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Connecting Europe Facility



SEA TRAFFIC MANAGEMENT FRAMTIDENS DIGITALA LÖSNINGAR FÖR EN SÄKRARE SJÖFART

CAJSA FRANSSON



Sea Traffic Management

Idéen

Konceptet

Projektet



TRANSAS

Sea Traffic Management Service
Creating a safer, more efficient and environment friendly maritime sector

SMHI

WÄRTSILÄ

Costa

FURUNO

NAVICON
COMPUTER SYSTEMS ENGINEERING

Liikennevirasto
Finnish Transport Agency

CIMNE
SSPA



KONGSBERG SAAB

ADVETO
ADVANCED TECHNOLOGY AB



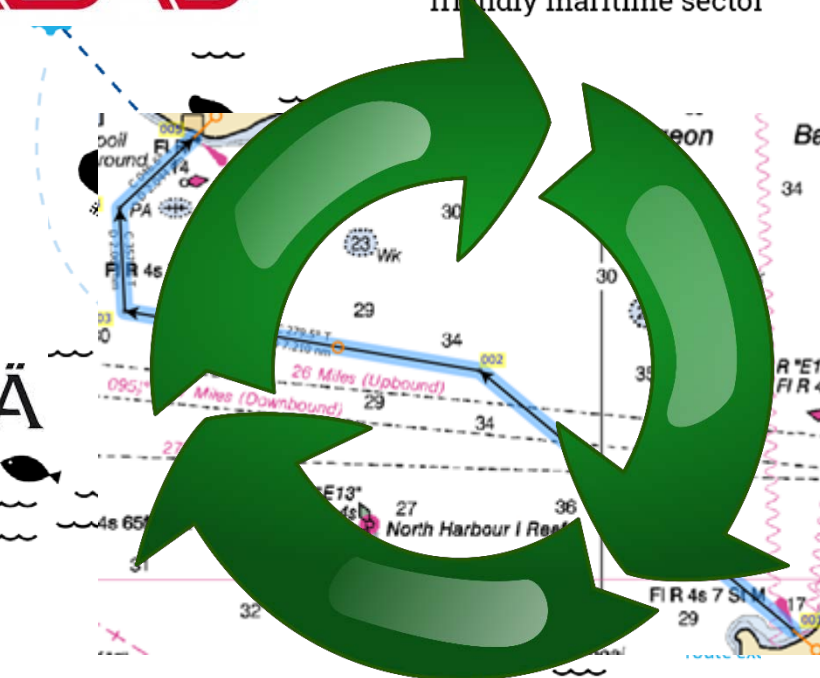
KYSTVERKET
NORWEGIAN COASTAL ADMINISTRATION



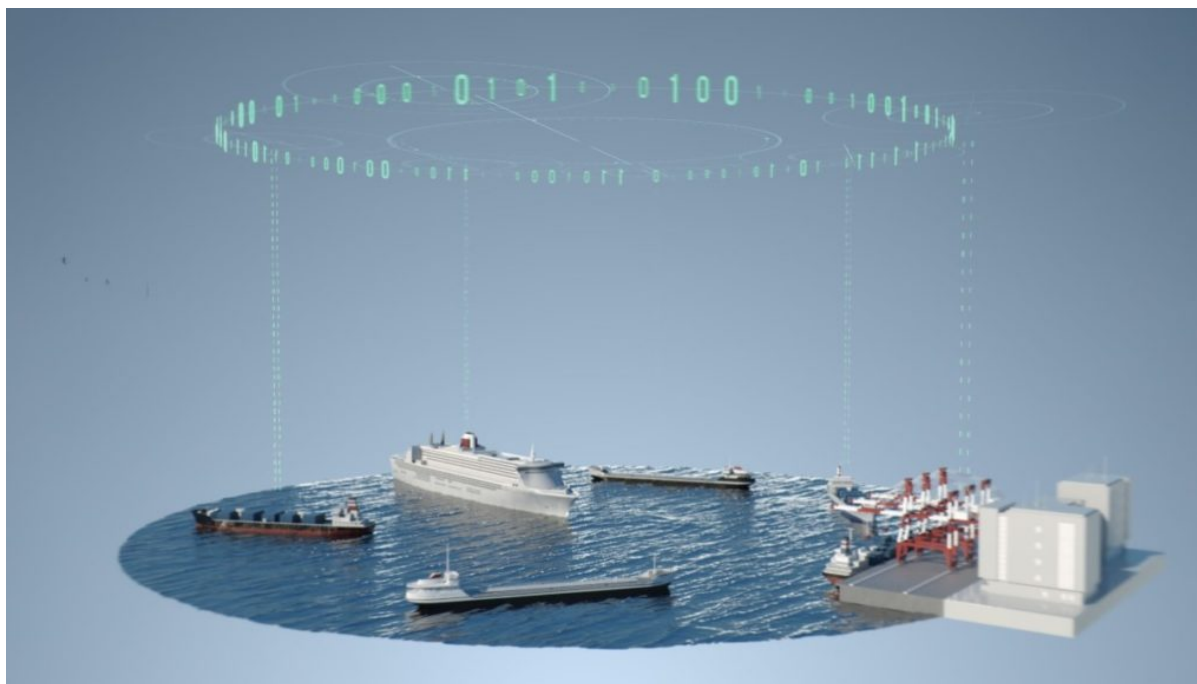
SWEDISH MARITIME ADMINISTRATION



SJÖFARTSVERKET



Digitalt informationsutbyte för framtidens sjöfart





SWIM connect



WORLD CUSTOMS ORGANIZATION



Co-financed by the European Union
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System-Wide Information Management
Builds on the Maritime Connectivity Plattform

RTZ (IEC 61174)

S-124

Port Call Message

Route message format (AIS-
ASM)

