

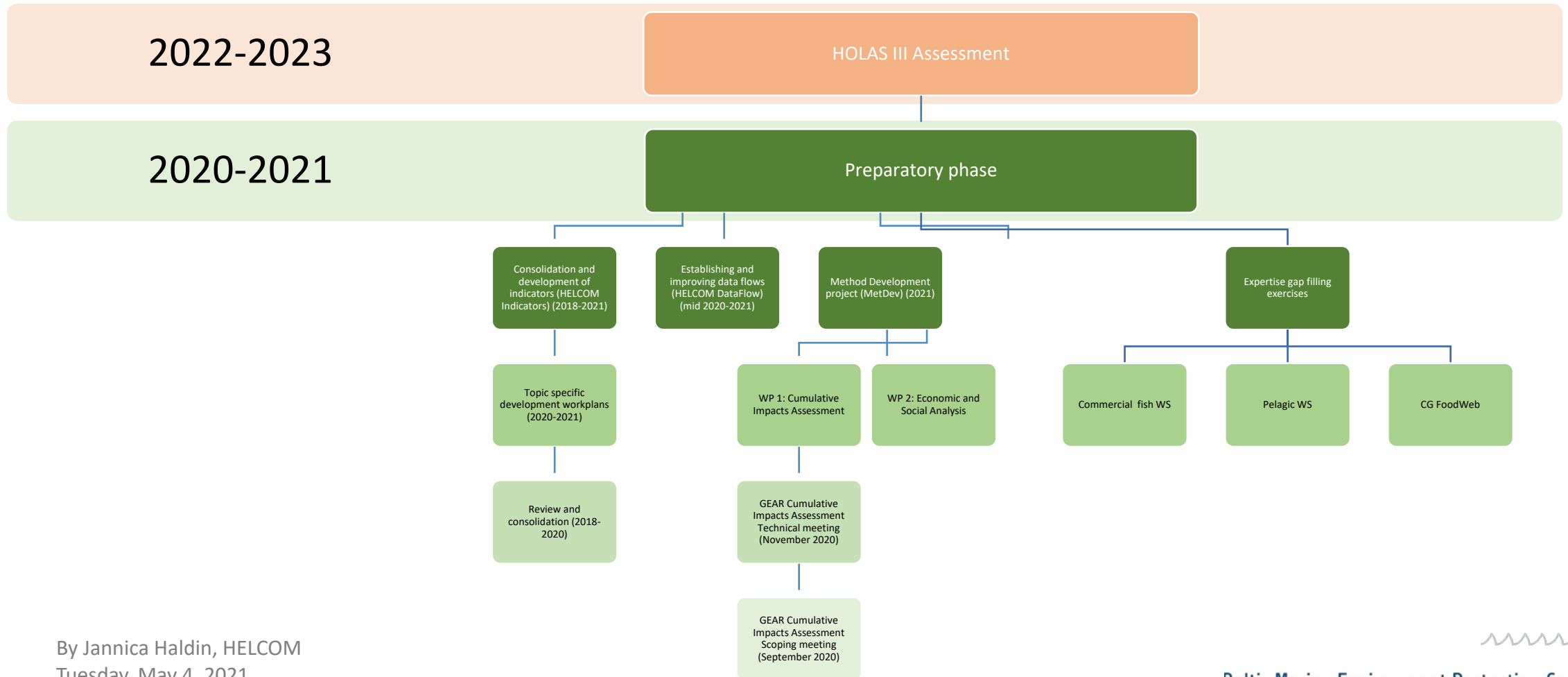
THIRD HELCOM HOLISTIC ASSESSMENTS OF THE BALTIC SEA ENVIRONMENT (HOLAS III)

