

Data and Information Management Plan

COWRIE established a data management plan to develop the data and information management system that sits behind the website. In the same way, developers faced with a wide stream of diverse information need to organise and manage that information internally, to distribute and back-up information resources.

Developer Data and Information Management Plans (DIMPs) are not envisaged as long or complex – essentially they can be a simple checklist to help ensure that data are managed

well internally (see box). Internally well-managed and documented data will be straightforward to submit to COWRIE.

Long term management is better supported by ensuring that the data tasks are distributed; that is, when specifying a contract it may be better to ensure that the consultants understand the developer's requirements to submit data, documentation and metadata to COWRIE. The distributed task will be more manageable and the metadata will be generated by the team undertaking the surveys.

Data and Information Management Plans checklist

1. Nominate a person who will be responsible for data management internally and, if different, a contact for data and metadata submission to COWRIE.
2. Create an appropriate data management structure for the storage and administration of the data and information and its backup. Often this is overlooked and the task distributed across many partners and organisations – with no central organisation of the data. A central repository of programme data and documentation will help ensure access and security of information.
3. Consider which data are actually needed – the test here is the ongoing usability of the datasets. Often many versions of files are created during a project; the archive should avoid duplication. Documentation, reports and associated files and specifications may all be relevant to subsequent use.
4. Ensure that all surveys and data are documented. Many of the existing surveys are not well documented, not all data have been received from consultants commissioned to undertake work, and undocumented datasets may be difficult to understand.
5. Create accurate and detailed metadata as separate files (i.e. not included in the header information). This should also consider information that is held in the datasets, i.e. the attributes that the dataset contains. Some survey companies already routinely create metadata for the submitted files; check whether this is the case before creating new metadata records.
6. Ensure that third party rights are understood and that the rights and restrictions are properly documented. Ordnance Survey and UK Hydrographic Office derived datasets may be of particular significance.
7. Distribute the task of metadata generation as far as possible; for example, request compliant metadata when a consultant is submitting data as part of a survey. COWRIE can help specify requirements, or direct consultants to the website. Metadata could be submitted online to COWRIE, but we recognise that you may want to do that later – if so, compliant metadata can be uploaded.
8. Ensure that data received are in appropriate formats and check that the files can be read and that files and data fields are correctly formatted. Any documentation and/or the metadata should record the software and versions used in handling the data.
9. Ensure that the documents are generated without password protection (at least for archive copies) as it may be necessary to change formats in order to access these in the longer term. Do not password-protect files, or please remove these restrictions before uploading to COWRIE.
10. Identify the protocols used for missing values and any measures of 'out of range' or 'below precision' values within data files.
11. Avoid datasets with embedded macros, spaces in attributes of filenames, embedded links and HTML controls in files (e.g. Excel/Access)
12. Datasets containing multiple data files may be supplied as a ZIP file (or TAR file on UNIX systems).
13. Define Quality Assurance (QA) procedures and responsibilities to ensure all checklist items are addressed, valid metadata is supplied and the submission to COWRIE is complete.