Will be validated and brought forward
for standardization

Voyage Information Service

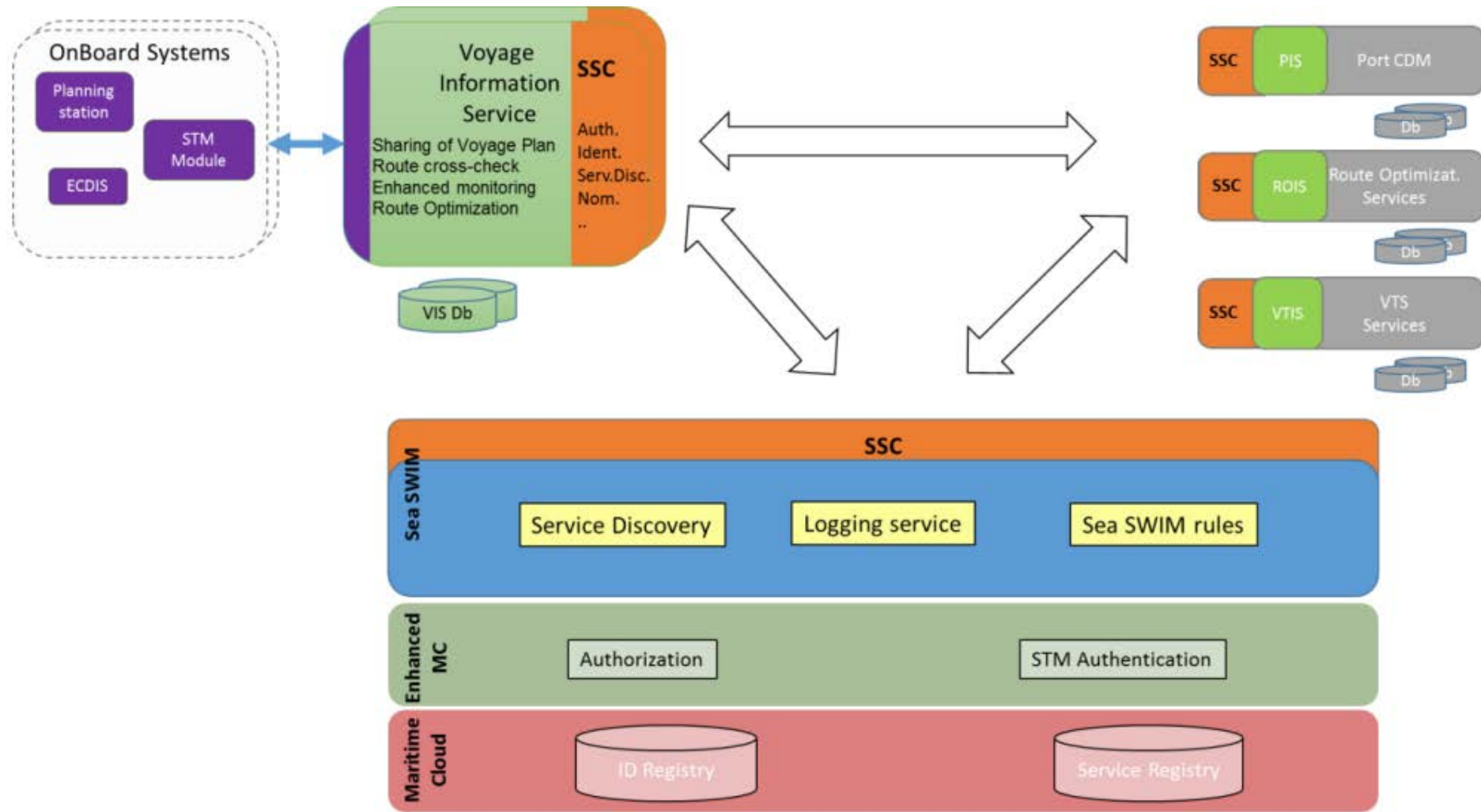
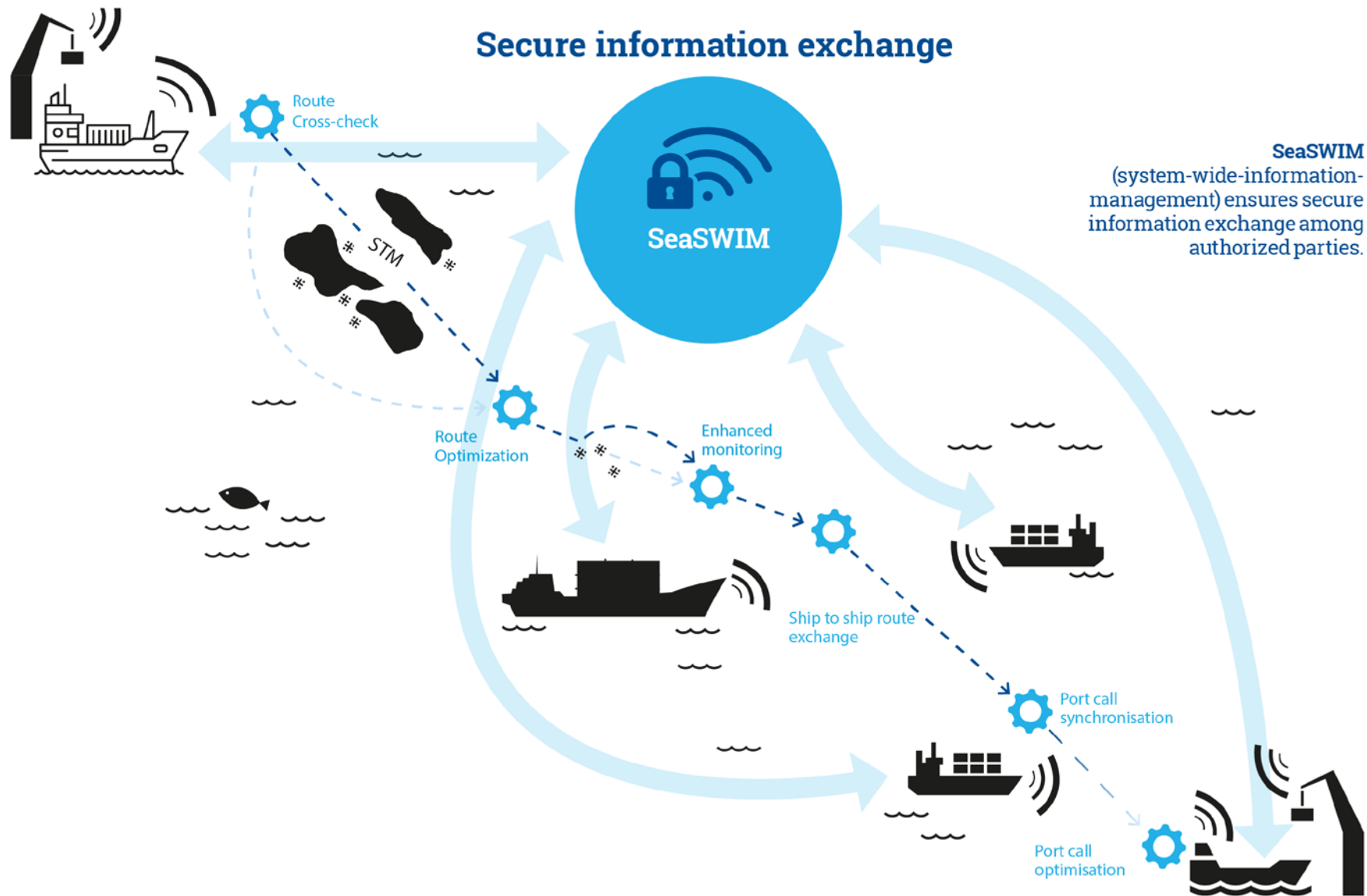