- **Planning and process**

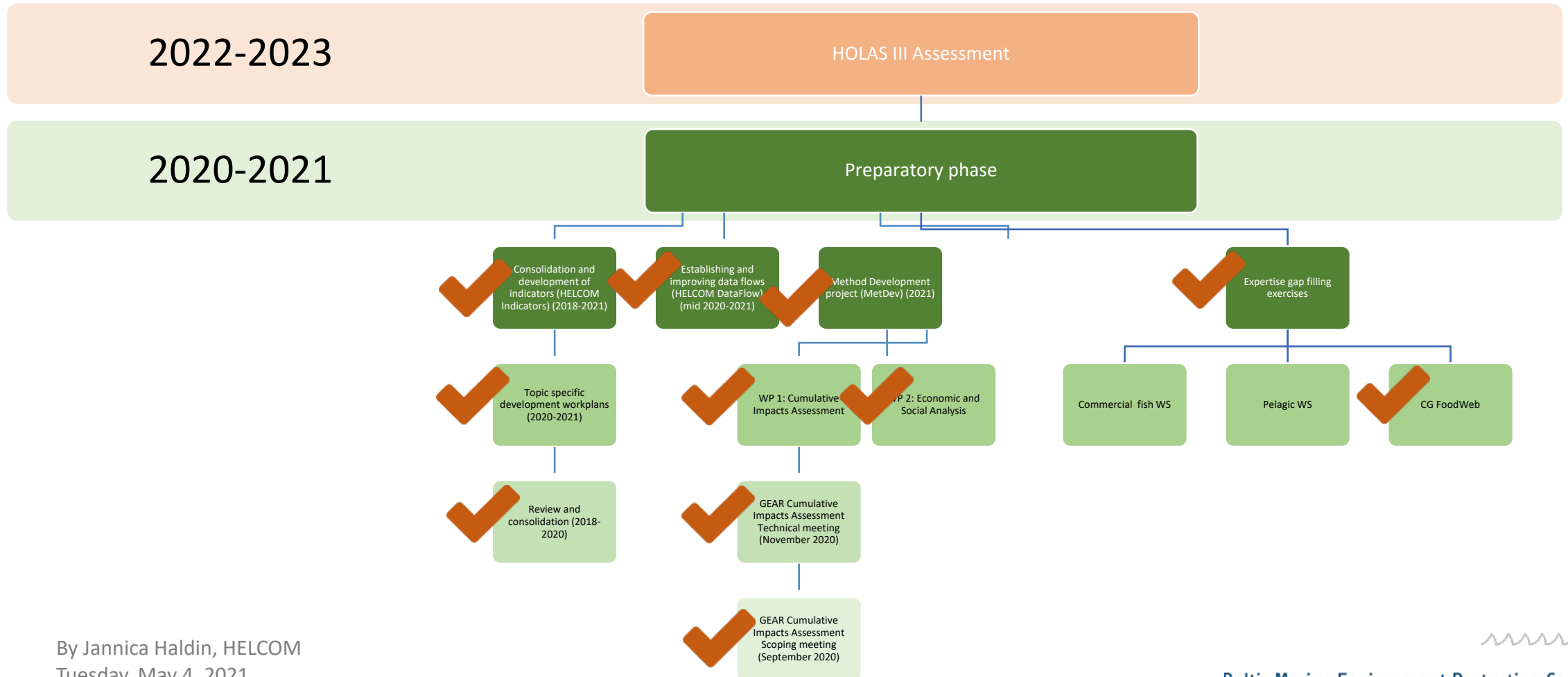
HOLAS 3 logo



Work to support the publication of the Third State of the Baltic Sea report - process



Work to support the publication of the Third State of the Baltic Sea report - process



HELCOM groups for guidance & approval, provisional submission dates

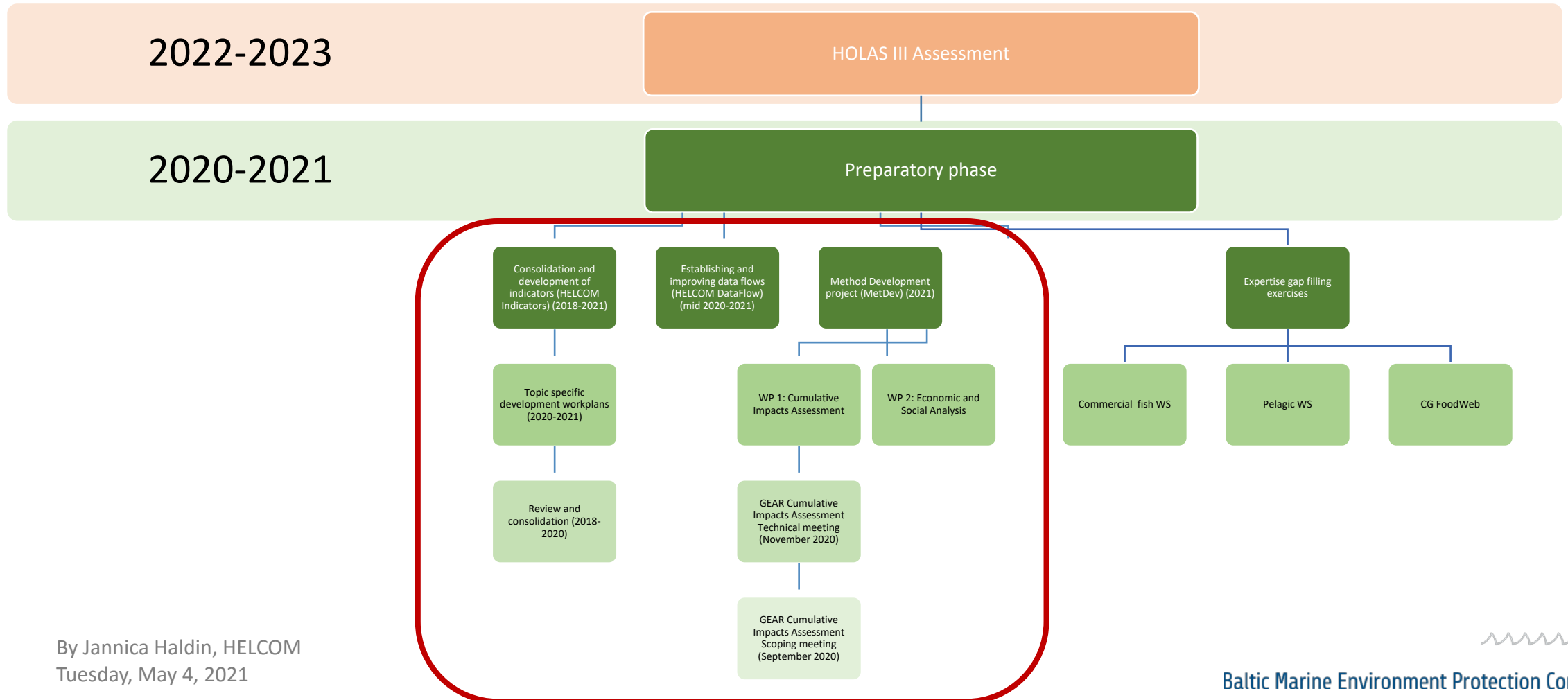
Year	Season	Meeting	Dates of meeting	Submission to Secretariat by	Expected type of submission (Update/guidance/review/approval)	
2021	Spring	PRESSURE 14-2021	13-16 April 2021	18 March	Update/guidance	
		FISH 13-2021	20-21 April 2021	25 March	Update/guidance	
		STATE&CONSERVATION 14-2021	3-7 May 2021	8 April	Update/guidance/review	
		GEAR 24-2021	18-20 May 2021	26 April	Update/guidance	
		HOD 60-2021	3-4 June 2021	7 May	Update/guidance	
	Autumn	MARITIME 21-2021				Update/guidance
		STATE&CONSERVATION 15-2021	4-8 October 2021	7 September		Review
		PRESSURE 15-2021	1-5 November 2021	7 October		Review
		GEAR 25-2021	8-10 November 2021	13 October		Review
		HOD 61-2021	8-9 December 2021	15 November		Approval
2022	Spring	FISH 14-2022	28 February-5 March 2022	3 February	Update/guidance	
		PRESSURE 16-2022	April 2022*		Update/guidance	
		STATE&CONSERVATION 16-2022	May 2022*		Update/guidance	
		GEAR 26-2022	24-26 May 2022	28 April	Update/guidance	
		HOD 62-2022	June 2022*		Update/guidance	
	Autumn	MARITIME 22-2022	*			Update
		STATE&CONSERVATION 16-2022	October 2022*	31 August*		Approval
		PRESSURE 16-2022	October/November 2022*	*		Update
		GEAR 26-2022	November 2022*	*		Update
		HOD 63-2022	December 2022*	17 October*		Approval
2023	Spring	HELCOM 44-2023	15-16 March 2023	5 December*	Approval	
		HOD 64-2023	June 2023*	8 May*	Approval	

Note that exact dates of submission etc are still provisional for the meetings which date are not yet set. These are indicated with an asterisk (*).

