## ICES/HELCOM Working Group on Integrated Assessments of the Baltic Sea (WGIAB)

2018/MA2/IEASG03 The ICES/HELCOM Working Group on Integrated Assessments of the Baltic Sea (WGIAB), chaired by Saskia Otto, Germany, Martin Lindegren, Denmark, Lauréne Pécuchet, Finland, and Matilda Valman, Sweden, will generate deliverables as listed in the Table below.

|           | Meeting<br>dates | Venue                          | Reporting details                      | Comments (change in Chair, etc.) |
|-----------|------------------|--------------------------------|--|----------------------------------|
| Year 2019 | 8-12 April       | Palma de<br>Mallorca,<br>Spain | Interim report by 29 May 2019 to IEASG |                                  |
| Year 2020 | TBD              | Copenhagenm<br>Denmark         | m Interim report by TBD 2020 to IEASG  |                                  |
| Year 2021 | TBD              | TBD                            | Final report by TBD 2021 to IEASG      |                                  |

## **ToR** descriptors

| ToR | Description   | Background  | <u>Science Plan</u><br><u>codes</u> | Duration | Expected<br>Deliverables   |
|-----|---|---|-------------------------------------|----------|--|
| a   | Conduct an ecosystem indicator analysis (combining natural and social sciences) across a number of Baltic Sea sub-systems including (i) robustness testing with respect to confounding multiple stressor effects and management suitability, (ii) threshold determination, and (iii) ecosystem trend and state evaluations. | This ToR will provide sub-system-specific suites of ecosystem indicators and respective thresholds to support the development of Integrated Ecosystem Assessments and Ecosystem-based Fisheries Management. The work relies on previous and ongoing work across HELCOM and ICES EGs, including WGSOCIAL, WGCERP, and SICCME | 1.9, 6.6, 7.1,                      | 1 year   | -Research article(s) on ecosystem indicator testing and ecosystem state assessments - Report cards displaying the state of Baltic Sea subsystems using selected indicator suites - Intermediate results reported in interim reports 2019 and 2020 as well as the final report. |
| b   | Conduct vulnerability analyses for the combined social – ecological system of Baltic Sea sub-systems to the cumulative effects of climate change, fisheries and eutrophication using an exposure – sensitivity approach.  | This ToR will investigate the consequences of cumulative external threats on the Baltic Sea ecosystems, identifying vulnerable components of both the social and ecological sub-systems as a basis for model-based management strategy evaluation exercises. This ToR   | 6.5                                 | 2 years  | - Research article(s) on the vulnerability of Baltic Sea subssystems to cumulative drivers - Intermediate results reported in interim reports 2019 and 2020 as well as the final report.   |

|   |   | relies on previous and<br>ongoing work across<br>ICES EGs, includiing<br>WGSOCIAL and<br>SICCME  |               |         | -output to<br>Ecosystem<br>Overview  |
|---|---|--|---------------|---------|--|
| c | Conduct a multi-model exercise exploring management strategies that best adapt vulnerable social – ecological system components of Baltic Sea sub-systems to the cumulative effects of multiple external drivers. | This ToR will provide important context to management and decision making processes within the Baltic Sea ecosystembased management landscape. | 6.4, 6.5, 7.1 | 2 years | -Research article(s) on management strategy evaluations of social – ecological systems components to multiple external drivers, - Intermediate results reported in the final report. |

## Summary of the Work Plan

| Year 1 | Annual meeting, intersessional work on social- ecological indicator suites development.                                   |  |  |
|--------|---|--|--|
| Year 2 | Annual meeting, intersessional work on vulnerability analyses to multiple external drivers.                               |  |  |
| Year 3 | Annual meeting, intersessional work on management strategy evaluations of vulnerable social-ecological system components. |  |  |

## Supporting information

| Priority                               | WGIAB aims to conduct and further develop Integrated Ecosystem Assessments for the different sub-systems of the Baltic Sea, in support of implementing the ecosystem approach in the Baltic Sea.                 |  |
|--|--|--|
| Resource requirements                  | Assistance of the Secretariat in maintaining and exchanging information and requirements data to potential participants. Assistance of especially the ICES Data Centre to collect and store relevant dataseries. |  |
| Participants                           | The Group is normally attended by some 20 members and guests.  |  |
| Secretariat facilities                 | None.  |  |
| Financial                              | No financial implications.   |  |
| Linkages to ACOM and groups under ACOM | WGBFAS   |  |
| Linkages to other committees or groups | WGINOSE, WGNARS, WGEAWESS, WGINOR, WGIBAR, WGCOMEDA, WGSOCIAL, WGMARS, SICCME, WGCERP  |  |

Linkages to other organizations

HELCOM