



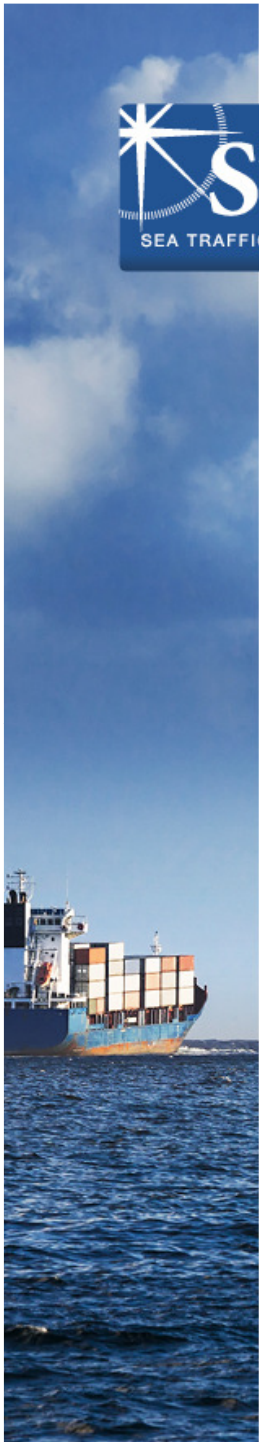
# The need for standardized APIs



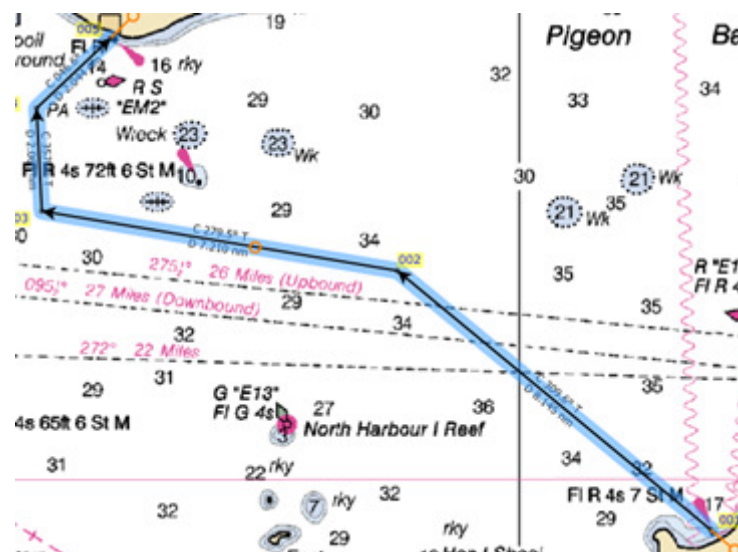
an update from the  
STM Validation Project



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RTZ, IEC 61174:2015  
→ S-4xx