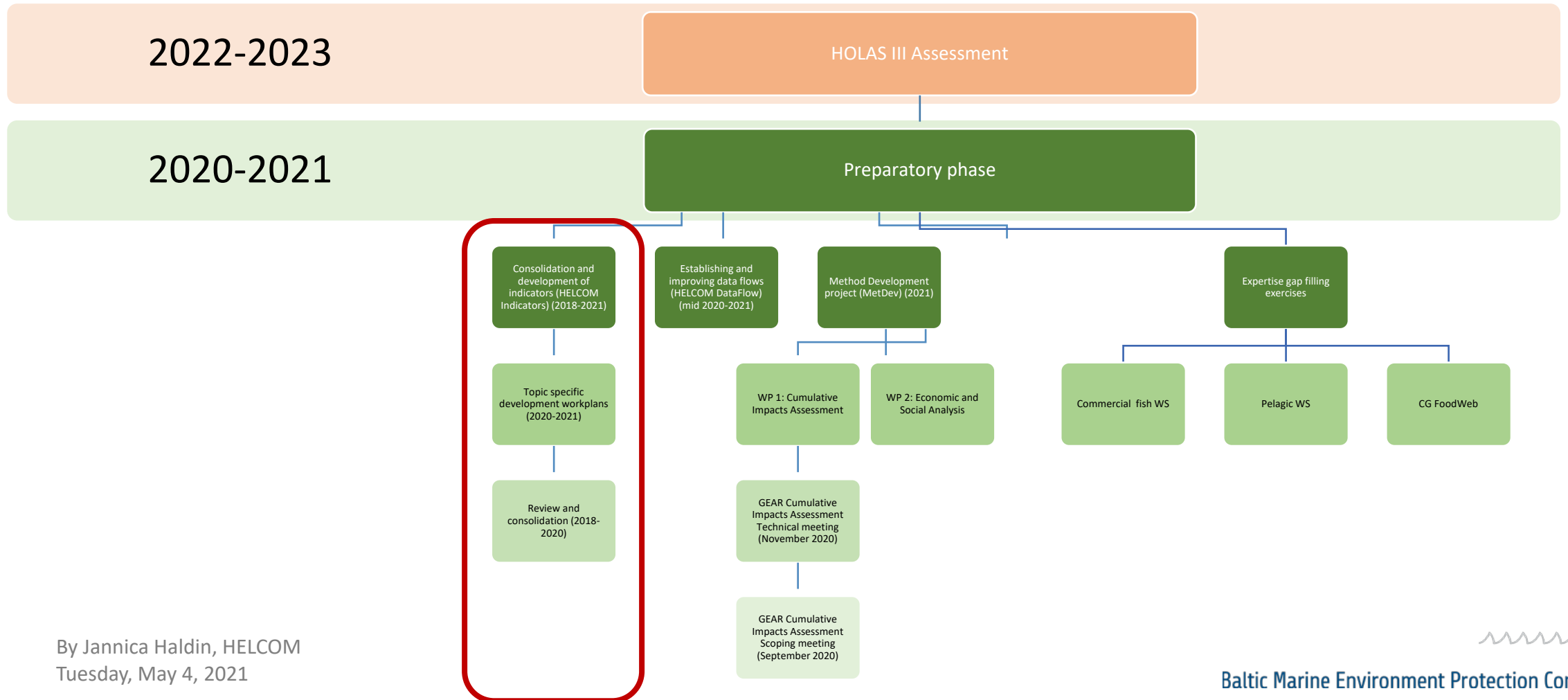
HOLAS III Preparatory Phase (January 2018-December 2021)

Internal projects

Work to support the publication of the Third State of the Baltic Sea report - process



HELCOM Indicators (docs 4J-14-4J-55 and 4J-91-4J-103 and 4J-106)



HELCOM Indicators (docs 4J-14-4J-55 and 4J-91-4J-103 and 4J-106)

- Main aim: to ensure that indicators to be included in the assessment are ready and operational by autumn 2021 and prevent overlap of development of indicators with indicator evaluation.
- Improve and extend spatial coverage of existing indicators, develop new indicators to cover identified gaps, in line with prioritization.
- **Any indicators not operational and approved by the end of 2021 (HOD in December 2021) will not be included in the HOLAS III assessment.**

Prioritization of indicator work for HOLAS 3:

- criteria for prioritization of HELCOM indicator work as agreed by GEAR 19-2018:
 - a) address primary criteria before secondary criteria
 - b) address criteria requiring threshold before criteria for which no thresholds are required
 - c) address lists of elements before threshold values and methodological standards
 - d) consolidate existing indicators before developing new indicators develop new indicators for major gaps relating to criteria requiring threshold values (i.e. where so far no assessment has been possible at all) before developing complementary indicators or indicators not requiring threshold values.
 - e) use opportunities for cooperation with OSPAR or other EU marine regions on indicators before starting parallel work
 - f) focus on work in accordance with and complementary to EU technical work, using EU standards etc. where relevant to avoid unnecessary efforts and overlaps.



HELCOM Indicators (docs 4J-14-4J-55 and 4J-91-4J-103 and 4J-106)

- Based on the consolidation and prioritisation work done in 2018 -> topic specific indicator workplans (can be found [here](#)).
- Timeline:

Process	1	2	3	4	5	6	7	8	9	10	11	12
Development + EG review and input												
First review and policy/technical guidance (S&C 14, GEAR 24)												
Development + EG review and input												
Second review and endorsement (S&C 15)												
Minor revisions based on feedback												
Approval (HOD 61-2020)												

