

FRAMEWORK OF COOPERATION ON MONITORING AND DATA SHARING FOR MOBILE SPECIES MANAGEMENT AND CONSERVATION

CITATION

Citation: Rees A, Gallon S. 2023. Framework of cooperation on monitoring and data sharing for mobile species management and conservation. MedPAN Collection. 9pp

Authors: Alan Rees

With the support of: Susan Gallon, MedPAN

Reviews: Pierre Vignes (MedPAN) and members of MedPAN Working Group on mobile species and especially Charalampos Dimitriadis (NECCA), H  l  ne Labach (Miraceti), Antonios Mazaris (Aristotle University of Thessaloniki), Laurent Sourbes (NECCA) and Milena Tempesta.

Coordination: Susan Gallon, Emilie Grimaud and Pierre Vignes, MedPAN

ACRONYMS

EU: European Union

HD: Habitats Directive

IMAP: Integrated Monitoring Action Plan

IP: Intellectual Property

MPA: Marine Protected Area

MSFD: Marine Strategy Framework Directive

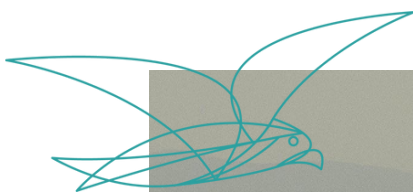
NGO: Non-Governmental Organisation



FRAMEWORK OF COOPERATION

Purpose of the framework

Some of the most prominent marine protected vertebrates in the Mediterranean Sea, such as cetaceans, marine birds and marine turtles, are highly mobile species. They are characterised by their large home ranges and long migrations. Many of them are top predators that play an important role in marine ecosystems and are considered “marine focal species”. Their statuses act as important indicators of marine ecosystems, which reflect oceanographic processes and anthropogenic pressures. Travelling through territorial waters, Exclusive Economic Zones and Areas Beyond National Jurisdiction, mobile species are crossing, during their life cycle, changing legislation and management frameworks. These migratory movements geographically link locations and stressors in distant ecosystems. This highlights the challenge of their conservation that requires coordinated actions at different scales by many nations, international and regional organisations and stakeholders. Conservation issues for highly mobile species explicitly emphasise the added value of monitoring and management network-based approaches across Mediterranean MPAs: highly mobile species are committing MPAs to a form of “ecological solidarity” and to collaborations beyond the local level¹.



¹Proceedings of the 2019 Regional Experience Sharing Workshop: Managing highly mobile species across Mediterranean MPAs. MedPAN, Collection. 62 pp

The objective of this document is to outline a synergistic working arrangement between two or more parties to supply information and data that contribute to the conservation and management of these mobile species at local, national and regional scales.

Biological data gathered should be made available and used to contribute to national and international reporting and assessment schemes such as the EU MSFD and the Barcelona Convention's IMAP. Other data types relating to habitat, such as environmental and anthropogenic impacts and others relating to potential violations of local rules and regulations may also be collected to contribute to effective management of MPAs.


All parties must accept that work carried out is not primarily for individual or institutional gain, status, or recognition, which may lead to competition and hinder cooperation, but is first and foremost to further the conservation of wide-ranging mobile species and the habitats in which they exist.

Partners and their roles

Partners in cooperation frameworks may be diverse, academic institutions, environmental NGOs, fisher cooperatives etc. but the MPA authority is the one partner that will have legal responsibility for the management of the location and hence will have ultimate say in what work is to be carried out on site, and what information types need to be prioritised. If there is a belief that the partner cannot be trusted to reliably gather and share data, then seek other partners.

The importance of information/data

At the core of all scientific collaborations within an MPA setting and across species' distribution range is the correct acquisition and treatment of information/data, which is the foundation for evidence-based conservation and management practices and may be required under national and international directives (MSFD / HD / IMAP). Assuming that all data collected are relevant, there are five interdependent pillars on which successful collaboration rests. These are quality, communication, ownership, use and sharing.



CODE OF CONDUCT

Acknowledging the above-mentioned formalities in which a framework of cooperation is agreed upon, the following conditions should be accepted by all parties within a general code of conduct.

All activities carried out by partners in the framework need to be undertaken to high ethical standards, respecting the welfare of the species and environments under consideration and the rights of individuals and institutions involved adhering to all relevant rules and regulations at the local, national and international levels.

Data quality

Scientific monitoring requirements will be determined according to the needs of the MPA, in the context of managing mobile marine species and data reporting requirements.

