

Minutes

Joint NWWAC/PelAC Focus Group Spatial Dimension

Virtual meeting via Zoom

10 January 2025

Participants

Nils Bunnefeld	Eklipse
Goncalo Carvalho (Chair)	Sciaena
Enda Conneely	IIMRO
Sophie de Reus	North Sea Foundation
Falke de Sager	Rederscentrale
Francesca Falco	Trinomics
Ed Farrell	KFO
Marco Gauger	BafG
John Lynch	ISEFPO
Mo Mathies	NWWAC
Alexander Mueller	CNPMEM
Patrick Murphy	ISWFPO
Aodh O'Donnell	IFPO
Alexandra Philippe	EBCD
Solene Prevalet	FROMNord
Irene Prieto	OPPF4
Petra Remeta	Trinomics
Dominic Rihan	KFO
Paul Thomas	PelAC

1 Welcome from the Chair (G. Carvalho)

The Chair welcomed all participants to the meeting. Apologies were received from Tim Heddema (Pelagic Freezer Trawler Association). The agenda was adopted.

Action points from the last meeting (07 November 2024)

1	Members to send any additional questions on the topic of this presentation to the Secretariat for written response.
	No questions were received from members regarding the previous meeting's presentations.

2	The Chair will follow up on the publication on the MAPAFISH study. The Chair will confirm the publication of the MAPAFISH after the meeting.
3	Members to review the draft advice and send comments using track changes to the Secretariat. Deadline 12:00 CET 14 November. The advice on Ecological Sensitivity analysis was finalized and circulated to the Irish department. A detailed response is awaited.
4	Thomas to send the MSP event report to the NWWAC Secretariat for circulation to members. Paul Thomas shared the report of the MSP workshop with the NWWAC Secretariat which circulated it to all members of the Focus Group.
5	Secretariat to add NWWAC ExCom point to draft advice as per last meeting's action point 7. Added into the draft advice on RAA and ORE
6	Secretariat to circulate draft ToR to members again for comment. The draft Terms of Reference of the Webinar were circulated to members, no comments were received.
7	PelAC Secretariat to share draft advice on herring spawning grounds with Focus Group members for review. The PelAC is still in the process of finalizing its advice on the impact of ORE activities on herring spawning grounds.
8	Discuss the Blue Forum paper during the planned joint PelAC/NWWAC Horizontal Focus Group in March in Dublin Add to agenda of one of the upcoming FG meetings
9	Co-Chairs of the ICES working group WGOWDF to provide regular updates on their work at future Spatial Dimension FG meetings. To be invited to webinar
10	Develop a recommendation from both ACs to the Commission asking for an update on the Member State pledges on MPAs under the marine Action Plan and their timelines – and present this as a recommendation to the joint Horizontal WG in March. FG Secretariats to keep track of Member State processes on MPAs and their progress, fed by input from members. To be kept on agenda for upcoming meeting/webinar
11	Develop a recommendation from the two ACs underlining the need to have an activity mapping in every sea-basin towards the Commission and Member States recommendations on FG priorities to the joint Horizontal WG in March in the following order of importance: <ul style="list-style-type: none"> 1) Broader activity mapping from an MSP angle 2) MPA designation processes with the sensitive areas aspect tied to this. 3) ORE developments should be monitored as a continuous priority Sea-bed mining monitored in the background while awaiting further developments. Review and keep on agenda for upcoming FG meeting
12	Invite speakers to the next Working Group in March to address how the different MPA processes on a national level fit in the broader MSP agenda Include in webinar agenda

13	Present FG recommendations to the Horizontal WG in March and refine FG TOR could following this discussion.
	To be reviewed

2 Study on the designation of renewables acceleration areas (RAAs) for onshore and offshore wind and solar photovoltaic energy ([link](#)) – Petra Remeta & Francesca Falco, Trinomics

The Chair gave the floor to Petra Remeta and Francesca Falco from Trinomics to present their study on the designation of Renewable Acceleration Areas for onshore and offshore wind and solar photovoltaic energy.

