



A data strategy for the
UK Marine Monitoring
and Assessment
Strategy (UKMMAS)
community

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Version	0.6
Summary	<p>This document is the data strategy for the UK Marine Monitoring and Assessment Strategy (UKMMAS) community. It provides a concise, high level and ambitious summary of the expectations for collecting, using and managing marine data by the UK Marine Monitoring and Assessment Strategy (UKMMAS) community. The overarching aim of the strategy is to ensure that the marine data produced by the activities falling under the remit of the UKMMAS community are made openly available for long-term access and use. This will yield economical, societal and scientific benefits by reducing duplication of effort and applying best practice data management procedures.</p> <p>Separate guidance on how to implement this strategy is being developed and will include templates and training resources/crib sheets for each area covered by the strategy. The guidance will also include a steer on where to focus effort, noting current obstacles and challenges to progress in this area. Further consideration will be given to cross referencing this strategy with other relevant strategies and initiatives e.g. the National Data Strategy and the UK's Geospatial Strategy, amongst others. However, there are specific challenges unique to working with marine data, such as the complexity of the marine environment and the high cost of data collection and archival/storage, which makes it essential to have a tailored data strategy for the UKMMAS community.</p>
Keywords	Data strategy; marine data

Change History			
Version	Author	Date of last revision	Status
Skeleton Draft 0.1	CP		Skeleton draft for comment, based on NERC data policy
Skeleton Draft 0.2	CP	29 th September 2020	Skeleton draft for comment, amended following comments from MEDIN Executive Team to encompass full data lifecycle.
Draft 0.3	CP	3 rd November 2020	Added section: Why have a data strategy?
Draft 0.4	CP	19 th November 2020	Clarified data may be collected for other purposes and then reused for marine assessments. Clarified economic benefits. Added section: What is covered? Added text to section: Why have a data strategy? Additional text in section: Data use.
Draft 0.5	CP	7 th May 2021	Added text to 'Data reuse' section to clarify that standards should be internationally compatible.
Draft 0.6	CP	27 th April 2022	In response to comments from Natural Resources Wales and the Environment Agency, added extra text to 'Why have a data strategy', 'Delivery', 'Data collection' and 'Data archival' sections; added new 'metadata' section.
Final	CP	16 th June 2022	Added MEDIN and UKMMAS branding

Why have a data strategy?

The UKMMAS community has a marine data strategy in order to:

- *achieve UK marine science policy goals¹, which are all reliant on marine data;*
- *ensure the continuing and efficient availability of data of long-term value;*
- *support the integrity, transparency and openness of the assessments that the data supports;*
- *enable the tracking and publishing of data;*
- *yield economic benefits, by reducing duplication of effort and applying best practice data management procedures;*
- *address challenges unique to working with marine data, such as the complexity of the marine environment and the high cost of data collection and archival/storage;*
- *drive improvements in data quality, accessibility and openness.*

Key principles

The marine data produced by the activities falling under the remit of the UKMMAS community are considered a public good and a capital asset and they will be made openly available for others to use. The UKMMAS community is committed to supporting long-term data management to enable continuing access to these data.

All UK assessments of its marine environment and resources will include open access to the supporting data and other relevant information, apart from a few special cases detailed in the strategy.

Delivery

The Marine Environmental Data and Information Network (MEDIN) will provide the key mechanism and infrastructure for delivering this strategy. This will ensure that data used for UK marine assessments are available alongside data from other marine sectors, thereby removing data silos and increasing efficiency. Delivery relies on widespread adoption by the UKMMAS community and resource being made available to implement the strategy by relevant funding bodies.

Separate guidance on how to implement this strategy will be produced to accompany this strategy.

What is covered?

The UKMMAS community defines marine data as records, obtained by measurement, observation, or modelling, of the marine environment. Information products, assessments and advice are not covered by this strategy.

Responsibilities

The expectations and responsibilities of the UKMMAS community with regard to data are set out below according to the data life-cycle: acquire, organise, use, share and maintain.

¹ e.g. Marine Strategy, OSPAR

Acquire

Data collection

Expectation that everyone collecting marine data for UK marine assessments will follow nationally or internationally recognised protocols (e.g. [MESH² Recommended Operating Guidelines](#)), quality control schemes (e.g. [NMBAQC³](#)) and standards (e.g. MEDIN data guidelines).

Organise

Data management

Expectation that everyone collecting marine data for UK marine assessments manage the data they produce in an effective manner (e.g. using [MEDIN data guidelines](#) or other comprehensive metadata standard) and plan for its long-term archival.

Metadata

Expectation that UKMMAS community will ensure all data used for UK marine assessments are described using nationally or internationally standardised metadata (e.g. MEDIN discovery metadata standard), which are published in national metadata catalogues (e.g. MEDIN portal; data.gov.uk).

Use

Data use

Expectation that UKMMAS community will make use of existing data, perhaps collected for different purposes, wherever possible, to support and supplement data collected specifically for marine assessments. (e.g. using the [MEDIN portal](#) to find data). This will allow more integrated assessments and broaden the evidence base.

Data analysis

Expectation that everyone analysing data for use in UK marine assessments will follow national or international standards (e.g. [NMBAQC](#)).

Share

Data reuse

Expectation that the data collected for UK marine assessments will be available for others to reuse with as few restrictions as possible, and in a timely manner.

² Marine European Seabed Habitats

³ NE Atlantic Marine Biological Analytical Quality Control Scheme

Ambition that all data collected for UK marine assessments are Findable, Accessible, Interoperable and Reusable (FAIR) (e.g. using MEDIN portal, Data Archive Centres and internationally compatible standards).

Data license

Expectation that the data collected for UK marine assessments will be made openly available under an Open Government License (allowing for exceptional circumstances⁴).

Data ownership

Expectation that the owner of all data used in UK marine assessments is clearly defined.

Maintain

Data archival

Expectation that the data collected for UK marine assessments will be archived at a nationally or internationally accredited data centre to ensure long-term access to these data. (e.g. [MEDIN Data Archive Centre](#)). This will ensure the continuing availability of these data even if the remit or priority of the organisation collecting the data changes.

⁴ e.g. to protect species that are identified as vulnerable to damage, disturbance or commercial exploitation of the information if information is made public. Some data collected for a specific purpose cannot be re-used and is restricted.