Oil Spill Response Preparedness in the Baltic Sea
Finnish Point of View

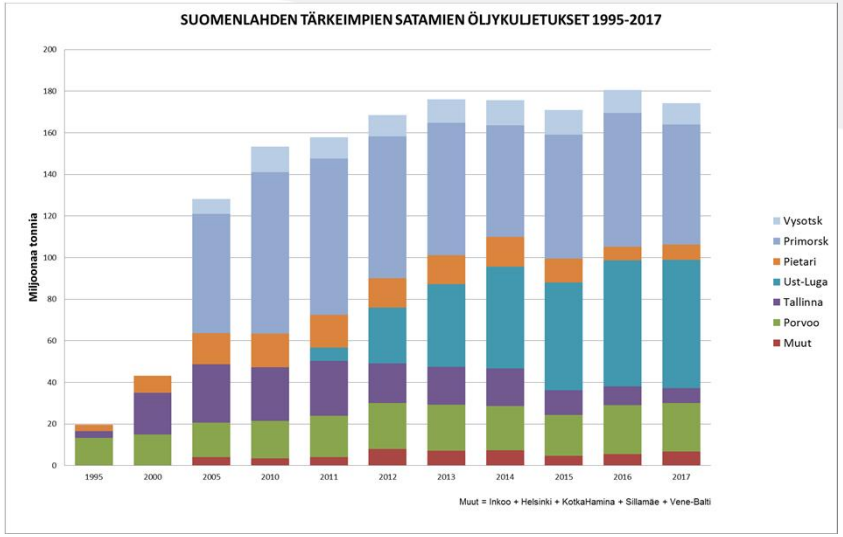
Commander Ismo Siikaluoma
SAR – and Maritime Safety Unit, Head of Unit

Extremes of the Baltic Sea...