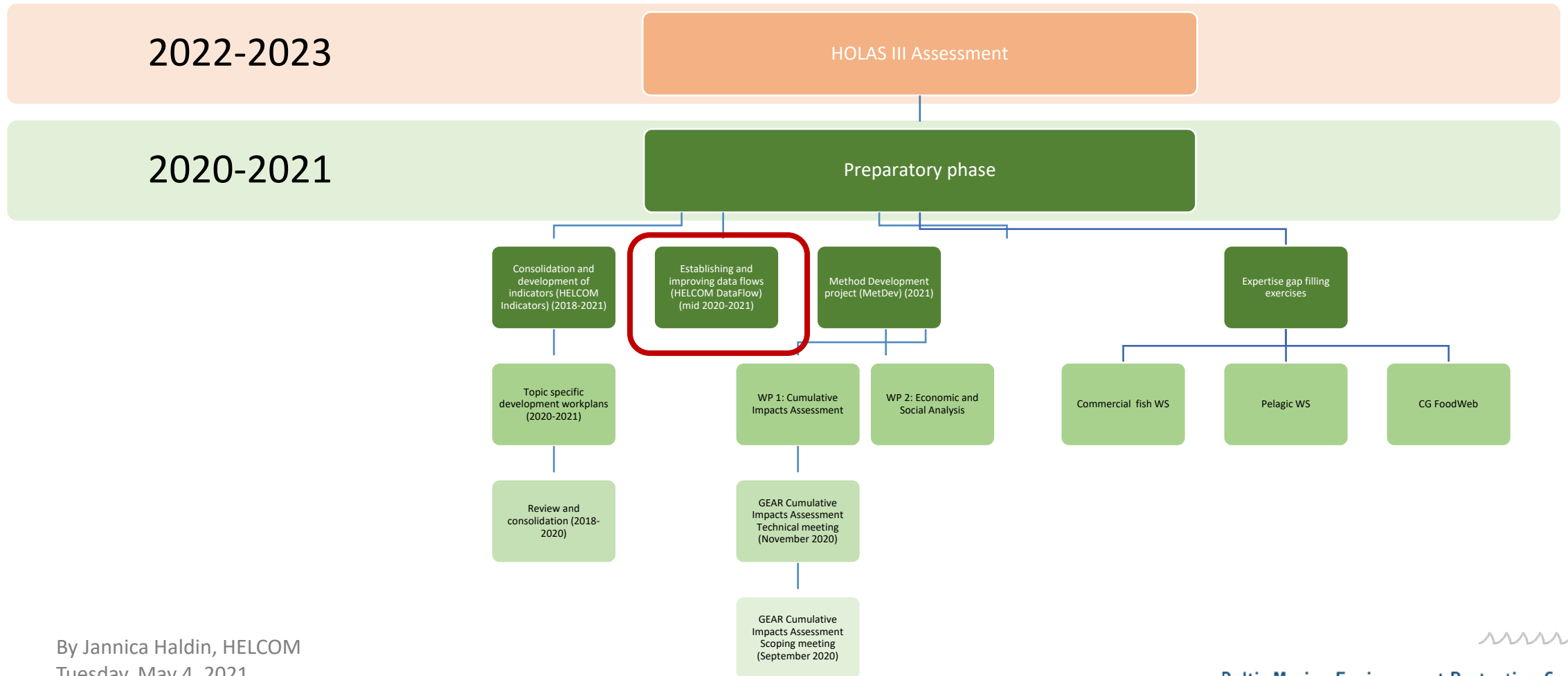
HELCOM Indicators, submission dates

- Deadlines for the relevant meetings:
 - Submission of TV to CPs for approval: submission to Sec **7 September**, submission to meeting 9 September.
 - STATE&CONSERVATION 15-2021 (PRESSURE cc): submission to Sec **7 September**, submission to meeting 9 September.
 - HOD 61-2021: submission to Sec **15 November**, submission to meeting 17 November.

More info:

- [Document 4-20 to HOD 57-2019.](#)
- [Topic specific workplans.](#)
- Documents 4J-14-4J-55 and 4J-91-4J-103 and 4J-106

HELCOM DataFlow (doc 4J-11 rev.1)



HELCOM DataFlow (doc 4J-11 rev.1)

- improving the HELCOM data flows to be fully operational for HOLAS III.
 - in-depth gap-analysis of current reporting data flows compared to the commitments outlined in Monitoring guidelines and Monitoring manual and as required by indicator-based assessments, including also data flows feeding cumulative impact assessments and economical and social analysis.
 - develop a data flow plan for HOLAS III based on input received on optimal reporting deadlines
 - seek solutions to reduce the need of ad-hoc data calls to a minimum by scoping data requirements to meet assessment needs, with feasible data request intervals, seeking solutions for synergies with other data flows and by seeking solution for regular annual reporting data flow.
 - looking for options on developing flexible ways of making data available/reporting data to reduce the intensity of workload for the national data providers, including establishing more frequent, more regular reporting.
 - further develop data management solutions in the Secretariat to reduce manual data processing
-
- Gap analysis for existing data flows done.
 - Early data call for HOLAS III prepared and approved.
 - Data flow plan submitted to S&C 14-2021.
 - Data called published.

HELCOM DataFlow (doc 4J-11 rev.1)

DataFlow project activity	2020						2021						2022																	
Activity	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	12
A. Gap analysis																														
B. Analysis of data flow requirements																														
C. Optimisation of data flow processes																														
D. Exploring options for data harvesting and synergies																														
E. Creating data conversion tools																														

Relevant meetings	2020						2021						2022					
S&C 13-2020																		
HOD 59-2020																		
S&C 14-2021																		
HOD 60-2021																		
S&C 15-2021																		
HOD 61-2021																		

HOLAS III timeline	2020						2021						2022					
HOLAS III Indicator data collection																		
HOLAS III Indicator data approval																		
HOLAS III CI Data collection																		
HOLAS III CI Data approval																		

	Project researcher
	Both project researcher and database developer
	Database developer

