

Work Package 5, Activity 5.3

Open Source Software Strategy

Sharing demonstrations, tools and
reference implementations in a sustainable

Maritime Open Source Software Community

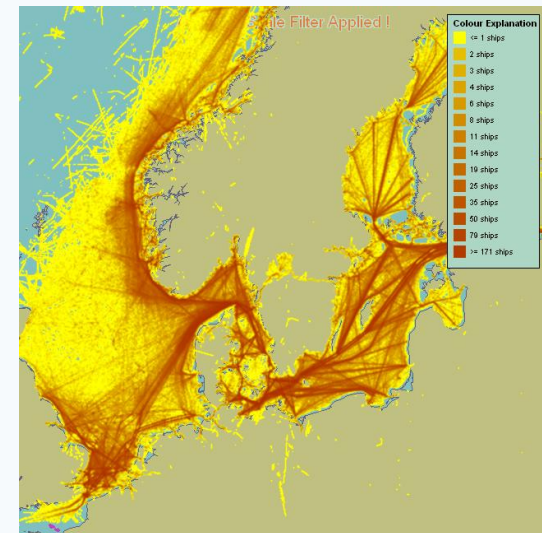
Jens K. Jensen, DaMSA
2011-09-19

Activity 5.3: Tool to support AIS Datalink Management

100+ AIS stations Baltic Sea Region,
emerging transmit services

Coordination of transmissions
required

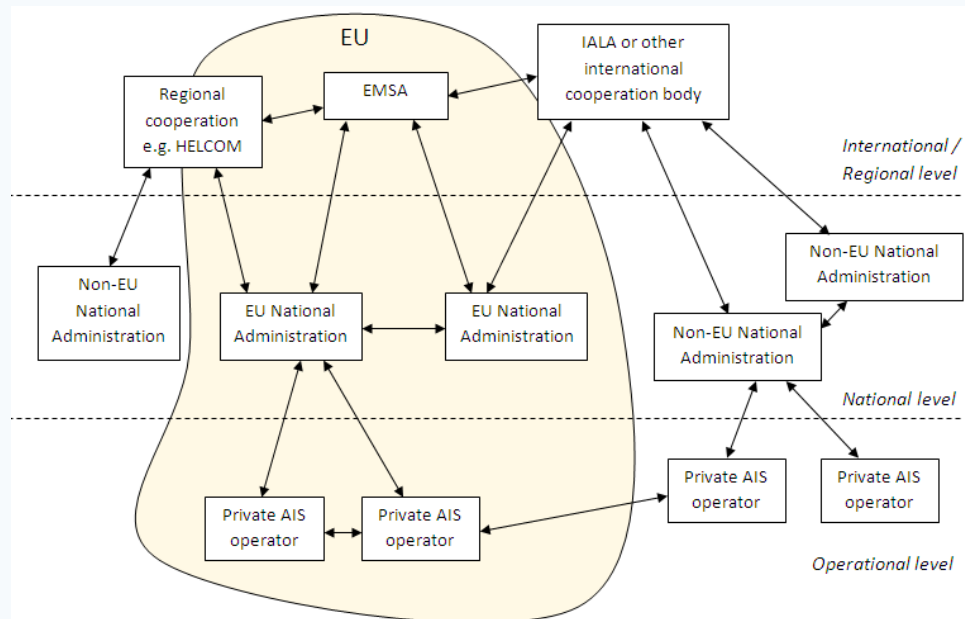
*Technically complex task,
geographically distributed time / frequency planning –
requires highly specialized tool*



Many stakeholders involved
local, national, regional, international

Global challenge!

Radio waves tend not to respect administrative boundaries...



Calls for transnational cooperation!

Task at hand: Develop highly specialized software tool, to a very limited market

Some theoretical work to be done



Technical experts available in EfficienSea project

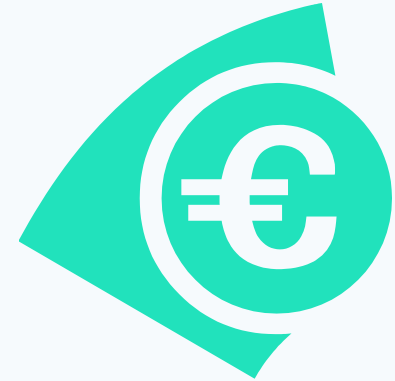


How to ensure future support and improvements, when market is limited...