Figure 3: Voyage Information Service context including actors

IALAs MSP

1. VTS Information Service
2. VTS Navigation Assistance Service
3. VTS Traffic Organisation
4. Local Port Service
5. Maritime Safety Information Service
6. Pilotage Service
7. Tug service
8. Vessel Shore Reporting
9. Telemedical Maritime Assistance Service
10. Maritime Assistance Service
11. Nautical Chart Service
12. Nautical Publication service
13. Ice Navigation Service
14. Meteorological Information Service
15. Real-time hydrographic and environmental information Service
16. Search and Rescue Service

Secure information exchange



SeaSWIM
(system-wide-information-management) ensures secure information exchange among authorized parties.



FILMTAJM



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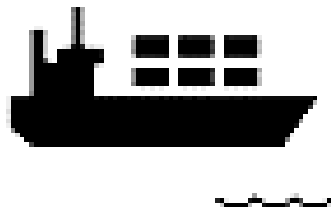
Pre-AIS

First ship:

Ship on my port side, ship on my port side in position 54 degrees 45.5 minutes North 16 degrees 38.7 minutes East

Other ship:

Panic, find paper and pen, scribble, scribble, check position.
Could that be us?



AIS-en ny förståelse



What are your intentions, sir?



SHIP TO SHIP ROUTE EXCHANGE

CPA-0



SHIP TO SHIP ROUTE EXCHANGE

CPA-3M





SHIP TO SHIP ROUTE EXCHANGE

CPA-3M

Route message format (AIS-
ASM)

