

Guidance/best practices document on relevant issues for verifiers assessing Monitoring Plans pursuant to Regulation (EU) 2015/757

This document is part of a series of documents prepared by experts gathered under two subgroups established under the umbrella of the "European Sustainable Shipping Forum (ESSF)": the MRV subgroup on monitoring and reporting and the MRV subgroup on verification and accreditation. These two MRV subgroups gathered for the period June 2015 to May 2017 in order to provide technical expertise relevant for the implementation of Regulation (EU) 2015/757 (the MRV shipping Regulation).

As indicated in their terms of reference, the two MRV shipping subgroups gathered relevant expertise and were mandated to identify guidance best practices in areas relevant for the implementation of the MRV shipping Regulation. The substance of this guidance/best practices document was unanimously endorsed by the representatives of the ESSF Plenary by written procedure ending on 30th of June 2017.

Apart from the present document, Guidance/Best practices documents have been established in the following areas:

- Preparation of Monitoring Plans by companies;
- Monitoring and reporting of fuel consumption, CO2 emissions and other relevant parameters;
- Backward assessment of monitoring plans;
- Use of external ship tracking data by verifiers;
- Materiality and sampling;
- Verification of emissions reports by verifiers;
- Recommendations for improvements issued by verifiers;
- Assessment of verifiers by National Accreditation Bodies in order to issue an accreditation certificate;
- Dealing with situations where the accreditation is suspended or withdrawn close to the planned issuing date of the Document of Compliance (DOC) by the verifier.

All best practice documents and other relevant documents can be downloaded from the Commission's website at the following address:

https://ec.europa.eu/clima/policies/transport/shipping_en#tab-0-1

1. INTRODUCTION

This document has been prepared by a Task Force under the MRV subgroup on verification and accreditation, co-ordinated by Mrs Helena Athoussaki (from PwC). This document is part of a series of guidance documents provided on specific topics of monitoring and reporting under the MRV shipping Regulation.

This guidance is for the verifiers assessing monitoring plans. It has been written to support the implementation of the MRV Regulation, by explaining its requirements in a non-legislative language. However, it should always be remembered that the EU Regulations set the primary requirement.

2. PRIOR TO THE ASSESSMENT

Before the start of the assessment of the monitoring plan provided by the companies, verifiers may perform certain activities in order to better organize the assessment process.

- (1) Verifiers may request from the companies, when appropriate and applicable, relevant documentation (electronic or hard copy) or description of the ship's installation or any other information deemed relevant to carry out the assessment (2016/2072 – Article 4¹). In the case that the shipping company has made any revisions to the procedures / materials / documents which are referred in the Monitoring Plan(s), the revised versions need to be provided.

How this may be done?

Reference is made to the Monitoring Plan template in accordance with Annex I of the Commission Implementing Regulation (EU) 2016/1927².

For example for the Basic data (part B) verifiers may request the Certificate of registry, the General Arrangement Plan, certificate of class, Emissions sources certificates (e.g. EIAPP), machinery items etc.

For the Activity data (Part C) verifiers may request Flow meters installation diagrams-piping diagrams, Description of calibration and details of flow meters, PMS, Company's Operations Manuals, SEEMP, relevant Section of ISM Manual, Bunkering/Fuel Management/Fuel Testing processes or flowcharts etc.

For the Data Gaps (Part D) verifiers may request to see a sample of electronic reported data, sample of noon report, relevant manuals or forms for missing data etc.

¹ Commission Delegated Regulation on verification activities and accreditation of verifiers pursuant to Regulation (EU) 2015/757 :

<http://eur-lex.europa.eu/legal-content/EN/TXT/PDF/?uri=CELEX:32016R2072&from=EN>

² Commission Implementing Regulation on templates for monitoring plans, emissions reports and documents of compliance pursuant to Regulation (EU) 2015/757

http://eur-lex.europa.eu/legal-content/EN/TXT/?uri=uriserv:OJ.L_.2016.299.01.0001.01.ENG

For the Management (Part E) verifiers may request the IT management description, IT manuals (back up, access procedures) Control activities, Data flow diagram, company's risk assessment procedures (when appropriate) etc.

Note : Any document provided to the verifier and contains data relevant only to the emissions report (ie. BDN, noon reports etc.) should not be subject to data verification and should only be used for the assessment of the MP.

- (2) Verifiers may consider different types of activities to measure scale and complexity of the assessment activities or data audit techniques.

How this may be done?

For example: inquiry, document inspection, walkthrough, observation, authentication etc.

- (3) Verifiers could use internal verification documentation in order to keep record and justify the verification activities for the assessment of the monitoring plan.

How this may be done?

For example: agreement and contract, risk assessment, strategic analysis, verification plan, assessment report and assessment conclusion, results of the independent reviewer, reasoning of site visit waive, list of non-conformities/resolved, etc.

- (4) Verifier may carry out a strategic analysis of all relevant activities of the shipping company in order to gain a better understanding of the shipping company's nature, scale and complexity of its activities.

How this may be done?

For example: by looking, the nature of the company, if the company is a Ship Management company or a Ship Owning company; nature of operations, the type of vessels, the fleet size, or the diversity of the fleet;

3. ADDRESSING THE ASSERTIONS OF MONITORING PLAN

The provisions of Article 5 of Commission Delegated Regulation 2016/2072 and the assertion described: When assessing the monitoring plan, the verifier could plan activities to address the assertions of completeness, accuracy, relevance and conformity with regulation (EU) 2015/757 of the information provided in the monitoring plan.

3.1. Assessing the completeness of the Monitoring Plan

Completeness means all sources w.r.t the monitoring and reporting of the data set are included and the coverage of the information is sufficient for the intended end-users to evaluate the extent of the company's performance.