Remeta began the presentation by providing an introduction to Trinomics, a private consultancy specializing in decision-making support for public sector partners. Remeta explained that Trinomics had been commissioned by DG Energy to create methodological guidance for implementing Renewable Energy Acceleration Areas (RAAs), as mandated by the recent revision of the Renewable Energy Directive. The study, conducted over five months in early 2024, aimed to assist Member States in streamlining the permitting process for renewable energy projects. This work focused on facilitating the EU's decarbonization and climate goals while ensuring environmental impacts were minimized.

She described the study's overarching objective as the development of guidance that could enable Member States to identify suitable locations for RAAs and address environmental considerations effectively. This process included drafting recommendations for mitigation measures to ensure that renewable energy development was pursued responsibly, with minimal harm to ecosystems. She emphasized that the approach sought to balance environmental protection with the acceleration of renewable energy projects, ensuring the process was inclusive and did not disproportionately impact other sectors.

Remeta elaborated on how the guidance was structured to provide a comprehensive framework for decision-making. The recommendations were designed to reduce environmental impacts while supporting the Union's broader climate objectives. She highlighted the importance of fostering a process that was not only efficient but also equitable, ensuring that the transition to renewable energy did not come at the expense of other sectors.

Remeta then handed over the presentation to her colleague, Francesca Falco. Falco was tasked with detailing the first major step in the methodological process, which involves selecting suitable locations for RAAs. Remeta concluded her portion of the presentation by emphasizing that the next section would delve into identifying mitigation measures for offshore RAAs, a topic of particular relevance to the audience.

Falco began by explaining the legal framework under the revised Renewable Energy Directive, specifically Article 15-C, which mandates Member States to designate Renewable Energy Acceleration Areas (RAAs). These areas are intended to facilitate the deployment of renewable energy projects by streamlining permitting processes, provided that installations within these areas have minimal environmental impact. Falco highlighted the importance of environmental impact assessment and

mitigation in this context, emphasizing the hierarchy of mitigation measures: avoidance of impacts as the primary objective, followed by minimizing impacts that cannot be avoided and restoring the environment to address residual effects. The study focused on the first two elements: avoidance and minimization.

She elaborated that careful site selection was the foundational step in the designation of RAAs, as it serves as a key avoidance measure. She described the overarching guidance provided by the directive to Member States, which includes identifying areas unsuitable for renewable energy development and prioritizing less sensitive locations.

Falco continued the presentation, delving into the methodology for localizing RAAs. She explained that the directive explicitly excludes biodiversity conservation sites, such as Natura 2000 areas and other protected sites under national law, which are typically identifiable through spatial planning tools. However, other exclusions, such as migratory routes for birds and marine mammals or ecologically sensitive areas like nesting and breeding sites, require additional data collection. Falco noted that while some data are available through academic institutions, environmental agencies, and NGOs, sourcing and consolidating these datasets remain a significant challenge.

Falco shared an example of a sensitivity analysis conducted on the Belgian continental shelf, which integrates various environmental indicators into a composite map to help identify exclusions for renewable energy development. This approach shows how spatial planning tools can be leveraged to ensure minimal environmental impact.

The discussion then turned to areas that should be prioritized for renewable energy development. Falco observed that while the directive provides guidance for onshore RAAs, it lacks equivalent recommendations for offshore areas. In response, the study proposed several criteria for prioritizing offshore sites, such as areas already identified for energy production in marine spatial plans, degraded seafloor areas, and the reuse of decommissioned oil and gas platforms as energy hubs. These suggestions align with the guiding principles of minimizing environmental sensitivity and maximizing efficient space use.

Falco also highlighted the importance of integrating the recently adopted Nature Restoration Regulation into the RAA designation process. She emphasized that Member States should align their restoration plans with the development of RAAs to avoid legislative conflicts and, where possible, exploit synergies between these initiatives.