# RTZ, IEC 61174:2015

## → S-4xx

TRANSAS



KONGSBERG



WÄRTSILÄ



SAAB



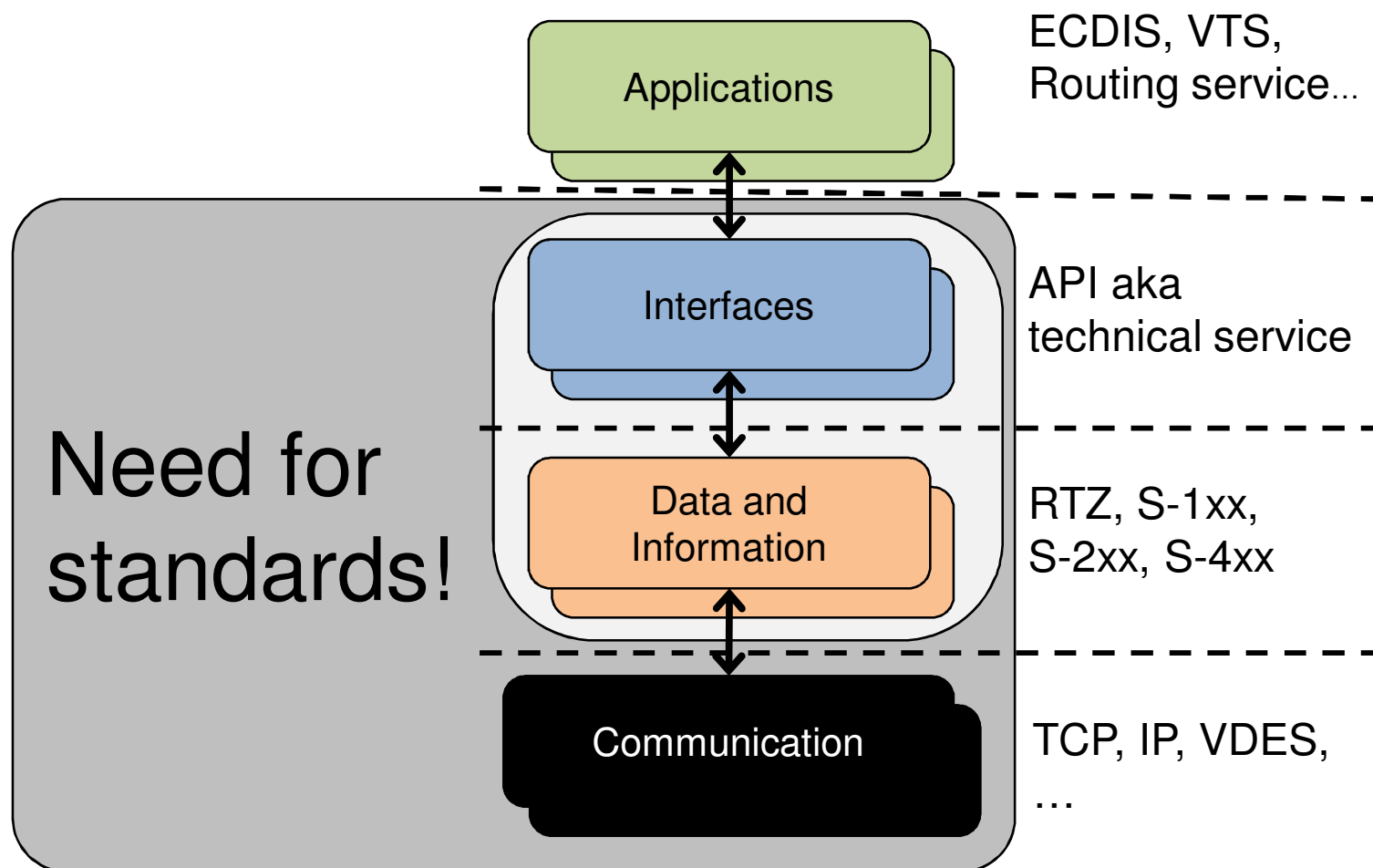
FURUNO

**ADVETO**  
ADVANCED TECHNOLOGY AB

