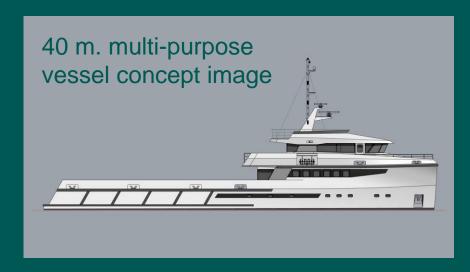
## Combining environmental monitoring and marine science between Finland and Estonia - Using available resources?

Juha Flinkman, Finnish Environment Institute SYKE





Gulf of Finland Science days, 16th – 17th Nov 2023 Tallinn, Estonia



#### Disclaimer:

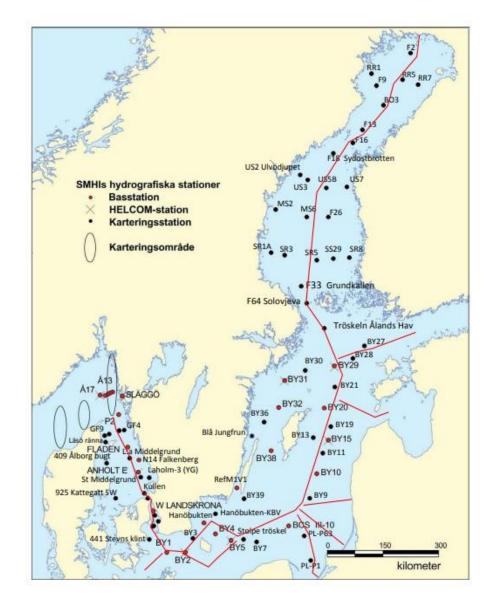
- What I will talk about now, is \_not\_ an official suggestion by SYKE or any other Finnish authority
- It is my personal opinion, based on 20+ years of experience as research vessel user, manager and developer
- Keyword: Trans-National Access, TNA
- In the core of my suggestion is the principle of cost-efficient use of existing research infrastuctures in order to achieve trans-national goals in marine environmental monitoring and science
- I'll probably get a bollocking for this, but it needs to be said out loud.





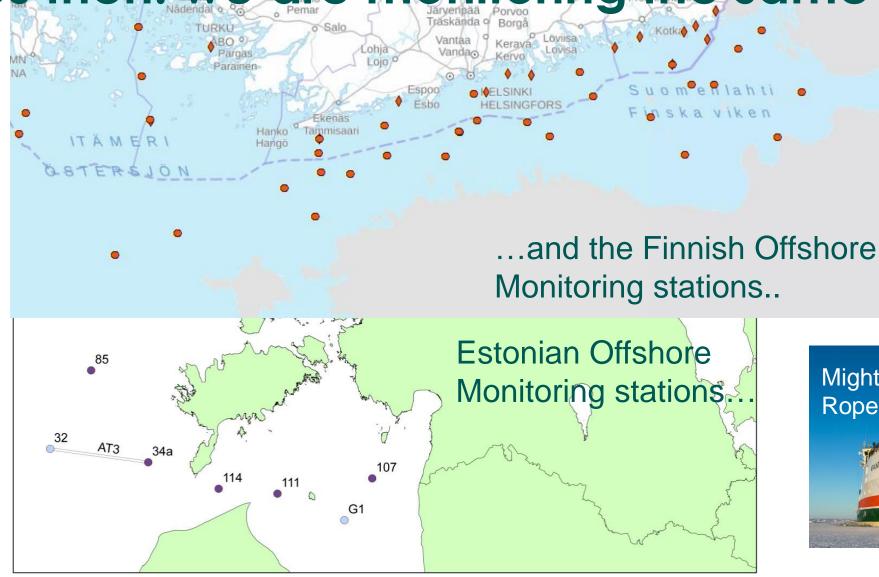
# Experiences of RI resource sharing between Finland and Sweden

- Use of R/V Aranda for Swedish environmental monitoring of the Baltic Sea: SYKE – SMHI co-operation 2014 – 2019!
- Increased amount of sea days for an available R/V
- Additional advantages: sharing the monitoring load, removing overlapping work
- More cost-effective monitoring!





### Us then: we are monitoring the same water!







### Harmonisation of monitoring programs?

- Considerable amount of work!
- Cruises: Estonia 6, Finland 4 annually
- Station networks: many stations are same, some different
- You can't break existing, long time series – need for careful evaluation and planning
- Monitoring is under QA, and we each have our own
- However, we've had intercalibrations...





### Lots of work, but there are advantages

- Working 24/7 on Aranda all year round is cost-efficient - saves time & money
- Finland: more sailing days for Aranda
- Estonia: access to a capable R/V on cost-cover basis only – avoid cost of ownership
- Share work load of science crew
- Include science projects to monitoring cruises
- Avoiding overlapping work would mean more resources

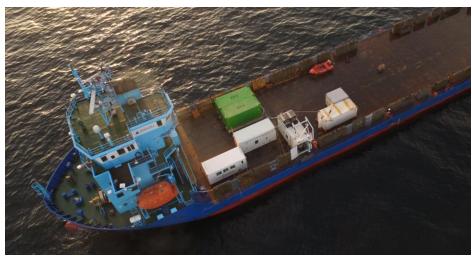




### Coastal monitoring?

- Finland has used ship-of-opportunity for this
- We have a working container-based sampling and analysis lab/winch/Aframe system
- Estonian New Vessel could use this
- This vessel could be used also for Finnish coastal monitoring
- GoF R/V "Barter Market"?







### TNA of large research infrastructures like R/V's

- That has been the common goal in European Marine Science for decades
- Primary goal is to facilitate access to R/V's for all scientists/research groups
- Secondary goal is to provide more cost-effective use to the R/V's
- Necessary funding tools have already been successfully developed: Eurofleets, Eurofleets II, Eurofleets +
- Development of Eurofleets RI...





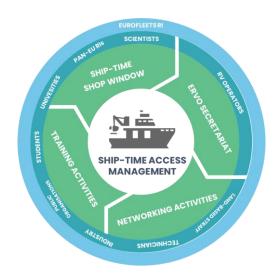




#### **Steps forward?**

- Utilize available resources for working the same water cost-efficiently
- Many Baltic States don't have a R/V...
- Create a Baltic Sea "Barter Market" for R/V's?
- Most importantly, work together transnationally in Eurofleets Legacy – also in marine environment monitoring!
- Participation to Eurofleets RI!
- Increase of "free" marine science => develop understanding of the sea, and work towards more accurate monitoring







In the coming years these Ladies need to be replaced. But the possibilities and options for co-operation between Finland and Estonia do not end there...



#### Thank you!

