

## **Introduction**

The Marine Environmental Data and Information Network (MEDIN) aims to promote best practice in data gathering to ensure that data are properly archived. To ensure that (public sector) research and survey commissioning bodies (Clients) adopt this best practice and have a contractual basis for the data gathering programs they commission from Contractors (or Tenderers), MEDIN has developed a style of standard clauses that can be used in tender specifications, so forming a fundamental part of the contract from the start. This will ensure that data management best practice and its associated costs are addressed by Contractors (tenderers) at the tender compilation stage.

This document collates the experience from the use of existing “data clauses” in contracts across the marine community in the UK with a view to providing a standard clause with guidance for implementation.

## **Requirement**

Ideally, data collection contracts should ensure that the following issues are addressed:

- The application of, and documentation of, appropriate standards during data collection.
- The generation and provision of metadata in an agreed standard format.
- That provision is made for the secure long-term archival of the data.
- That ownership, Intellectual Property Rights, and terms and conditions for third party use of the data are clearly and unambiguously established and documented.

## **Experience so far**

There have been two main uses of a data clause to date:

1. DTI/BERR adopted (through their main contractors, Royal Haskoning) a Marine Data Acquisition clause in a contract for their SEA surveying work in the N Sea (see Appendix A).
2. The Channel Coastal Observatory (CCO) applied the approach detailed at: [http://www.channelcoast.org/data\\_management/online\\_data\\_catalogue](http://www.channelcoast.org/data_management/online_data_catalogue)

MEDIN has discussed the effectiveness of these approaches with Royal Haskoning and the CCO. Royal Haskoning advised that they were comfortable with the application of the clause, as it represented best practice. The CCO confirm that establishing the requirements at the tender stage ensures that data management issues are addressed properly from the

outset, and that many potential future difficulties are averted. MEDIN notes that the CCO applies a more prescriptive approach than BERR, for instance specifying the data formats that must be used.

The CCO approach has many attractions as it provides detailed instructions on how data should be prepared, and so allows little scope for ambiguity or confusion. However, the broad range of data types and collection regimes across the marine sector is such that in many cases a single, detailed and proscriptive clause (such as that applied by the CCO) is not a practical option.

Therefore MEDIN proposes the use of a more generic data clause in tenders, given below, as a model. This does not preclude the application of a more detailed and specific clause, such as that used by the CCO, so long as the key issues are addressed.

### **Proposed Data Clause for use in Tender Specification:**

#### MARINE DATA ACQUISITION

- a) In all cases, standards applied to data collection and analysis shall be appropriate for the purpose of supporting the relevant environmental application.
- b) Recognised standards must be applied by the OPERATOR to the process of data collection, processing and archiving.
- c) Metadata must be provided with each data set following the MEDIN discovery metadata standard ([http://www.oceannet.org/marine\\_data\\_standards/medin\\_disc\\_stnd.html](http://www.oceannet.org/marine_data_standards/medin_disc_stnd.html)).
- d) The long term archival of data sets must be ensured by depositing the data in an appropriate Data Archive Centre (with any costs to be met by the OPERATOR) following the guidelines established by the Marine Environmental Data and Information Network (MEDIN). The OPERATOR can contact the relevant MEDIN Data Archive Centre ([http://www.oceannet.org/data\\_submission/](http://www.oceannet.org/data_submission/)) for an estimate of archiving costs. The OPERATOR should contact the appropriate MEDIN DAC within XX months of completing the work.
- e) Ownership and copyright of all data shall be vested in the OPERATOR.
- f) Any reports prepared by the OPERATOR must include details about how best practice has been achieved, what standards have been followed and confirm that the data have been submitted to the appropriate Data Archive Centre.

## **Frequently asked questions about the Marine Data Acquisition clause.**

### **THIS COULD BE USED AS EXPLANATORY NOTES TO ACCOMPANY A TENDER SPECIFICATION**

Four questions are usually asked about this clause:

#### **A) Why is this clause necessary?**

Too many marine data have been lost in the past. There is a new initiative to ensure that appropriate marine data are submitted to data archive centres. This clause alerts potential contractors (tenderers), via the tender specification, to the best practice so that costs can be taken into account at the tender preparation stage. On acceptance of a tender, this then becomes a contractual commitment and a condition of payment. The tender documents could identify appropriate standards or sources of expertise to be referred to. MEDIN would be willing to supply advice and guidance.

#### **B) How much work will be involved for the contractor (tenderer)?**

The clause essentially enforces best practice, so additional effort should not be significant. Necessary effort from the contractor (tenderer) will usually involve: identifying suitable standards and /or engaging experts to assess standards; defining metadata and data standards and formats. The client will check that the metadata have been generated and are available; confirm that all data have been lodged in a Data Archive Centre. The contractor (tenderer) may be required to report on how they have adhered to these terms of the contract.

#### **C) How will contractors (tenderers) know what to do?**

By reference to appropriate standards and authorities. Guidance can be sought from MEDIN or appropriate agencies.

#### **D) Does the clause apply to all marine data?**

By default, yes. The only exception could be the requirement to make arrangements to archive the data with a DAC, - a special case would have to be made for any such exceptions.

