

HELCOM HOLAS II

Monika Stankiewicz
HELCOM Executive Secretary



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Estonia

Latvia

Denmark

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Poland

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Ukraine



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Lithuania

Denmark

Poland

Germany

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Ukraine



HELCOM assessments – history in a nutshell

Three decades later...

BALTIC SEA ENVIRONMENT PROCEEDINGS

No. 5 B

ASSESSMENT OF THE EFFECTS OF POLLUTION ON THE
NATURAL RESOURCES OF THE BALTIC SEA, 1980

PART A-1: OVERALL CONCLUSIONS
PART A-2: SUMMARY OF RESULTS
PART B: SCIENTIFIC MATERIAL



Editor: Terttu Melvasalo

Editorial Board: Janet Pawlak (Editorial Secretary),
Klaus Grasshoff, Lars Thorell and
Alla Tsiban

BALTIC MARINE ENVIRONMENT PROTECTION COMMISSION
- HELSINKI COMMISSION -

Baltic Sea Environment Proceedings No. 122

Ecosystem Health of the Baltic Sea

HELCOM Initial Holistic Assessment



Helsinki Commission

Baltic Marine Environment Protection Commission



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HELCOM Monitoring and Assessment Strategy

carried out in six-year monitoring and assessment cycles



Holistic Assessments

- periodical
- using assessment tools

Thematic Assessments

- periodical
- using assessment tools

Core indicators

- updated regularly
- measure distance to GES

Supplementary Indicators & Supporting parameters

- Updated as needed
- Linked to specific core indicators



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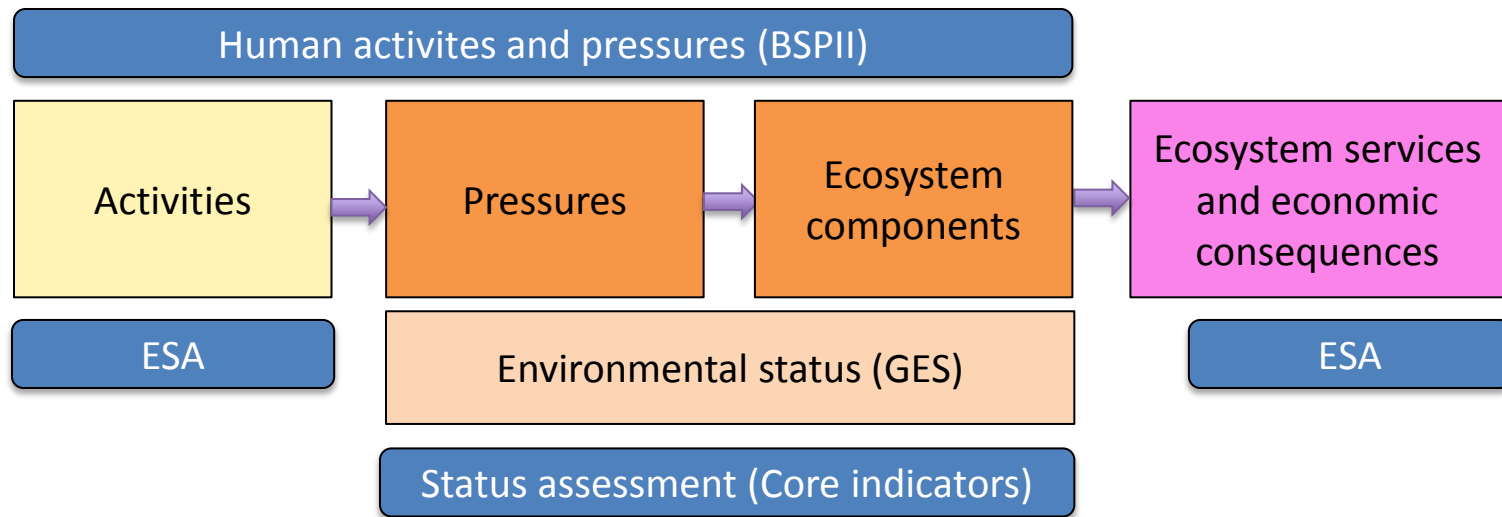
Project for developing a Second Holistic Assessment of the Ecosystem Health of the Baltic Sea (HOLAS II)