In addition, Falco discussed potential challenges beyond the directive's explicit requirements, such as the need to avoid culturally significant sites, buffer zones around protected areas, and conflicts with measures under the Marine Strategy Framework Directive. She emphasized the importance of addressing these issues early in the mapping process to prevent delays or disputes later in the approval phase.

The presentation concluded with a summary of enabling conditions and challenges for effective RAA designation. Enabling factors included a uniform national framework, robust environmental data

availability, methodologies such as scenario-based mapping, and early stakeholder engagement. Challenges included data limitations, administrative burdens in decentralized systems, inconsistencies in regional frameworks, and legal and regulatory constraints. Falco underscored the importance of addressing these trade-offs during the initial mapping phase to streamline the overall process.

Remeta resumed the floor by emphasizing that under the revised Renewable Energy Directive (Article 15-C), each Renewable Energy Acceleration Area (RAA) must have a mitigation rulebook. These rulebooks are designed to outline comprehensive and targeted measures to address environmental impacts effectively. The measures within these rulebooks must be tailored to the specific location and characteristics of each RAA. Differences between onshore and offshore technologies also influence the selection and application of these measures.

The guiding principle for RAAs is to mitigate environmental impacts comprehensively. As noted, the first and foremost step is proper site selection to avoid impacts altogether. For RAAs, avoidance and minimization measures take precedence. Restoration measures are limited to addressing impacts that occur during construction or decommissioning phases. It was made clear that RAAs cannot be planned with the assumption that significant environmental damage can be offset through restoration after the project's lifecycle. Similarly, offsetting impacts in one location by undertaking restoration activities elsewhere is not permitted.

The study suggested several criteria for prioritizing mitigation measures. While these criteria are not ranked by importance, they aim to help Member States identify measures that are impactful, cost-effective, and feasible. Measures should focus on addressing significant environmental impacts that cannot be avoided, with the severity and scope of these impacts varying depending on the RAA's specific context. Proven and tested measures are preferred to ensure efficiency and alignment with project timelines, minimizing unnecessary delays. Furthermore, measures that address multiple impacts or span different project phases—such as construction, operation, and decommissioning—are highly recommended, as they maximize effectiveness and reduce overall resource use.

For offshore wind projects, where environmental impacts such as wildlife mortality, habitat loss, and ecosystem degradation persist even after site selection, specific mitigation measures are necessary. Examples include scheduling construction activities and vessel movements to avoid ecologically sensitive periods, using deterrents during construction and operation, and employing controls to minimize noise, pollution, and electromagnetic field emissions. These measures aim to mitigate residual impacts, while ensuring the efficient deployment of RAAs.

The speaker stressed that mitigation measures outlined in the guidance document are not prescriptive but provide a variety of options for Member States. This flexibility allows the measures to be adapted to local contexts and needs.

Finally, the speaker highlighted the importance of considering cumulative impacts and engaging stakeholders throughout the RAA designation process. This holistic approach ensures that RAAs are planned in harmony with other marine activities, such as fisheries, tourism, and shipping, and that they

receive broad acceptance. Successful stakeholder engagement is essential for making informed decisions that balance decarbonization goals with environmental preservation and societal interests.

The presentation concluded with an invitation for questions and further discussions, with a reminder that while Trinomics conducted the study, the final decisions rest with DG Energy. The speakers provided their contact details for follow-up inquiries.

The Chair thanked Falco and Remeta for their presentation and opened the floor to questions.

Patrick Murphy took the floor to inquire on the carbon footprint of the Offshore development operations and questioned the inclusion of the economic impact of such development on stakeholders. Finally, he concluded by asking about the future evaluations of these projects.

Remeta underlined that the ecological footprint of the projects was not part of the exercise, neither were the wider considerations of the full life cycle. Regarding the socio-economic impact assessment, she underlined the importance of including it in the designation process of RAAs. Remeta stated that this was not part of the study but that Trinomics had developed guidance on the designation process to better include stakeholders. She concluded by highlighting that RAA designations and mitigation rulebook must undergo a Strategic Environmental Assessment that includes socioeconomic considerations.