## **FURTHER GUIDANCE FOR INDIVIDUAL CLAUSE CONDITIONS**

### **Application and documentation of Standards**

Evidence of application and documentation of agreed quality controls and other standards through the standard contract reporting mechanism will be a condition of payment.

Application and documentation of standards should represent normal “best practice”, and so should not result in any additional cost or effort for the contractor (tenderer).

Reference should be made to standards, protocols and recommended data formats documented by MEDIN, other appropriate sources (e.g. the UKMMAS protocols manual) or through reference to expertise as may reside within an appropriate agency or authority: SEPA, FRS, EA, CEFAS, JNCC, SNH, Natural England,...) if specific standards are not attached to this tender.

### **Generation and Publication of Metadata**

Publication of verified metadata in an agreed format will be a condition of payment.

Generation of metadata is not onerous and should represent normal “best practice”. This therefore should not result in any additional cost or effort for the contractor (tenderer).

MEDIN will progressively publish guidelines and tools to support the creation of metadata in its recommended format. Contractors (tenderers) should consult with MEDIN DACs for advice on metadata content.

Metadata should be created and published for all data in all cases. The only potential, and rare, exception could be for reasons of security or possible commercial confidentiality. A specific case would have to be made.

### **Provision for long-term archival in a Data Archive Centre (DAC)**

Proof that appropriate data have been lodged with a DAC will be a condition of payment.

This is likely to be the main source of additional cost and contractors (tenderers) should allow for this in their tender costs. The process for lodging the data would be agreed with the DAC in bi-lateral discussions.

All data should be lodged with a data archive centre unless the tender stipulates otherwise.

### **Ownership and copyright of data**

A) Who would police /enforce it?

This would be a legal agreement between the contractor, the contracting body and the Data Archive Centre where the data are finally lodged. These terms would be enforceable throughout the life of the data.

I am not sure how a tender specification and completed tender can create a contract with a data archive centre?

B) How much work will be involved for the contractors?

This should be a relatively simple statement of ownership and terms of further use. It should not involve significant cost unless legal opinion is required..

C) How will contractors know what to do?

By reference to other examples. The BERR contract and the CCO contract have clear conditions. Legal opinion could be consulted but it is imagined most government agencies and commercial organisations will have standard terms.

D) Does this apply to all marine data?

Yes.

## Appendix A

### *Data Clause as applied by BERR (DTI) (19<sup>th</sup> Feb 2007)*

#### MARINE DATA ACQUISITION

- 1 In all cases, standards applied to data collection and analysis as required in 2, 3 and 4 below shall be the highest that it is practical to attain and appropriate to the use to which they will be put.
- 2 Recognised standards must be applied by the Contractor and agreed by the Contracting Authority to the process of data collection and processing.
- 3 Metadata must be provided with each data set in accordance with ISO 19115 or other recognised standard as may be approved by the Marine Data and Information Partnership.
- 4 The long term archival of data sets must be ensured by depositing the data in an appropriate Data Archive Centre (with any costs reasonably incurred) working to the standards established by the Marine Data and Information Partnership.
- 5 For the purpose of clarity all data must be considered to be in the public domain and always freely available at no additional cost. All data will be protected by Crown Copyright.

("We will also ask the tenderers to quote their charges separately for this on a price schedule that we are issuing with the tender.")

## MEDIN Data Archive Centres

### British Geological Survey (BGS)

Email: [offshoredata@bgs.ac.uk](mailto:offshoredata@bgs.ac.uk)

Telephone: +44(0)131 6500275

*Seabed and sub-seabed geology, geophysics data*

### The Archive for Marine Species and Habitats Data (DASSH)

Email: [dassh.enquiries@mba.ac.uk](mailto:dassh.enquiries@mba.ac.uk)

Telephone: +44(0)1752 633291

*Flora, fauna and habitat data*

### British Oceanographic Data Centre (BODC)

Email: [enquiries@bodc.ac.uk](mailto:enquiries@bodc.ac.uk)

Telephone: +44 (0) 151 795 4884

*Water column oceanographic data*

### United Kingdom Hydrographic Office (UKHO)

Email: [bathy.dac@ukho.gov.uk](mailto:bathy.dac@ukho.gov.uk)

Telephone: +44 (0)1823 337900

*Bathymetry data*

### The Met Office

Email: [gcc@metoffice.gov.uk](mailto:gcc@metoffice.gov.uk)

Telephone: +44 (0)131 528 7312

*Marine meteorological (metocean) data*

### Centre for Environment, Fisheries & Aquaculture Science (CEFAS)

Email: [mary.brown@cefas.ac.uk](mailto:mary.brown@cefas.ac.uk)

Telephone: +44 (0) 1502 562244

*Marine fisheries data*

### Marine Scotland Science (MSS)

Email: [enquiries@marlab.ac.uk](mailto:enquiries@marlab.ac.uk)

Telephone: +44 (0)8457 741 741

*Marine fisheries data*

### Archaeology Data Service (ADS)

Email: [louisa.matthews@york.ac.uk](mailto:louisa.matthews@york.ac.uk)

Telephone: +44 (0) 1904 323982

*Marine historic environment data*

### Historic Environment Scotland

Email: [peter.mckeague@rcahms.gov.uk](mailto:peter.mckeague@rcahms.gov.uk)

Telephone: +44 (0) 131 651 6744

*Marine historic environment data*