2015-2018



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Proposed holistic assessment framework

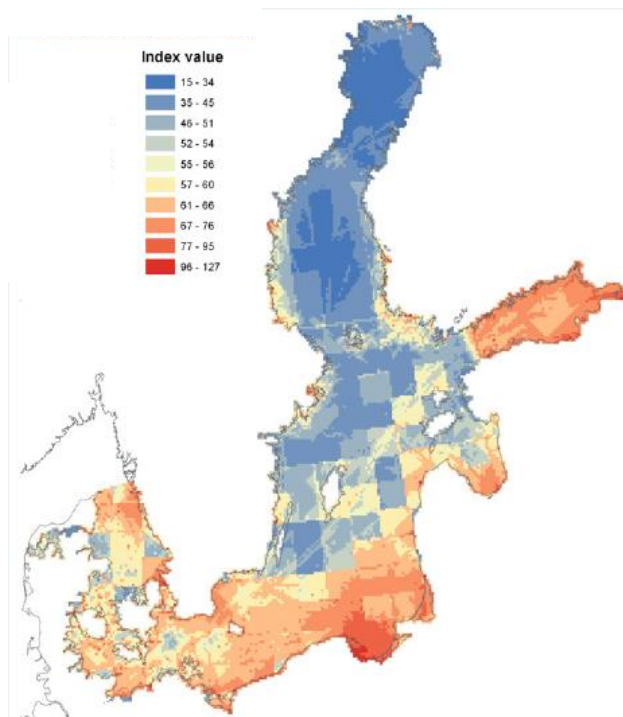


Align: data, data products, linkages between boxes, terminology, classifications
Conceptual framework for the analyses and the non-quantitative parts

The 2010 Pressure indices

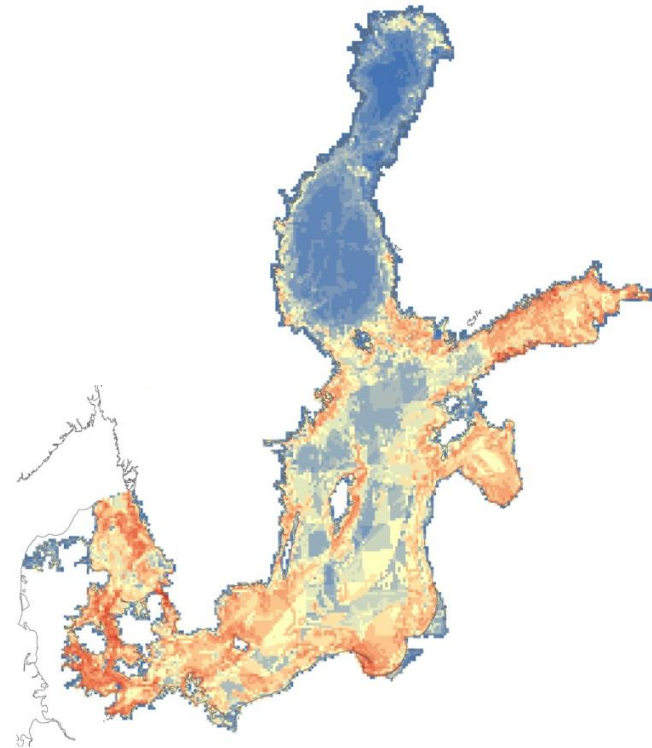
HELCOM BSPI (Baltic Sea Pressure index)

- Pressure data layers (intensity)



HELCOM BSPII (Baltic Sea Impact Index)

- Pressure data layer & Ecosystem component data layers & Impact scores



Korpinen et al 2012. *Ecological Indicators* 15:105-114.