Cost is always an issue...

High cost product = market value for supplier – high incentive for future support – but barriers for operators to use



Low cost product = AIS operators likely to participate, limit incentive for future product support



Strategic aim:

Sustainable maritime community
for sharing highly specialized software tools



Open Source Software Strategy

System blueprint available for anyone to improve or
support product

Free software package ensures no economical barriers -
widespread use

Why Open Source?

Not proprietary – stakeholder can freely develop extensions, improvements, etc. – world wide

Why Free?

Ensure no economic barriers prevent cooperation

Promote a sustainable

Maritime Open Source Software Community



Open Source License compatibility

Combining different OSS packages is like combining LEGO blocks of different colours...



... however, what if the red blocks are not allowed to combine with the yellow - and when combined, all other blocks become red too?

How to navigate OSS?

Describe OSS Strategy

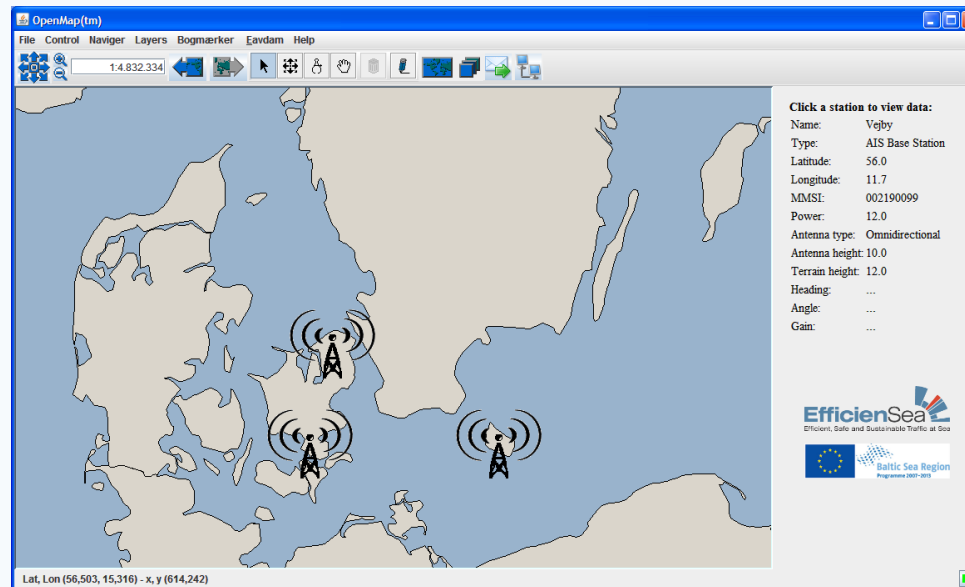
Ensure licensing conditions don't prevent compatibility with other stakeholders, including commercial

Enforce strategy – prevent inclusion of components, that violate licensing compatibility



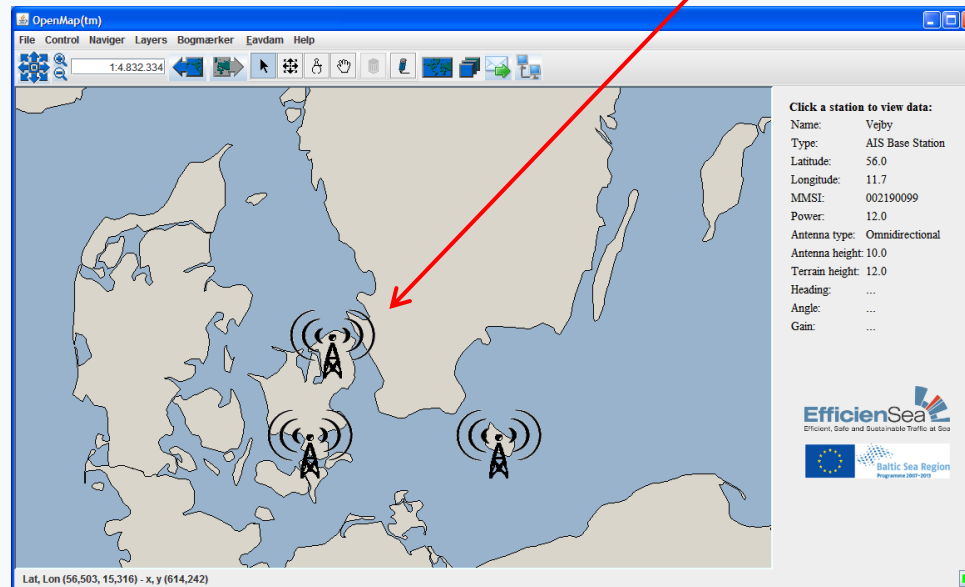
The EAVDAM application - Efficiensea Ais Vhf DAtalink Manager

