

## **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 [\\_\\_\\_\\_\\_](#)

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.

<b><i>Key deliverables</i></b>	<b><i>Deadline (after signature of contract)</i></b>