Will be validated and brought forward
for standardization





ROUTE OPTIMISATION



MONITORING SERVICES



Port Call Synchronisation

ETA 12:07



Den mänskliga faktorn



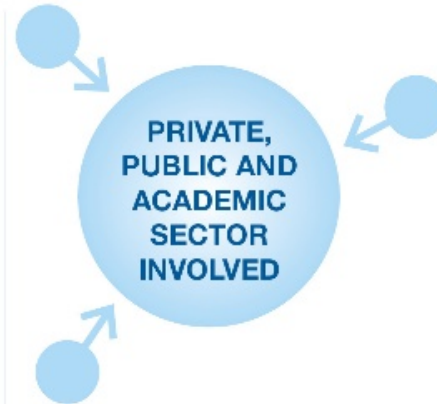
STM Validation Project



OVER 50 PARTNERS
INVOLVED



CO-FINANCED BY
THE EUROPEAN
UNION



43

MILLION EURO BUDGET



13 COUNTRIES



RUNS FROM 2015
UNTIL THE END
OF 2018



6 SHORE CENTRES

300

TESTSHIPS IN NORDIC AND
MEDITERRANEAN
SEA

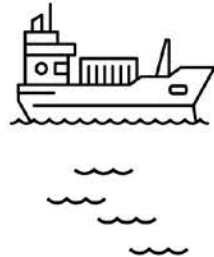
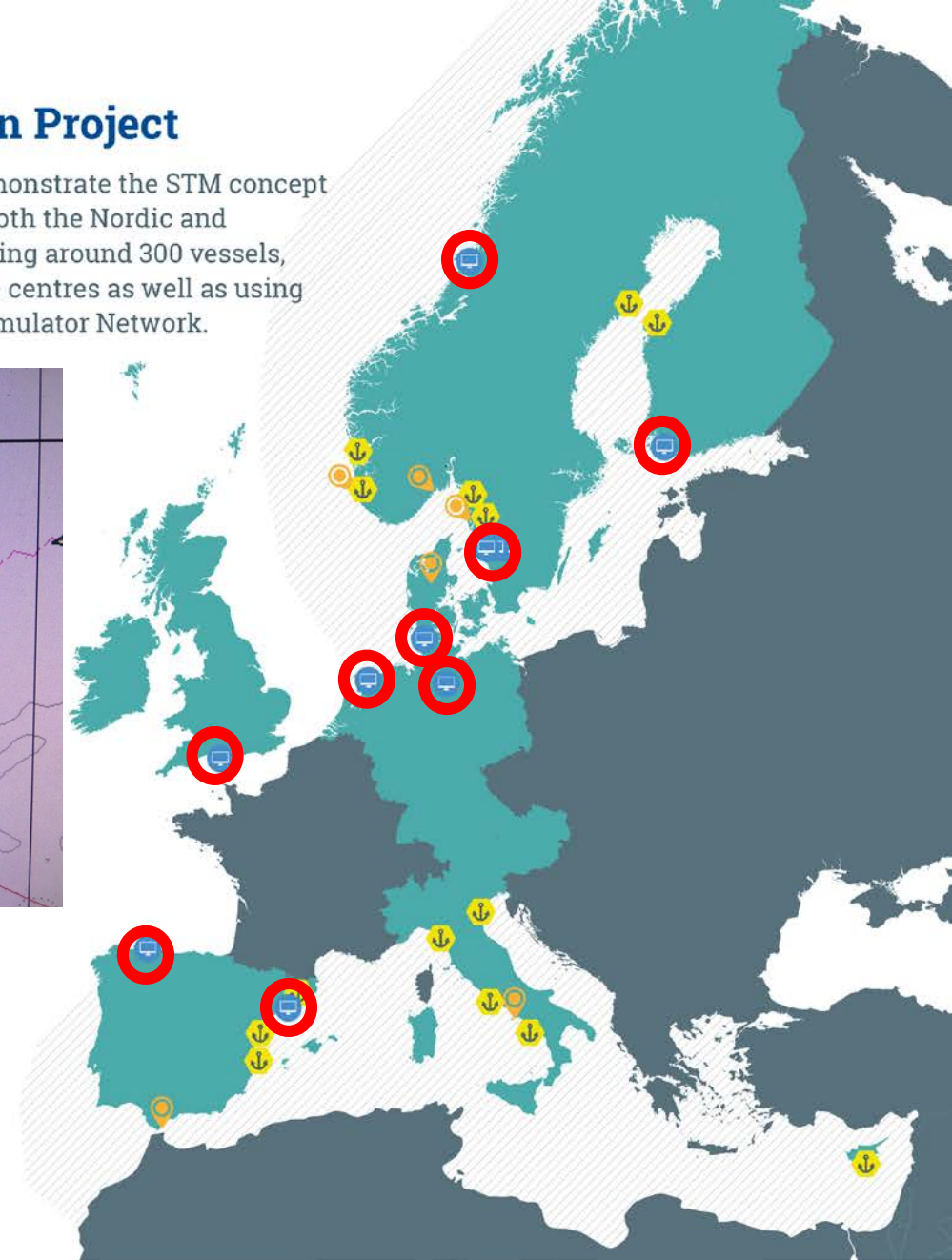
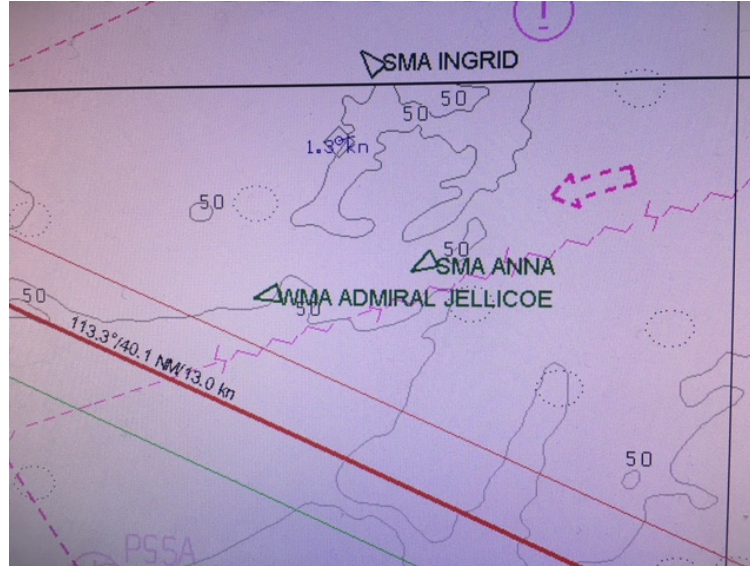


13 PORTS



STM Validation Project

The STM Validation Project will demonstrate the STM concept in large-scale test beds in both the Nordic and Mediterranean Seas, encompassing around 300 vessels, 14 ports and 6 shore based service centres as well as using the European Maritime Simulator Network.



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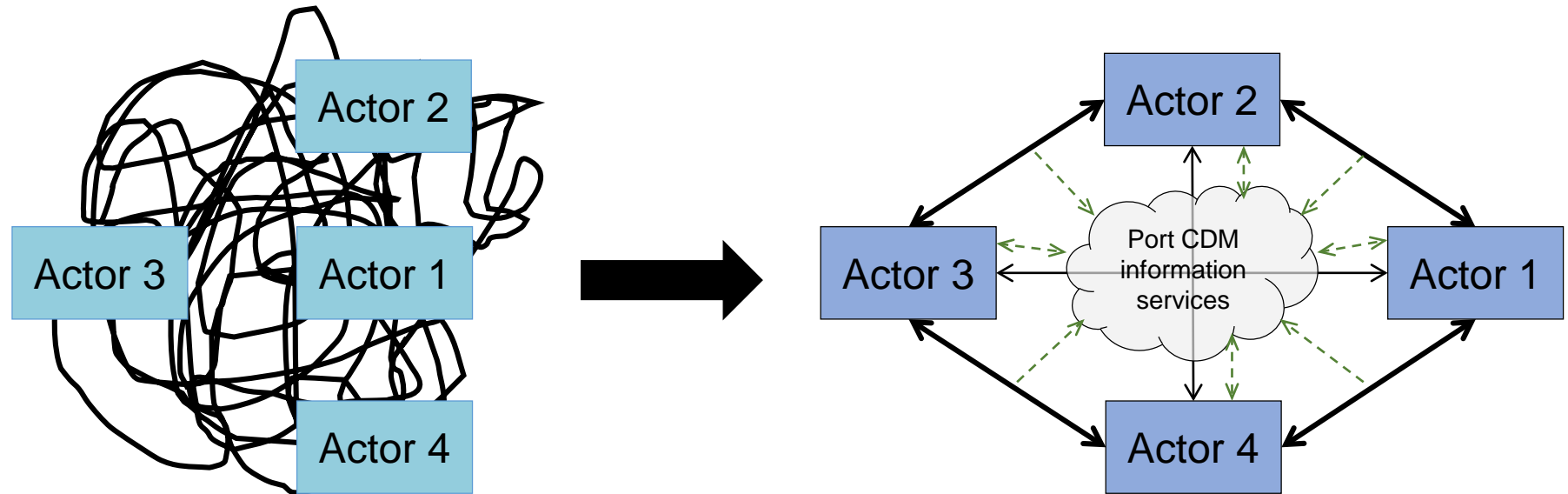
ROUTE OPTIMISATION



