



## Baltic Marine Environment Protection Commission

Working Group on the State of the Environment and Nature  
Conservation

STATE & CONSERVATION  
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|------------------------|--|
| <b>Document title</b>  | Overview of HELCOM indicator leads, co-leads and expert groups |
| <b>Code</b>            | 3J-14  |
| <b>Category</b>        | CMNT   |
| <b>Agenda Item</b>     | 3J – Progress of relevant HELCOM expert groups and projects    |
| <b>Submission date</b> | 13.9.2021  |
| <b>Submitted by</b>    | Secretariat  |

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### Background

Attachment 1 to this document compiles the information collated by the Secretariat on the lead and co-lead countries (and nominated experts) responsible for the HELCOM indicators. In addition, the members of relevant expert groups under which indicators are hosted are also provided, based on the lists currently available on the HELCOM sharepoint lists (as of 13 September 2021).

The Meeting is invited to provide updates or corrections to the information by email to the Secretariat ([Jannica.haldin@helcom.fi](mailto:Jannica.haldin@helcom.fi) and [owen.rowe@helcom.fi](mailto:owen.rowe@helcom.fi)) intersessionally by **17 May 2021 at the latest**.

### Action requested

The Meeting is invited to take note of the information and provide any corrections or additions via correspondence.

Continued development of HELCOM indicators: Lists of Lead/co-Lead countries, appointed experts, and members of relevant HELCOM expert groups, networks and projects.

*Updated as of 13.09.2021*

This document is updated to include information that is thematically organized to include:

- Information on Lead countries, co-lead countries and appointed national experts to develop HELCOM indicators.
- Contacts lists for HELCOM Expert Groups, projects and networks directly related to indicator work (lists of Experts are taken from the HELCOM Share Point system).
- Open aspects (e.g. possible options to support development or co-lead), or aspects for which clarification would be beneficial are highlighted within the document.
- Indicates persons currently not properly listed in the Expert Groups (and thus may not receive emails and access properly) as their Meeting Portal Registrations appear to need completing or correcting.

Note that aspects of priority and ongoing work, as provided in earlier versions of this document, have been deleted as the information is superseded by the indicator work plans and future work on HELCOM indicators process (see [document 4-20](#) of HOD 57-2019).

**Please submit further information, corrections and updates to the Secretariat ([owen.rowe@helcom.fi](mailto:owen.rowe@helcom.fi) and [jannica.haldin@helcom.fi](mailto:jannica.haldin@helcom.fi)).**

## Contact Lists of HELCOM Expert Groups/Project relevant for indicator work

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## Mammals

### Mammals indicators

| Core indicators                          | Lead Country | LC representative | Co-Lead Country               | CLC representative                                   |
|--|--------------|-------------------|-------------------------------|--|
| Distribution of Baltic seals             |              |                   | Denmark<br>Sweden             | Anders Galatius,<br>Markus Ahola                     |
| Population trends and abundance of seals | Sweden       | Markus Ahola      | Denmark                       | Anders Galatius,                                     |
| Nutritional status of marine mammals     | Sweden       | Sara Persson      | Finland<br>Germany<br>Denmark | Kaarina Kauhala<br>Ursula Siebert<br>Anders Galatius |
| Reproductive status of marine mammals    | Sweden       | Sara Persson      | Finland<br>Germany            | Kaarina Kauhala<br>Ursula Siebert                    |

| Candidate indicator               | Lead Country | LC representative | Co-Lead Country   | CLC representative              |
|-----------------------------------|--------------|-------------------|-------------------|---------------------------------|
| Harbour porpoise distribution     |              |                   | Germany<br>Sweden | Anita Gilles<br>Julia Carlström |
| Harbour porpoise abundance        |              |                   | Germany<br>Sweden | Anita Gilles<br>Julia Carlström |
| Seal pup weight at weaning        |              |                   |                   |                                 |
| 'Marine mammal health indicators' |              |                   |                   |                                 |

