Overview of the sufficiency of measures analysis to support the HELCOM Baltic Sea Action Plan update

HELCOM ACTION project
HELCOM Secretariat
January 2020

HELCOM

Objective of the analysis: assess whether existing measures are sufficient in achieving good environmental status

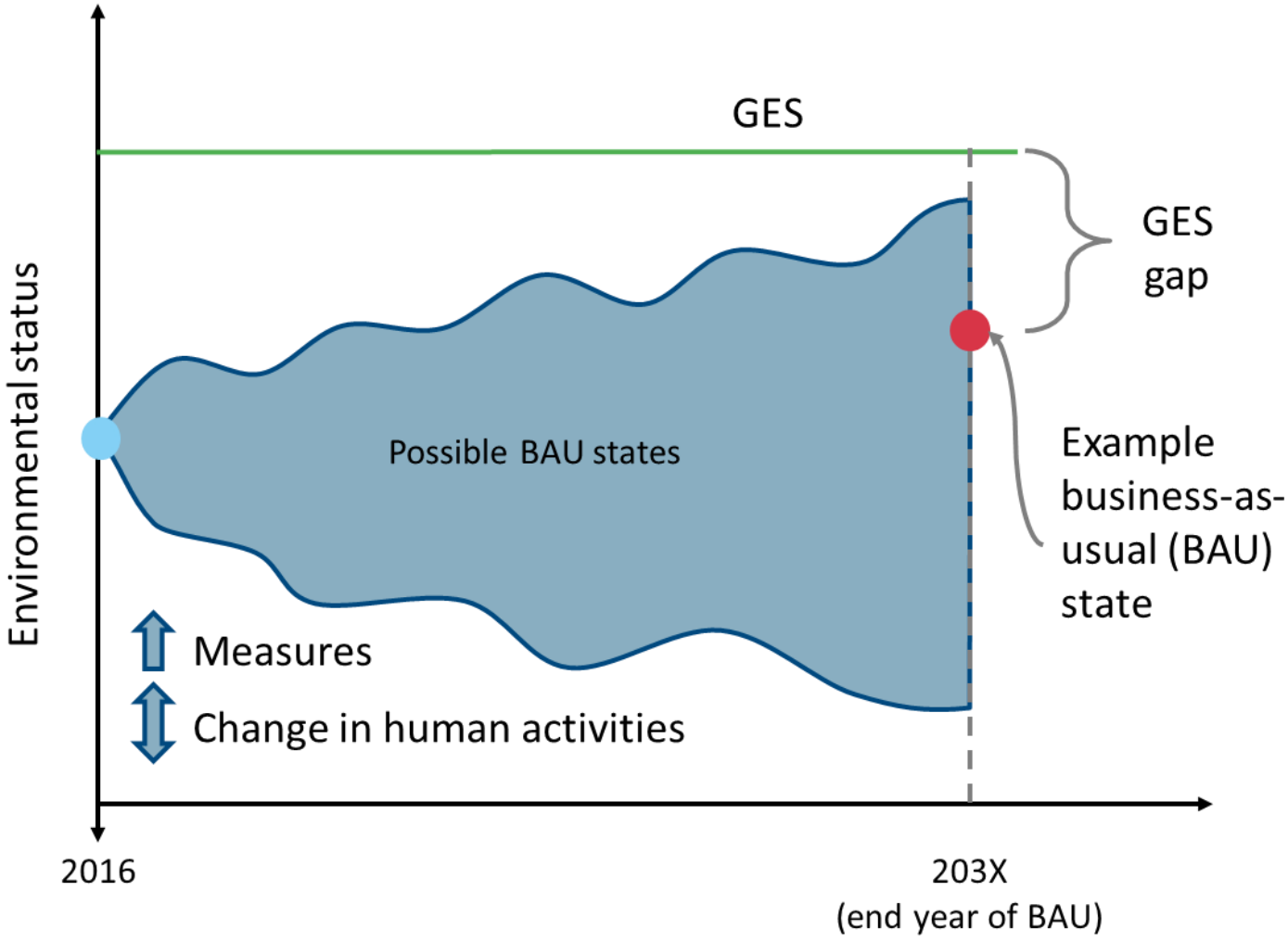
Analysis of sufficiency of measures (SOM)