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Baltic Sea Pressure and Impact index

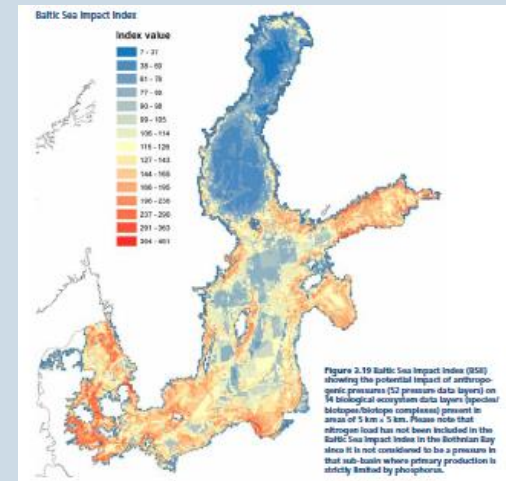
Pressure data layer

x

Impact score

x

Ecosystem component data layer



Impact scores rate the sensitivity of the ecosystem component to the concerned pressure, eg from 1-3.



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Collation of spatial datasets

HUMAN ACTIVITIES 43 datasets

PRESSURES 44 datasets

ECOSYSTEM COMPONENTS

Pelagic habitats (2)

Broad-scale seabed habitats (6)

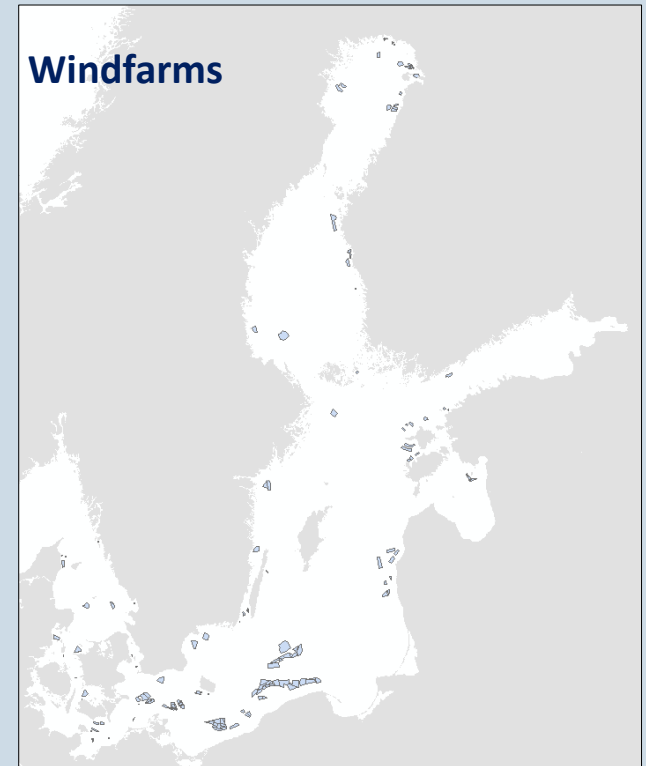
Habitat-forming species (5)

Natura 2000 habitats (8)

Fish species (7)

