

Terms of reference

Mapping and GIS analysis of species distribution ranges for calculating biodiversity wins and losses in the Catalan coast under climate changes scenarios

Project IMPETUS (Horizon 2020 Grant Agreement No 101037084) aims to help accelerate [Europe's climate adaptation strategy](#) and meet the European Union's ambitions to become the world's first climate-neutral continent by 2050. Its objective: turn climate commitments into tangible, urgent actions to protect communities and the planet. With 32 partner organisations based in 9 European countries, IMPETUS is 1 of 4 EU-funded projects that are coordinating on climate adaptation.

As part of the IMPETUS activities, IUCN Med will analyse the likelihood of species changing their distributions due to associated global environmental change and climate change. An assessment of potential changes in the spatial distributions of a wide range of taxa found in coastal dunes and marshes along the Catalan coast will be carried out, comparing projected future distribution changes with past and current distributions. The species assessed, including vertebrates, invertebrates and plants, will be ranked according to their risk of local extinction/significant decline in local populations and their opportunities to expand their ranges. Climate change adaptation measures that could benefit from a selection of project activities will be identified as a means to strengthen the resilience of target species and ecosystems.

Objective

The objective of this consultancy is to support the data collection and analysis of potential changes in the spatial distributions for a wide range of taxa found in the Ebro delta (or in Catalan dune systems along the Catalan coast), comparing projected future distribution changes with past and current distributions.

Specific tasks

Spatial data will be combined with the information from the IUCN Red List of Species and other available information of species occurrence to assess the likelihood of species changing their distributions due to associated climate change and other human-induced factors. With a broad taxonomic scope, results may support the definition of species and taxonomic groups that could be benefited or affected by future scenarios of environmental global change and gains and losses for the study area.

1. Scoping study to select species and taxonomic groups to be analysed
 - a. Get full RL database for the species occurring in the study area including tabular and spatial data.
 - b. Definition criteria and selection of species and groups to be analysed
 - c. Identify and collect environmental data and species occurrence

2. Environmental global change loss and gains analyses for the study area.
3. Final report and Story map that summarizes main results and key messages for communication purposes.

2.4 Key Deliverables

Key deliverables	Deadline (after signature of contract)
D1. List of taxa	July 2023
D2. Package of compiled data and maps (preliminary data)	September 2023
D3. Preliminary report	September 2023
D4. Package of compiled data and maps	July 2024
D5. Final Report and Story map	November 2024

2.5 Timeline (18 months)

2.6 Chronogram of activities to be carried out

The logistical plan and preparation of the activity/s, as well as relevant information, will be shared with IUCN-Med to ensure adequate follow-up.

The timeframe for the completion of this work will be from the signature of the contract until 20 November 2024 at the latest,

Required profile

- The company/expert(s)/organisation that is the subject of this consultancy must have knowledge and experience in climate change analysis and species distribution modelling.

Documentation to be submitted and criteria for selection

Activity proposals will be accepted until **28 June 2023, 12:00 (CET)** and evaluated according to the following criteria:

- Methodology, proposed ideas;
- Experience of the team in similar topics and examples of previous work;
- Financial offer.

Proposals should be sent, together with the experience of the team/person and a budget estimate, maximum 7 500 Euros (VAT included) per entity to: medspecies@iucn.org (with the reference "biodiversity wins and losses 2022").