

Writing Guidelines for Operational Report

The Operational Report is an important document that marks the end of the Science Teams joint field work and related operations. It comprises and describes the operational work, preparations and first preliminary results and serves as the common reference for all follow-up activities, such as scientific and engineering analyses, that usually are published in scientific journals.

Additionally, all data and its metadata collected and curated during the drilling operations and the joined laboratory or repository work forms the Operational Data Set which accompanies the Operational Report (s. Guidelines for the Operational Data Set). The Operational Report will be made available at the latest for the scientific community by the end of the moratorium phase.

It is best practice that the Operational Report is:

- published as digital supplement of the Science Report with reference to the accompanying Operational Data Sets under open access license of a regular journal such as the Scientific Drilling Journal
- reviewed by external reviewers
- written by all science team members active on the site or during drilling or report writing
- serves as state-of-the-art document for a post-drilling workshop gathering all science team members to plan subsequent scientific work and execute joint sampling (1st sampling party)

The Operational Reports structure could encompass:

Title page

Abstract

- **1. Expedition participants** (all personnel with relation to the operational phase should be mentioned. That can encompass e.g. the project leader, the principal investigators, the project manager and coordinator, the on-site science team, volunteers, logging teams, drilling supervisors, on-site engineer, drilling team, off-site assistants).
- 2. Introduction
- 3. Geological Setting
- 4. Scientific Objectives
- **5. Strategy** (including site selection, drilling strategy)
- **6. Site Preparation** (preparations, conductor casing, mobilisation, demobilisation)



7. Technical Operations

- Infrastructure at the location and drill site set up,
- Rig type and specifications of installed components (e.g. hook load capacity, drawworks, pumps, rotary table, power swivel, handling equipment),
- A summary of drilling and coring operations (incl. BHA's, bits, core bits, core recovery, used mud systems, mud pressure, mud density and mud flow, ROP, WOB, RPM etc),
- A casing scheme and description of cementing operations,
- Description of problems encountered e.g. fishing operations, mud loss, breakouts and a
- Summary of progress and costs including a drill-time log and a depth vs. cost breakdown.
- **8. Scientific Operations** (e.g. workflows, sampling, measurements, downhole logging)
- 9. Storage Location and 1st Sampling Party
- **10. Preliminary Scientific Assessment** (Topics according to the specific expedition: e.g. geology, geophysics, hydrogeology, microbiology, lithostratigraphy, micropaleontology, petrophysics)
- 11. Conclusions
- 12. Acknowledgements
- 13. References

A detailed example of an ICDP Operational Report is the COSC-1 report available online.