

Prioritization of indicator work for HOLAS III:

Indicator name/topic		Policy relevance (prioritization, see colours)
By-catch	By-catch (currently considers birds and mammals, not fish)	BSAP – Biodiversity, MSFD – D1C1
Marine mammals	Harbour porpoise abundance	BSAP – Biodiversity, MSFD – D1C2
	Harbour porpoise distribution	BSAP – Biodiversity, MSFD – D1C2
	Habitat for marine mammals	BSAP – Biodiversity, MSFD – D1C5
Pelagic habitats	Pelagic habitats – seasonal succession of dominating phytoplankton groups	BSAP – Biodiversity, MSFD – D1C6
	Pelagic habitats – zooplankton Mean Size and Total Stock	BSAP – Biodiversity, MSFD – D1C6
Foodwebs	Foodwebs	BSAP – Biodiversity, MSFD – D4C1 and D4C2
Seafloor/ Benthic habitats	Seafloor integrity/Benthic habitats – physical loss	BSAP – Biodiversity (and Maritime activities), MSFD – D6C1
	Seafloor integrity/Benthic habitats – physical disturbance	BSAP – Biodiversity (and Maritime activities), MSFD – D6C2
	Seafloor integrity/Benthic habitats – Cumulative impact on benthic biotopes	BSAP – Biodiversity (and Maritime activities), MSFD – D6C3
	Seafloor integrity/Benthic habitats - Condition of benthic habitats (?)	BSAP – Biodiversity (and Maritime activities), MSFD – D6C4
	Seafloor integrity/Benthic habitats – State of soft-bottom macrofauna community (?)	BSAP – Biodiversity (and Maritime activities), MSFD – D6C5
Fish	Fishing mortality (commercial fish)	BSAP – Biodiversity (and Maritime activities), MSFD – D3C1
	Spawning stock biomass (commercial fish)	BSAP – Biodiversity (and Maritime activities), MSFD – D3C2
	Age and size distribution (commercial fish)	BSAP – Biodiversity (and Maritime activities), MSFD – D3C3/D1C3
	Fish demographic factors – L90 coastal fish (commercial fish above)	BSAP – Biodiversity, MSFD – D1C3
	Fish distribution	BSAP – Biodiversity, MSFD – D1C3
	Fish habitat	BSAP – Biodiversity, MSFD – D1C3
	Abundance of key coastal fish species	BSAP – Biodiversity, MSFD – D1C2
	Eel and Sturgeon	BSAP – Biodiversity, MSFD – D1C2
Waterbirds	Abundance of waterbirds in the wintering season	BSAP – Biodiversity, MSFD – D1C2
	Breeding productiuivity of waterbirds	BSAP – Biodiversity, MSFD – D1C3
	Waterbird habitat quality	BSAP – Biodiversity, MSFD – D1C5
Hazardous substances	Hazardous substances concentration indicators (multiple)	BSAP – Hazardous substances, MSFD – D8C1
	Biological effects – in general, White-tailed sea eagle productivity, Malformed embryos of amphipods (sup)	BSAP – Hazardous substances, MSFD – D8C2
	Contaminants in food stuffs	BSAP – Hazardous substances, MSFD – D9C1
Litter	Beach litter	BSAP – ‘Hazardous substances’ (Pollution/Hazardous substances and litter), MSFD – D10C1
	Litter on the seafloor	BSAP – ‘Hazardous substances’ (Pollution/Hazardous substances and litter), MSFD – D10C1
	Microlitter in the watercolumn (sediments)	BSAP – ‘Hazardous substances’ (Pollution/Hazardous substances and litter), MSFD – D10C2
Noise	Distribution in time and space of loud low- and mid- frequency impulsive sounds	BSAP – ‘Hazardous substances’ (Pollution/Hazardous substances and litter) or Maritime Activities, MSFD – D11C1
	Continuous low frequency anthropogenic sound	BSAP – ‘Hazardous substances’ (Pollution/Hazardous substances and litter) or Maritime Activities, MSFD – D11C2
Linkages	Biodiversity-Pollution linkages (cross-cutting and interlinkages across themes)	Overall, including holistic BSAP overview and specific aspects within MSFD
Eutrophication	Total nutrients – Total Nitrogen and Total Phosphorus	BSAP – Eutrophication, MSFD – D5C1
	Oxygen – Shallow water oxygen	BSAP – Eutrophication, MSFD – D5C5 (D5C8)
	Oxygen – Oxygen debt (and State of the soft-bottom macrofauna community)	BSAP – Eutrophication, MSFD – D5C5 (D5C8)
	Cyanobacterial bloom index	BSAP – Eutrophication, MSFD – D5C3
	Phytoplankton spring bloom intensity based on chl-a	BSAP – Eutrophication, MSFD – D5C4
	Biomass ratio of opportunistic and perennial macroalgae	BSAP – Eutrophication, MSFD – D5C6
	Integration rules for indicators (e.g. direct and indirect effects)	BSAP – Eutrophication, MSFD – D5 overall
Linkages	Possible sub-division of identified sub-basins	BSAP – Eutrophication, MSFD – D5 overall
Linkages	Biodiversity-Eutrophication linkages (cross-cutting and interlinkages across themes)	Overall, including holistic BSAP overview and specific aspects within MSFD

Thematic Assessments: general

- Focusing on presenting methods and results in detail (focusing on the **WHAT** and the **HOW**).
- New topics introduced, expanding from those topics included in the integrated assessments.
- What to do with spatial pressures and impacts?



Template for Thematic Assessments

- A shared template for thematic assessments will be prepared (early 2022, first draft to be reviewed in spring 2022, approved by S&C in autumn 2022, jointly with the indicator results).
 - Ensures that the relevant information needed for the Summary report is available under all the thematic assessments.
 - Ensure that the thematic assessment reports present the needed information to make them policy relevant and also highlights gaps etc.
 - Support the holistic perspective.
 - Make the information and reports more accessible and easier to navigate.

Who will do what for the thematic assessments

State: Biodiversity []	Pressure: Pollution [EN HAZ, supported by Secretariat]	Pressure: Eutrophication [IN EUTRO, supported by Secretariat]	Economic and social analyses (Secretariat)	Pressure: Spatial pressures and impacts (Secretariat)
<ul style="list-style-type: none"> •Introduction [responsible for running BEAT, supported by Secretariat] •Species: <ul style="list-style-type: none"> •Seals [responsible for running BEAT] •Harbour porpoise (BLUES) •Birds [responsible for running BEAT] •Fish [responsible for running BEAT] •Zooplankton [responsible for running BEAT] •Phytoplankton [responsible for running BEAT] •Foodweb •Threatened species (Secretariat) •Bycatch (BLUES) •Habitats: <ul style="list-style-type: none"> •Seabed •Pelagic (BLUES) •Threatened habitats and biotopes (Secretariat) •Spatial conservation (MPAs, OECMs) (Secretariat) •Restoration (Secretariat) •BEAT methodology (BLUES) 	<ul style="list-style-type: none"> •Introduction [responsible for running CHASE, supported by Secretariat] •Contaminants (Secretariat) •Pharmaceuticals [] •Oilspills [indicator lead] •Marine litter (BLUES) •Underwater noise (BLUES) •Non-indigenous species [Indicator lead] •CHASE methodology [EN HAZ, supported by Secretariat] 	<ul style="list-style-type: none"> •Introduction [responsible for running HEAT, supported by Secretariat] •Nutrient concentration [responsible for running HEAT] •Direct effects [responsible for running HEAT] •Indirect effects [responsible for running HEAT] •HEAT methodology [IN EUTRO supported by Secretariat] 	<ul style="list-style-type: none"> •Introduction (Secretariat) •Ecosystem services [Secretariat] •Ecosystem accounting [Secretariat] •Drivers (Secretariat) •Use of marine waters (BLUES) •Cost of degradation (BLUES) • Effectivness of measures (BLUES) • Methodologies (Secretariat) 	<ul style="list-style-type: none"> •Introduction (Secretariat) •Methodology and tool (Secretariat)

Thematic Assessments

Process

3.1 Generating data driven thematic assessment results (including integrated assessments)

- Data driven thematic assessments (including integrated data assessments of the approved indicator results), is proposed to be taken forward as indicated in the list below. Information presented in square brackets is provisional and either remains open or is dependent on ongoing processes.
 - Biodiversity: Secretariat/partner;

3.2 Generating qualitative thematic assessments

- Qualitative assessments is proposed to be taken forward as indicated in the list below. Information presented in square brackets is provisional and either remains open or is dependent on ongoing processes.
- 3.3 Thematic assessment reports
- Thematic assessment reports will be prepared by the relevant lead as listed above, with the exception of the automated assessments, for which the IN EUTRO and EN HAZ will be responsible, supported by the Secretariat. The responsible party for the Thematic Assessment of Biodiversity remains open and will depend on the hosting of the BEAT tool.
- 3.4 Review and approval of thematic assessments



Approval

3.4 Review and approval of thematic assessments

- The thematic assessment reports, including the results of the assessments themselves and relevant contextual information, will be presented for approval to HELCOM 44-2023.
- The reports will be submitted to EGs, WGs and GEAR for intersessional review concomitantly with submission to the HELCOM meeting. Input from the review process is to be provided to Secretariat by the end of January/beginning of February 2023, as indicated in the detailed timeline (see Annex 1 for overview). Input will be consolidated by Secretariat and shared with the authors, who will be invited to provide clarifications and corrections as needed. A table with proposed amendments, together with prepared revised drafts will be provided to CPs prior to the HELCOM meeting, to provide an overview of changes and function as the basis for further input and approval at the meeting.

Thank you for your attention!