- One of the activities for the HELCOM Baltic Sea Action Plan (BSAP) update
- Carried out by the HELCOM SOM Platform and HELCOM ACTION project in 2019-2020
- Overall SOM approach endorsed by HOD 56-2019 and amended and supported by SOM Platform meetings 1-2019 and 2-2019

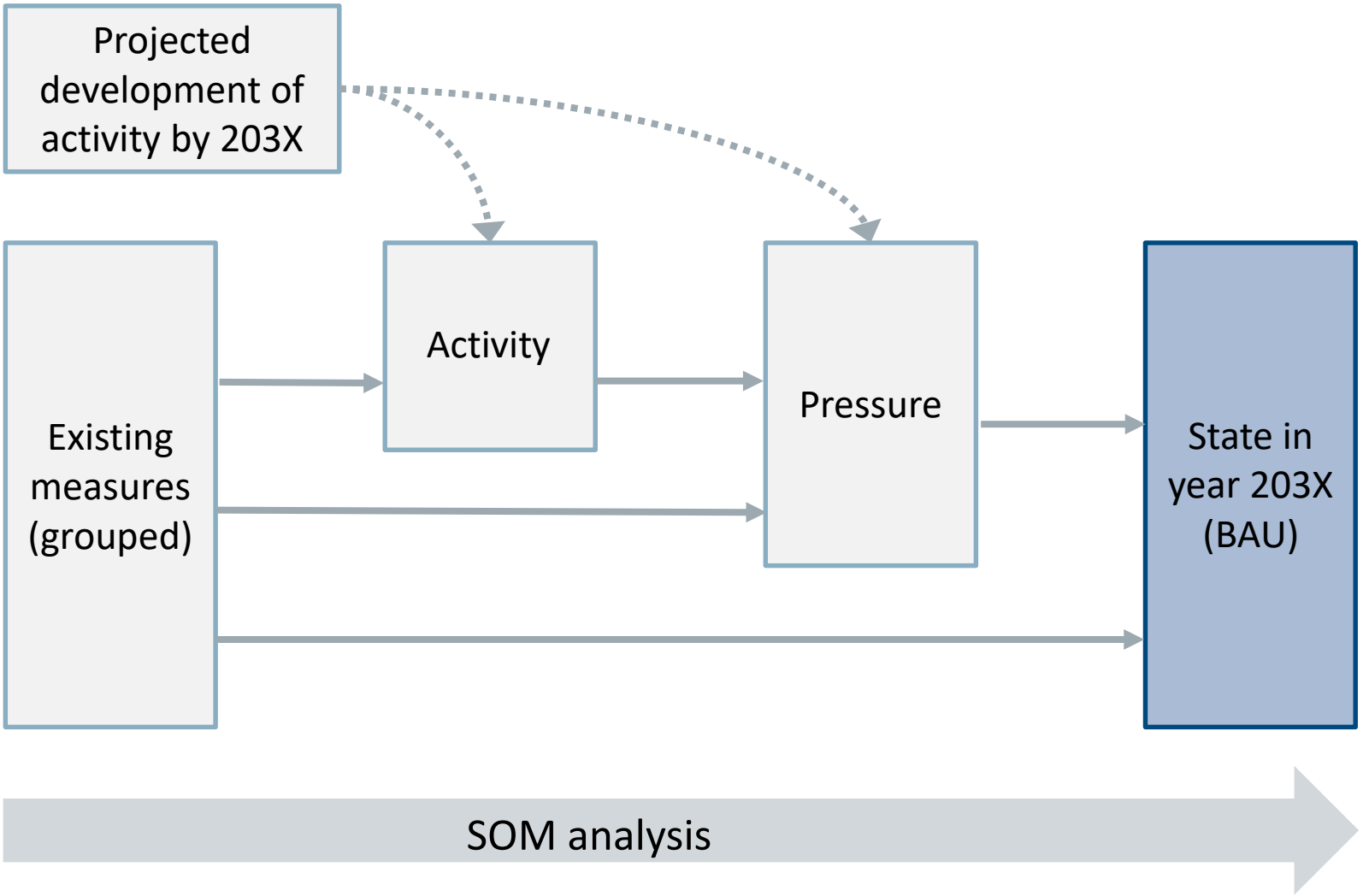
Features of the SOM analysis

- Supports the BSAP update by
  - assessing how far we are from achieving good status (GES) with existing measures
