Applied Microbiology International

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AMI Contribution to the EU Ocean Act Public Consultation

Get Involved

The AMI Policy Team intends to submit a response to the European Commission's public consultation on the proposed European Ocean Act. The consultation consists of an online questionnaire and the opportunity to upload a supporting document providing more detailed evidence and commentary.

Part 1: Questionnaire Response

The AMI team has produced a copy of the questionnaire here, which we invite anyone interested in contributing to AMI's response, to complete. We will then consolidate all the responses we receive into a single AMI-wide questionnaire response reflecting the majority view.

Part 2: Supporting Submission

We are also looking to submit an accompanying document alongside our questionnaire response, with a more extensive AMI contribution. This will capture the full range of perspectives from the questionnaire responses received and provide the opportunity to reinforce any key messages AMI members wish to amplify to the EU.

As such, AMI members are invited to use this document to:

- Complete AMI's version of the public consultation questionnaire (linked above and here)
- Expand upon any of your responses, or provide any general commentary based on the questions, in the document below or by emailing the policy team directly
- Respond to any of the AMI Policy Team's prompts (found below) based on a review of the legislation underpinning the new Ocean Act
- Provide scientific evidence, examples, case studies or expert insights relevant to the consultation that are outside of the questionnaire's scope, in the document below or by emailing the policy team directly

If you have any questions about how to get involved, get in touch – policy@appliedmicrobiology.org

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Background

On 05 June 2025, the European Commission adopted the **European Ocean Pact**, a strategic framework intended to improve coherence across EU ocean-related policies and strengthen implementation of existing legislation. The Pact lays the groundwork for a future **European Ocean Act**, which is expected to build on existing marine governance legislation, particularly the **Maritime Spatial Planning Directive** (2014/89/EU) and the ongoing revision of the **Marine Strategy Framework Directive** (MSFD). This public consultation relates to the design and development of this Ocean Act.

The Ocean Pact identifies six priority areas:

- Protecting and restoring ocean health.
- Boosting the sustainable competitiveness of the blue economy.
- Supporting coastal, island and outermost regions.
- Advancing ocean research, knowledge, skills and innovation.
- Enhancing maritime security and defence.
- Strengthening international ocean governance and diplomacy.

A key objective is to improve coordination across sectors and Member States, including encouraging greater cooperation at the sea-basin level rather than relying solely on national approaches.

AMI Discussion Prompts

1. Emphasising why marine microorganisms matter for ocean policy.

Please provide evidence, examples or perspectives on the contribution of marine microorganisms to any of the following areas, which are all emphasised and prioritised in the Ocean Pact. Please try to use language and terminology that is appropriate for a non-expert audience and provide references where possible.

- Climate change –
    - *There are a lot of references in the Ocean Pact to the ocean being an 'ally' to climate change. Can we highlight the role of microbes within this?*
- Pollution prevention and remediation
- Ecosystem functioning and restoration

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- Nature-based solutions

- Blue economy, biotechnology and bioeconomy –
    - *Algae production is specifically mentioned regarding biotechnology and the blue economy. Sea brines are specifically mentioned as an example of the important genetic resources that are sourced from the ocean.*
    - *Can/should we emphasise the importance of microbes in these areas beyond algae and sea brines?*

- Ocean knowledge, literacy and skills for blue innovation –
        - *Europe wants to position itself as a global leader in ocean science and wants to do so by launching a new Ocean Observation Initiative – another cornerstone of the Ocean Pact, alongside the Ocean Act. We can reference AMI's submission to a related EU consultation around ocean observation that was put together by André Atunes.*
        - *Are there any other points we wish to make around ocean knowledge, literacy and skills?*

- Other topics directly referenced in the Ocean Pact that it may be worth underlining the role/importance of microbes in:
    - Fisheries / food
    - Energy / decarbonisation / renewables
    - Blue economy – tourism, social dimensions
    - Maritime security and defence

2. Emphasising how marine microbes should be considered in ocean and maritime policy.

The Ocean Pact and existing EU marine legislation make extensive use of concepts (such as using an 'ecosystem-based approach') and definitions (such as 'good environmental status'). Please provide your insights and expertise on those pulled out below to determine if they are comprehensive and appropriate from a microbiological perspective.

- **'Good Environmental Status'** forms the basis for a lot of the EU's ocean-legislation aims.

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- **Is the EU's definition of 'Good Environmental Status (GES)' sufficient?** It is currently defined as

  'the environmental status of marine waters where these provide ecologically diverse and dynamic oceans and seas which are clean, healthy and productive within their intrinsic conditions, and the use of the marine environment is at a level that is sustainable, thus safeguarding the potential for uses and activities by current and future generations, i.e.:

  (a)the structure, functions and processes of the constituent marine ecosystems, together with the associated physiographic, geographic, geological and climatic factors, allow those ecosystems to function fully and to maintain their resilience to human-induced environmental change. Marine species and habitats are protected, human-induced decline of biodiversity is prevented and diverse biological components function in balance;

  (b)hydro-morphological, physical and chemical properties of the ecosystems, including those properties which result from human activities in the area concerned, support the ecosystems as described above. Anthropogenic inputs of substances and energy, including noise, into the marine environment do not cause pollution effects)

- Of the qualitative descriptors EU countries are asked to choose from and use to determine "good environmental status" in their respective waters (listed here, on page 16), should any microbiological descriptors be added?

- Of the characteristics currently listed as being indicative of GES (found here on page 18), should any microbiological characteristics be added?

- Of the 'pressures & impacts' listed as potentially affecting GES (found here on page 19), should any microbiological characteristics be added?

- The term **'ecosystem-based approach'** is also used heavily throughout current EU ocean legislation; however, it is not yet officially defined. The EU have said they are looking to create an official definition going forward.

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- *In your opinion, are microorganisms sufficiently recognised and reflected in current interpretations of ecosystem-based management?*
- *Would explicit consideration of microbial communities improve implementation of ecosystem-based approaches?*
- *If so, how should it be considered/incorporated?*

- The term '**biodiversity**' is also used heavily throughout EU ocean legislation.

  - *In your opinion, does the current use of the term 'biodiversity' adequately capture microbial diversity?*
  - *Would clearer recognition of microbial biodiversity improve policy implementation or environmental assessment?*
  - *If so, how should microbial biodiversity be described or characterised?*

- **Marine Protected Area's (MPAs)** are a conservation tool mentioned explicitly within the Ocean Pact and EU ocean-related legislation. For example, one of the targets set out in the Annex of the Ocean Pact is as follows:

  Support the biodiversity strategy by aiming to contribute to getting and keeping fish stocks to sustainable levels, reduce the impact of fishing on the seabed and minimise fisheries impacts on sensitive species by phasing out bottom fishing in MPAs by 2030, improving selectivity, protecting sensitive species, supporting the fishing sector, and strengthening research, implementation, governance, and stakeholder involvement.

  - *Are existing conservation approaches - such as MPA design and designation - sufficient to protect microbial ecosystem functions?*
  - *Should microbial communities be considered more explicitly within approaches such as MPAs, and if so, how?*

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PLEASE ADD ANY OTHER THOUGHTS, INSIGHTS OR EVIDENCE RELEVANT TO THE SURVEY, AMI PROMPTS OR EU'S PLANS IN GENERAL, HERE: