



Date 13 Oktober 2023

Status Final

Metocean Campaigns for Various Wind Farm Sites in the Dutch North Sea

Annex 5 - Section V

QUALITY REQUIREMENTS

Colophon

Project name	Metocean Campaigns for Various Wind Farm Sites in the Dutch North Sea
Project number	202306104
Version	Final
File name	VS67_MC_Annex 5 Section V Quality Requirements
Appendix(ces)	2
Author	MW
Reviewed	MB
Approved	JB

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1 Quality Assurance Requirements

1.1 Introduction

This document sets out the Contracting Authority's requirements with respect to quality assurance (QA) and quality control (QC).

This document sets out the minimum standards, which the Contracting Authority requires with respect to QA/QC issues for the metocean data and associated measurement campaign to be carried out.

The Contractor shall be responsible for all management of Quality processes to ensure full compliance with both statutory and procedural requirements.

The Contractor shall have a Quality Management System in place that is certified with:

- ISO 9001 or equivalent for quality management

1.2 Project Execution Plan

The Contractor shall implement a management system assuring the safe and adequate management of the Work covering all (Work) preparation, engineering, transportation, measurement/ inspection, quality, health, safety, environmental and interface aspects, all in accordance with the requirements of the Contract.

The overall management structure of the project shall be described in a Project Execution Plan to be submitted by Contractor. The Project Execution Plan shall describe the implemented procedures with regard to, but not limited to, the management of:

- The overall project
- Scope
- Methods and equipment used
- Planning
- QHSE
- Organisation
- Communication and Information
- Risks
- Procurement

The vessel(s) and measurement equipment have been selected to achieve the investigation objectives in an efficient manner. The measurement equipment configuration are optimised for efficient data acquisition and are described in adequate detail to demonstrate this. The data processing, analysis, interpretation and reporting methodologies are sufficiently detailed to demonstrate compliance with the Annex 5 Section III Scope of Work. Reference projects are described.

The Contractor shall ensure that the Project Execution Plan is approved by the Contracting Authority at least one week before any of the offshore Works under the Contract is commenced, and that any subsequent amendment to it by the Contractor is notified to the Contracting Authority. Contractor shall allow for sufficient time for review and revision taking into account the review periods as detailed in section 2.2 in this Contract document.

Contractor shall issue a draft version of the Project Execution Plan with the proposal. The approach, quality and completeness of the Project Execution Plan shall be valued and used as assessment criterion in the tender selection process. See also the tender document for all details related.

1.3 Project Quality Plan

Contractor shall prepare a Project Quality Plan (PQP) describing how its quality policy is implemented for the Work. The PQP shall address the systems and specific Quality Assurance (QA) requirements mentioned in this section, taking into account all relevant provisions in all Sections of the Contract. The PQP shall be in accordance with Contractor's documented quality management system and shall describe, as a minimum, all quality assurance and quality control issues that are relevant for all activities of the Works awarded under the Contract. The PQP shall describe at least:

- Quality management organisation and staffing (including but not limited to organisation charts, CV's, qualifications, previous experiences, etc.);
- Quality management procedures;
- Methods for data processing and validation analyses including flagging of data;
- Project Control procedures;
- Procedure handling of documents;
- Calibration and checks of equipment procedure;
- Validation, verification & performance test procedures;
- Project Audit Plan.

All activities and works by Contractor and his subcontractors shall be carried out in compliance with the Project Quality Plan.

The Contractor shall ensure that the Project Quality Plan is approved by the Contracting Authority at least one week before any of the offshore Works under the Contract is commenced, and that any subsequent amendment to it by the Contractor is notified to the Contracting Authority.

Contractor shall allow for sufficient time for review and revision taking into account the review periods as detailed in this Contract document.

Contractor should work in compliance with HSE requirements as described in Annex 5 – Section VI.

Contractor shall issue a draft version of the Project Quality Plan with the proposal. The approach, quality and completeness of the Project Quality Plan shall be valued and used as assessment criterion in the tender selection process. See also the tender document for all details related.