  - providing information for identifying the need for potential new measures
- First time in this extent in the Baltic Sea region or elsewhere
- Natural and social sciences approaches
- Same approach across all topics to ensure comparability and coherence (birds, mammals, fish, benthic habitats, hazardous substances, marine litter, underwater noise, non-indigenous species, input of nutrients)

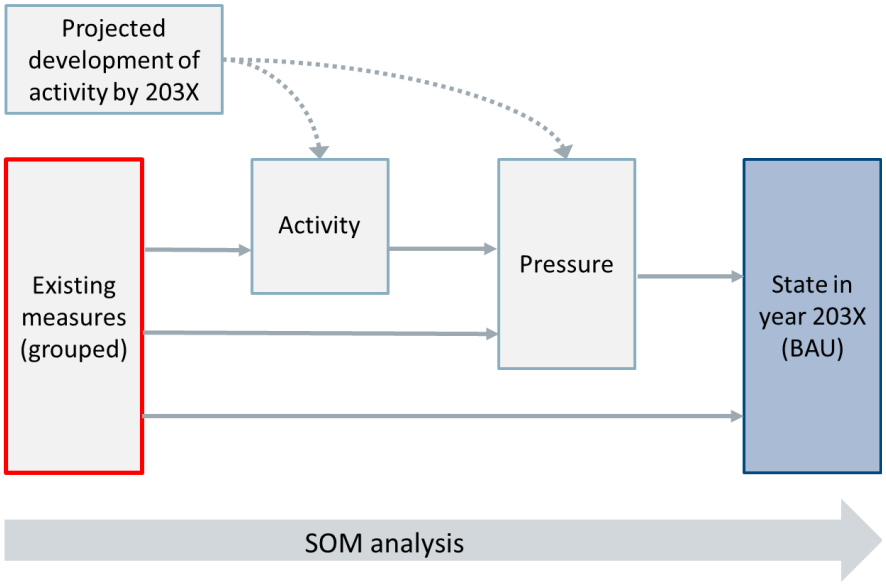
Assessing the business-as-usual (BAU) state for the SOM analysis