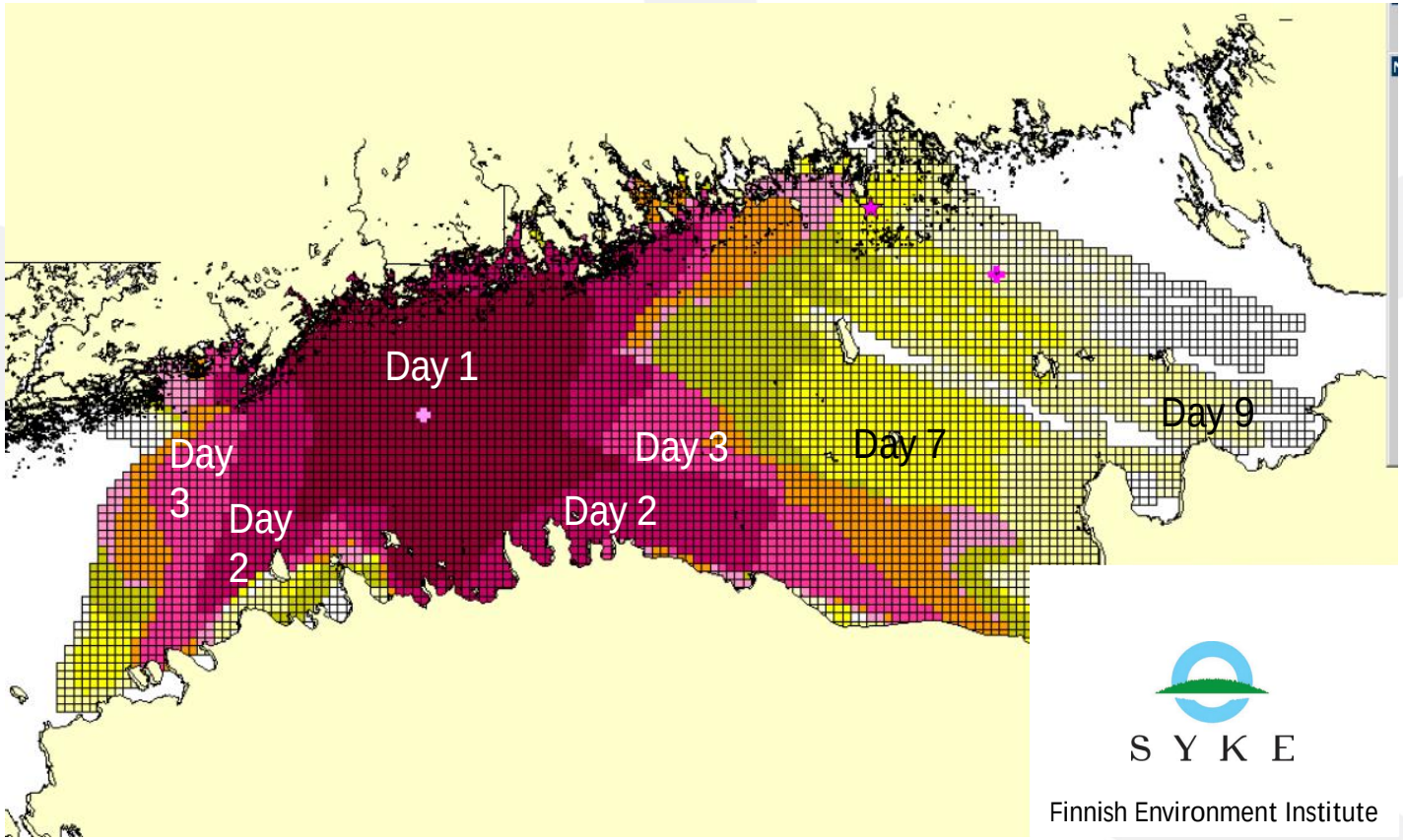
September

Maritime Traffic in the Baltic Sea

- Several oil terminals, 6 of them in the Gulf Of Finland
- Biggest oil cargo can be even 150 000 tons
- 120 vessels cross the Hanko-Paldiski line every day
  - 25 are tankers
- 45 000 vessels / year, 8 000 tankers / year



Simulations – Where can the oil be in 10 days?



SYKE

Finnish Environment Institute

Simulation of the spreading of 30 000 tons of oil in Autumn conditions.

RAJA

HELCOM

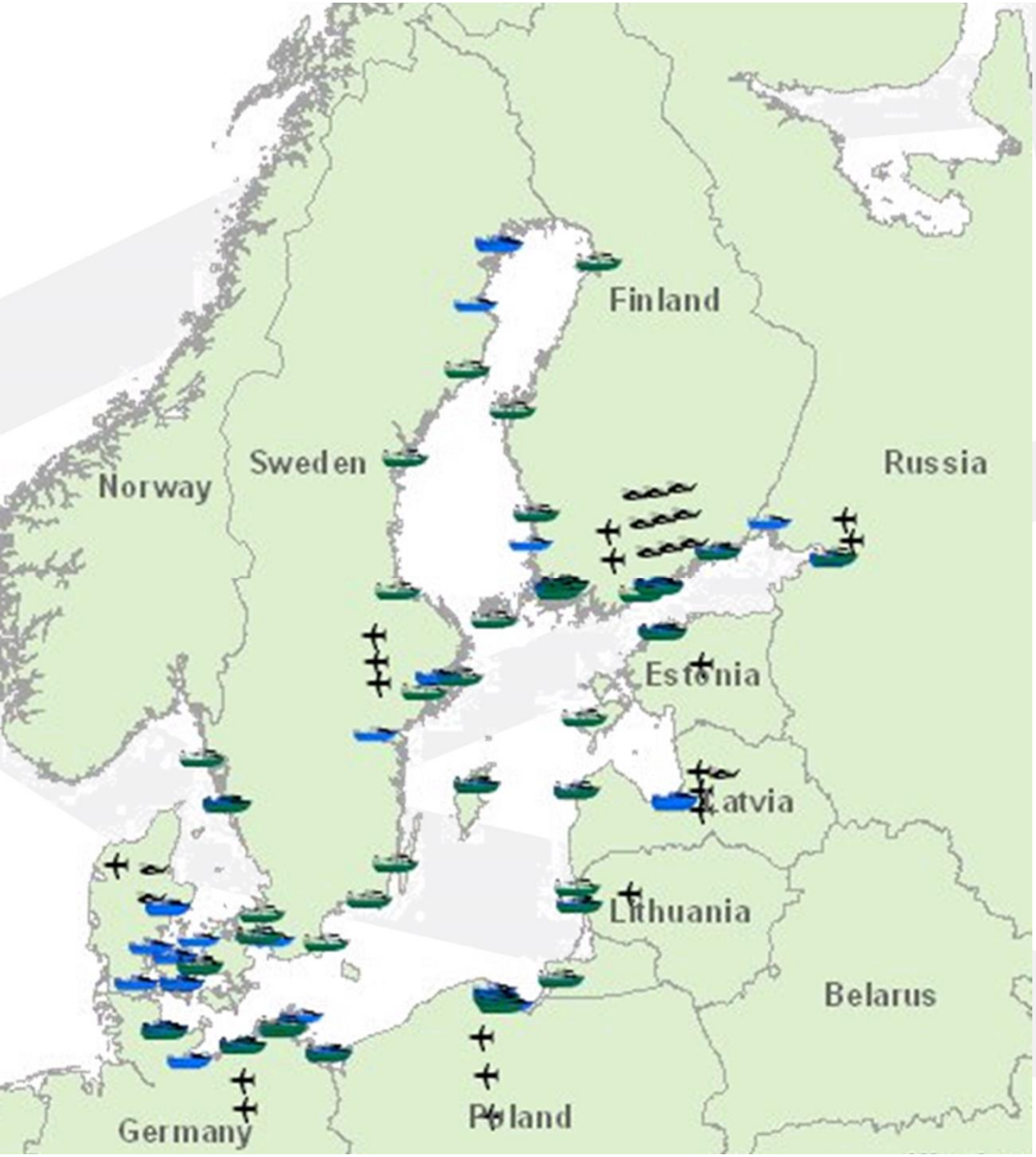
Helsinki Commission (HELCOM) - International co-operation since 1974 (new Convention signed in 1992)