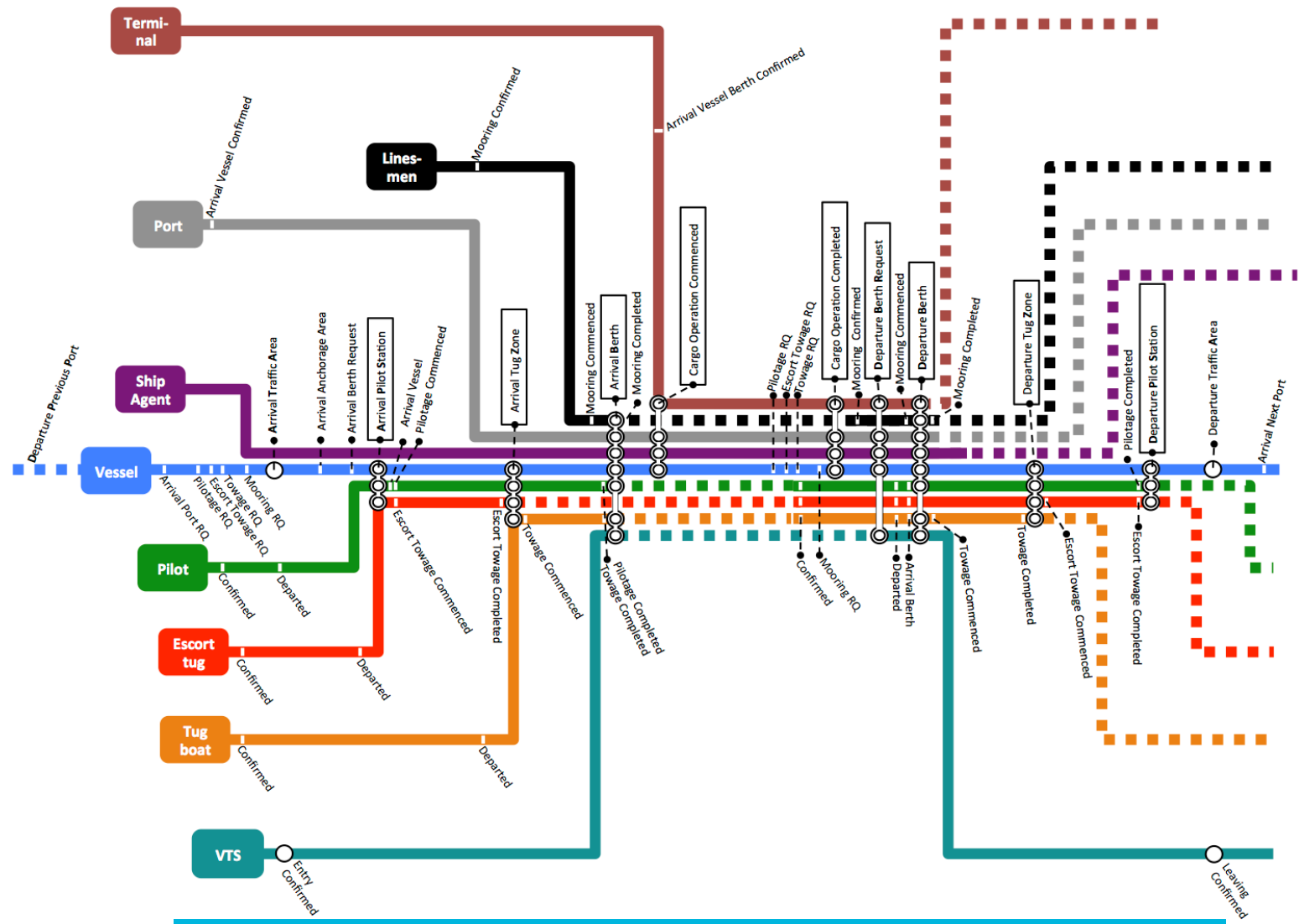




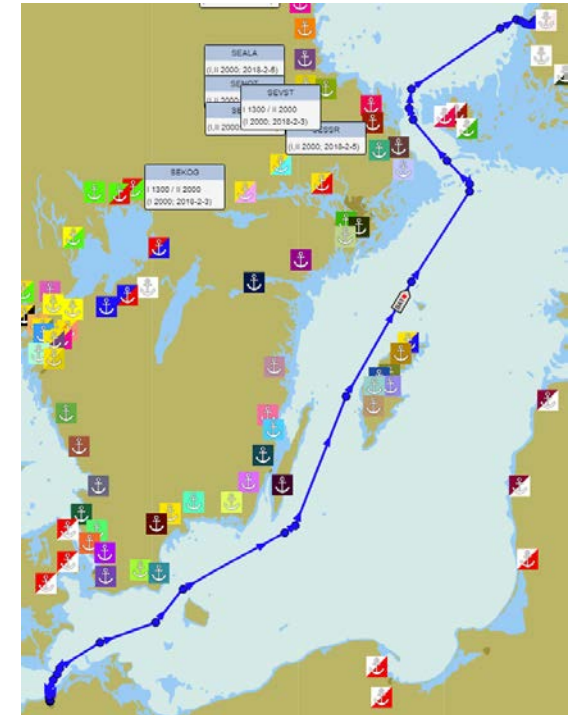
Informationsdelning i realtid.



