

# GES-REG

## Good Environmental status through regional coordination and capacity building

**Urmas Lips**  
**GES-REG Project Coordinator**



# Project aim

The main aim of the project is **to support coherent and coordinated** implementation of Marine Strategy Framework Directive (2008/56/EC) in the central and north-eastern sub-regions of the Baltic Sea – in the Gulf of Finland, northern part of the Baltic Proper and Gulf of Riga

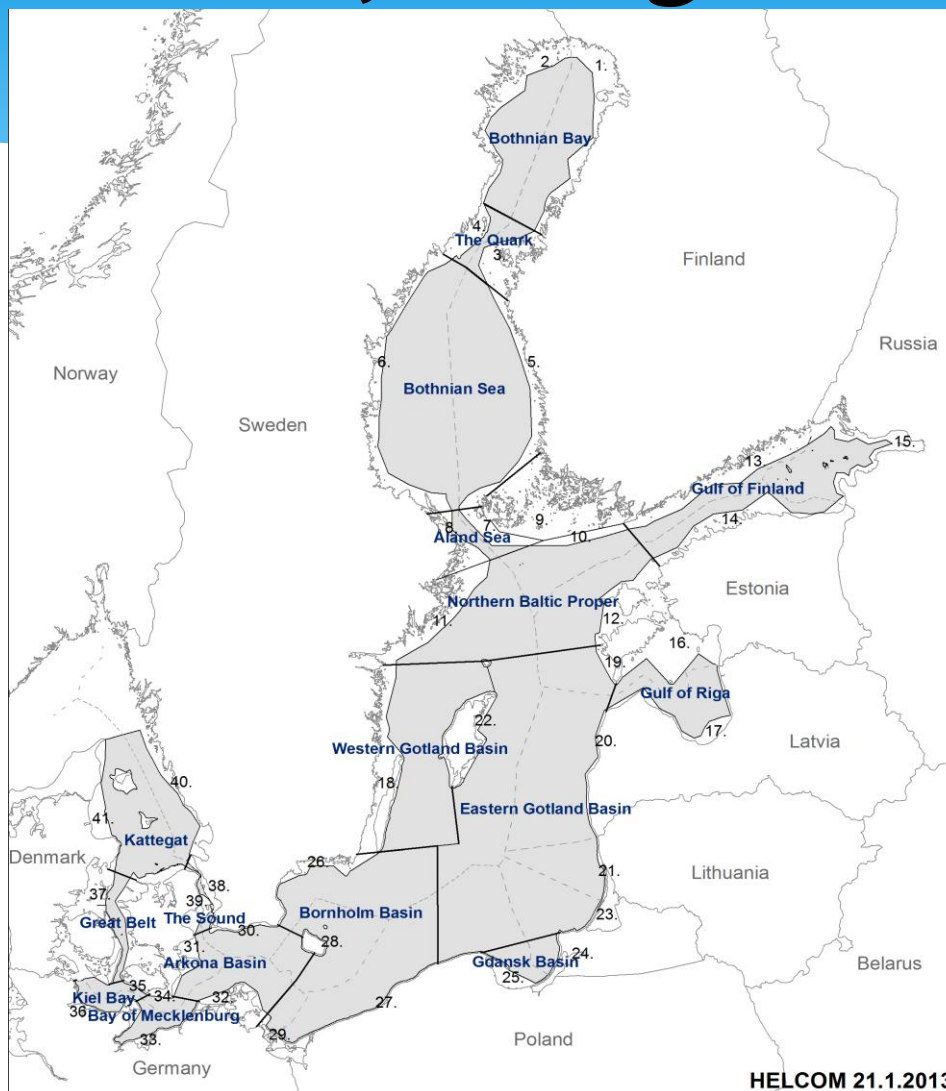
GES-REG supports implementation of MSFD in all participating countries and gives input to the parallel work in HELCOM

Duration – 1 June 2011 – 31 December 2013

Budget – 1 472 648 €, including 1 137 446 € ERDF funding

Web site: <http://gesreg.msi.ttu.ee/en>

# Project region



Gulf of Finland

Northern  
Baltic Proper

Gulf of Riga

# Project partners

## Partners:

Tallinn University of Technology, Marine Systems Institute (**MSI**) - LP  
University of Tartu, Estonian Marine Institute (**EMI**)  
Ministry of the Environment of Estonia (**MoE-Est**)  
Estonian Institute for Sustainable Development/Stockholm Environment  
Institute Tallinn Centre (**SEIT**)  
Latvian Institute of Aquatic Ecology (**LHEI**)  
Finnish Environment Institute (**SYKE**)  
Finnish Game and Fisheries Research Institute (**RKTL**)

## Associated Partners:

MTT Agrifood Research Finland (**MTT**)  
Stockholm University, Stockholm Resilience Centre, BalticSTERN Secretariat  
(**SRC**)

# Work packages

**WP1 – Project management and coordination** – to guarantee high quality administration, management and communication

**WP2 – Analysis of initial assessments** – to perform detailed analysis of initial assessments for coherence and gaps

**WP3 – Advance knowledge base to support assessment of GES** – guidance for harmonised use of descriptors, criteria and indicators

