| | |
|---|---|
| **Document title** | Baltic list of the human activities |
| **Code** | 5-1 |
| **Category** | INF |
| **Agenda Item** | 5 – Assessments and data for MSP |
| **Submission date** | 3.2.2016 |
| **Submitted by** | HELCOM Secretariat |
| **Reference** | |

## Background

HELCOM aims to form a regional list of human activities/uses and pressures for the Baltic Sea that would serve both Maritime Spatial Planning and environmental assessment needs. This list could also give insight to the future development of the marine use. Regional list provides a level of consistency in how the human uses and activities are assessed and provide a framework for the collection and sharing of information and monitoring.

Tentative matrix on linking human activities and pressures will be added to the Meeting portal prior the meeting.

## Action requested

The Meeting is invited to take note of the outcome of the stocktaking of the regional list of human activities and related environmental pressures in the Baltic Sea region.

# Regional list of activities and pressures

HELCOM, through its activities in preparing assessments on maritime activities and the second holistic assessment of the ecosystem health, reviewed and ranked relevance of different human activities and their pressures on the marine environment in the Baltic Sea. The listing of human activities/uses and pressures under the revision of Annex III of the EU Marine Strategy Framework Directive has been taken as a starting point as the grouping of uses are well interlinked with MSP Directive.

Common regional list provides a level of consistency in how the human uses and activities are assessed and provide a framework for the collection and sharing of information and monitoring. Regional list can serve several directions as there are parallel data and assessment needs in implementation and reporting of the Helsinki Convention and Baltic Sea Action Plan, based national requirements, and MSFD, HD and MSP directives as far as EU countries are concerned. When the activities and pressures are categorized in a consistent way, the data and information collected under other policies will be used more effectively.

This document contains the compiled regional lists of human activities (table 1) and pressures (table 2) relevant in the Baltic Sea. Table 1 includes classified activities together with indicated example subactivities for more detailed indication of sea use. Table 2 contains a list of relevant pressures with tentative coarse indication to the related human activities linked to the pressure.

The matrix between human activities and pressures is under preparation and will be placed into HELCOM Meeting portal prior the meeting.

Table 1. Regional list of **human activities and uses in the Baltic Sea**. Example subactivities contains indicative information to represent the activity. Activity themes are marked with blue shading.

| **Activity in the Baltic Sea** | **Example subactivity** |
|---|---|
| Cultivation of living resources | |
| Aquaculture - marine | Fin-fish mariculture (Aquaculture) |
| | Shellfish mariculture |
| Aquaculture - fresh water | |
| Agriculture | |
| Forestry | |
| Production of energy | |
| Renewable energy generation | Wind energy production (Wind farms: operational and under construction) |
| | Wave energy production |
| Non-renewable energy generation | Fossil fuel energy production |
| | Nuclear energy production |
| Transmission of electricity and communications | Cables |
| Extraction of living resources | |
| Fish and shellfish harvesting (professional, recreational) | Potting/ creeling |
| | Netting |
| | Demersal long lining |
| | Pelagic long lining |
| | Benthic trawling |
| | Pelagic trawling |
| | Benthic dredging |
| | Leisure fishing |
| | Fishery with coastal stationary gear |
| Fish and shellfish processing | |
| Marine plant harvesting | Machine collection (fucoids, kelp) |
| | Dredging (maerl, furcellaria) |
| | Hand collecting (seaweed, macrophytes) |
| | Reed harvesting |
| Hunting and collecting for other purposes | Game hunting (Sea birds: eider, long tailed duck) |
| | Predator control (Sea birds: cormorant, mammals: seal) |
| | Bait collection (digging) |
| Extraction of non-living resources | |
| Extraction of minerals | Extraction of metal ores |
| | Extraction of sand and gravel |
| Extraction of oil and gas | Oil and gas industry infrastructure (Oil platforms) |
| | Pipeline placement and operation (Pipelines) |
| Physical restructuring of coastline or seabed (water management) | |
| Land claim | Permanent land claim (urban, industrial, leisure, agriculture purposes) |
| Canalisation and other watercourse modifications | Large-scale water deviation |
| | Canalisation |
| | Culverting/trenching |
| | Coastal dams, weirs |
| Coastal defence and flood protection | Sea walls |
| | Breakwaters |
| | Groynes |
| | Flood protection |
| | Tidal barrages |
| Offshore structures (other than for energy production/extraction) | Artificial reefs and islands |