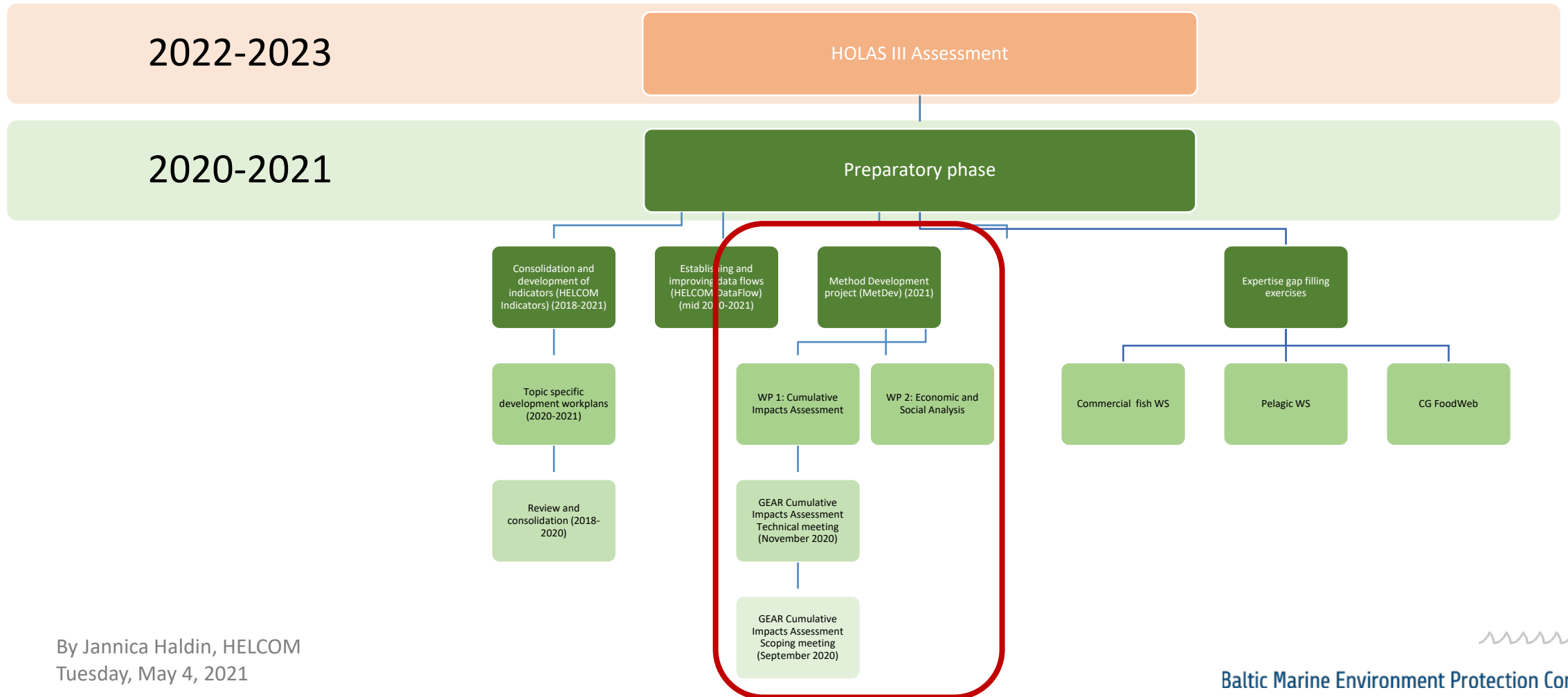
HELCOM DataFlow, submission dates

- Deadlines for the relevant meetings:
 - HOD 60-2021: submission to Sec **7 May**, submission to meeting 12 May.
 - STATE&CONSERVATION 15-2021: submission to Sec **7 September**, submission to meeting 9 September.
 - HOD 61-2021: submission to Sec **15 November**, submission to meeting 17 November.

More information:

- [Project proposal](#)
- Data call
- Data gap scoping
- Data flows for HOLAS III evaluation
- Document 4J-11 rev.1

HELCOM MetDev



HELCOM MetDev

- Focuses on established analyses for HOLAS which are NOT indicator driven:
 - Spatial pressure and impact assessment (WP 1)
 - Economic and Social analyses (WP 2)

HELCOM MetDev: Spatial pressure and impact assessment (doc 4J-57)

- Aims and tasks identified through a **survey**, a **policy workshop** and a **technical workshop** in 2020.

Tasks:

- a) Capacity for subset analyses of any activity/pressure/impact/ecosystem component combinations
- b) Improve sensitivity scores and matrices
- c) Improve links between pressures and change in state
- d) Linking back proportion of impact to the relevant human activity/ pressures/ecosystem component
- e) Differentiate between direct and indirect pressures
- f) Include temporal resolution (e.g. retrospective changes over time/within a year)
- g) Explore inclusion of antagonistic/synergistic effects of pressures and activities
- h) Improved confidence assessment and presentation of uncertainties and assumptions.
- i) Validation of results
- j) Other tool development
- k) Other data development

HELCOM MetDev: Spatial pressure and impact assessment (doc 4J-57)

- HELCOM Expert Support:
 - HELCOM Expert Groups based on identified need
 - Workshop planned
- Review, guidance and approval: State and Conservation (scientific/technical) and GEAR (policy/strategic)
- Will us on BSPI/BSII and the tool developed under PanBaltic Scope as core.
- Will build on functionality developed under other tools in the region.

HELCOM MetDev: Spatial pressure and impact assessment (doc 4J-57)

Task	2021												2022		
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3
a. Capacity for subset analyses of any activity/pressure/impact/ecosystem component combinations															
b. Improve sensitivity scores and matrices															
c. Improve links between pressures and change in state															
d. Linking back proportion of impact to the relevant human activity/pressures/ecosystem component															
e. Differentiate between direct and indirect pressures															
f. Include temporal resolution (e.g. retrospective changes over time/within a year)															
g. Explore inclusion of antagonistic/synergistic effects of pressures and activities															
h. Improved confidence assessment and presentation of uncertainties and assumptions.															
i. Validation of results															
j. Other tool development															
A. Other data development															



HELCOM MetDev: Economic and Social Analyses (doc 4J-56 and 4J-58)

- Tasks:
 - a) Improved integration of ESA and environmental assessments
 - b) Improved implementation of the ecosystem services approach (doc 4J-58)
 - c) Pilot assessment of the prospects of marine ecosystem accounting (doc 4J-58)
 - d) Driver indicators (doc 4J-56)

HELCOM MetDev: Economic and Social Analyses (doc 4J-56 and 4J-58)

- HELCOM Expert Support: EN ESA
- Review, guidance and approval: GEAR and S&C
- conceptual development, development of approaches, data collection and analyses for regional assessments.

