

# Environmental Authority view

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Oil Spill Final conference

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# SYKE's role in oil spill response

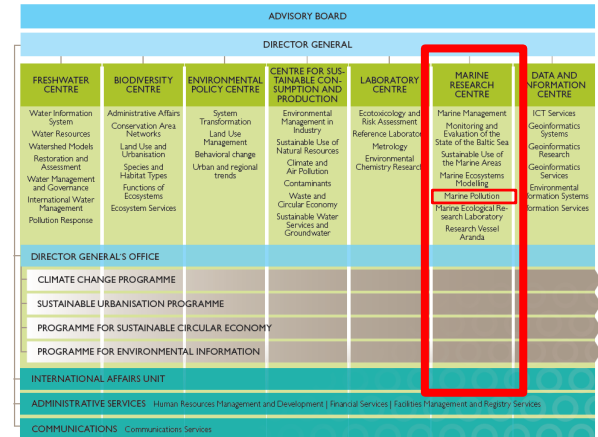
- The Finnish Environment Institute (SYKE) is a research institute and government agency under the Ministry of the Environment
- SYKE was the competent government oil pollution combatting authority (for large oil spills) until end of 2018, from 2019 onwards the authority is Finnish Border guard
- After the responsibility change some of the oil spill prevention projects moved to Marine Pollution unit
- Marine Pollution unit has expertise in impacts of oil spills and oil spill exercise and prevention methods on the Arctic region

# SYKE Marine Pollution unit

- Marine pollution unit specialized in research of harmful chemicals in marine environment
- Expertise in ecotoxicology, microbial and molecular ecology, marine chemistry, under water noise and hydroacoustic
- Impacts assessment of oil, microplastics, war chemicals and other chemicals

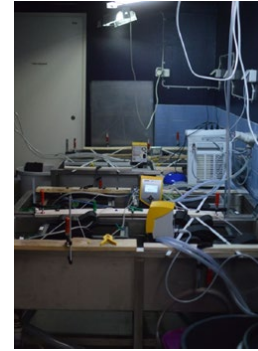


Finnish Environment Institute SYKE | Organisation 2018



# Research projects related to oil spills

- Research areas related to oil spills
  - Aquatic ecotoxicity and ecological impacts of oil spills
  - Crude oil biodegradation in Arctic conditions and microbial ecology
    - Effects of dispersants on biodegradation and dispersant toxicity
  - Bioremediation methods
- Recently ended and current projects:
  - GRACE (2016-2019), Oilres (2015-2019), Arctic Coast Bioremediation (ACBR) (2019-2021), Low Sulphur Fuel Oils NHK (2021)



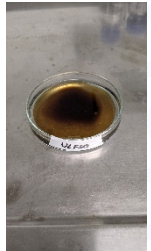
Ecotoxicity testing on mussels  
(Photo: Aino Ahvo)



Pilot-scale in-situ remediation of  
oil polluted sediments (Photo:  
Laura Hoikkala)



Photos from crude oil biodegradation experiments



# Other projects related to oil spills

- Other projects related to oil spill response in SYKE:
  - Oilspill
  - SIMREC
  - Hylyt
  - APP4SEA (ended 2020)



# OIL SPILL



- Enhancing Oil Spill Response Capability in the Baltic Sea Region - OIL SPILL
- The focus of the OIL SPILL project is to strengthen the oil spill response capability in the Baltic Sea Region (BSR) by enhancing cooperation structures, procedures and skills between and within the relevant stakeholders.
- SYKE's involvement in in WP2 and WP3

# WORK PACKAGE (WP) STRUCTURE (1/2)

## **WP 1: Project Management**

*Lead Partner: University of Turku (FI)*

## **WP 2: Horizontal & Vertical Cross-Border cooperation**

*WP 2 Leader: Ministry of Environment of Estonia (EE)*

### **GoA 2.1 Institutional and organisational cooperation**

*GoA 2.1 Leader: Ministry of Environment of Estonia (EE)*

### **GoA 2.2 Legal and liability issues (e.g. CAs vs. NGOs)**

*GoA 2.2 Leader: Finnish Environment Institute (FI)*



# WORK PACKAGE (WP) STRUCTURE (2/2)

## WP 3: Joint Exercises & Educational cooperation

*WP 3 Leader: SW Finland Emergency Services*

### GoA 3.1 Exercise execution & staff exchange

*GoA 3.1 Leader: SW Finland Emergency Services*

### GoA 3.2 Dissemination of state-of-the-art technologies

*GoA 3.2 Leader: Fire and Rescue Board of Klaipeda County (LT)*

### GoA 3.3 NGO educational activities in cooperation with CA's

*GoA 3.3 Leader: Finnish Red Cross (FI)*

### GoA 3.4 Maritime simulation training

*GoA 3.4. Leader: Tallinn University of Technology (EE)*





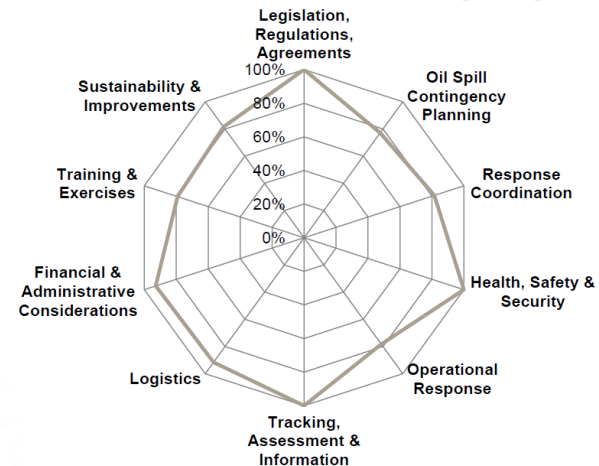
# WP2: RETOS tool

- RETOS tool was developed for assessing level of oil spill response planning and readiness management in relation to commonly agreed pre-established criteria considering international Best Management Practices
- Modelling was planned to be done with project partner authorities

Global Performance Analysis Results

Category	Value
Legislation, Regulations, Agreements	100 %
Oil Spill Contingency Planning	77 %
Response Coordination	82 %
Health, Safety & Security	100 %
Operational Response	78 %
Tracking, Assessment & Information Management	100 %
Logistics	92 %
Financial & Administrative Considerations	93 %
Training & Exercises	79 %
Sustainability & Improvements	82 %
<b>Total</b>	<b>84 %</b>
<i>Institution Specific Criteria</i>	<i>N/A</i>

Level C Results with No Weighting



## More Information:

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