Falco took the floor to stress the diversity of environmental footprints of renewable energy projects. She underlined that depending on where installations will be deployed, the impact will vary greatly.

Edward Farrel was then given the opportunity to ask about the sensitivity mapping in Belgian waters. He asked if a standardised approach to sensitivity mapping had been developed by member states.

Falco replied that a guidance document from the European Commission had been developed but that no standardised method had been approved. She concluded by underlining that the Commission had published case studies on the matter.

Farrel wished to know if the sensitivity mapping was covered under the stakeholder engagement considering the deadline of the 21st of May 2025 to carry them out.

Falco stated that this was the case in the Portuguese case study, where stakeholders were involved since the beginning of the project. Stakeholders in this case study were not limited to local communities but also included experts from a wide range of stakeholders. She underlined that this diversity could facilitate the collection of relevant data, and lead to very different area designation, with the inclusion of issues at the start of the process being easier to deal with.

John Lynch took the floor and thanked the presenters for their work. He inquired about the potential implications of displacing fisheries from areas with lower environmental sensitivity, potentially leading to a concentration of fishing activities in areas with higher environmental sensitivity. He sought clarification on whether this dynamic had been considered in the analysis.

Falco responded, acknowledging that the issue raised is precisely one of the challenges that needs careful consideration during the planning and designation of renewable acceleration areas. She explained that the potential displacement of fisheries and its associated impacts depend heavily on the type and location of installations within these areas.

To address such concerns, the presenter emphasized the importance of conducting robust stakeholder consultations from the outset of the planning process. They noted that involving stakeholders early ensures that relevant data, such as information on fisheries activities, can be integrated into the administrative decision-making process. This approach helps authorities to identify and mitigate potential "leakage effects," where activities are displaced from less sensitive to more sensitive areas.

Remeta added that the trade-offs had not been included in the study but they included how to consider specific trade-offs.

Solène Prevalet took the floor and highlighted the deployment of a wind farm in Dunkirk, located within a Natura 2000 site. She raised an important question regarding whether the requirements to avoid implementing a Renewable Acceleration Area (RAA) in a protected site could be bypassed if the site in question was not formally designated as an RAA.

Remeta responded that the project focused only on RAA designation and that ORE designation outside these areas could be done through the usual process.

Aodh O'Donnell took the floor regarding the change of motto from avoid, minimize mitigate to avoid, minimize and restore in the designation of RAA.

Remeta addressed the query by explaining the rationale behind emphasizing the "avoid, minimize, restore, and offset" mitigation hierarchy in the study. She clarified that this approach was adopted in close consultation with DG ENVI. DG ENVI stressed the importance of focusing exclusively on avoidance and minimization measures for Renewable Acceleration Areas (RAAs).

This prioritization reflects the intent to ensure that environmental impacts within RAAs are addressed proactively, without relying on restoration or offsetting measures as part of the mitigation strategy. Remeta further emphasized that this stringent approach applies solely to RAAs. For other renewable energy projects outside of designated acceleration areas, measures such as restoration and offsetting would still be permissible within the broader environmental mitigation framework.

The Chair thanked Remeta and Falco for their presentation and invited them to attend the next presentation if they wished to.

3 Potential impacts of Offshore Wind Farms (OWF) expansion on achieving Good Environmental Status (GES) as defined by the MSFD – Marco Gauger (BafG), Nils Bunnefeld (Eklipse)

The Chair introduced the next presenters Marco Gauger and Nils Bunnefeld who presented the results of their study on Potential impacts of Offshore Wind Farms (OWF) expansion on achieving Good Environmental Status (GES) as defined by the MSFD.

Bunnefeld began by introducing the structure of the presentation, which focused on understanding the potential impacts of offshore wind farms, specifically fixed foundation turbines and grid connection infrastructure. He outlined the objectives of the study, including investigating cumulative impacts on marine ecosystems and identifying knowledge gaps and mitigation strategies through a combination of literature reviews, expert consultations, and participatory workshops.