1.4 Contingency Plan

The Contractor shall have a contingency plan in place for the situation that the measurement system is not functioning, damaged or lost. This contingency plan shall outline the measures that will be taken by the Contractor in order to prevent loss of data and to assure continuation of the measurements at the shortest notice possible in case of malfunctioning of the measurement systems.

This contingency plan shall clearly specify:

- The procedures that are in place to monitor proper functioning of all systems (including mooring and positioning systems) of the measurement systems including the warning limits of the various instruments.

- The procedures in case the measurement systems need to be retrieved from its target position for repair or other maintenance activities.
- The procedures in case the mooring system of the measurement systems have failed and the system is drifting at sea. Including communication plan to third parties like local or national authorities.
- The procedures for mobilisation of vessels and personnel that are needed for recovery operations. The mobilisation procedure shall detail the measures taken by the Contractor to assure (early) availability of the needed vessels and personnel.
- The procedures for deployment of back-up systems in case of the measurement systems have been lost or is damaged beyond (quick) repair (if available).
- The procedures for the validation (status) of back-up systems. The back-up system should be ready to be deployed.

Contractor shall issue a draft version of the Contingency Plan as part of the Project Execution Plan. The quality and completeness of the contingency plan shall be evaluated in the tender selection process. See also the tender document for all details related.

1.5 Validity of Measurements

During the execution of the measurements, the Contractor shall continuously verify the proper functioning of the measurement systems. Hereto Contractor shall compare the results of the measurement systems with an independent source of wind data. The Contractor shall also provide a webportal at Contracting Authority's disposal with all instrument readings realtime or almost realtime visible. This requirement is not applicable to dedicated "offline" subsurface instruments. At the moment that there are indications for malfunctioning of the measurement systems, Contractor shall take immediate action, one and another as specified in the contingency plan that shall be made by Contractor.

1.6 Meetings

The Contractor shall be available for regular meetings with Contracting Authority with regard to the coordination and progress of the project. As a minimum the following meetings will be established:

- Project Kick-off Meeting and close-out meeting (including lessons learned);
- Weekly Progress meetings at Contracting Authority office or through videoconferencing during the execution of the Work
- Kick-off meetings the day before an offshore operation;
- De-brief meeting the day after an offshore operation;
- Any other meetings as specified in the Contract.

The Contracting Authority reserves the right to plan any other meetings that are deemed necessary during the execution of the works. Contractor shall make relevant representatives available for these meetings.

2 Document Management

2.1 Document Management System

Contractor shall implement a document management system in which all documents are uniform, in which they have a unique number, in which they can be traced, and in which they are kept in a safe and easy way.

The quality documents must be part of the overall document management system.

Contractor to provide a Master Document Register or similar. Where naming, status and planning of transfer of documents shall be maintained.

The naming of the documents shall be standardized in order to facilitate the document control during the whole project. The naming code is required for all documents produced within the project and is specified in section 4.5 of Annex 6 Starting Points and Assumptions.

2.2 Review terms for approval

For documents and digital deliveries (datasets) that shall be submitted to Contracting Authority for approval, the following maximum review terms shall be taken in account:

- If approval by Contracting Authority is necessary: 10 working days for each first revision of the document and digital deliveries and 5 working days for each subsequent revision. This applies to any document and digital deliveries supplied for approval, including the project documentation, deployment and maintenance procedures, monthly data and data validation reports and the final report;
- Contractor shall issue an updated revision of a commented document, which was sent for approval to Contracting Authority, within 5 working days after the comments have been issued by the Contracting Authority.
- For reviewing documents and digital deliveries, Contracting Authority shall use the document review form. When Contracting Authority has sent the review form to Contractor, Contractor shall respond as quickly as possible. Contractor shall fill in the complete Contractor response box with its answer. Contracting Authority shall respond in the same form. Maximum review terms as described above shall be maintained. The template form can be found in Annex 1 of this document.
- Documents and other deliverables will be considered approved if all comments within the document review form have been answered by the Contractor and accepted / closed by the Contracting Authority.