Main task: to protect the marine environment of the Baltic Sea from all sources of pollution

10 Contracting Parties (9 Baltic Sea Coastal States and the EU)

Secretariat located in Helsinki, Finland

HELCOM



HELCOM Emergency and Response Capacity

- 70 emergency and sea-going response vessels
- 1 chartered by European Maritime Safety Agency (EMSA)
- Satellite and aerial surveillance
- Oil drift forecasting tools (HELCOM Seatrack Web)
- HELCOM RECOMMENDATION 31/1
  - First vessel has to be operational in 2h
  - Vessel has to reach any location in their EEZ in 6 h
  - 12 hours: adequate & substantial response started

Aerial Surveillance in the Baltic Sea

HELCOM Recommendations

- Each country should monitor its main shipping lanes and port entries at least twice a week and other sea areas once a week
- Aerial surveillance with remote sensing equipment
- Co-operation

HELCOM Response – Proven Preparedness to Respond to Pollution Incidents in the Baltic

- HELCOM Recommendations covering:

CO-OPERATION IN RESPONSE

COOPERATION IN CASE OF A CHEMICAL TANKER ACCIDENT

REPORTING AND REQUESTS FOR ASSISTANCE

RESTRICTED USE OF CHEMICAL AGENTS AND OTHER NON-MECHANICAL MEANS

AIRBORNE SURVEILLANCE

MINIMUM ABILITY TO RESPOND TO OIL SPILLAGES IN OIL TERMINALS

COMBAT POLLUTION FROM OFFSHORE UNITS

PLACES OF REFUGE

OILED WILDLIFE RESPONSE

DEVELOPMENT OF NATIONAL ABILITY TO RESPOND TO SPILLAGES

ENSURING ADEQUATE EMERGENCY CAPACITY

SUB-REGIONAL CO-OPERATION

DRIFT FORECASTING

FOLLOW-UP STUDIES IN CONNECTION WITH MAJOR OIL SPILLS

HELCOM Response

- Subgroups
  - aerial surveillance, shore response, oiled wildlife response, submerged objects, HNS manual update
- Exercises
  - Annual Balex Delta
  - Other smaller exercises
- Setting Targets for the Response Preparedness

- HELCOM Response Manuals (Vol. I Oil + Vol. II Hazardous Substances)
  - Reporting procedures
  - Requesting and providing assistance
  - Command structure and communication during operation etc
  - Co-operation on aerial surveillance
  - Oil sampling