The specific data parameters stipulated as required by the MPA will be acquired by the monitoring organisation ensuring the six dimensions of quality: completeness, uniqueness, consistency, timeliness, validity, and accuracy are maintained. These data must be gathered following standardised protocols for them to be valid and comparable between locations. Data do not need to be perfect, but they should be gathered in a standardised manner as they will be of critical importance for effective analyses and holistic interpretation of the status of different mobile species populations.



© Renaud Dupuy de la Grandrive

Data communication

Within a specific location, data shall be reported to the MPA authority in a time-appropriate manner. E.g., pre-scheduled seasonal monitoring reports and databases should be delivered on time and time-sensitive data, such as that of animal strandings and acute threats should be shared immediately.

Communication channels will be predetermined and adhered to. Ideally with a single named point of contact (with backups) per party. For example, scheduled reports to be emailed to a single email account and urgent communications to take place using specified mobile phone numbers.

Any justified out-of-the-ordinary request for data communication should be complied within a timeframe determined by the urgency of the need. Nonessential requests for data communication will be handled professionally and responded to within a mutually agreed time frame.

Across the species' distributions, scheduled seasonal communication of monitoring data summaries should be supplemented with ad hoc communication for time-sensitive issues where situations are likely to impact the species under the scope of more than one stakeholder's work or where expertise from the stakeholder group is being sought.

Data ownership

Specific data parameters collected for use by the MPA authority will remain the IP of the monitoring party with rights of each party detailed in the sections on Data use and Data sharing. This changes to co-ownership of the specific data should the MPA authority substantially contribute, financially or through field effort, to the data acquisition process. Irrespective of ownership, it should be acknowledged by all parties that the data are gathered for the purpose of effective management of mobile species and should be available for this purpose. Furthermore, it should be noted that data collection that is financed by EU and certain national and international funding streams is required to be open access and hence available for use by any EU citizen, which may override the following suggested data use and sharing agreements.

Data use

The fundamental assumption here is that the information gathered in any one location is made available to improve conservation status for mobile species not only at that location but across the species' range.

Within MPAs, all parties can use the data specified as collected for the MPA authority in their own internal data exploration and analyses.

Data owners can publish reports, articles and peer reviewed papers etc. acknowledging the other parties involved. For example, the scientific monitoring party can publish the data acknowledging that they were collected under agreement with the specific MPA authority.

Where data ownership is shared between the scientific monitoring party and the MPA authority, both parties need to agree to the output and be credited with co-authorship.

MPA authorities wishing to publish data owned by the scientific monitoring party need to gain permission to do so and seek input and co-authorship from the third party. When the publication involves only summaries and no raw data or related statistics, as might be expected in outreach materials, only named acknowledgement of the data owner as source of the data is required.

MPA authorities wishing to recruit additional third parties for specific analyses and reporting need to do so with the agreement of the (co)data owner and outputs must be seen by, commented on, accepted, and co-authored by all parties.



Data sharing

Sharing summarised data to contribute to national initiatives and international monitoring frameworks (such as for the MSFD and IMAP) should be a given and data ownership indicated in the metadata for the submitted dataset.

Data are not to be shared with third parties without agreement of all data owners, this includes sharing with a third party to complete analysis and reporting that will only be used by the parties integral to the framework of cooperation.

Data should be available to share with relevant MPA authorities and stakeholders with full credit given to all relevant parties, unless in rare cases there is good cause not to do so, such as the intended recipient has a poor track record of respecting IP rights and not crediting data sources. The data owner should be informed of the intent to share, and they should accept this unless they can present strong arguments to the contrary. Examples for data sharing might be: 1) the MPA is experiencing a spate of animal strandings with known or unknown cause, the MPA authority might legitimately want to share this information with other MPA authorities to better understand the severity of the threat and determine the most appropriate form of management response, or 2) The Mediterranean MPA network wishes to assess its effectiveness at dealing with a certain threat or, identify the prevalence of different threats across the region in order to highlight issues and strengthen conservation measures, hence the MPA authority should be able to share specific data that contribute to these analyses.

The data owner(s) should strongly consider uploading monitoring datasets to an online repository for archival, clarifying ownership and simplifying access rights for the hard-earned data. Such repositories include OBIS-SEAMAP (<https://seamap.env.duke.edu/>) for georeferenced data and Dryad (<https://datadryad.org/>) for any type of data in any format.