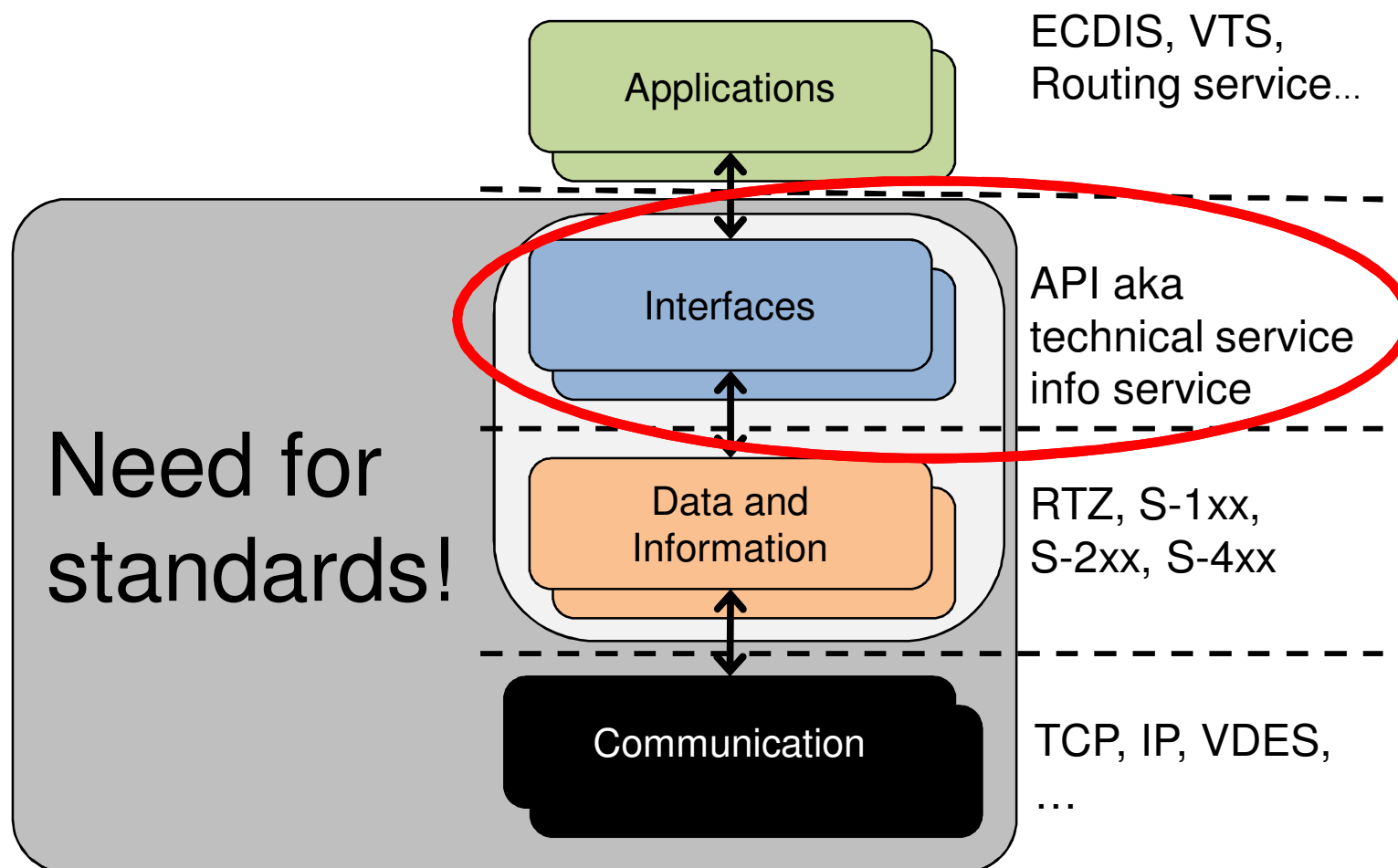


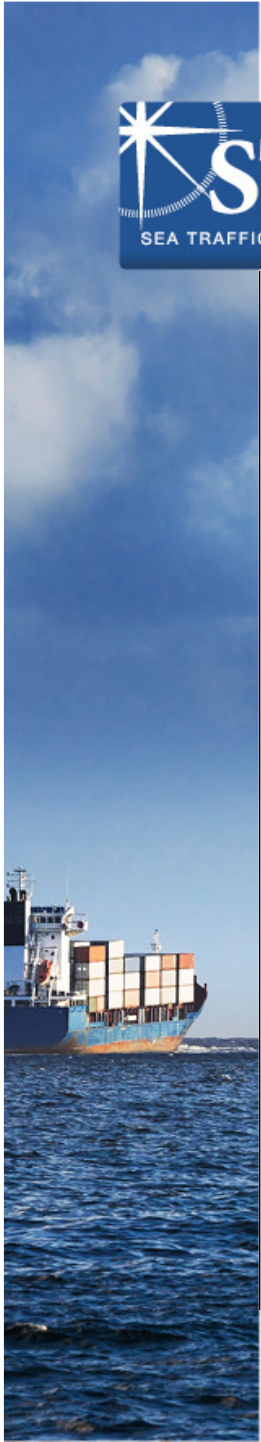
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# Layered standards