**WP4 – Sound and cost effective joint monitoring and assessment scheme**

**WP5 – Economic and social analysis**

**WP3 – Advance knowledge base to support assessment of GES** (MSFD Article 9); responsible partner – SYKE, involved partners – MSI, EMI, LHEI, RKTL

**Content** – Analyses of methodologies will be conducted for descriptors: **non-indigenous species, food webs, marine litter and underwater noise. Seminars and small-scale pilot studies** in will be carried out to contribute to the capacity building

**Planned results** – **Reports** summarising and analysing the information on **methodologies** that can be used to develop further the science base for **GES descriptors, criteria and indicators** as well as defining need for **capacity building**



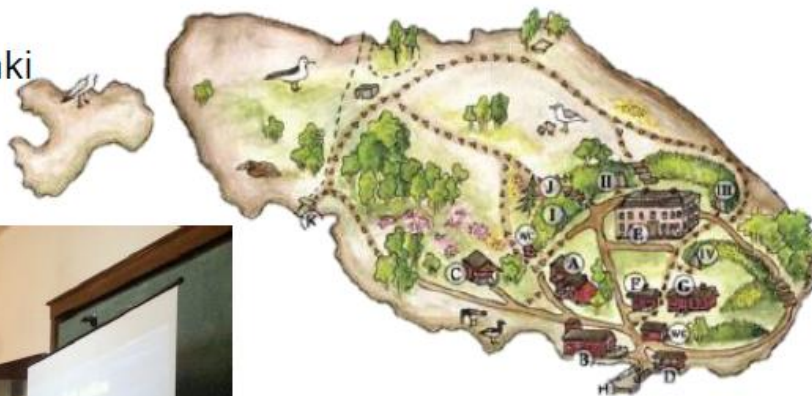


# Seminar in August 2012

NE RESEARCH CENTRE

## 3. Seminar on food webs and non-indigenous species

- August 2012 in Helsinki
- 5 speakers
- 29 participants



# Seminar on marine litter and underwater noise, 24-25 Jan 2013

## Structure of the seminar:

First day – marine litter. Second day – underwater noise

Lectures and presentations by invited speakers and by project partners (results of pilot studies)

Workshop/panel discussion – the aim is to answer questions, such as – what are the most important issues to focus on (regarding marine litter), next steps to initiate monitoring and assessment, priorities for capacity building



# Seminar on marine litter and underwater noise, 24-25 Jan 2013

Workshop questions:

What are **the most important issues and/or first steps** to be able **to assess the status** in regard of marine litter

e.g. monitoring of what parameters – macro-litter as beached litter or on the sea bed, micro-litter in water and sediments), modelling approaches, GES etc

What are **the priorities for research** and development?

# Underwater noise Introduction to the day

MSFD Descriptor 11 – Introduction of energy, including underwater noise, is at levels that do not adversely affect the marine environment

COM Decision 1 Sep 2010:

11.1 Distribution in time and place of loud, low and mid frequency impulsive sounds

11.2 Continuous low frequency sound

# Underwater noise Indicators

11.1.1 Proportion of days and their distribution within a calendar year over areas of a determined surface, as well as their spatial distribution, in which anthropogenic sound sources exceed levels that are likely to entail significant impact on marine animals measured as Sound Exposure Level (in dB re  $1\mu\text{Pa}^2 / \text{Hz}$ ) or as peak sound pressure level (in dB re  $1\mu\text{Pa}_{\text{peak}}$ ) at one metre, measured over the frequency band 10 Hz to 10 kHz

# Underwater noise Indicators

11.2.1 Trends in the ambient noise level within the 1/3 octave bands 63 and 125 Hz (centre frequency) (re 1 $\mu$ Pa RMS; average noise level in these octave bands over a year) measured by observation stations and/or with the use of models if appropriate

# Underwater noise Initial assessments

Main gaps of the Initial Assessments relate to underwater noise and marine litter.

There is also insufficient or no monitoring at national or HELCOM level for marine litter and underwater noise.

Marine litter and underwater noise are currently not adequately covered at national or regional level.

## Baltic Sea Roof Report

Overview of the reporting by Baltic Sea EU member states for Articles 8, 9 and 10 of the Marine Strategy Framework Directive and HELCOM's activities as the regional coordination platform



HELCOM GEAR Group



# Underwater noise TSG Report

The most widespread and pervasive kind of anthropogenic energy introduced to the marine environment is underwater sound. Organisms that are exposed to sound can be adversely affected both on a short timescale (acute effect) and on a long timescale (permanent or chronic effects). These adverse effects can be widespread and it was decided that the two indicators for underwater noise be used in describing Good Environmental Status:  
**Impulsive noise and Ambient noise**

European Marine Strategy Framework Directive  
Good Environmental Status (MSFD-GES)

Report of the Technical Subgroup on Underwater Noise  
and other forms of energy

Final Report

27 February 2012



# Seminar on marine litter and underwater noise, 24-25 Jan 2013

## Workshop questions:

What are **the most important issues and/or first steps** to be able **to assess the status** in regard of underwater noise  
e.g. monitoring of loud, low and mid frequency impulsive sounds; monitoring of continuous low frequency sound; modelling approaches, GES etc

What are **the priorities for research** and development?