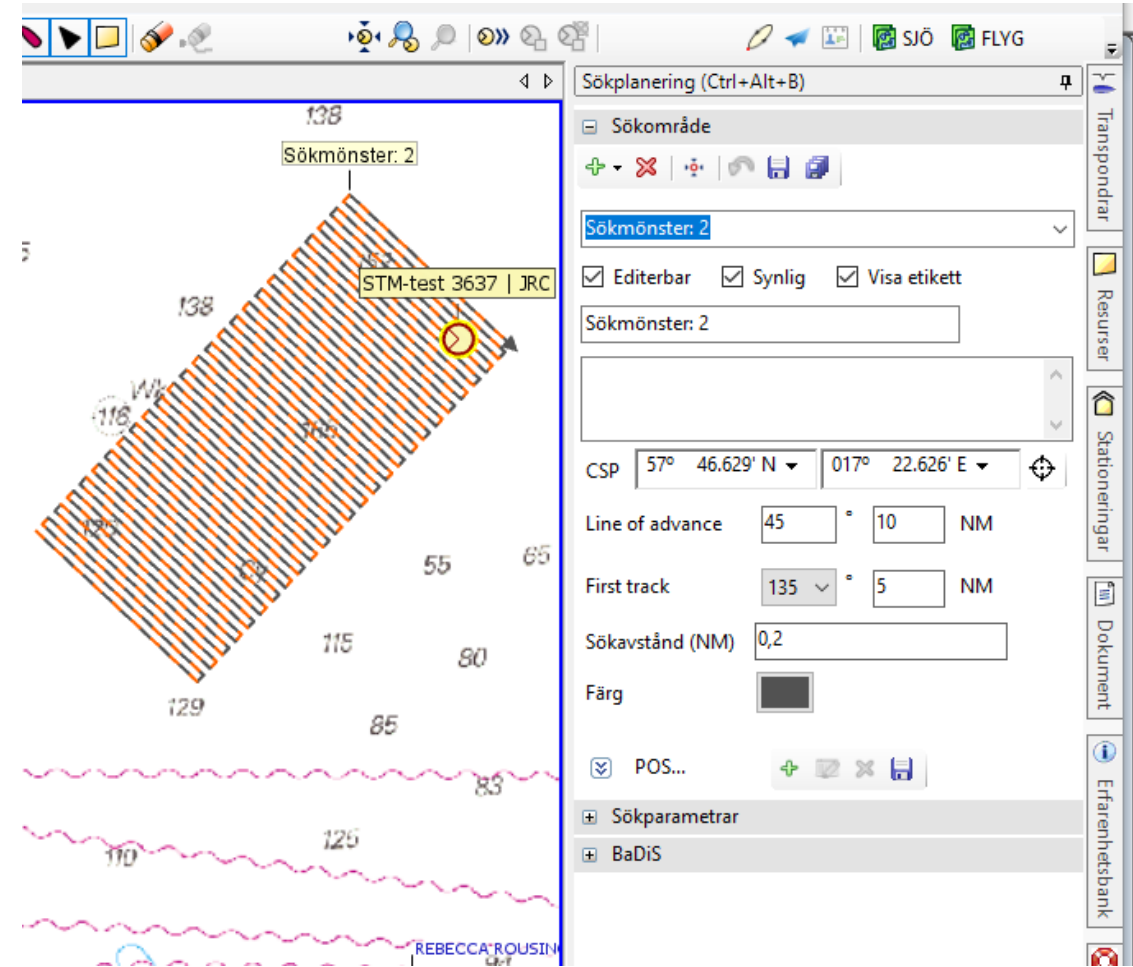
The Metro map an event driven approach



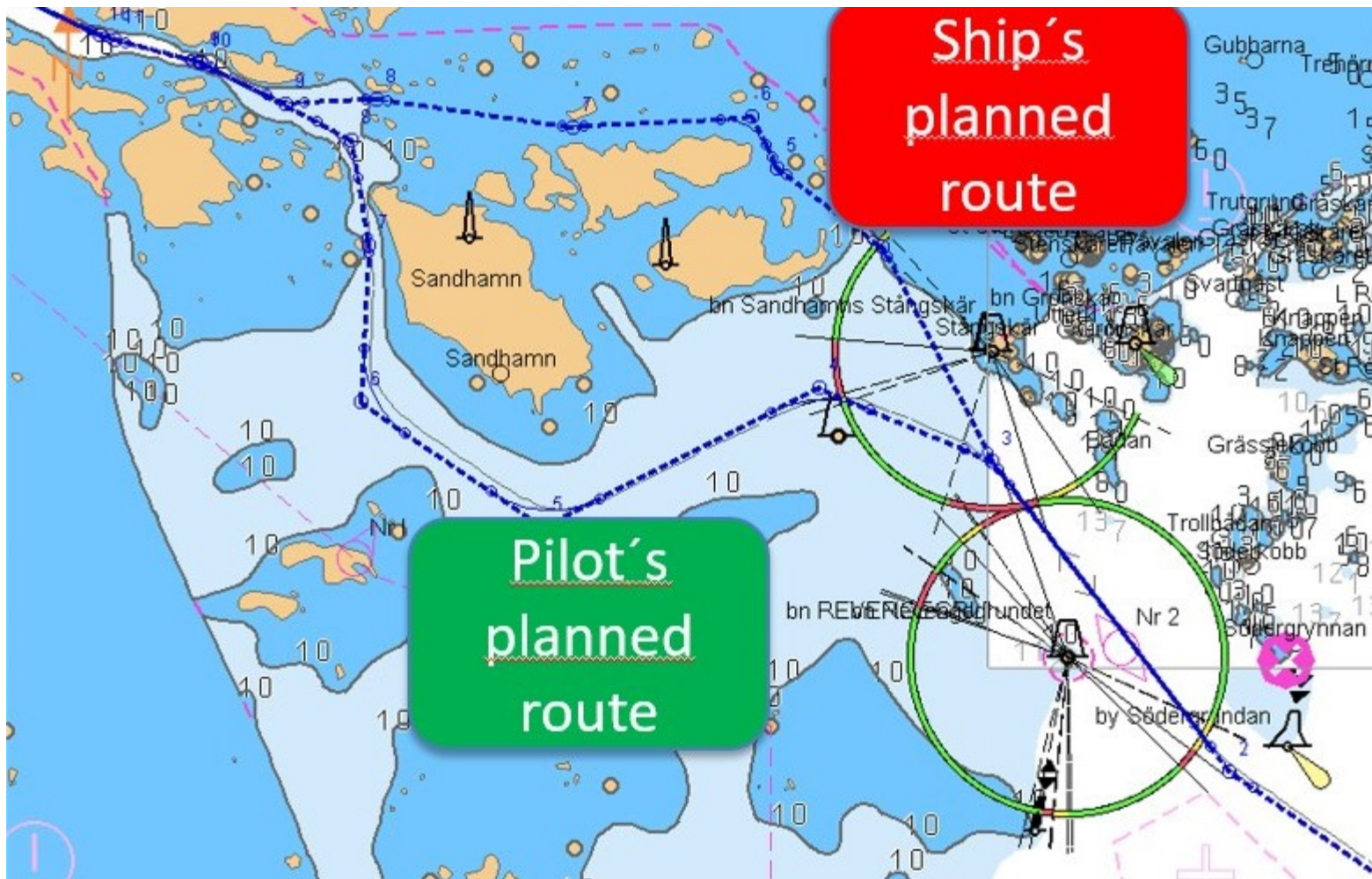
Vinternavigation



Search and rescue



Pilot route service





Navigations varningar

ECDIS Internal Clock 09:06:45 UTC 26 JAN 2018 ENC Category: Base Depth: [m] Status: Better scale available Views: [Icons]