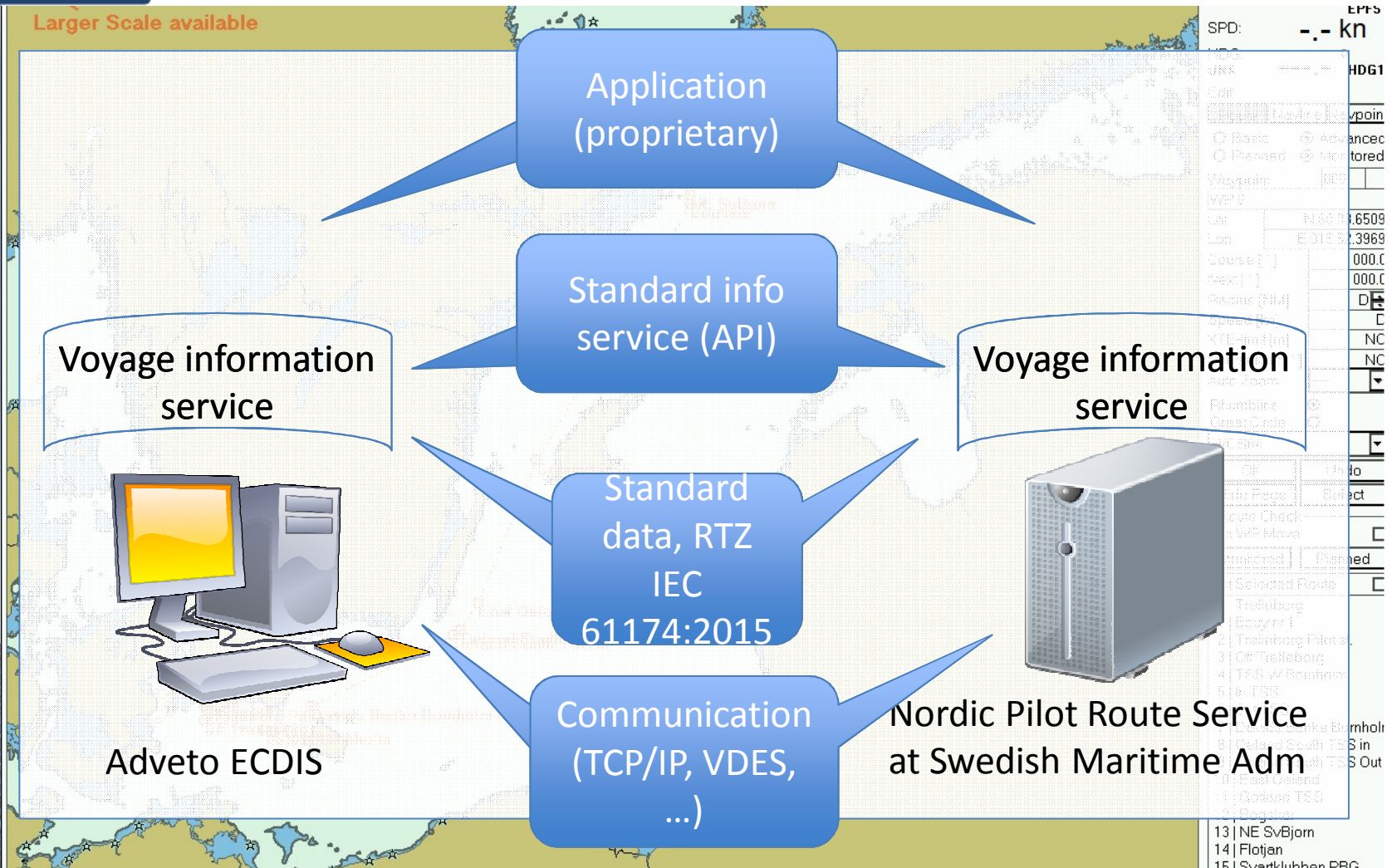


# Layered standards





# STM architecture enabling E-navigation



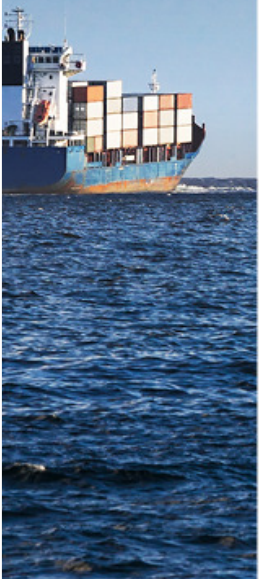
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# MSP 6 Pilotage Services

The Swedish Maritime  
Administration has launched

*Nordic Pilot Route Service*



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# A voyage plan in ECDIS



Imagery: Adveto AB



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# Service call Pilot Routes

STM Module - Cinderella

VIS SPIS

Voyage Plans Services Identities Ar

Actual Voyageplan

UVID urn:mrn:stm:voyage:id:a

Route Status 1 Original

Call Service with VP Nordic Pilot Route Service

Published VP:s

UVID	Status	Published
urn:mrn:stm:voyage:id:adveto.20298-Trelleborg-Svartklubben-20170425	1	2017-04-25 17:59:51