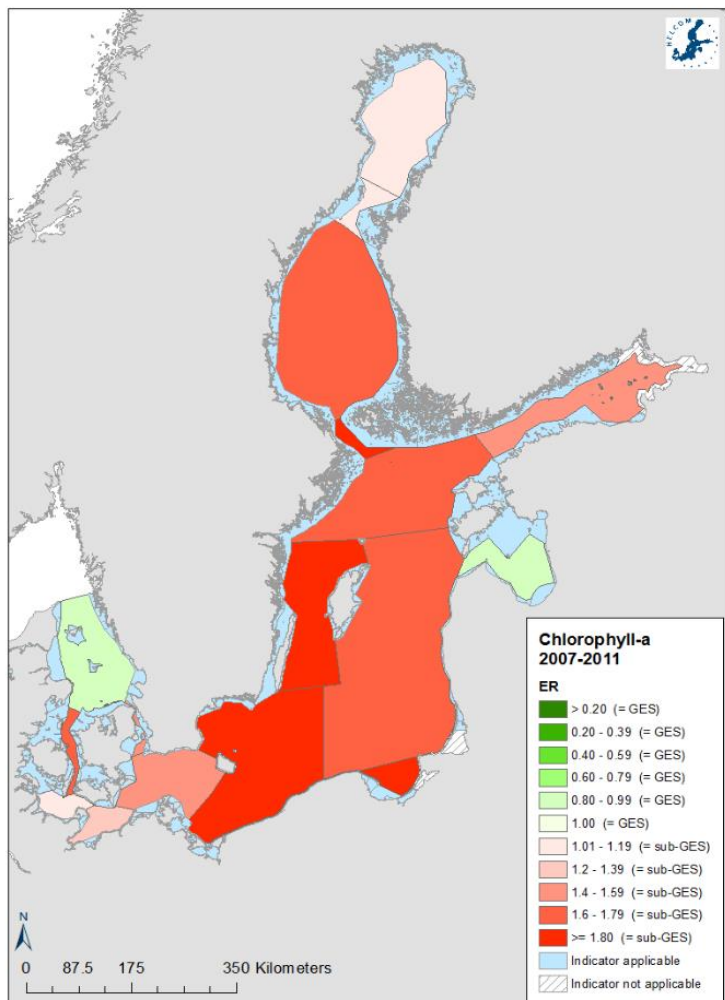
Important bird areas (3)

Marine mammals (3)



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Status assessment - indicators



Chlorophyll-a in 2007-2011.
Green = GES, red = SubGES.

Indicator was updated for update of overall eutrophication status of the Baltic Sea, and published as web reports (<http://www.helcom.fi/baltic-sea-trends/indicators/>). (BSEP 143).