HELCOM MetDev: Economic and Social Analyses (doc 4J-56 and 4J-58)

Task	2021												2022					
	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3			
A. Improved integration of ESA and environmental assessments					Guidance from WGs and EN ESA				Review by WGs and EN ESA			Approval by HOD						
B. Improved implementation of the ecosystem services approach																		
C. Pilot assessment of the prospects of marine ecosystem accounting																		
D. Driver indicators																		



HELCOM MetDev, submission dates

- Deadlines for the relevant meetings:
 - STATE&CONSERVATION 15-2021: submission to Sec **7 September**, submission to meeting 9 September.
 - HOD 61-2021: submission to Sec **15 November**, submission to meeting 17 November.

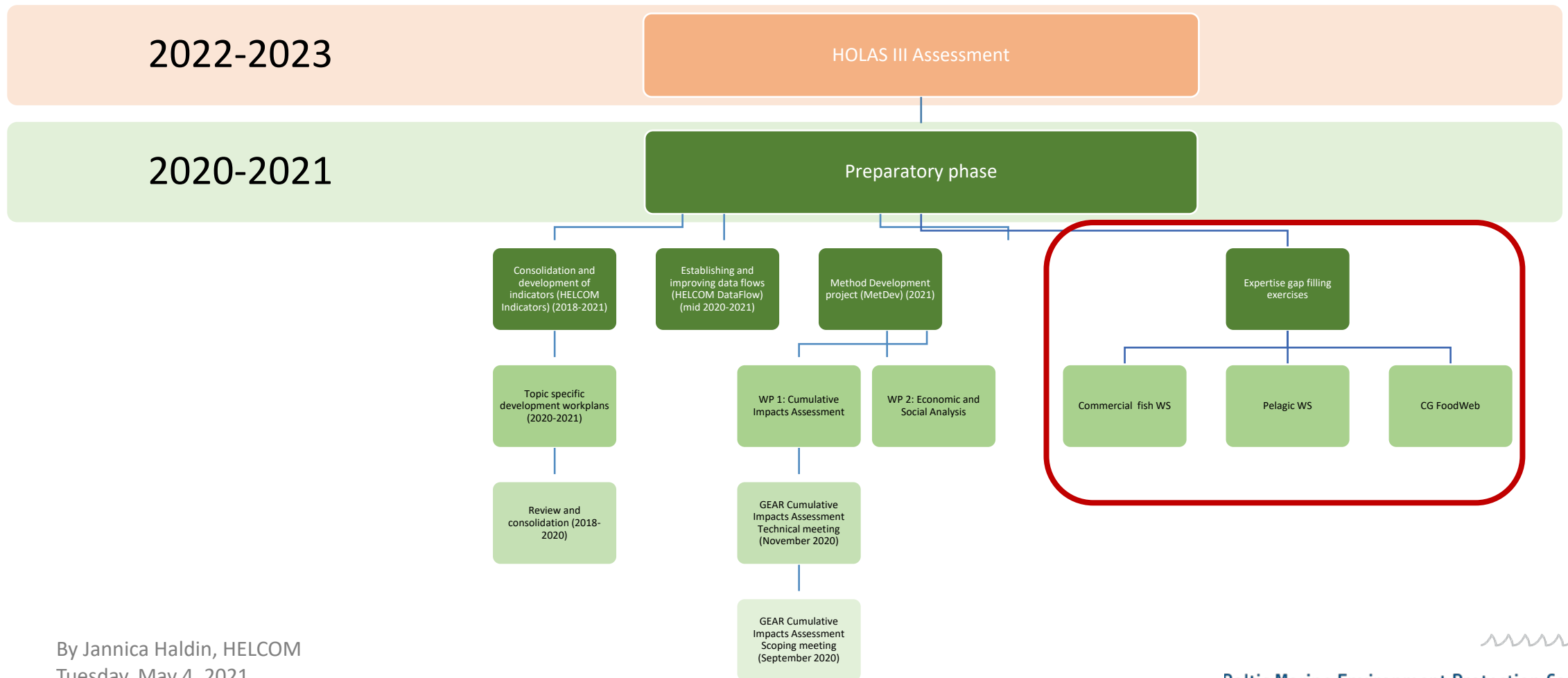
More information:

- [Project proposal \(Attachment 1\)](#)
- [Results of survey](#)
- [Outcome of Policy WS](#)
- [Outcome of Technical WS](#)
- [Overview of tool functionality and proposal for core structure](#)
- Documents 4J-56, 4J-57 and 4J-58

HOLAS 3 Preparatory Phase (January 2018-December 2021)

Expertise gap filling exercises

Work to support the publication of the Third State of the Baltic Sea report - process



Identifying gaps and scoping how to fill them (docs 4J-7-4J-9, 4J-15, 4J-66, 4J-71, 4J-72)