Received VP:s

UVID

urn:mrn:stm:voyage:id:s

urn:mrn:stm:voyage:id:t

Received VP:s

UVID

urn:mrn:stm:voyage:id:svartklubben:001

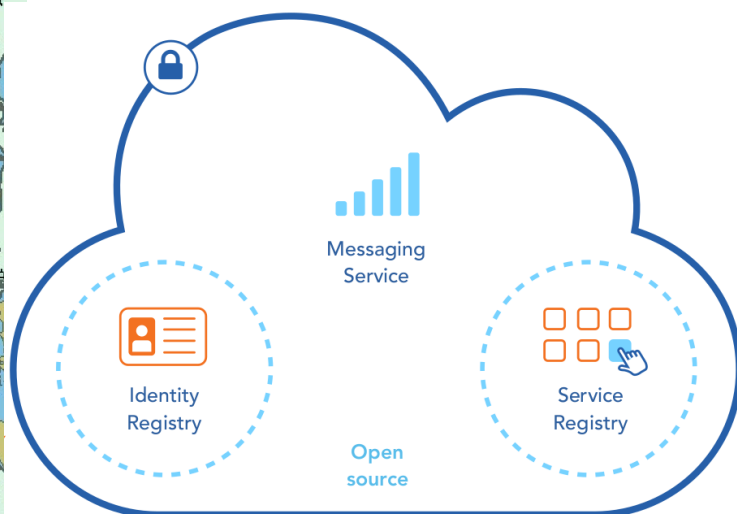
urn:mrn:stm:voyage:id:trelleborg:001

Imagery: Adveto AB



# ...built on the ~~Maritime Cloud~~ MCP!

- authentication and identity management
- discovery of identities and services

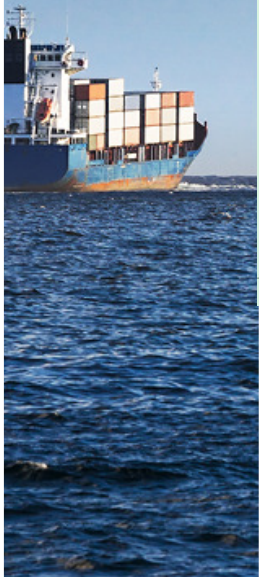
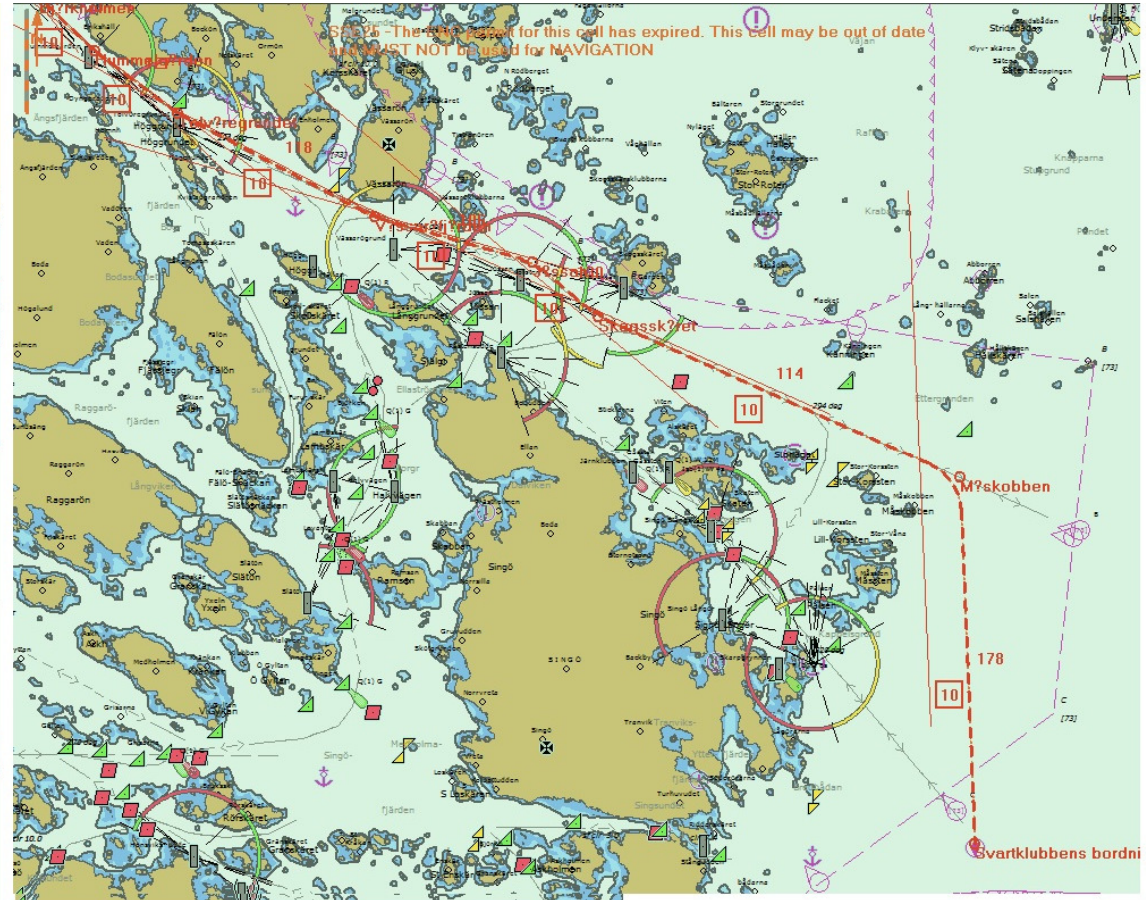
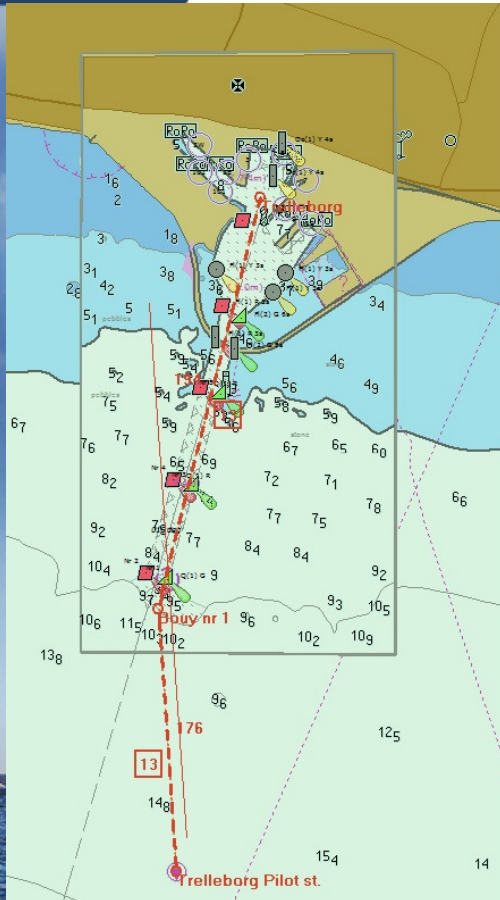


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15   Sværklubbh PRG	



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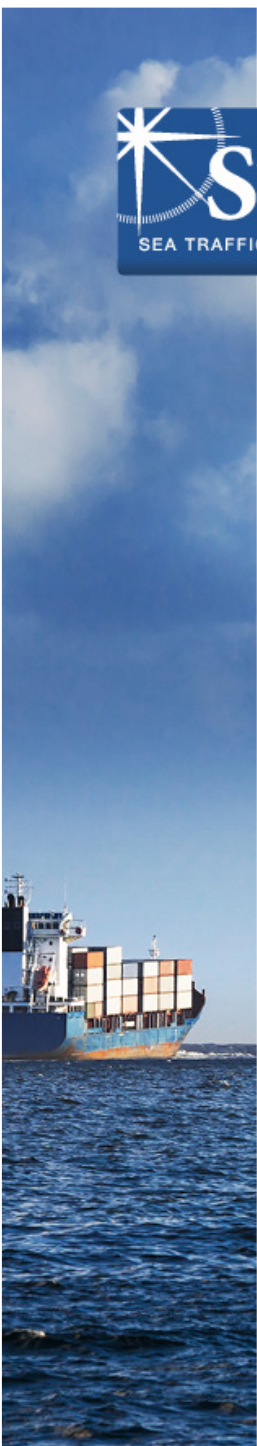
# Pilot routes displayed in ECDIS...