Display
 Orient. North Up Browse
 Range 48 NM Rings Off
 REF CCRP Hide Overlays

Heading & Speed
 HDG 048.0° GYRO
 STW 0.6 kn GNSS
 COG 048.0°
 SOG 0.0 kn AUTO DGNS 1
 Set 183.0° Drift 0.6 kn

Position WGS84
 LAT 55°42.144' N AUTO DGPS 1
 LON 012°35.799' E Adjust

Vector & Trails
 REF Ground Charts ENC
 Vector 12 min T
 Plot Off T
 Predict Off T
 Targets Fusion ARPA Sleeping All AIS Trial Off

Alerts
 No Unacknowledged Alerts
 Silence ACK Alerts... Cautions...

Route Bro... Target List... Message...
 New Route... Open Close Activate Sign...

Filter

State	Catalog	Name
<input checked="" type="checkbox"/>	Stm	0903_KBH-OSLO COAST
<input checked="" type="checkbox"/>	Stm	0904_OSLO-KBH Coast

0903KBH-OSLO COAST
 Route View Options

! No.	Name	BWW [°]	Distance [NM]	Sail	P Corr [NM]	SB Corr [NM]	! ROT [°/min]	Radius [NM]	Latitude	Longitude
1	Piers out							0.50	55°42.530' N	012°36.809' E
2	Middelgrund L/H	056.3	0.72	RL			15.9	1.50	55°42.999' N	012°38.054' E
3	L/B # 21	046.7	1.77	RL			15.9	1.50	55°44.385' N	012°40.658' E
4	Knoelen L/B	018.2	7.26	RL			15.9	1.50	55°51.186' N	012°44.622' E
5	Staffans Banke L/B	357.2	1.90	RL			15.9	1.50	55°52.833' N	012°44.480' E
6	Haken N L/H	359.3	1.25	RL			15.9	1.50	55°54.261' N	012°44.449' E
7	L/B # M4	343.6	9.32	RL			15.9	1.50	56°03.332' N	012°39.685' E
8	L/B # M1	316.3	6.15	RL			15.9	1.50	56°07.682' N	012°32.261' E
9	Kullen L/H	333.4	20.16	RL			15.9	1.50	56°25.706' N	012°16.072' E
10	Morups Banke L/B	352.2	26.64	RL			15.9	1.50	56°52.000' N	012°09.500' E
11	Fladen L/H	336.7	23.54	RL			15.9	1.50	57°13.500' N	011°52.500' E

Planning View, 36 Waypoints (270.67 NM, 10:49)

Route Comparison Results

Compare route: 0903_KBH-OSLO COAST
 with: Version: 2
 Date of Version: 26/01/2018 - 09:03:10 UTC

Changed Route Properties

Property Name	New Value	Old Value

Changed Waypoints

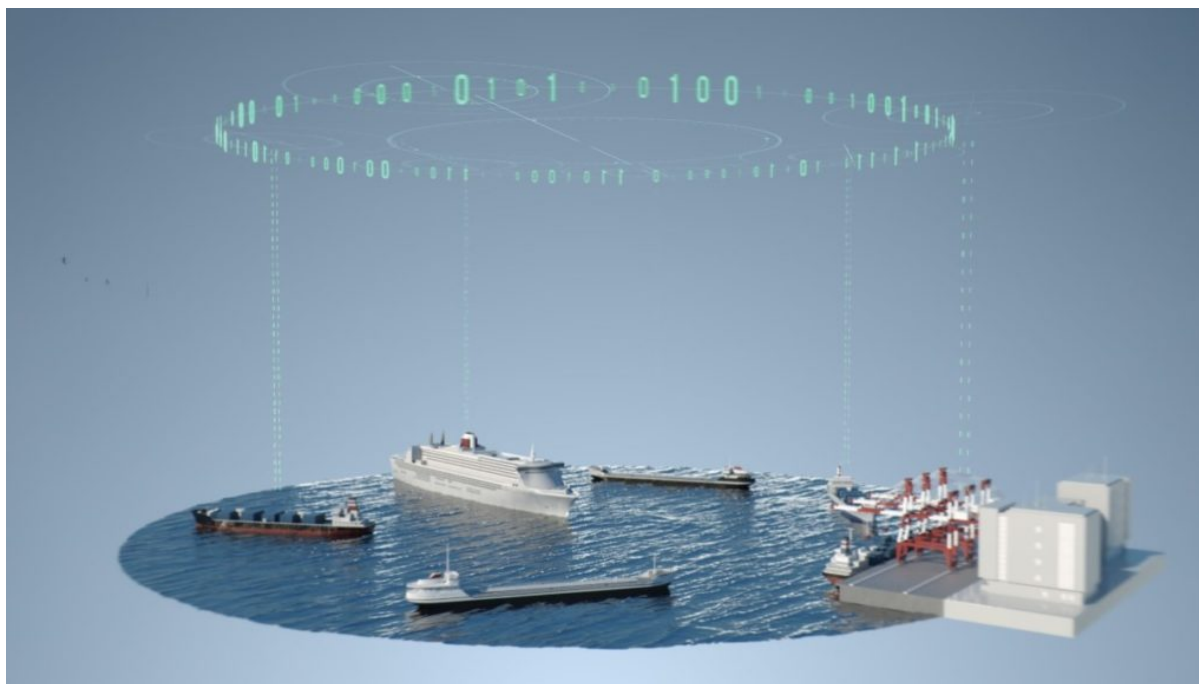
Number of added waypoints: 0
 Number of removed waypoints: 0
 Number of changed waypoints: 3

Distance
 The compared route is 12.74 nm longer then the source route.