- STATE&CONSERVATION 12-2020 document 4J-14

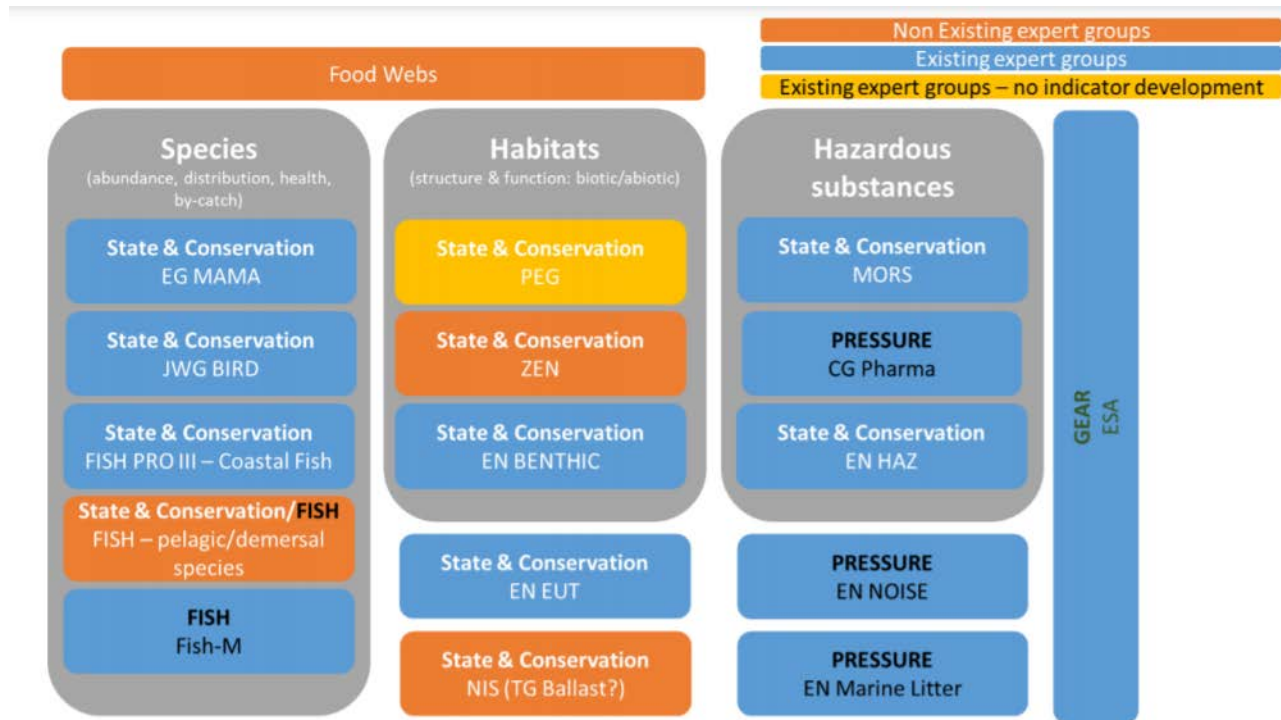


Figure 1 Overview of existing expert groups which are active in indicator development (blue boxes), expert groups not dealing with indicator development in particular (orange boxes) and gaps in the expert group organization concerning indicator development (red boxes).

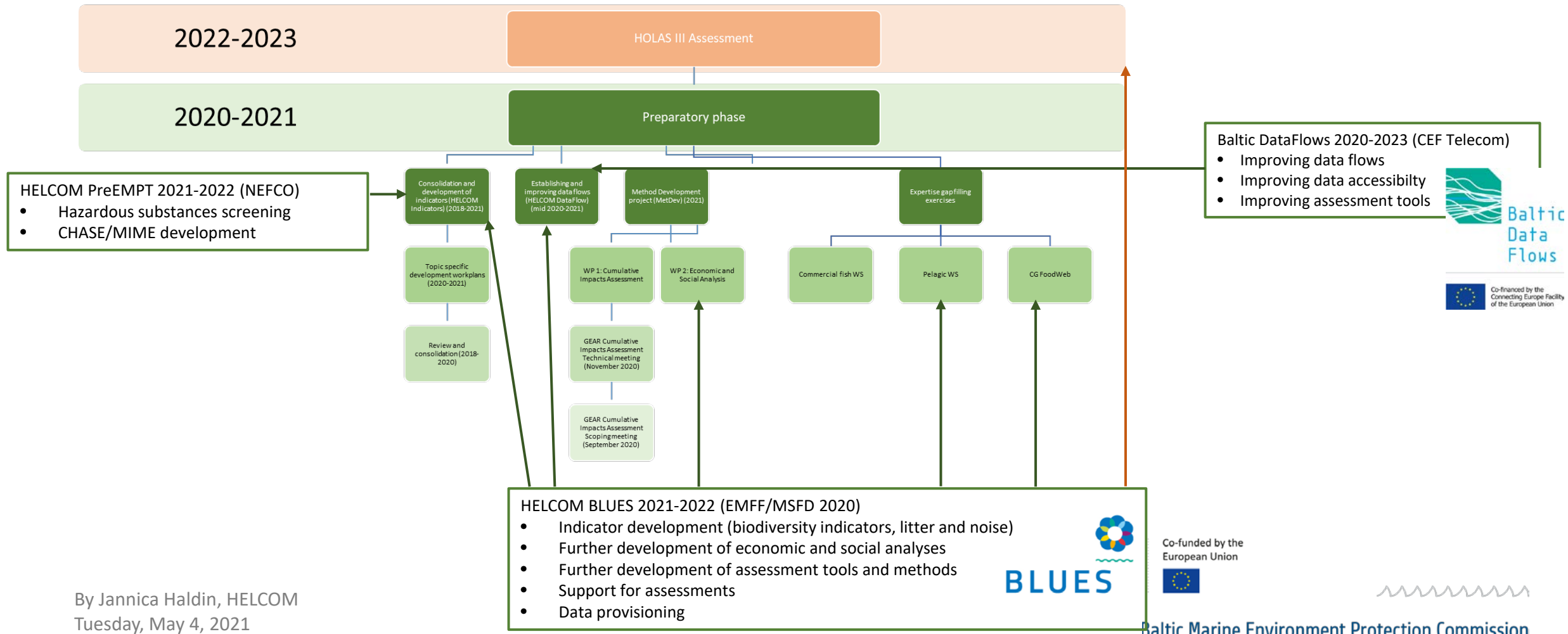
Expertise gap filling exercises (docs 4J-7-4J-9, 4J-15, 4J-66, 4J-71, 4J-72)

- [HELCOM WS on Pelagic Habitats \(HELCOM Pelagic WS1-2021\) Annex 2, Spring 2021](#)
- [HELCOM WS on Status Assessment of Commercial Fish \(HELCOM ComFish WS 1-2021\), Annex 3 August 2021](#)
- [HELCOM Correspondence Group on Food webs \(CG FOODWEB\), Annex 1 January 2021 ->](#)

HOLAS 3 Preparatory Phase (January 2018-December 2021)

External Projects

Work to support the publication of the Second State of the Baltic Sea report - process



Baltic Data Flows (docs 4J-12 and 4J-80, 4J-83/84)

Baltic Data Flows 2020-2023 (CEF Telecom) (docs 4J-12 and 4J-83/84)

- Improving data flows for eutrophication, hazardous substances and zooplankton, phytoplankton and zoobenthos (the data reported to HELCOM databases hosted by ICES (not seafloor litter and noise)). (doc 4J-12).
- Improving data accessibility (sharing metadata with EU metadata portal).
- Improving assessment tools (HEAT and CHASE automation and partially BEAT) (docs 4J-80, 4J-83/84).
- Coordinated by HELCOM, 7 partners.



