

**3J-20 Current status of data flows and data hosting arrangements for each HELCOM indicator**

# Background

- In order for each HELCOM core indicator to be fully regionally coordinated, each indicator should have:
  - Agreed monitoring guideline which is followed by Contracting Parties
  - Working **data flow arrangements including common database / access point** where data resulting from monitoring programmes should be reported and made available

# Background

- Document 3J-20 summarizes data flow situation of each HELCOM indicator, by outlining following issues:
  - Existence of monitoring manual record / guideline / recommendation, which sets requirement for monitoring and data reporting
  - Reporting format used
  - Reporting interval
  - Current data host
  - Problems in obtaining complete and coherent dataset for HELCOM HOLAS II Assessment
- The document also outlines emerging data themes, which currently are not used in HELCOM core indicator, but have been used in HELCOM HOLAS II Assessment, based on existing data flow or ad hoc data call.

# Action requested

- The Meeting is invited to:
  - take note of current status of data flows for HELCOM indicators used in HOLAS II.
  - take note of indicators / themes without established data flow arrangement
  - take note of emerging data flow requirements stemming from monitoring / indicator development and recommend actions on how to address the requirements

# Current status of data flows and data hosting arrangements

- Table 1 (Separate Excel attachment ATT1) Outlines data flow arrange by each indicator. It contains following columns:
- Baltic Sea Action Plan theme related to indicator
- Status indicator (core, pre-core)
- Reference to recommendation or guideline which is used in reporting
- Monitoring manual link
- Reporting format
- Current data host, only in case of established data flow arrangement.
- HELCOM Group that is involved in data reporting
- Status of the data flow arrangement based on following criteria:

Theme	Value	Description
Regularity	Regular	Annual reporting without need for ad hoc data requests
	Irregular	Ad hoc data request required for data reporting (used in HOLAS II)
Completeness	Functional	Most of the CPs are reporting data
	Sporadic	Serious gaps in data reporting by CPs

BSAP Theme	Indicator	Indicator format	Reportin g format	Data host	Interval	Group	Status	Comments
Biodiversity	<a href="#">Abundance of coastal fish key functional groups</a>	Core	Excel	HELCOM Secr.	Annual	FISH-PRO	Regular-Functional	
Biodiversity	<a href="#">Abundance of key coastal fish species</a>	Core	Excel	HELCOM Secr.	Annual	FISH-PRO	Regular-Functional	
Biodiversity	<a href="#">Abundance of salmon spawners and smolt</a>	Core				ICES WGBAST*	Irregular-Sporadic	Data hosting arrangements not in ToR of the working grop
Biodiversity	<a href="#">Abundance of sea trout spawners and parr</a>	Core				ICES WGBAST*	Irregular-Sporadic	Data hosting arrangements not in ToR of the working grop
Biodiversity	<a href="#">Abundance of waterbirds in the breeding season</a>	Core	Excel	HELCOM Secr.		JWG Bird	Irregular-Sporadic	Data reporting takes place only via data call.
Biodiversity	<a href="#">Abundance of waterbirds in the wintering season</a>	Core	Excel	HELCOM Secr.		JWG Bird	Irregular-Sporadic	Data reporting takes place only via data call.
Biodiversity	<a href="#">Diatom/Dinoflagellate index</a>	Pre-Core - tested in HOLAS II				PEG	Irregular-Sporadic	Ad hoc data collection by experts.
Biodiversity	Seasonal succession of dominating phytoplankton groups	Core - tested in HOLAS II				PEG	Irregular-Sporadic	Ad hoc data collection by experts.
Biodiversity	<a href="#">Distribution of Baltic seals</a>	Core	Excel	HELCOM Secr.		SEAL EG	Irregular-Sporadic	Data reporting takes place only via data call.
Biodiversity	<a href="#">Number of drowned mammals and waterbirds in fishing gears</a>	Pre-Core - tested in HOLAS II					Irregular-Sporadic	There is currently no source of monitoring data which specifically compiles and analyses the numbers of by-caught waterbirds and marine mammals in a representative manner.
Biodiversity	<a href="#">Nutritional status of seals</a>	Core				SEAL EG	Irregular-Sporadic	Ad hoc data collection by experts, Finland and Sweden only covered.
Biodiversity	<a href="#">Population trends and abundance of seals</a>	Core	Excel	HELCOM Secr.		SEAL EG	Irregular-Sporadic	Data reporting takes place only via data call. Only aggregated figures (census report) provided annually.
Biodiversity	<a href="#">Reproductive status of seals</a>	Core				SEAL EG	Irregular-Sporadic	Ad hoc data collection by experts, Finland and Sweden only covered.
Biodiversity	<a href="#">State of the soft-bottom macrofauna community</a>	Core	ICES ERF	ICES	Annual		Regular-Sporadic	Data reporting to ICES is not complete. National data was included in HOLAS 2 to supplement regional dataset.
Biodiversity	<a href="#">Zooplankton mean size and total stock (MSTS)</a>	Core	ICES ERF	ICES	Annual		Regular-Sporadic	Data reporting to ICES is not complete. National data was included in HOLAS 2 to supplement regional dataset.