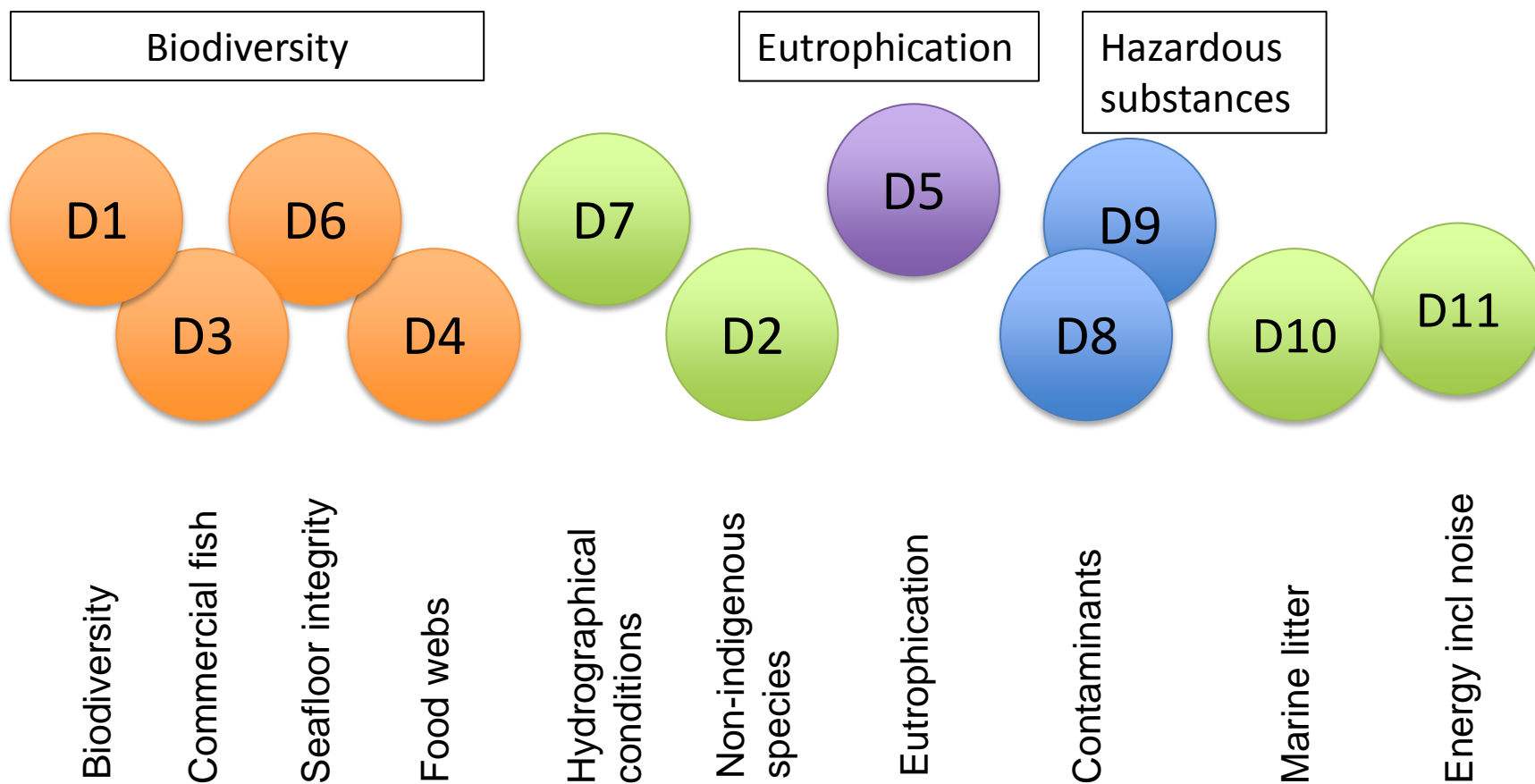
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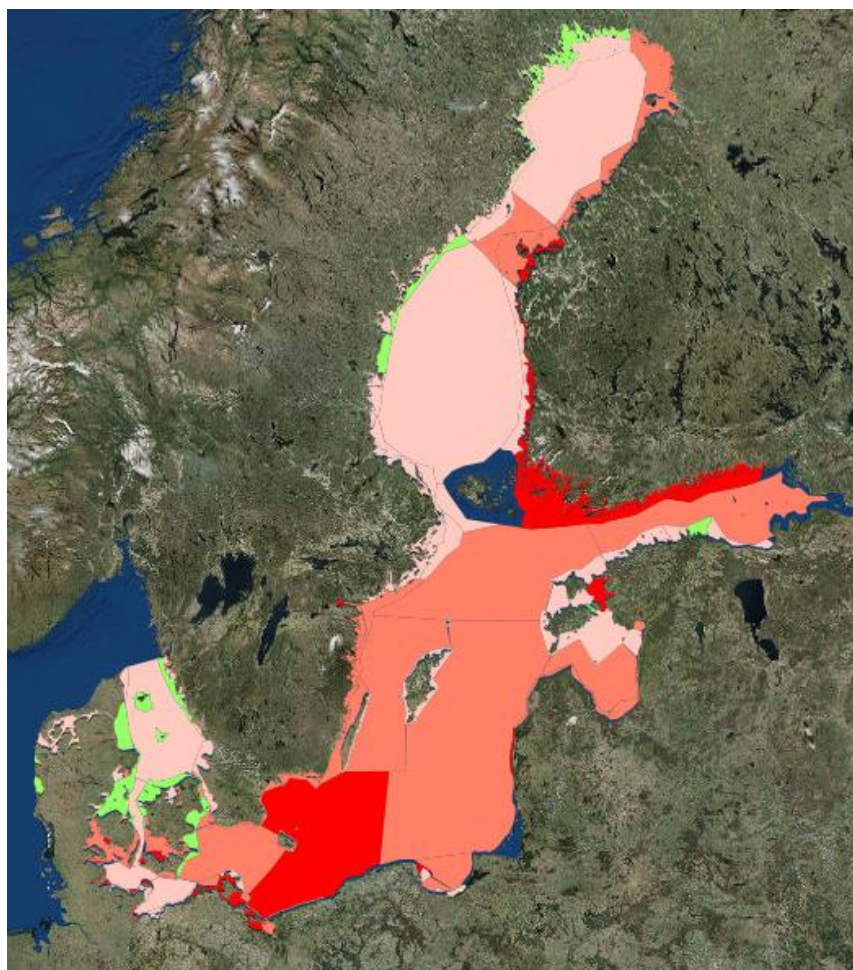
Coverage of the core indicators