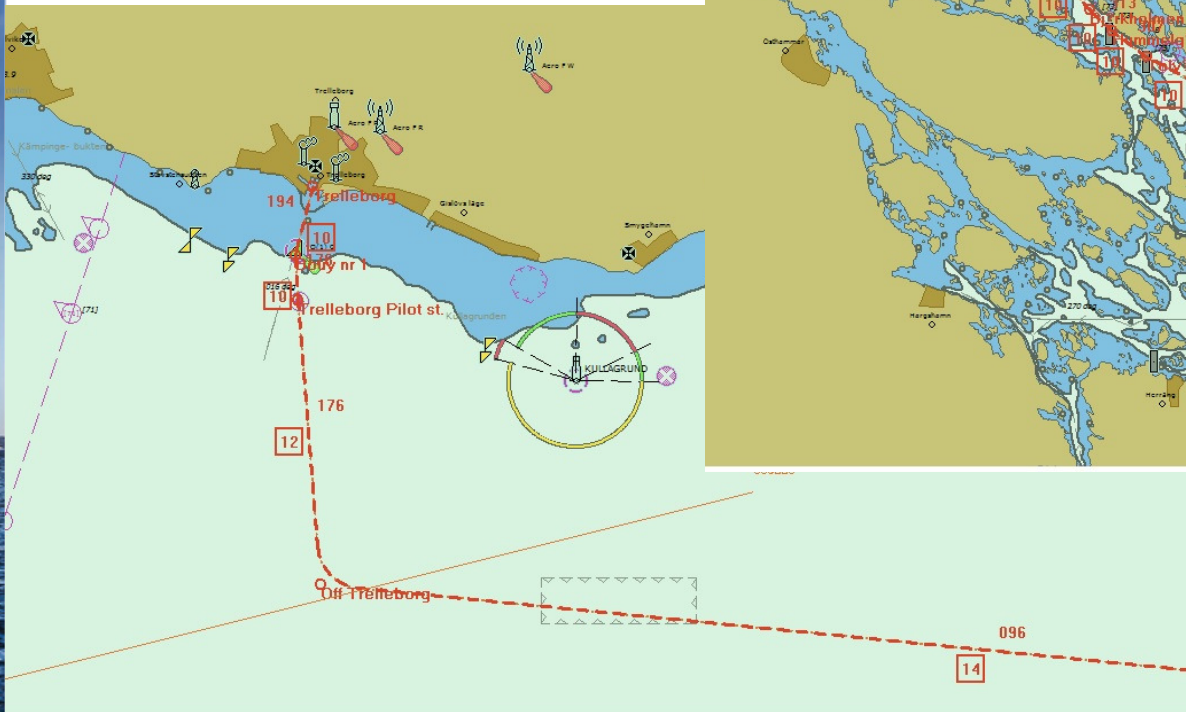
Imagery: Adveto AB



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...merged with voyage plan