Bunnefeld proceeded to describe Eklipse and provided an overview of the Eklipse workflow. He concluded by highlighting the unique aspects of Eklipse's approach, which relies on public engagement and transparency at multiple entry points. He emphasized that this methodology ensures a dynamic response to evolving knowledge needs while maintaining robust quality standards. He then passed the floor to Gauger to present the study's findings.

Gauger, researcher with the German Federal Institute for Hydrology, is one of the co-Chairs of the current project and presented the findings of the study thus far.

The project is centred on the unique approach of analysing cumulative impacts of offshore wind farms through the lens of Good Environmental Status (GES) as defined by the Marine Strategy Framework Directive (MSFD). Unlike other studies that assess environmental impacts broadly, this initiative examines impacts through 11 GES descriptors to align more closely with the concerns of DG Environment. The research employs two key methodologies: a scoping review of academic literature and a participatory workshop with expert consultations.

For the study, a large number of academic papers were screened, focusing on research conducted in European waters such as the North Atlantic, Mediterranean, and Baltic Seas. The emphasis was on peer-reviewed literature, although the team acknowledged the potential importance of grey literature in understanding cumulative effects.

Descriptor 6: Seafloor Integrity

Out of 265 papers initially reviewed, 64 were relevant to the cumulative impacts on soft-bottom ecosystems. The research revealed both positive and negative impacts, with 14 papers highlighting short-lived effects, while others discussed reef effects caused by wind farms, including the creation of new habitats that attract marine life. However, these reef effects were found to be unstable and dependent on local environmental conditions.

Negative impacts included disturbances to physical seabed characteristics and the facilitation of non-indigenous species by wind farms. Studies also showed that while some fishing restrictions might lead to localized recovery of commercial stocks, broader spillover effects were inconclusive.

Knowledge gaps included the absence of long-term studies beyond ten years and a lack of agreed-upon thresholds for assessing impacts.

Descriptor 10: Marine Litter

Among 696 papers reviewed, only two focused specifically on cumulative impacts of marine litter associated with offshore wind farms. The findings indicated that wind farms contributed minimally to marine litter compared to other sources such as river runoff and fishing activities. Both studies were conducted in the North Sea, highlighting the need for further research in this area.

Descriptor 11: Energy and Noise

Out of 423 papers, 87 were identified as relevant to cumulative noise and energy impacts. These studies focused on behavioural changes in marine mammals and fish, as well as biodiversity shifts in benthic communities due to underwater noise from wind farm operations and passing ships. The research also identified potential impacts from electromagnetic fields generated by energy cables.

Recommendations included noise mitigation measures like bubble curtains and soft-start procedures for piling operations. However, cumulative impacts across multiple wind farms and sound sources were understudied, highlighting a critical knowledge gap in understanding long-term and large-scale effects.

The project identified significant knowledge gaps across all descriptors, including limited studies on long-term cumulative effects and insufficient data on interactions between multiple wind farms. In particular, noise-related research needs further exploration to assess population-level impacts on marine species.

Gauger emphasized that while substantial progress has been made, many uncertainties remain, particularly regarding long-term impacts. The research team is finalizing full-text reviews and preparing short science summaries for all 11 GES descriptors. They plan to hold a participatory workshop in the spring to present additional findings and engage with stakeholders on knowledge gaps and potential solutions.

Gauger concluded by thanking his colleagues and the audience for their time and attention, expressing hope for continued collaboration in addressing these complex environmental challenges.

The Chair opened the floor for questions.

Murphy raised a question regarding whether the potential impact of turbine blade shredding on microplastic pollution had been calculated as part of the environmental assessment.

Gauger responded that the objective of their work was to gather information through expert workshops and that as of this day they were unable to include this knowledge in their study. He informed Murphy that he would be ready to include any grey literature he would have in the report.

Murphy wished to know if the report had been peer reviewed as he found some of the assumptions to be questionable.