| Activity in the Baltic Sea | Example subactivity |
|---|---|
| Restructuring of seabed morphology | Dredging |
| | Beach replenishment/ nourishment |
| Tourism and leisure | |
| Tourism and leisure infrastructure | Piers |
| | Marinas and leisure harbours |
| | Slipways |
| Tourism and leisure activities | Recreational boating, yachting |
| | Beach use (bathing sites, beaches) |
| | Water sports (surface) |
| | Wildlife watching |
| | Underwater cultural heritage |
| Transport | |
| Transport infrastructure | Fishing harbours |
| | Industrial and ferry ports (harbours, bunkering points at sea; oil terminals) |
| | Bridges and causeways |
| | Tunnels |
| Transport – shipping | Ship/boat-building facilities |
| | Passage of ships/boats (passenger shipping; shipping density) |
| | Mooring, anchoring, beaching, launching |
| Transport - air | |
| Transport - land | Road transport |
| | Rail transport |
| Urban and industrial uses | |
| Urban uses | Urban land use |
| Industrial uses | Oil and gas refineries; Industrial plants |
| Waste treatment and disposal | Solid waste disposal, incl. Deposit of dredged material |
| | Urban waste water treatment |
| | Industrial waste water treatment |
| | Industrial animal farming |
| | Carbon capture and storage (Carbon sequestration) |
| Security/defence | |
| Military operations | Military infrastructure (e.g. military firing ranges) |
| | Waste disposal (munitions) |
| Education and research | |
| Research and survey | Research and survey (e.g. monitoring stations, tracks of seismic surveys) |

Table 2. Regional list of **pressures in the Baltic Sea**. Pressure themes are marked with blue shading. "Example activities linked to pressure" column suggest activities representing the pressure. Activity themes are marked with blue shading.

| **Pressures from human activities in the Baltic Sea** | **Further specification of pressures including pathways and sources** |
|---|---|
| Physical | |
| Change of seabed substrate or morphology (~ physical loss) | |
| Disturbance or damage to seabed | |
| Extraction of seabed substrate | |
| Hydrological | |
| Changes to hydrological conditions | |
| Energy | |
| Input of sound | Ambient underwater noise |
| | Impulsive noise |
| Input of other forms of energy | Input of electromagnetic and seismic waves |
| | Input of light |
| | Change in water temperature |
| Substances | |
| Input of hazardous substances (synthetic substances, non-synthetic substances, radionuclides) | Air emission from multiple sources at land and deposition to the sea |
| | Riverine inputs and direct discharges from the coast, including pharmaceuticals and radioactive substances |
| | Deposit of contaminated dredged material at sea |
| | Dumped chemical hazardous waste at sea |
| | Dumped chemical munitions at sea |
| | Hazardous wrecks |
| | Oil slicks and spills from ships and oil platforms |
| | Polluting ship accidents |
| Input of litter (solid waste matter, including micro-size litter) | Beach litter |
| | Other forms of litter (any other than beach litter) |
| Input of nutrients | Losses in aquaculture |
| | Nitrogen emission from land and shipping and deposition to the sea |
| | Discharges in sewage from passenger ships |
| | Riverine inputs and direct discharges from the coast |
| Input of organic matter | Riverine input |
| Biological | |
| Disturbance of species | |
| Extraction of, or mortality/injury to, species, including target and non-targeted catches (by commercial and recreational fishing) | Extraction of target and non-target fish species in commercial fishery |
| | Extraction of fish species by recreational fishery |
| | Incidental catches (e.g. birds, mammals) |
| Input of genetically modified species and translocation of indigenous species | |
| Input of microbial pathogens | |
| Input or spread of non-indigenous species | |