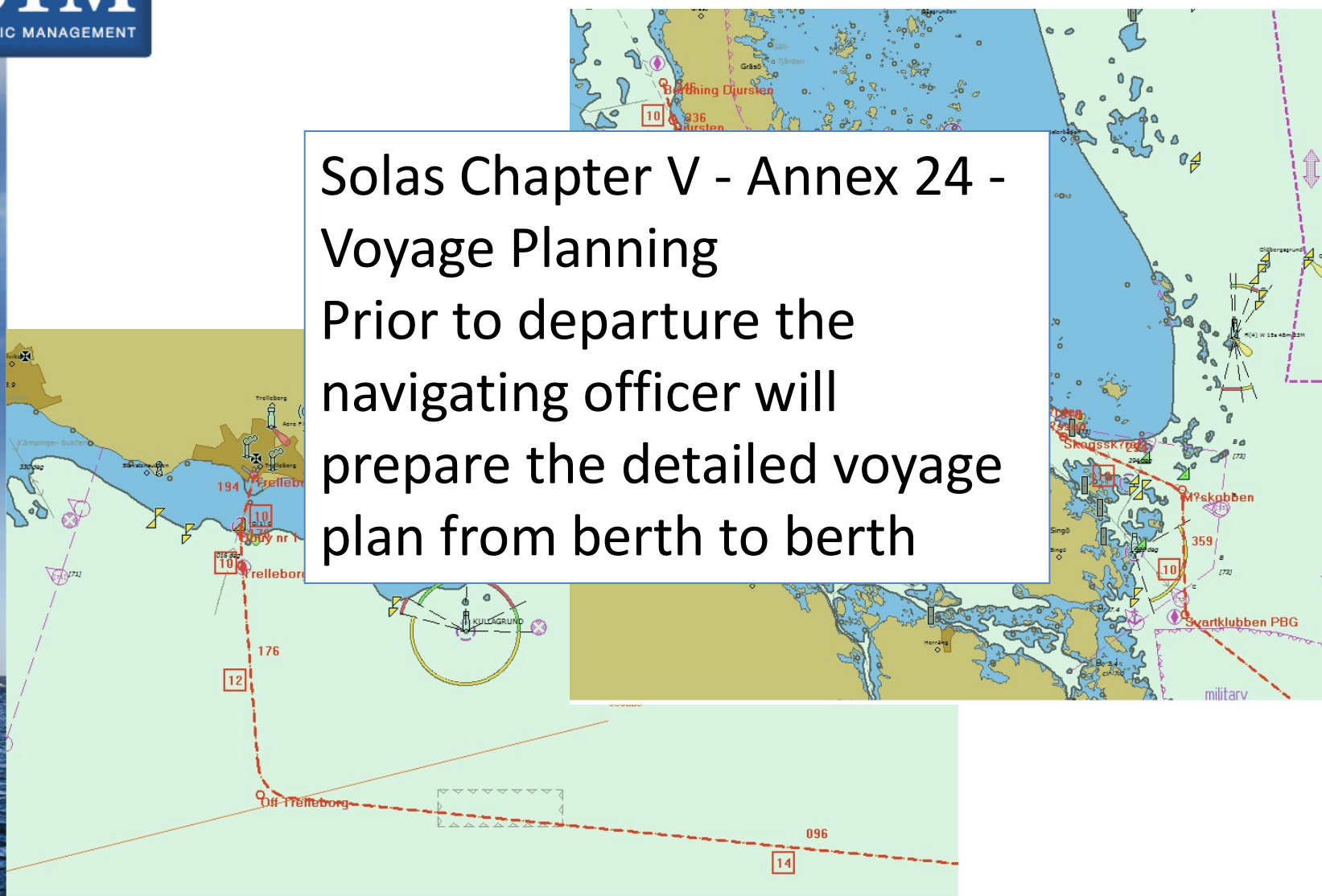
Imagery: Adveto AB



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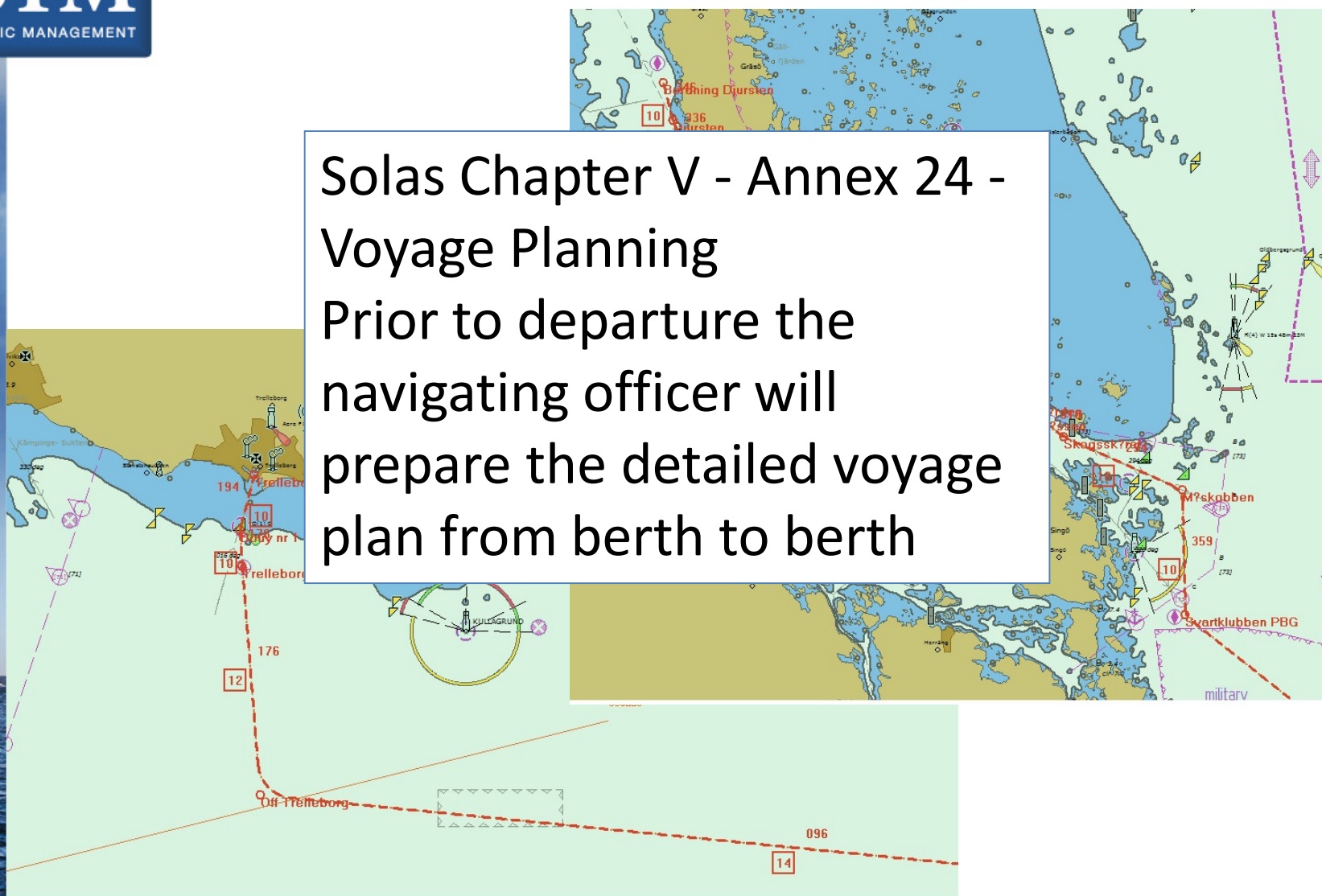
# ...merged with voyage plan

