

*Horizon Europe - Work Programme 2021-2022
Missions*

Projects funded under this topic will:

- build links with other Mission activities and other relevant activities within the Mission lighthouses’ areas and Blue Parks to maximize synergies;
- contribute to the aims and work pursued under the EU4Ocean Coalition and its dedicated Network of European Blue Schools and complement it;
- build links with the Mission implementation monitoring system that will be part of the Mission Implementation Support Platform and with the basin lighthouse support facilities and platforms, for reporting, monitoring and coordination of all relevant implementation activities in the lighthouses’ areas.

Participation of students of Ukrainian nationality who have received a temporary protection status in the European Union is encouraged.

Proposals are expected to show how their activities and results will achieve the Mission’s objectives, in line with the timeframe of the Mission phases, i.e.: by 2025 for the ‘development and piloting’ phase and 2030 for the ‘deployment and upscaling phase’.

HORIZON-MISS-2022-OCEAN-01-09: Towards a European e-DNA library of marine and freshwater species

Specific conditions	
<i>Expected EU contribution per project</i>	The Commission estimates that an EU contribution of around EUR 2.00 million would allow these outcomes to be addressed appropriately. Nonetheless, this does not preclude submission and selection of a proposal requesting different amounts.
<i>Indicative budget</i>	The total indicative budget for the topic is EUR 2.00 million.
<i>Type of Action</i>	Coordination and Support Actions
<i>Legal and financial set-up of the Grant Agreements</i>	<p>The rules are described in General Annex G. The following exceptions apply:</p> <p>Grants awarded under this topic will be linked to the following action(s):</p> <p>HORIZON-MISS-2021-OCEAN-05-01: Underlying models for the European Digital Twin Ocean</p> <p>HORIZON-MISS-2021-OCEAN-IBA-01 EU Public Infrastructure for the European Digital Twin Ocean</p> <p>HORIZON-INFRA-2022-EOSC-01-03: FAIR and open data sharing in support of healthy oceans, seas, coastal and inland waters</p>

Expected Outcome: Project results are expected to contribute to all of the following expected outcomes:

- Contribution to the development of the next generation marine monitoring programmes and mapping initiatives that focus on collecting and analysing environmental DNA-of marine and freshwater species;
- Assessment of all relevant activities, actions and projects that entail collecting and analysing environmental DNA from marine and freshwater species implemented in the European Union and in the Associated countries for their synergies;
- Assessment of the feasibility of creation of an integrated European e-DNA library of all marine and freshwater species that would be based on FAIR principles and publicly available and support marine biodiversity monitoring programmes and mapping initiatives. Compatibility with the European Marine Observation and Data Network (EmodNet) and the future Ocean and Water knowledge system (Digital Twin Ocean) will be part of the assessment;
- Assessment of ongoing international efforts on standards and interoperability of data, methods, techniques, etc.
- Fair and equitable sharing of the benefits from the use of marine genetic resources linked to biodiversity, in line with the EU Biodiversity Strategy 2030;
- Promote synergies and harmonisation between projects and initiatives to collect and analyse DNA of marine and freshwater species for their future successful scale up.

Scope: Genomic techniques represent a major source of innovation in marine monitoring techniques. They offer the potential to provide accurate, real time and cost-efficient monitoring and observation of the marine environment and its biological diversity that can be used for policy making and policy implementation, such as in the case of status assessment requirements.

This topic aims at coordinating and networking ongoing activities at EU level, assessing the needs and requirements for establishing an EU e-DNA repository/library of marine and freshwater species and developing plans for its efficient data curation and storage to ensure the provision of accurate time series, data standards and harmonisation for marine biodiversity monitoring and observation.

Interdisciplinary by nature, proposals should integrate in the consortium relevant scientific expertise (e.g.: in marine monitoring and observation, genomics, blue biotechnology, marine biology and ecology, big data analysis, machine learning methods) as well as European Research Infrastructures and relevant end users, such as environmental agencies, regional