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## Birds

### Bird indicators

| Core indicators | Lead Country | LC representative | Co-Lead Country | CLC representative |
|-----------------|--------------|-------------------|-----------------|--------------------|
|                 | Germany      | Volker Dierschke  | Finland         | Andreas Linden     |

|   |                |                         |                   |                                     |
|---|----------------|-------------------------|-------------------|-------------------------------------|
| Abundance of waterbirds in the breeding season  |                |                         |                   |                                     |
| Abundance of waterbirds in the wintering season | <b>Germany</b> | <b>Volker Dierschke</b> | Finland<br>Sweden | Markku Mikkola-Roos<br>Fredrik Haas |

| Candidate indicator                            | Lead Country | LC representative | Co-Lead Country  | CLC representative |
|--|--------------|-------------------|--|--------------------|
| Distribution of seabirds                       |              |                   | Development under JWGBIRD (HELCOM Chair<br><b>Volker Dierschke</b> ) |                    |
| Breeding success in guillemots of Gotland      |              |                   | Development under JWGBIRD (HELCOM Chair<br><b>Volker Dierschke</b> ) |                    |
| Breeding success or productivity of waterbirds |              |                   | Development under JWGBIRD (HELCOM Chair<br><b>Volker Dierschke</b> ) |                    |

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## Coastal Fish

### Coastal fish indicators

| Core indicators                                 | Lead Country | LC representative | Co-Lead Country | CLC representative |
|---|--------------|-------------------|-----------------|--------------------|
| Abundance of coastal fish key functional groups | Sweden       | Jens Olsson       | Finland         | Antti Lappalainen  |
| Abundance of key coastal fish species           | Sweden       | Jens Olsson       | Finland         | Antti Lappalainen  |

| Candidate indicator            | Lead Country | LC representative | Co-Lead Country | CLC representative |
|--------------------------------|--------------|-------------------|-----------------|--------------------|
| Size structure of coastal fish | Sweden       | Jens Olsson       |                 |                    |

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## Pelagic habitats – zooplankton

### Zooplankton indicators

| Core indicators                       | Lead Country | LC representative | Co-Lead Country              | CLC representative                                  |
|---------------------------------------|--------------|-------------------|------------------------------|---|
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## Pelagic habitats – phytoplankton

### Phytoplankton indicators

| Core indicators  | Lead Country   | LC representative    | Co-Lead Country             | CLC representative   |
|--|----------------|----------------------|-----------------------------|--|
| Seasonal succession of dominating phytoplankton groups | <b>Estonia</b> | <b>Andres Jaanus</b> | Finland<br>Latvia<br>Sweden | Harri Kuosa<br>Sirpa Lehtinen<br>Iveta Jurgensone<br>Marie Johanssen |

| Pre-core indicators | Lead Country | LC representative | Co-Lead Country | CLC representative |
|---------------------|--------------|-------------------|-----------------|--------------------|
|                     | Germany      | Anke Kremp        | Estonia         | Andres Jaanus      |

|                                      |  |  |                                       |   |
|--------------------------------------|--|--|---------------------------------------|---|
| Diatoms/<br>dinoflagellates<br>index |  |  | Finland<br>Latvia<br>Poland<br>Sweden | Harri Kuosa<br>Sirpa Lehtinen<br>Iveta Jurgensone<br>Janina Kownacka<br>Marie Johanssen |
|--------------------------------------|--|--|---------------------------------------|---|

| Candidate indicators   | Lead Country   | LC representative             | Co-Lead Country                                    | CLC representative  |
|--|----------------|-------------------------------|--|---|
| "Phytoplankton community composition as a food web indicator".           | <b>Finland</b> | Sirpa Lehtinen<br>Harri Kuosa | Lithuania<br>Sweden<br>Latvia<br>Estonia<br>Poland | Irina Olenina<br>Marie Johansen<br>Iveta Jurgensone<br>Andres Jaanus<br>Janina Kownacka |
| Phytoplankton species assemblage clusters based on environmental factors |                |                               | Finland<br>Latvia<br>Sweden                        | Harri Kuosa<br>Sirpa Lehtinen<br>Iveta Jurgensone<br>Marie Johanssen<br>Andres Jaanus   |
| Phytoplankton taxonomic diversity  |                |                               |  |   |

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## Benthic habitats

### Indicators of benthic communities and habitats

| Core indicators  | Lead Country | LC representative | Co-Lead Country    | CLC representative  |
|--|--------------|-------------------|--------------------|---|
| Population structure of long-lived macrozoobenthic species |              |                   | Finland<br>Germany | Samuli Korpinen<br>Henrik Nygård<br>Alexander Darr<br>Michael Zettler |
| State of the soft-bottom macrofauna community              |              |                   | Finland<br>Sweden  | Henrik Nygård<br>Mats Blomqvist                                       |

| Pre-core indicators  | Lead Country | LC representative  | Co-Lead Country   | CLC representative   |
|--|--------------|--|---|--|
| Cumulative impact on benthic biotopes                      | Germany      | Torsten Berg,<br>Isabelle Taubner<br>Kristine Brüggemann<br>Axel Kreutle | Sweden  | Antonia Nyström-Sandman  |
| Condition of benthic habitats                              | Estonia      | Georg Martin,<br>Kristjan Herkul   | Finland<br>Germany<br>Latvia<br>Lithuania<br>Sweden     | Samuli Korpinen<br>N.N. - TBC<br>Juris Aigars<br>Darius Daunys<br>Antonia Nyström Sandman<br>Mats Blomqvist<br>Anna Westling |
| Lower depth limit distribution of the macrophyte community |              |  | Estonia<br><br>Finland<br>Germany<br>Latvia<br>(Sweden) | Kaire Torn,<br>Georg Martin<br>Samuli Korpinen<br>Kolja Beisiegel<br>Juris Aigars<br>(Mats Blomqvist)                        |

|  |  |  |                              |  |
|--|--|--|------------------------------|--|
| Population structure of long-lived macrozoobenthic species |  |  | Finland<br>Germany<br>Sweden |  |
|--|--|--|------------------------------|--|

| Candidate indicators                                    | Lead Country | LC representative | Co-Lead Country | CLC representative |
|---|--------------|-------------------|-----------------|--------------------|
| Biomass ratio of opportunistic and perennial macroalgae | Estonia      | Georg Martin      | Sweden          |                    |
| State of hard-bottom communities                        |              |                   |                 |                    |

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## Eutrophication

| Core indicators | Lead Country | LC representative   | Co-Lead Country | CLC representative |
|-----------------|--------------|---|-----------------|--------------------|
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| DIP                             | Germany | Dr. Wera Leujak,<br>Federal Environment<br>Agency<br>(Wera.leujak@uba.de)<br>Joachim Kuss<br>(joachim.kuss@io-warnemuende.de)  |  |  |
| Oxygen debt                     | Estonia | Urmas Lips   |  |  |
| Water transparency              | Finland |  |  |  |
| Chlorophyll a                   | Finland | Vivi Fleming   |  |  |
| Total nitrogen concentrations   | Germany | Dr. Wera Leujak,<br>Federal Environment<br>Agency<br>(Wera.leujak@uba.de)<br>Joachim Kuss<br>(joachim.kuss@io-warnemuende.de)  |  |  |
| Total phosphorus concentrations | Germany | Dr. Wera Leujak,<br>Federal Environment<br>Agency<br>(Wera.leujak@uba.de)<br>Joachim Kuss<br>(joachim.kuss@io-warnemuende.de ) |  |  |

| Pre-core indicators                                 | Lead Country      | LC representative | Co-Lead Country | CLC representative |
|---|-------------------|-------------------|-----------------|--------------------|
| Cyanobacterial bloom index                          | Finland           | Vivi Fleming      |                 |                    |
| Shallow-water bottom oxygen                         | IN Eutrophication |                   |                 |                    |
| Phytoplankton spring bloom intensity based on chl-a | Finland           | Vivi Fleming      |                 |                    |

| Candidate indicators           | Lead Country | LC representative | Co-Lead Country   | CLC representative |
|--------------------------------|--------------|-------------------|-------------------|--------------------|
| Deep-water oxygen consumption' |              |                   |                   |                    |
| Baltic Sea acidification       |              |                   | Sweden<br>Germany | TBC                |

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### Input of nutrients

The indicator on progress towards fulfilling Maximum Allowable Inputs for nitrogen and phosphorus is available [at the HELCOM web-site](#) and a proposal for operationalization of the indicator is contained in document 3.3 to HOD 48-2015.

| Core indicators                                      | Experts   |
|--|---|
| Inputs of nitrogen and phosphorous to the sub-basins | RedCore DG (Lars Svendsen, DCE Denmark, Bo Gustafsson, BNI Sweden, and the Secretariat)<br>Ricardas Paskauskas (LT) |

## Hazardous substances

### Hazardous substances indicators

| Core indicators                                       | Lead Country                         | LC representative                                   | Co-Lead Country              | CLC representatives                                  |
|---|--------------------------------------|---|------------------------------|--|
| Hexabromocyclododecane (HBCDD)                        | Sweden                               | Anne Sørensen<br>Elisabeth Nyberg                   | Finland                      | Emmi Vähä  |
| Metals  | Poland                               | Tamara Zalewska                                     | Denmark<br>Finland<br>Sweden | Martin M Larsen<br>Harri Kankaanpää<br>Anne Sørensen |
| Polybrominated biphenyl ethers (PBDE)                 |                                      |   | Finland<br>Sweden            | Emmi Vähä<br>Anne Sørensen                           |
| Perfluorooctane sulphonate (PFOS)                     | Sweden                               | Anne Sørensen<br>Elisabeth Nyberg                   | Finland                      | Jaakko Mannio  |
| Polyaromatic hydrocarbons (PAH) and their metabolites | Denmark<br>Germany (PAH metabolites) | Martin M Larsen<br>Ulrike Kammann (PAH metabolites) | Finland                      | Harri Kankaanpää                                     |

|  |                   |  |                    |                                     |
|--|-------------------|--|--------------------|-------------------------------------|
|  |                   |  | Sweden             | Anne Sørensen                       |
| Polychlorinated biphenyls (PCB) and dioxins and furans | Germany           | Detlef Schulz-Bull<br>Berit Brockmeyer | Finland<br>Sweden  | Emmi Vähä<br>Anne Sørensen          |
| TBT and imposex  | Sweden<br>Denmark | Marina Magnusson<br>Martin M Larsen    | Finland            | Emmi Vähä                           |
| White-tailed sea eagle productivity                    | Sweden            | Peter Hellström                        | Finland<br>Germany | Toni Laaksonen<br>Christof Herrmann |

| Supplementary indicators   | Lead Country | LC representative | Co-Lead Country | CLC representative |
|--|--------------|-------------------|-----------------|--------------------|
| Reproductive disorders: Malformed amphipod embryos (supplementary, only FI&SE) |              |                   | Sweden          | Elena Gorokhova    |

| Pre-core indicators                             | Lead Country | LC representative | Co-Lead Country | CLC representative |
|---|--------------|-------------------|-----------------|--------------------|
| Acetylcholines terase inhibition                |              |                   |                 |                    |
| Diclofenac concentration                        | Lead needed  |                   |                 |                    |
| Estrogenic-like chemicals and effects           |              |                   | Finland         | Kari Lehtonen      |
| Lysosomal membrane stability (LMS)              |              |                   | Finland         | Kari Lehtonen      |
| Fish Disease Index (no work done in CORESET II) |              |                   | Finland         | Kari Lehtonen      |
| Micronucleus test (no work done in CORESET II)  |              |                   | Finland         | Kari Lehtonen      |

| Candidate indicators | Lead Country | LC representative | Co-Lead Country | CLC representative |
|----------------------|--------------|-------------------|-----------------|--------------------|
|----------------------|--------------|-------------------|-----------------|--------------------|

|               |  |  |                   |                                   |
|---------------|--|--|-------------------|-----------------------------------|
| EROD activity |  |  | Sweden            | Joachim Sturve and<br>Lars Förlin |
| Copper        |  |  | Sweden<br>Denmark |                                   |

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## Radioactive substances

### Radioactive substances indicators

| Core indicators  | Lead Country | LC representative | Co-Lead Country | CLC representative |
|--|--------------|-------------------|-----------------|--------------------|
| Radioactive substances:<br>Cesium-137 in fish and surface waters | Poland       | Tamara Zalewska   | Finland         | Meerit Kämäräinen  |

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## Oil pollution

### Oil pollution indicator

| Core indicators                             | Lead  |  |  |  |
|---|-------|--|--|--|
| Oil-spills affecting the marine environment | IWGAS |  |  |  |

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## Marine litter

### Marine Litter indicators

| Pre-core indicators    | Lead Country   | LC representative                       | Co-Lead Country   | CLC representative           |
|------------------------|--|---|-------------------|------------------------------|
| Beach litter           | Currently carried out in cooperation between HELCOM BLUES and EN Marine Litter |   | Denmark<br>Sweden | Jakob Strand<br>Eva Blidberg |
| Litter on the seafloor | Denmark  | Anna Rindorf<br><br>Marie Storr-Paulsen |                   |                              |

| Candidate indicators | Lead Country | LC representative | Co-Lead Country | CLC representative |
|----------------------|--------------|-------------------|-----------------|--------------------|
|                      |              |                   |                 |                    |

|                               |         |             |                    |                              |
|-------------------------------|---------|-------------|--------------------|------------------------------|
| Microlitter in the watercolum | Finland | Outi Setälä | Denmark<br>Germany | Jakob Strand<br>Elke Fischer |
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## Underwater noise

### Underwater noise indicators

| Pre-core indicators  | Lead Country | LC representative | Co-Lead Country              | CLC representative  |
|--|--------------|-------------------|------------------------------|---|
| Continuous low frequency anthropogenic sound                                   | Denmark      | Jakob Tougaard    | Finland<br>Germany<br>Sweden | Okko Outinen<br>Jens Fisher<br>Mathias Andersson,<br>Emilia Lalander    |
| Distribution in time and space of loud low- and mid-frequency impulsive sounds | Germany      | Carina Juretzek   | Denmark<br>Finland<br>Sweden | Jakob Tougaard<br>Okko Outinen<br>Mathias Andersson,<br>Emilia Lalander |

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## Additional indicators

i.e. indicators that are not linked to previously listed experts groups/networks/projects.

| Core indicators  | Lead Country | LC representative  | Co-Lead Country             | CLC representative   | Working arrangements   |
|--|--------------|--|-----------------------------|--|--|
| Abundance of salmon spawners and smolt                   | Finland      | Tapani Pakarinen, Atso Romakkaniemi  |                             |  | Updated <i>in cooperation with ICES WGBAST</i>   |
| Abundance of sea trout spawners and parr                 | Finland      | Tapani Pakarinen   |                             |  | Updated <i>in cooperation with ICES WGBAST</i>   |
| Number of drowned mammals and waterbirds in fishing gear | Germany      | Sven Koschinski (sk@meereszoologie.de)<br>Volker Dierschke<br>Axel Kreutle<br>Gesine Lange | Poland                      | Katarzyna Kaminska   | Active work being carried out under HELCOM BLUES.  |
| Proportion of large fish in the community                | Sweden       | Norbert Häubner  | Germany<br>Finland          | Christian Pusch<br>Antti Lappalainen   |  |
| Trends in arrival of new non-indigenous species          | Finland      | Maiju Lehtiniemi   | Germany<br>Latvia<br>Sweden | David Johannes<br>Christian Buschbaum<br>Manuela Krakau (Federal Environment Agency)<br>Kai Hoppe (kai.hoppe@kuestenbiologie.de)<br>Solvita Strake<br>Rahmat Naddafi | TG ballast indicated that the indicator is not a good fit with the group. Possible cooperation with OSPAR in the future. Cooperation amongst the team of experts identified as leads and co-leads. |



|  |  |         |  |  |
|--|--|---------|--|--|
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|--|--|---------|--|--|

| Candidate indicators                         | Lead Country | LC representative | Co-Lead Country | CLC representative | Working arrangements |
|--|--------------|-------------------|-----------------|--------------------|----------------------|
| Maximum length fish in the pelagic community | Sweden       | Norbert Häubner   |                 |                    |                      |