

## **Description of the planned negotiated procedure for a middle value contract for biodiversity modelling study**

In the context of the Horizon Europe Mission ‘Restore Our Ocean, seas and waters by 2030’ (‘Mission Ocean & Water’) and the implementation of the Digital Ocean Twin there is a need to better understand the current landscape of marine biodiversity computational models.

The objective of this contract is to identify and analyse computational models currently used (including emerging models) to analyse past, present, and future marine biodiversity and ecosystems. This study will establish an inventory of marine ecosystem/biodiversity models<sup>1</sup> and provide a basis how these models can be used in the implementation of the Digital Twin Ocean and in boosting the decision-making capacity under the Marine Strategy Framework Directive.

The contractor will carry out a study to analyse the landscape of computational models used for the analysis of marine biodiversity/ecosystems and such emerging computational models. As a part of this study, the contractor will:

1. identify models used in analysis of marine biodiversity/ecosystems and classify them, create a relational database of models and propose ten models most representative of the different model classes and/or most often used in each model class;
2. assess the requirements to configure, run, validate, and possibly couple the selected ten models with physics and/or biogeochemistry models (for example, open-access Copernicus models) so that they can be operated as a part of the Digital Twin Ocean/ Copernicus;
3. deliver the analysis report which will summarise the results of the analysis carried and publish that report on an adequate web forum, for instance the Maritime Forum website;
4. based on the published report, obtain feedback from maritime ecosystems/biodiversity modelling developers and users through a workshop that the contractor will organise;
5. analyse the feedback obtained from various sources (written, from the workshop and other) and, on this basis, revise the database and draw up a final report.

The contractor shall deliver a final report comprising at least the following items: Executive Summary, Introduction and methodology, results (incl. tables extracted from the relational database) covering all tasks, annexes (e.g. annex with technical information on database, confidential data/information not for publication, slides/report from the workshop).

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<sup>1</sup> Under ‘marine biodiversity models’ are understood computational ecosystem models including interactions between multiple species, and/or group of species and/or trophic levels, and their environmental and societal stressors.

The tenderer must have the necessary technical, professional, economic and financial capacity to execute the contract and must prove at least 2 years of experience in the field of biodiversity modelling. Proficiency in English is required.

The persons who will carry out the tasks and services must have at least five years of relevant professional experience in marine ecosystem/biodiversity modelling expertise, and/or experience in software development for such models, and/or model developing and/or working with and/or evaluating such models. All persons carrying out the tasks must be proficient in English.

Maximum budget for the contract is 130 000 EUR.

The estimated date of launch of the procedure is Mid-October 2021 and estimated duration of the contract is 6 months. If you are interested in providing the services required, contact the email address [RTD-OCEANS-TENDER@ec.europa.eu](mailto:RTD-OCEANS-TENDER@ec.europa.eu) at the latest on **22<sup>th</sup> October 2021 at 16:00** Brussels time, **confirming you fulfil the required selection criteria**. Requests received by the European Commission Servers after this deadline will not be accepted.