

GES4SEAS

Milestone Report

M1.6 – Brief on PAB feedback/outcomes to WPs4-5.



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GES4SEAS (Achieving Good Environmental Status for maintaining ecosystem services, by assessing integrated impacts of cumulative pressures) project is funded by the European Union under the Horizon Europe program (grant agreement no. 101059877). Views and opinions expressed are however those of the authors only and do not necessarily reflect those of the European Union or UK Research and Innovation. Neither the European Union nor the granting authority can be held responsible for them.

1. Milestone M1.6

This *Milestone Report Brief on PAB feedback/outcomes to WPs 4 and 5* summarizes the progress made during this active stage of interactive co-development between the PAB and the *GES4SEAS* project partners responsible for the development of the toolbox and several scientific tools (methods, models, indices, approaches, workflows) and supporting resources that will integrate the *GES4SEAS* toolbox. This document serves as roadmap for other WPs, and especially WP4 and WP5, including the needs, expectations and recommendations from the PAB about the toolbox and the different approaches to be followed in the project.

This milestone reports on ongoing activities within WP1:

(M1-48) *Task 1.2. Co-creation and design thinking process*, lead by AZTI and developed in partnership with UAVR, NIVA, AU, SYKE, TI-SF MariLim, Scitation, CNRS, ISPRA.

(M1-48) *Task 1.3. Iterative development & validation of beta toolbox version*, lead by AZTI and developed in partnership with NIVA, AU, SYKE, UAVR, MariLim.

This Milestone 1.6 **Brief on PAB feedback/outcomes to WPs 4 & 5** provides an update on the *GES4SEAS* Practitioner Advisory Board Members, details the approach to maintain a continuous communication flow between the project partners and the PAB, including the strategic updated calendar of participatory events. It also provides an overview of the PAB engagement activities that took place since the last Milestone 1.5, as well as an outline of the activities planned for the project second year (up to Month 24 where the next Milestone 1.7 is due) and which envisage close interaction with the PAB and other stakeholders.

1.1 Update of *GES4SEAS* Practitioner Advisory Board Members

The Practitioner Advisory Board (PAB) is now composed by 15 Members from 14 Institutions (Table 1). The project PAB has now on-board representatives from all four Regional Sea Conventions in Europe, after the inclusion of OSPAR during the first year of the project. Recently, a new representant **OSPAR** has been assigned, **Carole Durussel**, who is the Deputy Secretary responsible for cross-cutting issues, including OSPAR work on cumulative impacts assessments, and will from M18 onwards represent OSPAR on the *GES4SEAS* Practitioner Advisory Board. The complete updated list is detailed below and can be found in the project website along with a small profile of PAB Members (<https://www.ges4seas.eu/practitioner-advisory-board-members/>).

Table 1. List of Members of the GES4SEAS Practitioner Advisory Board (PAB) as of Month 18 of the Project.

Competent authorities from EU Member States	
SPAIN	Lucía García-Denche
IRELAND	Sorcha Ní Longphuirt
ROMANIA	Otilia Mihail
GERMANY	Axel Kreutle
ITALY	Roberto Giangreco
Regional Seas Conventions	
HELCOM	Juuso Haapaniemi
	Black Sea Commission Iryna Makarenko
UNEP/MAP	Christos Ioakeimidis
OSPAR	Carole Durussel
European Environment Agency	Johnny Reker, Monika Peterlin
EU COM Knowledge Centre for Biodiversity (KCBD)	Camino Liqueste
EU COM Joint Research Centre Georg Hanke	
Expert - Fisheries and Oceans Canada (DFO), Canada	Roland Cormier
Expert - European Global Ocean Observing System (EuroGOOS)	Dina Eparkhina

1.2 Summary of GES4SEAS partners & PAB engagement activities up to M18

A **calendar of main participatory events** set-up early on the project (**Milestone 1.2**) keeps being **regularly updated** by partners with activities for which they would like the PAB to be involved or consulted. This calendar is shared within the project TEAMS workspace and has been **instrumental to plan participatory events**, avoid overlaps, foster synergies between activities and partners and avoid stakeholder fatigue by optimizing requests and means of collaboration. The calendar has currently 17 entries covering the main planned interactions with PAB with GES4SEAS activities, with details updated as work progresses ([Figure 1](#)).