Gauger responded that their study was based on peer reviewed articles, he underlined that if grey literature existed on the matter, they would include it as well. He concluded by underlining that no impact from offshore windfarms had been seen on microplastics.

Murphy informed Gauger that he would like to participate in the workshops organised by Eklipse on the matter and inquired on the process to join them.

Gauger responded that they had published two open calls for expert one in June and a second in November. He agreed to inform the PelAC and the NWWAC about the final workshop. He concluded that it had proven challenging to find enough participants considering the 11 descriptors. Moreover, participants are requested to allocate 10% of their time to the working group.

The Chair took the floor to underline that Eklipse provided the opportunity to exchange information and get the views of non-formal experts and non-researchers.

Gauger confirmed the Chair's views and recalled that there were three events opening the process to external participants: the general call for information in the beginning of 2024, the June and November call for experts and the final workshop planned for February or March.

O'Donnell took the floor to underline the robustness of the methodology and the process, he questioned if the biggest issue in ORE science was the lack of robust science as well as the knowledge gaps on the impacts on the marine environment.

Gauger responded by acknowledging the difficulty of conducting research in offshore wind farms due to their vast areas and underwater settings. While studying marine mammals through passive acoustic monitoring is relatively feasible, topics like microplastic ingestion require sampling of animals and identification of specific plastic sources, including wind farms. Gauger emphasized the need for proper funding to address these challenges and highlighted the importance of including grey literature in participatory workshops to identify knowledge gaps and inspire targeted research funding.

Bunnefeld echoed these concerns, stressing the importance of critically analyzing existing knowledge while transparently reporting evidence limitations. He noted that the study would identify areas with robust evidence and those with significant gaps. He shared that similar desk studies in the past have led to funding calls by the European Commission to address knowledge gaps, expressing hope that this approach might yield similar outcomes.

O'Donnell added his concerns about drawing conclusions from insufficient evidence, highlighting the novelty of offshore wind farm impacts and the limited baseline data available. He pointed out that while fishermen often have firsthand knowledge of the sea, their insights may not always align with scientific approaches, underscoring the challenges of bridging experiential knowledge with formal research.

The Chair thanked Bunnefeld and Gauger for their insightful presentations emphasizing the importance of their work in understanding offshore wind farms' impacts. He noted that their findings and methods would help highlight knowledge gaps and ensure informed decision-making while avoiding rushed conclusions.

4 Webinar on ORE impacts on fisheries

- Terms of Reference
- Agenda and speakers

The Chair opened the final agenda item on the incoming webinar on ORE impacts on fisheries. He reiterated the importance of the upcoming participatory workshop and requested that information about the workshop be sent to Mo Mathies and Paul Thomas for wider circulation among members. He also encouraged PelAC and NWWAC members to participate actively in the workshop.

Mathies confirmed that the terms of reference for the next webinar had been finalized, with all speakers and dates confirmed. She informed the group that the webinar would take place on February 25th, starting at 9:00 AM CET. Details, including registration links, would be shared shortly via email.

Falke De Sager raised a query about the European Ocean Days scheduled for March 3-7 in Brussels. Mathies clarified that neither the NWWAC nor the PelAC had received official communication from the Commission regarding the event. However, she assured members that this would be discussed in an upcoming Secretariat meeting to determine AC's involvement, if necessary. Thomas added that while the event had been flagged, details remained unclear, and the group would follow up as more information became available.

Timeline and summary of actions agreed

The Chair invited Mathies to summarize the meeting's action points. Mathies confirmed the following key actions:

1	Nils Bunnefeld and Marco Gauger will share their presentation slides with Mo for circulation among members and inclusion on the NWWAC and PelAC websites. They will also provide details about the upcoming participatory workshop, which will be circulated to members.
2	Members were encouraged to forward any additional questions about the presentations to Mo, who will compile and share them with the speakers for written responses.

In closing, the Chair reiterated the importance of building knowledge around offshore wind farms' impacts and thanked the speakers for their contributions. He encouraged members to send any follow-up queries and concluded the meeting by wishing everyone a good weekend.