D2 Non Indigenous Species (C-GES 1)	Birds (C-GES 2) BIRDS ABUND BREED (C-GES) BIRDS ABUND WINTER (C-GES)	Mammals (C-GES 4) SEALS DISTR (C-GES) SEALS POP (C-GES) MAMMALS NUTRITION (C-GES) MAMMALS REPR (C-GES)	Fish (C-GES 4+2) FISH COAST FUNCT (C-GES) FISH COAST KEY SP (C-GES) FISH SALMON REPR (C-GES) FISH SEATROUT REPR (C-GES) FISH LFI (C) FISH ML (PC) COMM FISH 3.2 (ICES-GES) COMM FISH 3.3 (ICES-GES)	D8 Contaminants (C-GES 6) HAZ HBCDD (C-GES) HAZ METALS (C-GES) HAZ PBDE (C-GES) HAZ PFOS (C-GES) HAZ RAD (C-GES) HAZ EAGLE REPR (C-GES) HAZ PCB (C) HAZ PAH (C) HAZ TBT IMPO (C) HAZ ACI (PC) HAZ DICLO (PC) HAZ ESTRO (PC) HAZ LMS (PC) HAZ REPR (PC)
NIS ARRIVAL (C-GES)				
D3 Commercial fishing (C-GES 1)	Benthic habitats (C-GES 0) BENTHOS POP STRUCTURE (C) BENTHOS BQI (C) BENTHIC DISTR BIOTOPES (PC) VEGETATION DEPTH (PC)	Pelagic habitats (C-GES 1) PELA ZOOPLANKTON (C-GES) PELA DIATOM DINOS (PC) PELA SEASON SUCC (PC) EUTRO PRIM CSA (PC) EUTRO SPRING BLOOM (PC)	Food webs (C-GES 0) -	
COMM FISH 3.1 (ICES-GES)				
D6 Seafloor integrity (C-GES 0)	D10 Marine litter (C-GES 0) LITTER BEACH (PC)	D11 Energy and noise (C-GES 0) NOISE CONTINUOUS (PC)		
SEAFLOOR CUM IMPACT (PC)				
D5 Eutrophication (C-GES 5)				
EUTRO DIN (C-GES) EUTRO DIP (C-GES) EUTRO CHLA (C-GES) EUTRO CLARITY (C-GES) EUTRO OX DEBT (C-GES) EUTRO NTOT (PC) EUTRO PTOT (PC)				Annex III EUTRO MAI (C-GES) INCIDENTAL CATCH (C) OIL SPILLS (PC)

C-GES=Core indicator with GES definition, C=Core indicator still lacking GES definition, PC=Pre-Core

Draft grouping of indicators in HOLAS II





- ≤ 0.5 (GES)
- 0.5 - 1.0 (GES)
- 1.0 - 1.5 (SubGES)
- 1.5 - 2.0 (SubGES)
- > 2.0 (SubGES)

Test assessment: overall eutrophication status.