no.	Workpa- ckage	Task	Brief description of the input required	Period for engagement activity (month(s) of project)	Deadline for PAB input (month of project)	Milestone(s) /Deliverable(s) associated (due date)	Preferred means of communication (suggestions)	GES4SEAS contact	PAB members to engage / invite
1	WP4	T4.1	Feedback on Roadmap to develop an innovative assessment framework and the corresponding toolbox (a software containing a set of tools for assessment and other tasks)	M6-M7	March 2023 (M7)	D4.1 Beta prototype toolbox combining existing codes from GES and CIA/CEA assessments (M11)	E-mail		All
2	WP2	T2.1	Feedback on the final Deliverable 2.1. Receive comments on the main topics of this report that will be pertinent to the practical guidelines to be developed and outlined in D2.3.	M10-11	July 2023 (M11)	D2.1 Ecosystem management approaches based on a review of the activity-pressure-effects chain towards achieving GES in the MSFD (M9)	E-mail		All
3	WP2	T2.3	Feedback on deliverable 2.1 will be taken into account when developing the content of the deliverable 2.3. Digestion of D2.1 PAB comments and reflection of main suggestions and/or concerns in D2.3. Input also into D2.3 made available to PAB.	M10-11	July 2023 (M11)	D2.3 Guidelines (Best Practical Options) for Practical Ecosystem Approach (M13)	(Indirect, extracted from with D2.1 comments) & E-mail		All
4	WP3	T3.1	Workshop on Ecosystem Services (WP3): identify Learning Sites applying it + PAB engagement	M15-M17	15-19 January (M17)	D3.1 Selected methods and potential applications in Learning Sites (M17) D3.2 Applications of selected tools by LSs, their specific configurations and main outputs to test tipping points and thresholds (M30)	LS online workshop - was any member of the PAB invited? Gerian Piet		Camino Liqueste (JRC-BSC)?
9	WP5	T5.2	Methods to assess and manage HABs, invasive species, jellyfish blooms and top predators will take into account the outcomes of WP1 (PAB): - M18 (2nd Feb 2024): 1st online training workshop on CIMPA open to PAB (video of session and material facilitated to those not able to attend) - next workshop?	M9-M32	April 2024 (M20)	M5.2 Method identified for assessment and management of HABs, invasive species and jellyfish blooms (M13) / D5.2 Review and testing methods for HABs, invasive species and jellyfish blooms (M34)	Personal communication and short interviews / training workshops	UAgean; UAVR; Other GES4SEAS partners?	All PAB members invited to workshops
10	WP2	T2.4	Ecosystem-Based Approach (WP2): identify Learning Sites applying it + PAB engagement. Online workshop on the SEAS4GES tool (please complete).	M13 - M19	7th March 2024 (M19)	D2.4 Lessons learnt in the application of the Guidelines (M48)	e-mail exchange and online workshop	Anita Franco + WP2 leads	Will it be open to PAB participation?
5	WP4/WP5	several WP4 tasks & T5.3, T5.4	Toolbox application (WP4): all Learning Sites must test it + PAB engagement (Physical workshop in Germany)	M13-M20	22-25 April (M20)	M1.7; M4.3; M4.4; M5.1 & D4.2 Framework and toolbox for assessment and analyses of CIA/CEA, GES status, ES, and uncertainty (M30) M5.3 Developed tools applied/tested at all LSs (M40) / D5.3 Synthesis of applying frameworks and tipping point concepts to LSs (M42)	e-mail exchange and online meetings among LSs in preparation of Workshop in April	WP4 & WP5 (tasks leads)	Will it be open to PAB participation?
6	WP5	T5.3	Assessing the relevance of information gaps, and testing the tools during development, data limitations and information gaps will be identified. Also with the help of stakeholder workshops. Here LS need to clarify which LS stakeholder are also part of the PAB. But there is no dedicated PAB meeting or consultation process	M2-M40	M30		physical workshop on 22-25 April (M20)	Ti-SF (Jennifer)	Will it be open to PAB participation?
7	WP3	T3.3	Engage PAB/stakeholders to define management scenarios for pressures and footprints in the future	M9-M18	April 2024 (M20)	D3.2 Applications of selected tools by LSs, their specific configurations and main outputs to test tipping points and thresholds (M30)	TEAMS possibly with interactive PESTEL Plus an in-person if we can piggy-back on to another event A focus group in a 1h30min online session to present project development need and collect ideas Discussion at annual meeting plus electronic meeting	CEFAS	How is this going?
8	WP4	all	Discussions/dialogue with PAB/stakeholders about the minimum requirement for data (pressures and ecosystems), and how to deal with analyses in data poor regions	M17 - M7	M7	M7 or D7		?	How is this going?
11	WP4	T4.6	Discussion with PAB/stakeholders about how to best present uncertainty/confidence of the toolbox	M20-M28	M30	M4.4 Approaches for presenting and including uncertainty in the assessment (M30)		AU	
12	WP1	T1.4	Ideas (and in a later stage, actual inputs see a later entry on this calendar) on practical formats to present and develop the GES4SEAS Guidance with recommendation for practitioners. Discussion on target topics and contents for the briefs' collection; resources; technical support and tutorials; etc...	M21 - M7	M42	D1.1 Guidance on recommendation for practitioners - as a brief collection (M46)	start in our next annual meeting thinking of this? formats, timings, etc		
13	WP4	all	Discussion /dialogue with PAB/stakeholders about thresholds for acceptance of methods/toolbox, including user friendliness and options for comparison of different methods (old vs. new versions)	M7 - M7	M7	M7 or D7	A focus group in a 1h30min online session to present project development need and collect ideas	WP4 leads	
14	WP4	T4.7	Additional feedback and testing of the toolbox by the PAB from their perspective as end-users of the toolbox	M25-M44	M44	M7 or D7	Hands-on tool testing requests combined with feedback exchange using collaborative online tools to collect feedback (e.g. Collaborator)		
15	WP1	T1.4	Inputs on practical formats to present and develop the GES4SEAS Guidance with recommendation for practitioners. Discussion on target topics and contents for the briefs' collection; resources; technical support and tutorials; etc...	M33 - M42	M42	D1.1 Guidance on recommendation for practitioners - as a brief collection (M46)	yet to be decided; maybe start planning the actual inputs our annual meeting of 2025 decide permanent repository of resources and tutorials/guidances and links to permanent WGy/institutions	WP1: Heliana /Angel	
16	WP2	T2.4	Feedback on the deliverable. Initially on the contents, later on the deliverable	M40-M48	M47	D2.4 Lessons learnt in the application of the Guidelines (M48)	E-mail		
17	WP5	T5.4	Feedback from stakeholder meetings (WP1&6) will also be used for improving frameworks and tipping point concepts	M43-M48	M44	M5.4 Use of EDVA/EBVA for assessing cumulative effects identified (M45) / D5.4 Guidelines for monitoring and management of coastal ecosystems exposed to multiple pressures (M48)	yet to be decided		