# Current status of data flows and data hosting arrangements

- **Eutrophication related indicators** are in general well organized in terms of data flow due to regular reporting practice carried out by Contracting Parties and established review procedure developed in EUTRO OPER project and carried out by IN-Eutrophication group.
- Russian data has not been reported to COMBINE since 2013. For HOLAS II, the gap was filled for Gulf of Finland by using data made available from Gulf of Finland Year project. For future open sea and complete coastal assessments, and more spatially evenly distributed in-situ data, reporting of Russian national monitoring data to COMBINE should be enabled.
- Use of earth observation data and ship-of-opportunity data to complement in-situ monitoring increases spatial and temporal coverage of data used in eutrophication assessment.

# Current status of data flows and data hosting arrangements

- **Hazardous substances related** indicators are mostly reported to COMBINE database hosted by ICES with the exception of Radioactive substances (MORS Database hosted by HELCOM Secretariat). The data flow arrangement can be generally considered as working for these data flows.
- Ad-hoc based data collection without established data host has taken place for following hazardous substances indicators:
  - White-tailed eagle productivity (core)
  - Diclofenac (pre-core)
- The indicator evaluations (from COMBINE data) have so far been carried out with the assistance of the OSPAR MIME tool developer.
  - In the latter part of 2018 the development of a dedicated platform (similar in function to the EUTRO OPER) will be carried out for the HELCOM hazardous substances indicators and integrated assessment (CHASE tool).
  - This joint work (HELCOM-OSPAR-ICES) is underway and will be a focus for autumn 2018.



# Current status of data flows and data hosting arrangements

- **Maritime related indicators – data flow situation**
  - Maritime related indicator derive data from HELCOM IWGAS group's aerial surveillance activities (Illegal oil discharges) and from AquaNIS database (Trends in arrival of new non-indigenous species).
  - AquaNIS database was agreed by State & Conservation to be used in HOLAS II assessment as a data hosting platform of alien species related indicator, but long-term solution for data flow arrangement is needed.

# Current status of data flows and data hosting arrangements

- Table 2 (Separate Excel attachment ATT2) outlines data flow arrangements for other datasets, which have been used in assessments, but are have not been applied for a core indicator. Some of these datasets are related to development of pre core / candidate indicator.

Dataset	Related indicator	Dev. stage	REC / Guideline	Mon. manual	Reporting format	Data host	Group	Status	Comments
Deposit sites of dredged material			<a href="#">Exists</a>		Excel / Shp	HELCOM Secr.	EN-DREDS	Regular-sporadic	
Impulsive noise	Distribution in time and space of low- and mid- frequency impulsive sounds	Pre-core indicator			Excel	ICES	EN-NOISE	Regular-sporadic	Limited reporting.
Ambient underwater noise	Continuous low frequency anthropogenic sound	Pre-core indicator	Draft				EN-NOISE	Nonexistent	Data hosting arrangement required for operationalization of data flow arrangement.
Litter	Beach litter	Pre-core indicator	Draft (beach)	Link			EN-LITTER	Nonexistent	Data hosting arrangement required for operationalization of data flow arrangement.
Shipping accidents					Excel	HELCOM Secr.	MARITIME	Regular-Functional	
Discharges of radioactive substances			<a href="#">Exists</a>		Excel	STUK	MORS	Regular-Functional	
Harbour porpoise (HELCOM/ASCOBANS)	Harbour porpoise distribution and abundance	Candidate indicator		<a href="#">Link</a>	Excel	HELCOM Secr.	SEAL EG	Regular-Sporadic	Mostly incidental sightings.

# Current status of data flows and data hosting arrangements

- **Summary:**

- **Gaps in existing and agreed data flows: Data reporting especially for biodiversity related indicators should be made more complete for future assessments.**

- **Emerging indicator and monitoring development issues that require attention are:**

- Solution for long-term database hosting for Trends in arrival of new non-indigenous species-indicator.
- Solution for data hosting of data stemming from Continuous noise monitoring programme.
- Solution for data hosting of data stemming from Litter monitoring.