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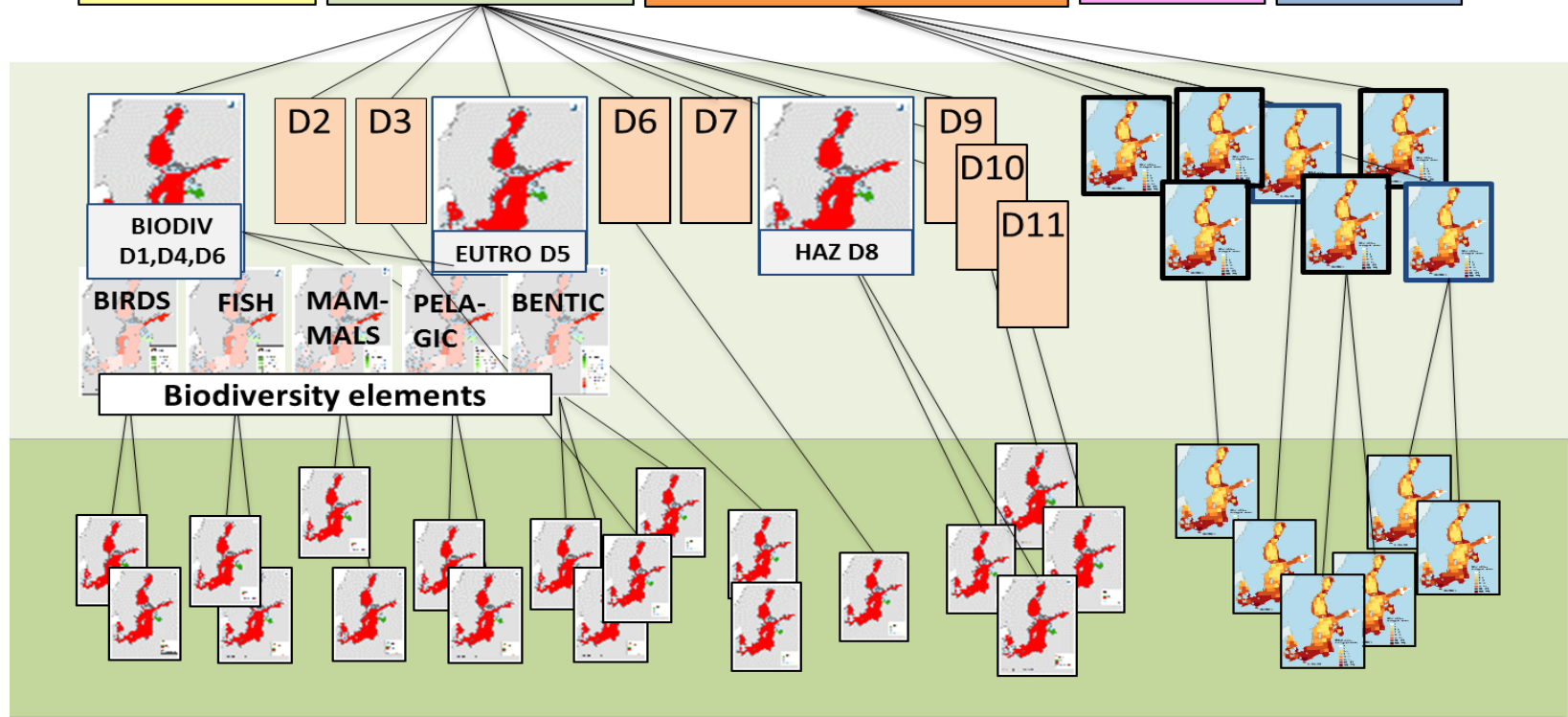
Economic and social analyses (ESA): how to link the natural science-based assessment to analyses of benefits and consequences for human well-being

- Use of marine waters
 - Linked to assessment of human activities and pressures
- Cost of degradation
 - Benefits forgone if GES is not reached
- Ecosystem services?