Figure 1: Snapshot of GES4SEAS Calendar of main participatory events at the end of **Month 18** of the project. The Calendar aim is to support engagement with the PAB during project activities and developments. Blue activities are closed, orange activities are ongoing or kicking-off during the second year of the project. The remaining activities are planned for a later stage in the project.

Building on the results of the initial Stakeholders' online Survey and discussions during the 1st PAB workshop at the kick-off meeting (26 to 30 of September 2022) several **recommendations and priorities** were made by the PAB that were compiled into a report and disseminated within the project (**Milestone 1.3**). These recommendations include the top features or capacities that stakeholders expect from an environmental assessment toolbox with implications for activities in the different work packages of the project. The PAB recommendations contain information particularly relevant for supporting the scientific methodologies and associated tool developments taking place during this second year under WP3, WP4 and WP5.

Based on the Project planned activities, on the topics identified during the initial survey by the stakeholders, including the PAB, as well as based on the continuous exchange with the PAB members (see summary of most relevant activities with PAB engagement up to Month 18 in [Figure 2](#)), WP1 has been able to coordinate and promote a productive communication and interaction aligned with the project goal of generating tools and scientific outputs that are co-created with the input of the actual end-users of the research outcomes produced by GES4SEAS. The main interactions are hereafter described and updated by work package.