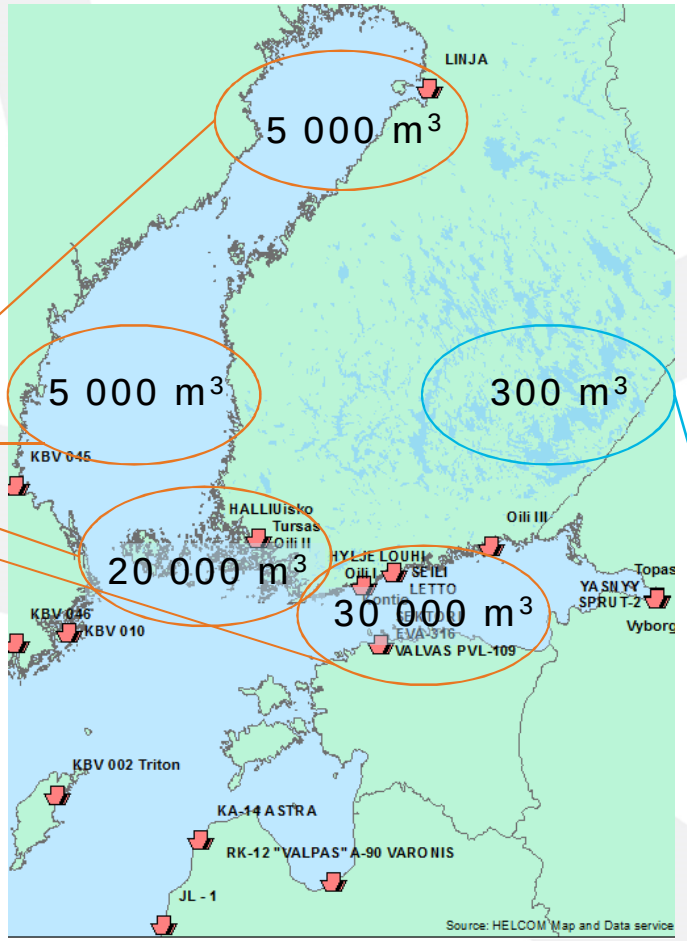
http://www.helcom.fi/Documents/HELCOM%20at%20work/Groups/RESPONSE/Work%20Plan%20for%20HELCOM%20Response%20Working%20Group%202017-2018.pdf

Oil Response in Finland

Oil Response Target Levels for Finland

What should Finland be able to respond to—together with neighboring countries?

Total outflow of two cargo tanks



Outflow of one fuel tank (no oil cargo allowed in the lake area)

Oil spill response preparedness in Finland

- Based on cooperation with other authorities and actors
- Area of responsible is dived in two
  - Open sea (FBG)
  - Shoreline (Rescue Services)
- Oil response vessels from FBG, Navy, governmental companies, salvage companies
- Preparedness is base on act (law) and agreements
- Rescue Services have about 150 vessels / boats to be able to use to response actions, 30 of those are capable to collect oil
- app. 150 km oil boom on store´s on the coast line

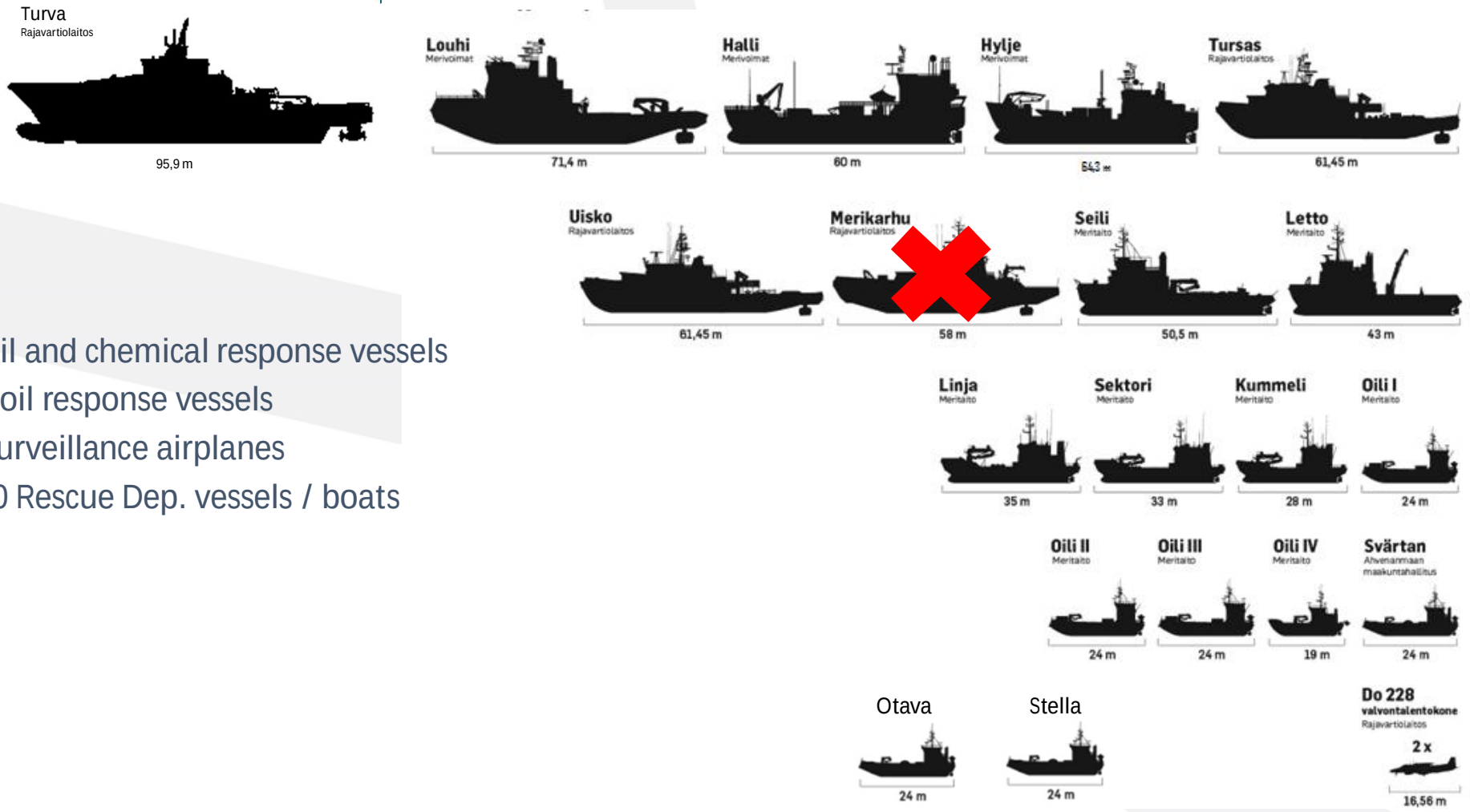
Oil Response in Finland is Cross Sectoral Cooperation

