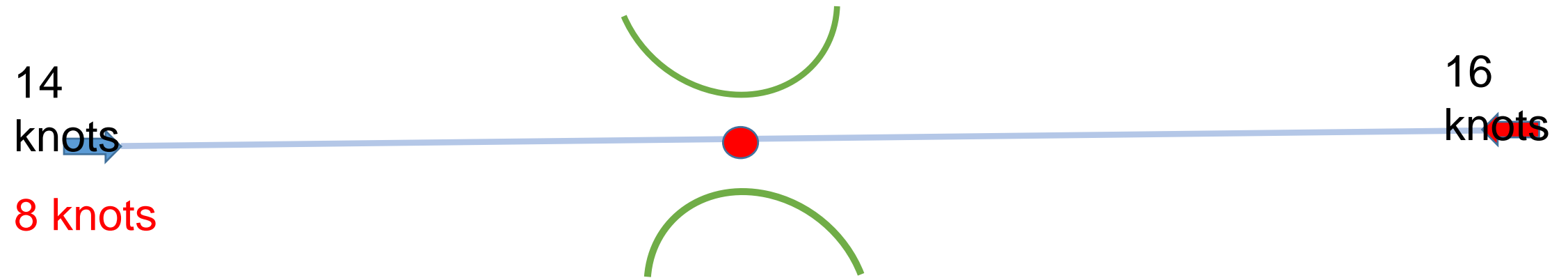


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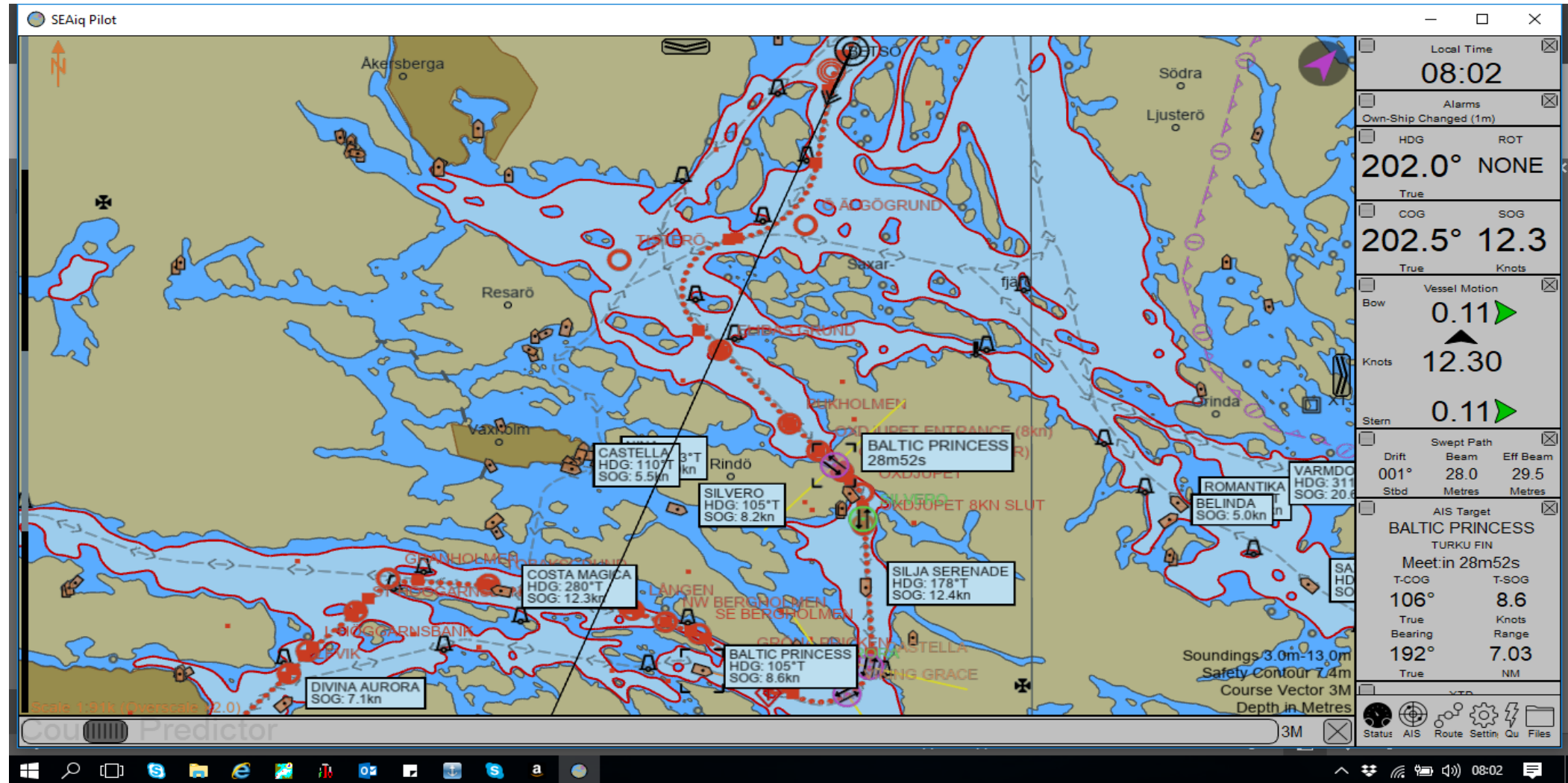


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Smart calculations



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Participants

VTS Vessel Traffic Service Center

- Turku, Finland
- Stockholm, Sweden

Pilots


- Stockholm
- Turku

18 Ferries

- Viking Line
- Birka Line
- Tallink-Silja
- FinnLines



Kiitos, Tack & Thank You!

An aerial photograph of a wide, blue waterway, likely a strait or a large bay, surrounded by lush green islands and peninsulas. Several large ferries are visible, moving through the water. In the foreground, the stern of a large white ferry is visible. Further back, another white ferry is moving away. In the distance, two red ferries are visible. The water is a deep blue, and the surrounding land is covered in dense green forest. The sky is a pale, hazy blue.