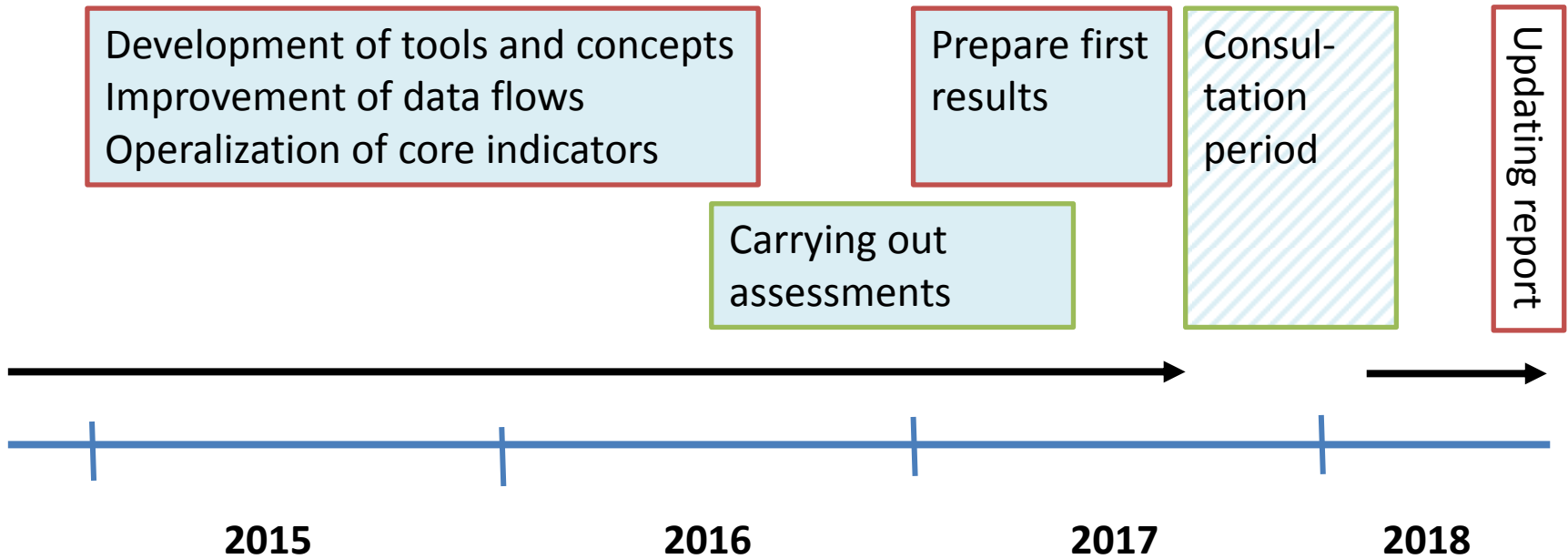


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Overview of HOLAS II outputs at different level of detail



Timeline



How is this possible?

Keep key stakeholders informed

[<< Back to the news list](#)

A FISHY PART OF MARINE ENVIRONMENTAL POLICY?

Category: News
09/05/2016 09:20

This week is all about fish in the Baltic Sea as three HELCOM meetings dealing with sustainable fisheries are held back-to-back in Gothenburg, Sweden. Key topics for HELCOM professionals gathering this week include migratory fish species, indicators, as well as the follow up of the recent HELCOM Recommendation on aquaculture. HELCOM has worked for years for healthy Baltic Sea [fish populations](#) as important parts of the ecosystem, weakened by unsustainable fishing as well as pollution including eutrophication-induced oxygen depletion and high levels of hazardous substances.



Baltic herring. Photo: Riku Lumiaro/SYKE.

RELATED

Action area: Fisheries

Action area: Fish communities

HELCOM Fish Group

Second Meeting of the HELCOM Task Force on migratory fish species (FISH-M 2-2016), 9 May 2016.

HELCOM workshop on fish indicators (FISH IND WS 2016), 10 May 2016.

4th Meeting of the Group on Ecosystem-based Sustainable Fisheries (FISH 4-2016), 11-12 May 2016.



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Recommendations

- In absence of knowledge on status or impacts, assessment of human activities and pressures could still be of great value
- Utilize global monitoring for regional purposes
- Grass root work needed to harmonize national monitoring
- Include social-economic analysis from the beginning
- Spatial data important (maritime spatial planning)
- No restriction on data use
- Engage national experts in assessments to build capacities





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Vacancy for HELCOM Communication Secretary
- apply by 25 November



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