



15 January 2017

Executive Summary

Contribution from the **Baltic Marine Environment Protection Commission (HELCOM)** to the Part I of the report of the Secretary-General on oceans and the law of the sea, pursuant to General Assembly draft resolution A/71/L.26, entitled "Oceans and the law of the sea"

The effects of climate change on oceans

In recent decades the Baltic Sea region has warmed up faster than the global average. The warming is expected to continue throughout the 21st century – this currently cannot be explained by anything else than increased greenhouse gas concentrations.

Overall, a decrease of 75% in snowfall and a sea ice decrease of around 50-80% are expected for the next 100 years in the region. A sea level rise comparable to the global rise is expected for the southern half of the Baltic Sea.

As adaptation to climate change has been taken into account long term by HELCOM it is in major part integrated in HELCOM work. So far two major HELCOM thematic assessments have been released, in 2007¹ and in 2013², both prepared in close collaboration with BALTEX and its successor programme Baltic Earth. The thematic assessments will continue as a regular HELCOM activity.

Selected proposals for mitigating climate change impacts

Climate change impacts should be included into HELCOM targets and measures

- Climate change will challenge the reduction of eutrophication in the Baltic Sea, requiring possibly additional measures to reach the agreed targets
- The impacts should be better accounted for when planning for measures, e.g. in land use and agriculture

Other human pressures should be decreased to mitigate the climate impacts on biodiversity

- Several actions needed; reduction of eutrophication in focus as it will lead to a diminished pressure on biodiversity and increase the ecosystem resilience
- Fishing practices should be adjusted, e.g. reviewing maximum sustainable yields
- Better knowledge needed

Ecologically coherent network of protected areas is essential to ensure a safe space for species and habitats

- Assess the boundaries of marine protected areas (MPAs), the MPA network as well as the management of MPAs

Non-indigenous species (NIS) may increase and cause additional pressure

- New ecological niches may open up for NIS; monitoring programmes should accommodate
- Shipping and aquaculture should take effective measures to minimize the risk of NIS.

¹ <http://www.helcom.fi/Lists/Publications/BSEP111.pdf>

² <http://helcom.fi/Lists/Publications/BSEP137.pdf>

Balancing acts are necessary to decrease the effects of toxic pollutants when climate change puts an additional physiological pressure on the organisms

- Stricter measures recommended against widespread PBT substances, pesticides and pharmaceuticals as their use is likely to increase due to climate change.

Acidification requires attention; Better preparedness for vulnerability and higher risks; Develop and maintain marine monitoring and data assimilation; Apply a multiple-stressor and holistic approach; More research needed; Communicate uncertainties; Improve communication between science and policy; Knowledge on climate change and Baltic Sea impacts should be reviewed at regular intervals