Call for tender
Mapping of marine key habitats and assessing their vulnerability to fishing activities in Malta
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Additional information

1.The timeline for this project is not ideal and fieldwork will need to be conducted throughout winter months. To avoid higher costs from storm/standby days, is it possible to agree on an extended project period to allow for more optimal weather periods for field sampling?

The timeline for this project could not be extended du to the deadlines of the overall project (Medkeyhabitats II timeline) agreed with the funding partner.

2.I have some request/s for clarification on page 13, specifically, Assessing the impact of commercial fishing activities on the marine habitats within the study area, plus identifying areas of strong interaction with these identified fishing activities. What does the term 'identifying strong interaction with these identified fishing activities' mean?

It is meant to identify areas, within the sites concerned by this project, where high interaction between marine key habitats and fishing activities is detected.

3.in the context of a recent research, where it appears that the fishing activities in the earmarked MPAs co-exist with multiple activities including bunkering, shipping and marine traffic, aquaculture, as well as land-sea interaction etc... which are all happening within these 'congested' seas. So my question is: How do we plan to identify/single-out the vulnerability (and its extent) of the marine habitats to fishing activities, given the multiple stressors in place? Something to think of in the context of the methodology proposed in the TOR which seems to be single-sector-specific (rather than multi-sector) http://spn.mnhn.fr/spn_rapports/archivage_rapports/2013/SPN%202013%20-%205%20-%20Methode_evaluation_risque_peche_Natura2000_2012.pdf) . Maybe propose study zones where only fishing takes place (exclusive areas), comparing the results to multiple-use zones?

The project is related to the assessment of vulnerability of marine key habitats to fishing activities and the Methodology proposed in the call of tenders is more than suitable for this purpose. The project should focus mainly on the impact of fishing activities on the marine key habitats. Listing the other human activities and assess their impact on marine habitats should be considered out of the scope of the project and could be proposed as an extra activity without prejudice to the main objective of the whole activity and its timeline.

4.With regard to Spatio-temporal aspects of fishing activities, the ToR methodology proposes the use of VMS. According to EU law, only vessels larger than 12m are required to have VMS, and these vessels in Malta are not allowed to fish within the 25 nautical mile zone. The only form of spatial data available is GPRS installed on some of the local vessels, which covers

around 10% of the inshore fleet. So temporal and spatial activities might not be readily available as required by the ToR. Something else to take into account and maybe request clarification on what is expected for the Spatio-temporal deliverables.

The WMS data is optional (GFCM regulation concerning VMS is also for boats larger than 12m) and the Spatio-temporal data could be collected through interviews with fishermen or from the local authorities responsible of fisheries. thus, in the call of tender, at least the expert 4 should be a Maltase speaker to facilitate the exchanges with the various target audiences and the fishermen within the framework of implementation of the fisheries study.

5.With regards to the Posidonia sampling/survey – tender document specifies that 'Minimum one *Posidonia oceanica* monitoring system are to be installed in the study areas.' Is one *P. oceanica* monitoring station requested per study area, or just one monitoring station for the entire study?

It is meant to have one monitoring station for the entire study to be selected during the validation meeting of the Phase 1 in collaboration with SPA/RAC and Environment and Resources Authority (ERA)

6.With regards to *Posidonia oceanica* monitoring methodology – whilst the monitoring methodology to be deployed for maerl assemblages is specified within the tender document (Garrabou at el., 2014), no equivalent monitoring protocol for *P. oceanica* is specified within the tender document. Does this mean that tenderers can specify their own protocol in the submitted methodology?

The Protocol for *Posidonia oceanica* monitoring is specified in the call of tender in page 12 as foot note number 2. The protocol is *Pergent G., 2007. Protocol for the setting up of Posidonia meadows monitoring systems. « MedPosidonia » Programme / RAC/SPA - TOTAL Corporate Foundation for Biodiversity and the Sea; Memorandum of Understanding N°21/2007/RAC/SPA_MedPosidonia Nautilus-Okianos: 24p + Annexes.* This Protocol could be provided by SPA/RAC if needed.

7.In terms of benthic habitats to be monitored, the tender document refers to a) *P. oceanica* meadows, b) maerl assemblages and c) dark habitats. However, concerning (c), these are listed only once in the tender document and not in a consistent fashion. Hence, do dark habitats need to be mapped in the study? And can we have a better idea of what is meant by 'dark habitats'? Caves, mesophytic areas, etc?

As provided for by the Action Plan for the conservation of habitats and species associated with seamounts, underwater caves and canyons, aphotic hard beds and chemo-synthetic phenomena in the Mediterranean Sea (Dark habitat Action plan) and in the context of the call of tender, only caves are considered but no mapping activities is required for the one that could be found in the sites considered by this project in Malta.

8.In terms of fish counts, do these need to be conducted within the <50m areas, i.e. through SCUBA divers, or/also within the >50m areas, and thus through ROV deployment?

Fish count should be conducted within the depth <50 m only and through Scuba divers and visual census.

9.Although reference is made in the tender document to SCUBA diving, one gets the impression that this is being included simply in support of the ROV, multibeam and SSS surveys, which will provide most of the habitat mapping and bathymetric data. Hence, can we

have an indication of how much SCUBA diving is requested and what's the scope of such a technique (e.g to ground-truth the conclusions made by examining ROV footage)?

Scuba diving is requested to characterise the marine key habitats (e.g shoot density of Posidonia), setting up of the monitoring systems. Ground-truth could be made by scuba diving and ROV.

10.Can we have an indication of why the van Veen grab sampling of soft bottoms is requested? Will this feed into the calculation of the BENTIX and/or AMBI indices for the soft bottoms in question? Any how many sampling stations are needed here?

It depends of the site, for rocky bottom like "Fifla" no sampling is needed. The van Veen grab sampling is used to define the type of soft bottom and the its associated species.in this case one sample per site is enough.

11.Would it be possible to include other methods than sonar to map seagrass distribution? The application of remote sensing would be possible by using satellite images and different ground truthing techniques. This would allow us to map Posidonia distribution until a maximum depth of 15-20m in an innovative and time efficient way and result in easy monitoring protocols for the future. Deeper areas would still be mapped with sonar.

The only techniques requested to be used in the context of this project is the side scan sonar (SSS) and multibeam. If other methods will be used (for other purpose e.g. scientific) than the ones requested should be used out of the scope of this project without prejudice to the main objective of the whole activity and its timeline

12. Required clarification on page 12 specifically:
'Whenever possible, a small amount of sample shall be collected for taxonomical identifications. This approach usually simplifies the process and limits the impact of sampling activities on the study area'.
In order to assess the taxonomical units presenting each sampled habitat how many samples need to be collected and to which taxonomic level the species present need to be identified?

13. On page 12 specifically: 'Whenever possible, a small amount of sample shall be collected for taxonomical identifications. This approach usually simplifies the process and limits the impact of sampling activities on the study area'.
In order to assess the taxonomical units presenting each sampled habitat how many samples need to be collected and to which taxonomic level the species present need to be identified? It is important for us to know this information since taxonomical identification is a very time consuming and needs to involve people with high specialists' skills.

The sampling should occur only in case of direct observation. Sampling should be limited as much as possible, identification should use photos taken. Species identification could be limited to genius (species level whenever it is possible). The reports of similar mapping activities conducted in other countries could be used as example (link)