Based on Open Source GIS viewer (OpenMap™)



The EAVDAM application - Efficiensea Ais Vhf DAtalink Manager

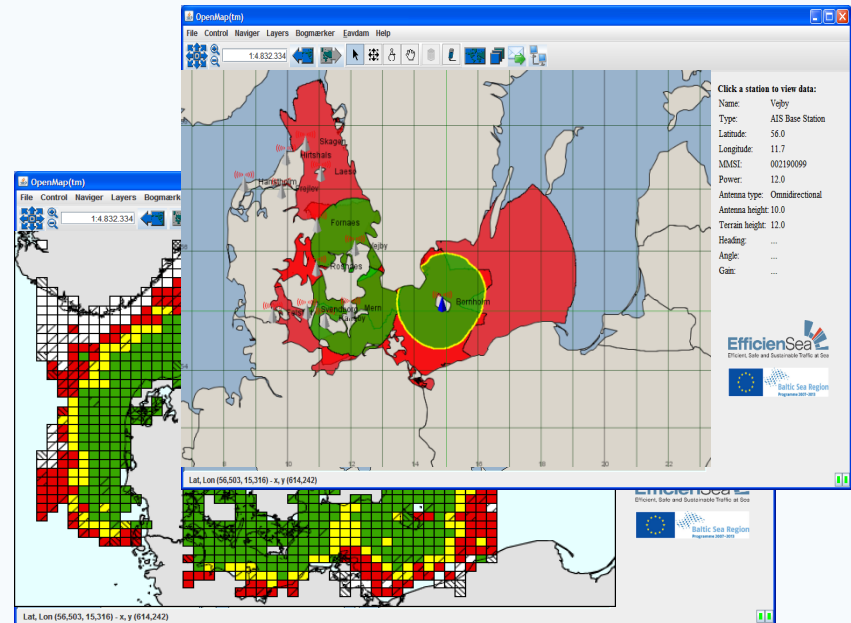
Ability to maintain data on **own fixed AIS stations**



The EAVDAM application - Efficiensea Ais Vhf DAtalink Manager

Different means of estimating geographical coverage

Declare coverage and interference areas

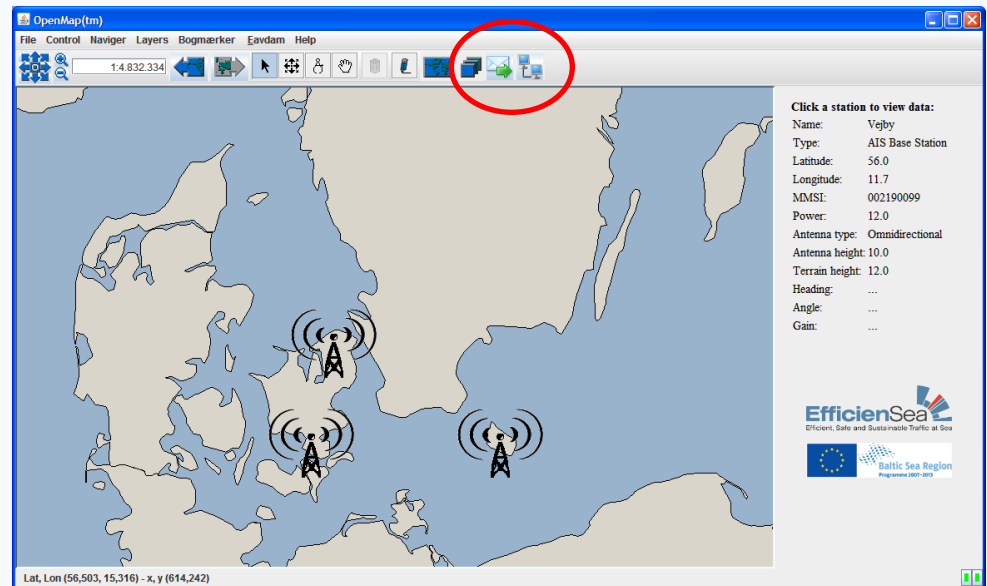


The EAVDAM application - Efficiensea Ais Vhf DAtalink Manager

Exchange data on current / planned stations, proposals for changes

Central respository or e-mail

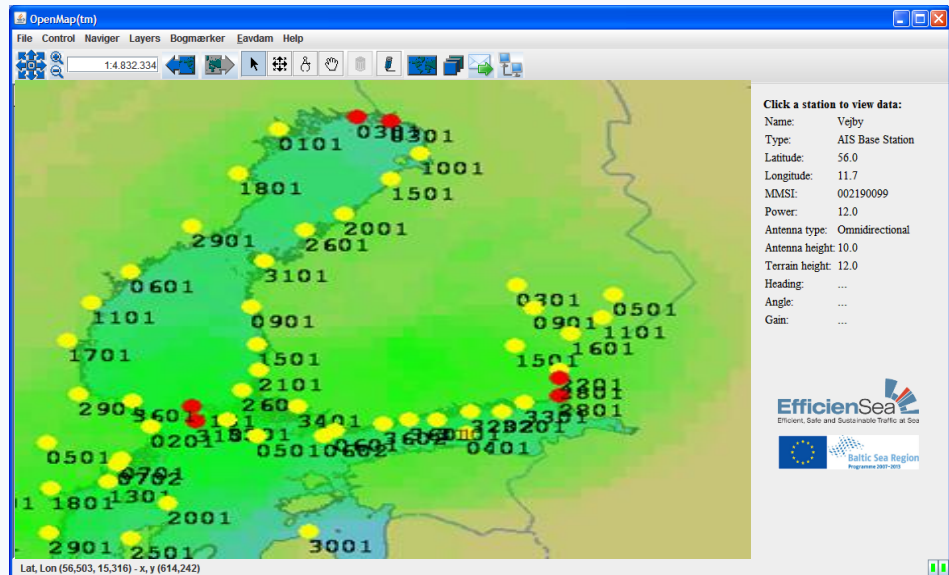
Supports peer-to-peer coordination or approval procedure



The EAVDAM application - Efficiensea Ais Vhf DAtalink Manager

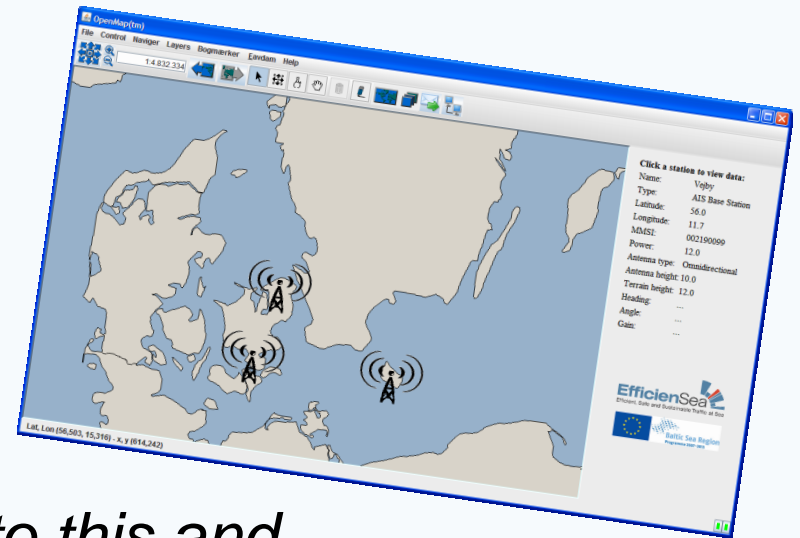
Detect conflicts in transmission schemes

Geographical
distribution of
capacity loading



Truly specialized tool

... requested by authorities in EU, Black Sea Region, Australia, Canada...



Many stakeholders may add to this and similar products In the future

Maybe the strategy for a Sustainable OSS Community holds more value, than the product itself?

Question: Where to establish a Maritime Open Source Software Community?