Accept Reject

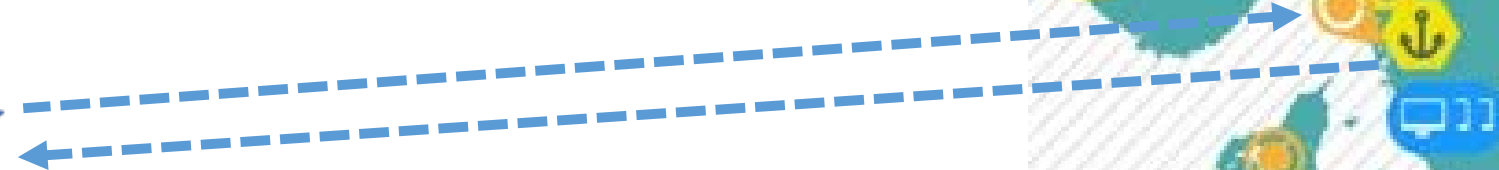
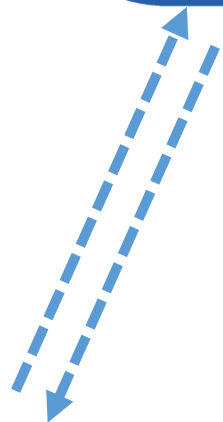
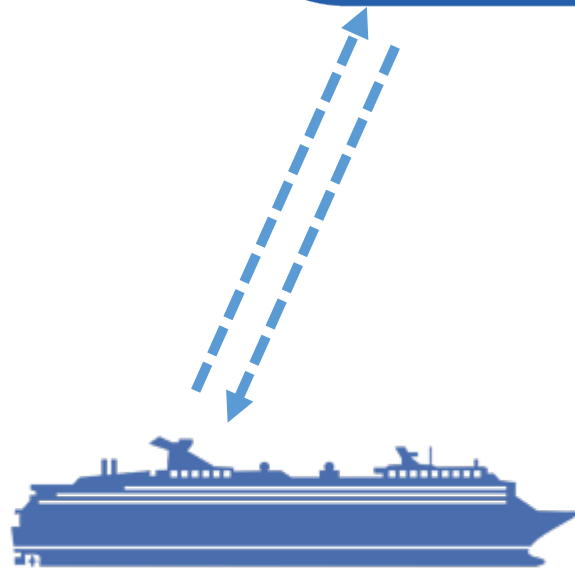


Digitalt informationsutbyte för framtidens sjöfart





SC Gothenburg





ECDIS Internal Clock 09:06:45 UTC 26 JAN 2018 ENC Category: Base Depth: [m] Status: Better scale available Views: [Icons]

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 REF CCRP Hide Overlays

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<input checked="" type="checkbox"/>	Stm	0903_KBH-OSLO COAST
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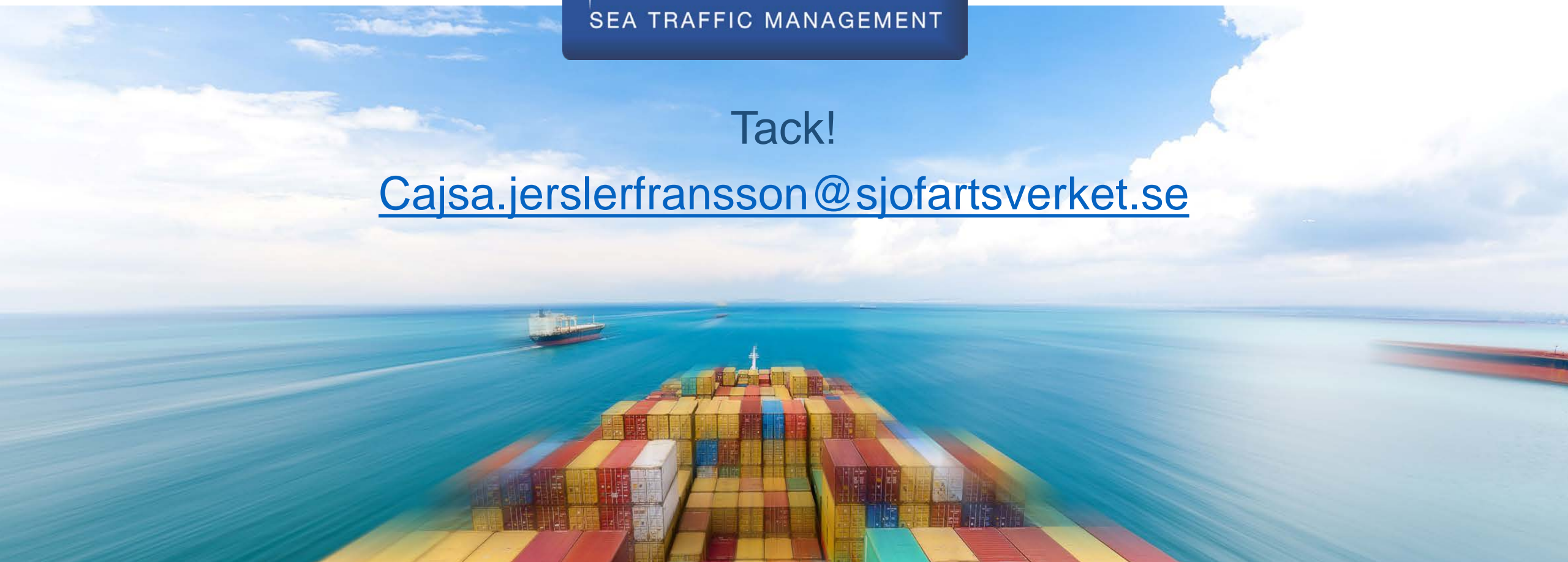
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Accept Reject



Tack!

Cajsa.jerslerfransson@sjofartsverket.se





Allt om STM finns att läsa på
www.stmvalidation.eu