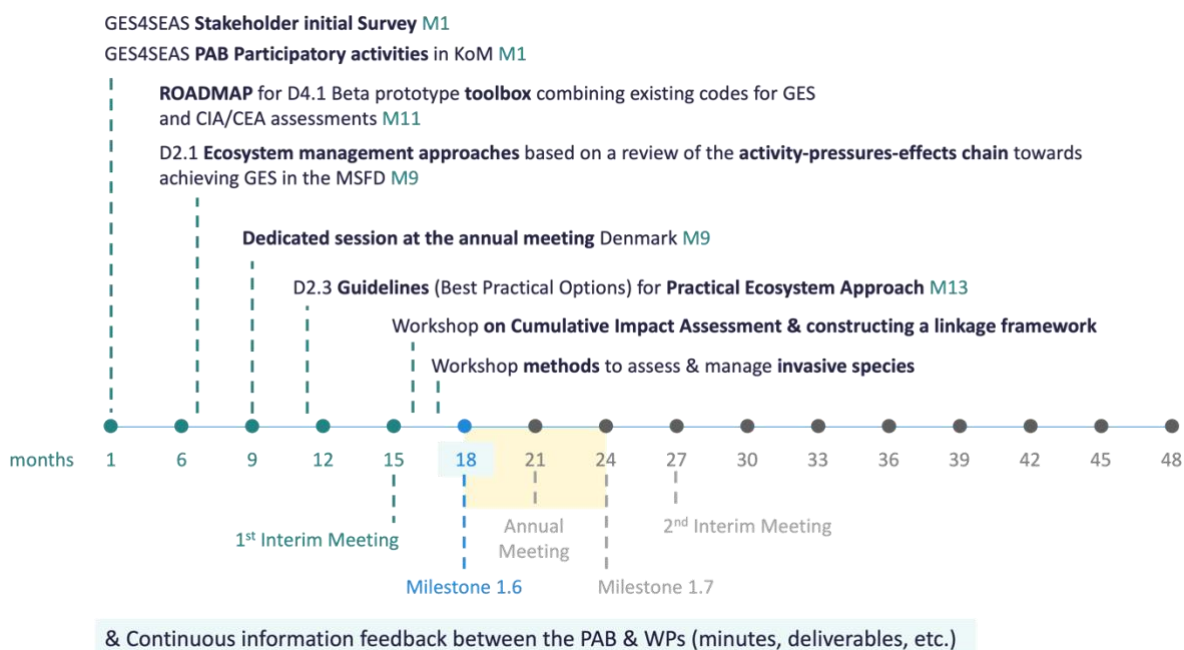


Figure 2: Main activities and Deliverables with PAB engagement and contribution during GES4SEAS first 18 months. In yellow is the period until next Milestone 1.7.

WP2 | Developing the conceptual framework and knowledge base for ecosystem-based management During this stage of co-creation and design thinking process (coordinated by WP1 under Task 1.2) the PAB engaged mostly with the activities within WP2 with important contributes for Deliverables:

- D2.1 Ecosystem management approaches based on a review of the activity-pressures-effects chain towards achieving GES in the MSFD and
- D2.3 Guidelines (Best Practical Options) for Practical Ecosystem Approach;
- but also punctually on D2.2 Technical report on the state-of-the-art in support of EBM approaches to address HABs, jellyfish outbreaks invasive species and decline of top predators.

WP3 | Understanding the mechanisms that determine the cumulative impacts of human activities and climate change Engage PAB & stakeholders through the GEs4SEAS Learning Sites (in coordination with WP5) to define management scenarios for pressures and future footprints (WP3) that will contribute to D3.2 **Applications of selected tools by LSs, their specific configurations and main outputs to test tipping points and thresholds** (M30). An online and in-person sessions are being planned to engage with stakeholders.

WP4 | Linking pressure and status assessment with the capacity to supply ecosystem services into a unifying holistic framework and nested toolbox After the important feedback and relevant contributions of the PAB to the ROADMAP for Beta prototype toolbox combining existing codes for GES and CIA/CEA assessments (leading to future D4.1), which is a living document central to WP4

developments, the beta version of the tool was showcased to the PAB for comments at the first annual meeting and at the 1st online interim meeting. Now a new session to present the most updated version of the tool (current on version 0.9) is being planned for the hands-on workshop planned for end of April 2024 (Month 21) in Germany and for the 2nd annual meeting (Month 24).

WP5 | Learning sites: Testing and synthesis Through WP2, 3 & 4, Learning Sites at the WP5 are receiving guidelines and inputs that already benefited from the PAB feedback. This WP5 activity has kicked-off in force since the practical workshops that started in January (Month 17) and will run up to the annual meeting (M24), in which the PAB and also some LS specific stakeholders will contribute to the different steps of the tests with real data and scenarios. Specific thematic workshops (*related with WP2, 3 and 5*) aiming to support learning sites and inform relevant stakeholders on thematic progresses were also concluded (Figure 2), one on Cumulative Impact Assessment & constructing a linkage framework and another on methods to assess & manage invasive species.