Components of the SOM analysis

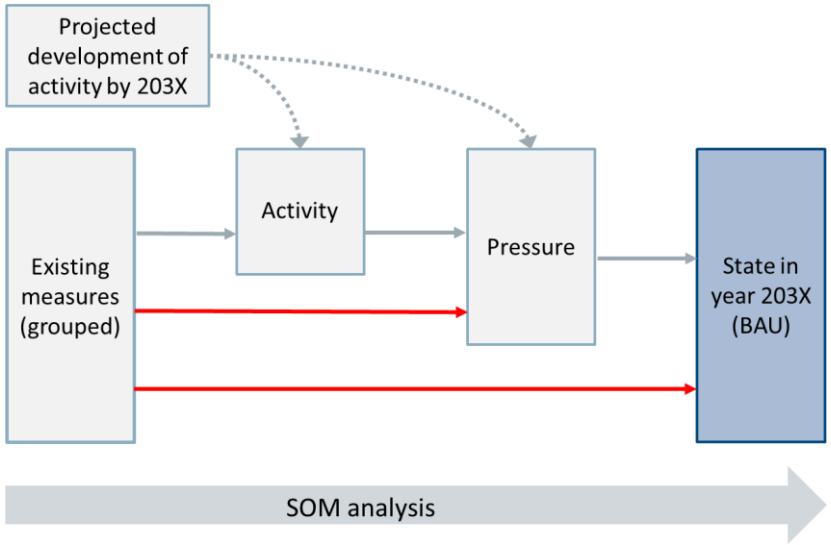


Existing measures



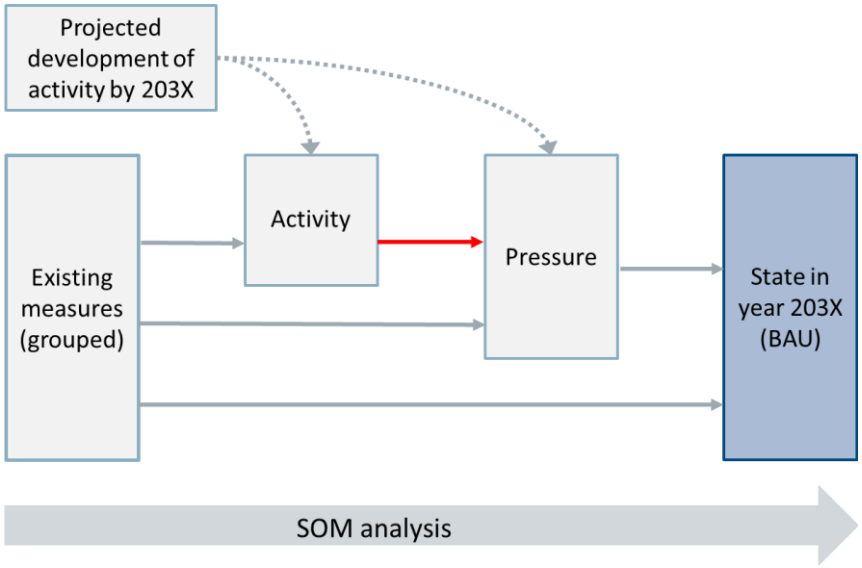
- Measures in existing relevant policies, e.g. current BSAP, MSFD
- Implemented, ongoing and planned in the time frame of BAU
- Grouped to general measure types to reduce the number of measures and improve the feasibility of the analysis

Effectiveness of measures



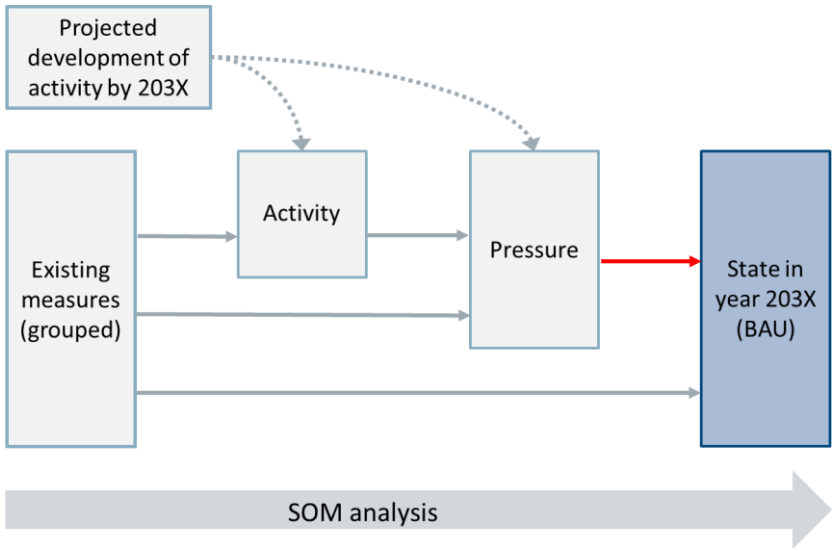
- Reduction in a specific pressure from a specific activity from implementing a generalized measure
- Assessed as a percent (%) change
- Restoration measures
- Based on expert elicitation and existing literature and models