2.3 Documentation

All produced documents are handed over to Contracting Authority electronically in PDF-format. In cases that Contracting Authority has a valid reason to receive documents in an editable digital format as well, these will be provided by Contractor at the request of Contracting Authority.

All project documentation will be in English, except as explicitly stated otherwise.

3 Communication

3.1 Confidentiality

All information provided to Contractor by the Ministry of Economic Affairs and Climate Policy and/or the Netherlands Enterprise Agency and/or the Ministry of Infrastructure and Water Management and/or Rijkswaterstaat and/or TenneT must be regarded confidential.

All deliverables produced by Contractor remain confidential until a deliverable has been made public by the Ministry of Economic Affairs and Climate Policy and/or the Netherlands Enterprise Agency and/or the Ministry of Infrastructure and Water Management and/or Rijkswaterstaat and/or TenneT.

3.2 Language

All correspondence, documents, drawings, schedules, minutes of meetings and other commercial or technical data shall be in the English language.

Contractor shall secure at all sites where work is performed a 24/7 availability of fluent English speaking and reading supervisors.

Contractor shall secure at all sites where work is performed sufficient knowledge of the Dutch language is available within the project team to enable communications with third parties and to correctly interpret written and spoken instructions.

3.3 Taxonomy

All Contractors must use the most recent Taxonomy as presented in Annex 6 Starting Points and Assumptions.

3.4 Correspondence

All correspondence under the Contract shall be addressed, directed and controlled successively between Contracting Authority's Representative and Contractor's Representatives.

The Contracting Authority's Representative is specified in the Contract.

Correspondence is defined as letters, e-mails and minutes of meetings –all including potential attachments. All correspondence must be properly numbered, dated, identified with a subject and signed if in hard copy as per the requirements set out in this document. Further requirements regarding standards, formats and templates are specified in Annex 6 - Starting Points and Assumptions.

All e-mails related to the metocean measurement campaigns must be sent in CC to the appropriate project mailbox: VS67@rvo.nl

Oral communicated instructions or information in connection with the Contract by all parties involved shall be confirmed in writing.

3.5 Communication Authorities

All correspondence concerning review/approval/comment by Statutory Authority, Local Authority and or third parties shall be copied to Contracting Authority.

3.6 Communication in Case of Emergency

In case of emergency, Contractor shall communicate directly with the emergency services and inform the Netherlands Enterprise Agency immediately. The communication procedure in case of emergencies shall be clearly defined in the Emergency Response Plan as specified in Annex 5 - Section VI HSE Requirements.

4 Queries

4.1 Contractor Queries

Contractor shall use the Contractor Technical Query Form for any technical query. The template form can be found as Annex 2 of this document

Contractor shall fill in the entire Contractor Query box, including 'document name' and 'subject', but also the correct index and revision numbers. Contractor shall under '1. Contractor's Query' describe and detail his question as much as possible. Finally, Contractor shall also add the date of the query, the author and the approver of the query.

4.2 Contracting Authority Response

When Contractor has sent his query to the Contracting Authority, the Contracting Authority shall respond as quickly as possible. The Contracting Authority shall fill in the complete Contracting Authority response box with its answer, including author and approver.

4.3 Further Information Required

In case the response of the Contracting Authority is not clear to the Contractor, or the Contractor requires further explanation, it can add another page, marked 'Contractor's Follow-up Query'.

4.4 Contracting Authority Technical Queries

When the Contracting Authority has a technical query, the process is very similar. The Contracting Authority will send a 'Contracting Authority Technical Query Form' with all information added and a fully detailed question. The Contractor shall return this within the indicated response time with a 'Contractor's Response'

Appendix 1 Template-Document-Review-Form

Appendix 2 Template-Contractor-Technical-Query-Form