Solas Chapter V - Annex 24 -  
Voyage Planning  
Prior to departure the  
navigating officer will  
prepare the detailed voyage  
plan from berth to berth

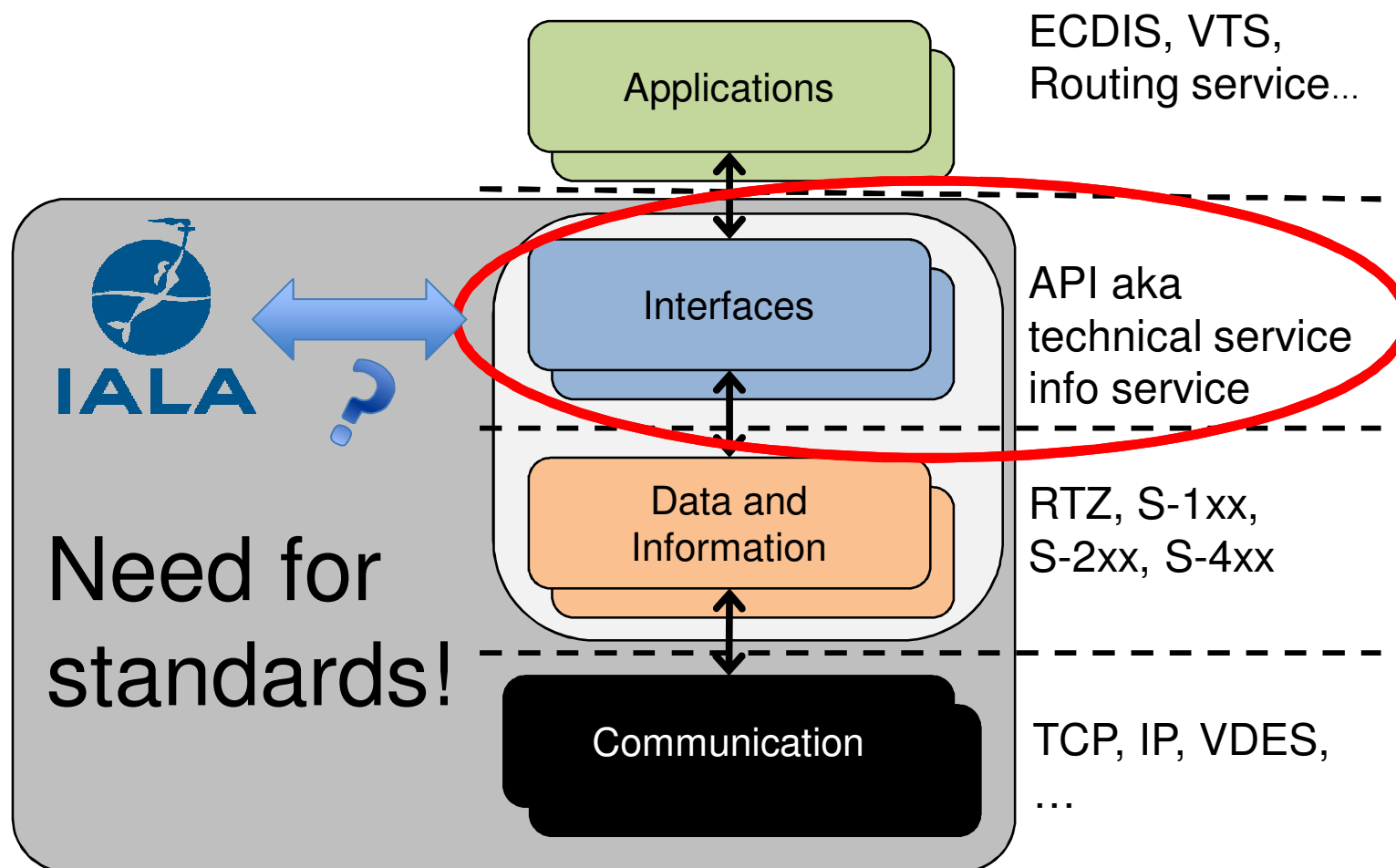


# ...merged with voyage plan

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# Layered standards





[www.stmvalidation.eu](http://www.stmvalidation.eu)



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