BLUES



Co-funded by the
European Union

HELCOM BLUES

(docs 4J-13, 4J-17-18, 4J-20, 4J-28 rev.1, 4J-30, 4J-54, 4J-59-60, 4J-62-63, 4J-65, 4J-67, 4J-69, 4J-71-72, 4J-74, 4J-77, 4J-79, 4J-84, 4J-91-93, 4J-107)



HELCOM

Project Consortium



14

partners



6

out of 9 Baltic
Sea states



7

identified
subcontractors





What are we aiming to do?

Envisioned project products and deliverables



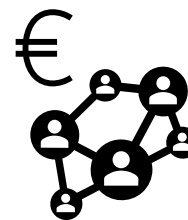
Consolidation and development of indicators (biodiversity, litter and noise)



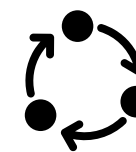
Expertise gap filling (e.g. pelagic habitats, foodwebs)



Support for assessments



Further development of economic and social analyses



Further development of assessment tools and methods



Establishing and improving data flows



Key outcomes of HELCOM BLUES

=> new and improved methodology

=> improved assessments

=> indicator development



How will we do it?

Project setup



HELCOM BLUES 2021-2022

Activity 1. Analyses to support effective regional measures (Activity lead: LUKE)	Task 1.1 Develop the assessment framework
	Task 1.2 Improved data for the assessment
	Task 1.3 Estimation of benefits
	Task 1.4 Effectiveness of measures and policy-support
Activity 2. Improved regional assessment of biodiversity (Activity lead: HELCOM)	Task 2.1 – Bycatch
	Task 2.2 Non-commercial fish
	Task 2.3 Pelagic habitats
	Task 2.4 Harbour porpoise
	Task 2.5 Integrated biodiversity (BEAT) and preliminary food web approach
Activity 3. Support for, and harmonisation of, regional work on Descriptor 10 (marine litter) (Activity lead: HELCOM)	Task 3.1 Beach litter
	Task 3.2 Progress development of microlitter indicator
Activity 4. Support for, and harmonisation of, regional work on Descriptor 11 (underwater noise) (Activity lead: TalTec)	Task 4.1 Continuous noise
	Task 4.2 Impulsive noise
Activity 5: Data accessibility (Activity lead: HELCOM)	Task 5.1 Improving capacity for biodiversity data reporting
	Task 5.2 Provisioning external data products for assessments
	Task 5.3 Developing tools for beach litter data flow and assessment



What is BLUES aiming to do?

Envisioned project products and deliverables



Activity 1 - Effectiveness and Measures

- Description of the improved assessment framework for sufficiency, effectiveness and economic impacts of measures.
- Data for assessing the effectiveness and costs of regionally coordinated actions.
- Literature review on marine valuation studies.
- Improved approach for assessing regional benefits.
- Regional benefit estimates of achieving good environmental status.
- Results of regional analyses of the use of marine waters and cost of degradation.
- Results for the improved sufficiency and effectiveness of measures analysis.
- Approach for and results of a regional cost-benefit analysis of achieving good environmental status for 1-2 environmental topics.
- Description of incentives and regulations around the Baltic Sea countries to mitigate nutrient loading.



Activity 2 - Biodiversity

- Regional bycatch risk maps and corresponding confidence evaluation for key species,
- Test cases evaluations for bycatch.
- Improved state indicator assessment for by-catch.
- Application of an improved methodology for state assessment for non-commercial fish.
- Application of size-based assessment for key fish species and interim threshold values .
- Operational indicators for zooplankton and phytoplankton, including threshold values and Pan-Baltic coverage.
- Approach for a more informative and integrated assessment of pelagic habitats.
- Improved harmonisation between HELCOM and OSPAR, assessment of trends in abundance of the Belt Sea harbour porpoise population.
- Test evaluation and threshold value application for the Belt Sea porpoise population trend in abundance evaluation.
- Expert-based qualitative assessments of abundance and distribution of the Baltic Proper population assessments.
- Adaptation of BEAT assessment flow to include new approved indicators.
- Review of food web assessment approaches and summary of knowledge on the Baltic Sea



Activity 3 – Marine Litter

- HELCOM beach litter data compatible with EU coding,
- an overview of the effectiveness of EU regulations and actions within the HELCOM Regional Action Plan on Marine Litter.
- Beach litter assessment
- Standard Operating Procedures (SOPs) for monitoring of seabed sediment and water samples.
- Survey and dataset for consideration to calculate baseline and threshold values.



Activity 4 – Underwater noise

- New soundscape maps
- Quantitative continuous noise assessment for HOLAS III
- Improve calibration standards for monitoring of continuous noise
- Quantitative impulsive noise assessment for HOLAS III



Activity 5 - Data

- Updated data model of the biodiversity database
- Updated biodiversity database web application
- Reporting format for mobile species abundance and distribution
- Fishing effort and intensity maps, publicly available and downloadable set of data products (maps).
- Beach litter assessment tool, including making available downloadable sets of assessment raw data and data products (maps).
- Beach litter assessment data products

Plan for S&C 14-2021

- Data related preparatory work.
- Overarching indicator related documents.
- Indicators with no foreseen changes in approach from HOLAS II.
- Indicator development and assessment methodology changes, thematically, indicators first and then assessment methodologies.

- Indicators=indicator evaluation results
- Assessments=integrated/thematic assessment approaches

Plan for S&C 14-2021

- Indicator development and assessment methodology changes, thematically, indicators first and then assessment methodologies:
 - Biodiversity:
 - Phytoplankton
 - Zooplankton
 - Pelagic habitats
 - Benthic habitats
 - Fish
 - Waterbirds
 - Marine mammals
 - Bycatch
 - Foodwebs
 - BEAT tool
 - Eutrophication
 - Indicators
 - HEAT tool
 - Pollution
 - Contaminant indicators
 - CHASE tool
 - Marine litter indicators
 - Marine litter assessments
 - UW noise indicators
 - UW assessment

Plan for S&C 14-2021

- Indicator development and assessment methodology changes, thematically, indicators first and then assessment methodologies:
 - Acidification indicator
 - Driver indicators
 - Spatial pressures and impacts assessment
 - Economic and social analyses assessment
 - Ecosystem service and ecosystem accounting
 - Cost of degradation
 - Use of marine waters
 - Sufficiency and effectiveness of measures
 - Cost-benefit of measures

Thank you for your attention!