Activity – pressure link



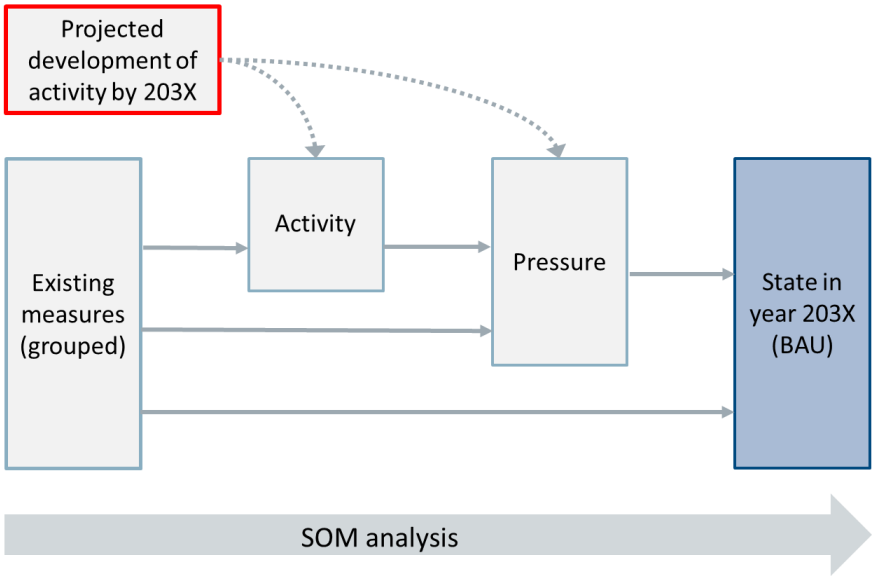
- Contribution (%) of activities to pressures
- Mainly based on expert surveys
- Loss and disturbance to the seabed
  - Approach used in HOLAS II
  - Links percent contribution of activities to the two physical disturbance pressures
- Input of nutrients: data from ACTION WP4

Linking pressures with state components



- Links between pressures and state components
- Depending on the existence of GES threshold:
  - Required pressure reduction (in %) to reach or maintain GES
  - Required pressure reduction (in %) to achieve a specific improvement in the state component
- Mainly based on expert elicitation

Development of human activities



- Changes in human activities over time
- Alternative assumptions possible, e.g. 1) no change, 2) most likely change in activities
- Analysis limited to predominant activities
- National and regional data sources
- Qualitative information translated into percentages

Main components in SOM analysis using expert elicitation

1. Linking activities to pressures
2. Effects of measures on pressures
3. Linking pressures with state components

- Information from scientific literature and expert elicitation to allow for comprehensive inclusion of measures, pressures and state components

Results from the SOM analysis

1. Relative contribution of activities to pressures
2. Lists of existing measures and their implementation status
3. Relative effectiveness of measures types in reducing pressures from activities
4. Effectiveness of measure types in reducing pressures
5. Most significant pressures affecting state components
6. Pressure reductions required to achieve GES/status improvements
7. Status improvements/pressure reductions from existing measures
8. Are existing measures sufficient to achieve GES/specific status improvement?
9. Where (spatially and topic-wise) measures are likely insufficient?
10. What types of measures are still needed and what activities/pressures should they target?
11. Time lags between measures and environmental state

Timeline for 2020

- Survey and literature data collection completed in February 2020
- Validation of data intersessionally / in Working Group meetings in the spring 2020
- Preliminary results presented to SOM Platform 3-2020 at the end of March

More information

Website with SOM materials

Document on SOM approach for SOM Platform 2-2019

Document on use of survey results in the SOM model for SOM Platform 2-2019