All WPs | Dedicated sessions were set during the **project 1st annual meeting in May 2023** in Denmark, with the presence of PAB members on site and others through remote attendance. An overview of the project implementation and discussion of main ongoing activities was presented to the PAB, opening a forum for discussion and exchange of ideas and recommendations. Six months after the annual meeting in **November 2023** (Month 15), **the first interim online meeting** of the whole project with the attendance of the PAB took place. A six-month frequency overview was envisaged within the project to foster regular feedback and communication between the PAB & all GES4SEAS WPs. The agenda for the **GES4SEAS 2nd annual meeting (27th-31st May 2024, Istanbul, Turkey)** is already being planned to allow again for the PAB attendance in person as well as online. The PAB members attending in person will be able to follow the joint plenary sessions as well as the several hands-on sessions prepared for the event, according to their topics' preference and expertise. In addition, **continuous information feedback** between the PAB & GES4SEAS was ensured through sharing of relevant meeting minutes and dissemination of project deliverables and other outputs with no direct engagement of the project. This was maintained throughout the entire period and coordinated by WP1 leads.

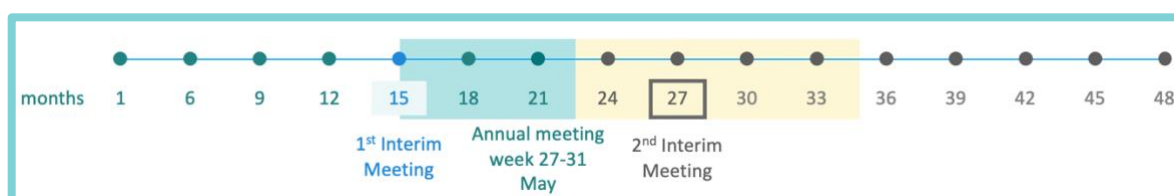
The PAB has also been instrumental in **identifying relevant fora**, namely MSFD working groups (e.g. MSCG) and other venues (Regional Sea Conventions) where the project could present its objectives and developments to future end-users of its most relevant outputs.

1.3 Planning of PAB engagement activities for 2nd year

Ongoing and near future activities have been planned and communicated to the PAB during the 1st interim online meeting (Month 15) (*Figure 3*). Besides **WP4** activities leading towards **initial testing of the toolbox**, activities with PAB within WP3 and **WP5** will also intensify in year 2. In **WP3** particularly regarding **capacity building** on diverse methodological approaches that can be used for

Understanding the mechanisms that determine the cumulative impacts of human activities and climate change, and in WP5 regarding the application of project approaches and tools to **Learning sites: Testing and synthesis**, with the support and inputs from PAB and other relevant stakeholders. In addition, the means to interact with PAB were also presented to allow the PAB some feedback both on content as well as format of expected interactions, e.g.:

- workshops with PAB members invited according to interest and scope
- in-person meetings try to match or back-to-back with other events
- through TEAMS, possibly with interactive online tools e.g. a PESTEL analysis
- online focus group (e.g. 1h30min session) to present project development needs and collect ideas
- personal communication and short interviews
- training workshops.



GES4 SEAS

WP1

Upcoming interactions with PAB

Workshop on **Ecosystem Services** (WP3) 15-19 January 2024 Netherlands tbc

Some PAB members might also interact directly in some of the national/international **Learning Sites** (WP5) from January 2024 tbc

PAB/stakeholders input on minimum requirement for data (**pressures and ecosystems**) and on how to deal with analyses in **data poor** regions (WP4) from January 2024 tbc

Engage PAB/stakeholders to define **management scenarios for pressures and future footprints** (WP3) until April 2024 tbc into D3.2 Applications of selected tools by LSs, their specific configurations and main outputs to test tipping points and thresholds (M30)

Methods to assess and manage HABs, invasive species, jellyfish blooms and top predators until April 2024 tbc into D5.2 Review and testing methods for HABs, invasive species and jellyfish blooms (M34)

Toolbox application (WP4) Spring end of March tbc

Hands-on workshop to **test the tool** for GES4SEAS LSs & session on **tipping points** 22-25 April 2024 Germany

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WP1

Next annual meeting 27-31 May 2024 (Istanbul, Turkey)

PAB dedicated session to start discussion of ideas and strategy to present and develop the **GES4SEAS Guidance with recommendation for practitioners** (T1.4).
(e.g., best formats; discussion on target topics and contents for the briefs' collection; resources; technical support and tutorials; etc...)

Plan 3rd year interactions with PAB Iterative development and validation of the beta toolbox version (T1.3)

Figure 3: Main activities requiring PAB engagement or contribution during GES4SEAS second year (green period) and beyond (yellow period).



2024