- **Governmental and local authorities, institutes and public utilities** are obliged to support the response operation so that it can be done in an efficient manner
- **Municipalities** are responsible for clean up of the coastline (shore) and islands
- Finnish Environment Institute, Traficom and Defence Forces are participating in Hazardous and Noxious Substances (HNS) and oil response operations
- Defense Forces in Response Operation:
  - Provides equipment (e.g. vessels, boats, vehicles), personnel and specialists
- Volunteer organizations have an active role

Preparedness

- Preparedness process is based on Search and Rescue (SAR) preparedness processes
- Each of the Rescue Service Districts have their own Response Plans
- Marine Oil Response planning process is lead by the Finnish Border Guard
  - Cooperation between Coast Guards and the Rescue Services

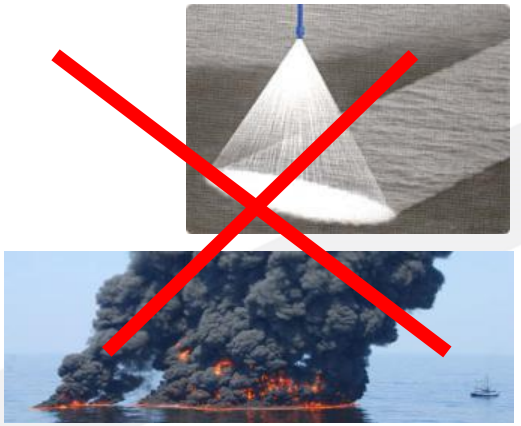
Finnish Oil Response Fleet



- 2 oil and chemical response vessels
- 18 oil response vessels
- 2 surveillance airplanes
- 150 Rescue Dep. vessels / boats

Oil Response Principles

- Governmental authorities are responsible for the whole operation
- HELCOM: restricted use of dispersants
- Mechanical oil response methods
  - in-built oil recovery systems on vessels
  - Oil booms
    - Restricting and directing of spreading
- Capability to work in various conditions
  - Bad weather and darkness
  - Ice
  - Shallow waters, Archipelago



Planning and Tactics of a Major Oil Response Operation?

- Will be developed in "OILART" project 2019-2020
  - Concept on how to design and command a large scale oil response operation
- Concrete outcomes of the project:

Tactical Principles of Oil Response in the Northern Baltic Sea

"Aim"

Designing and Commanding Tool for the Rescue Commander:

Efficient Coordination of the Existing Multisectoral Resources

"Means" – "How to"

RAJA

EUROPEAN MARITIME AND FISHERIES FUND
OPERATIONAL PROGRAMME FOR FINLAND 2014-2020

Centre for Economic Development, Transport and the Environment

European Union

RAJAVARTIOLAITOS
GRÄNSBEVAKNINGSVÄSENDET
THE FINNISH BORDER GUARD

Commander Ismo Siikaluoma
SAR – and Maritime Safety Unit, Head of Unit