Verifiers need to assess whether all mandatory fields in the monitoring plan template have been filled in by companies according to Annex I of the Commission Implementing Regulation (EU) 2016/1927.

How this may be done?

For example:

- A “cross-check” matrix will be used whereby when the required item is covered in the submitted Monitoring Plan.
- A Monitoring Plan is considered as complete when all mandatory items are included and the matrix is appropriately populated.
- Verifier could look for reference section / paragraph of procedures and process or flow charts prepared and maintained outside the MP to which reference is made in the MP.

3.2. Assessing the relevance of the Monitoring Plan

The information provided by the company could be relevant in the context. The data set is appropriate to the needs of the intended end-user.

Verifiers need to review the submitted Monitoring Plan so as to identify whether the submitted information is relevant to provide the necessary insight in the way information it is monitored and reported by the company.

Practically, relevance will require that verifiers review all referenced documents and have the necessary competence to assess whether these are relevant.

How this may be done?

For example:

- When describing the procedure for recording the amount of cargo (see Table C.5. of Annex I of 2016/1927), the shipping company makes reference to a procedure related to cargo handling. The verifier may review the cargo handling procedure referenced in the Monitoring Plan and have the necessary competence to deem this as relevant.
- When assessing the monitoring plan, the verifier may take into consideration available information on existing management systems only relevant, effectively applied and covering elements under the Regulation (EU) 2016/1927.
- To determine quality assurance and reliability of information technology (Table E 2, Regulation (EU) 2016/1927), verifier may ask for validation of IT system, company`s procedures for addressing corrective and preventive actions for the non-conformities.
- When evaluating the relevance of data gaps (Part D, Regulation (EU) 2016/1927) the verifier may seek to understand in which cases the data gaps methods used by the ship and ensure that the methods results in conservative estimates.

3.3. Assessing the Conformity of the monitoring plan

According to Article 2 (2) (a) of Regulation (EU) 2016/2072 “ non-conformity means for the purpose of assessing a monitoring plan, that the plan does not fulfil requirements under Article 6 and 7 of Regulation (EU) 2015/757 and Implementing Regulation (EU) 2016/1927.”

To that extent, we can define that conformity means that all mandatory items as required by both Articles 6 - 7 of 2015/757 and Annex I of EU 2016/1927 are covered.

How this may be done?

For example:

- Part of the internal verification documentation there is a checklist whereby the verifier assess the conformity of the monitoring plan.
- Where the verifier identifies non-conformities, it informs the company thereof without delay and request relevant corrections (corrective and preventive actions) within proposed timeframe.
- The verifier agrees with the company a timeframe to correct all non-conformities in order to reassess the monitoring plan before the start of the monitoring period.
- In the internal verification documentation, the verifier marks as resolved all the non-conformities that have been corrected in during the assessment period of the monitoring plan.
- If, based on the assessment the verifier concludes that the monitoring plan is in conformity with the Regulation (EU) 2016/1927, the verifier informs the company of the acceptance of the monitoring plan.
- The verifier could timely inform the company in writing about the acceptance or on a voluntary basis provide acceptance via the THETIS MRV tool.
- The verifier may check that the data available (via noon / departure / arrival / voyage reports/abstract log) is sufficient to conform with the requirement to report fuel consumption at sea and within ports from berth to berth.

3.4. Assessing the accuracy of the monitoring plan

Accuracy is the closeness to the true value. A verifier may carry out a due diligence exercise to ensure that the process(es) for gathering, calculating and measuring data sets exhibit the highest degree of correctness.

How this may be done?

For example:

- For Parts B.1. and B.2.– an independent third party database could be used for cross-reference, as well as the vessel's Certificate of Registry and Certificate of ISM Code issued by Flag.
- For Part B.3. – documents could be tested: the NOx Technical File, Manufacturer's manuals, Certificate of Classification of Machinery provided by Classification societies may be used as a basis for review.
- For Parts C.2.2. to E.6. the following verification activities could take place as a minimum (following Article 5 (3) of 22.9.16 delegated act):

- a. Document inspection – measuring equipment approval certificate; Manuals; Job descriptions and responsibilities of relevant personnel; Flowcharts, Piping diagrams; IT system audit certificates, SEEMP, ISM manual (SMS), relevant ISOs, outsourced agreements, manufacturers’ specification, company’s manuals, forms and plans.
- b. Inquiry with relevant staff – conduct interviews.
- c. Observation- by looking the procedure being performed by others.

4. PROCEDURES & CONTROLS

Accuracy in the Monitoring Plan could be established when procedures and controls in place are tested.

4.1. Checking the data flow procedures

The verifier may want to assess whether the shipping company has in place a data flow describing the series of activities taken from recording primary data at sea to storing information regarding measurements ashore. The so-called “data flow” diagram is not a requirement as such, its existence nevertheless reveals a good company profile which has exercised due care in preparing for the implementation of the Regulation (EU) 2015/757.

The data flow diagram is a good instrument to be used particularly when assessing the requirement of Table C.2.5. “Procedures for recording, retrieving, transmitting and storing information regarding measurements”. Such a tool could help the verifier acquire a good understanding of the company’s operating environment, drawing conclusions on the risk profile which might influence the nature of the assessment to be done by the verifier.

To assess the data flow, the verifier need to understand how data recording related to fuel consumption takes place on the vessel side, how is this data retrieved (e.g. automated through flow meter measurements vs. manual tank soundings performed by the Chief Engineer), how is this data transmitted to shore (e.g. through the use of predefined forms in a central system versus through email), and lastly how is data stored and where.

The verifier may check which persons are responsible and competent for specific data flow activities.

The general data flow is often dependent on existing IT and/or data management systems. The verifier cannot rely solely on existing IT and/or data management systems or procedures without testing the specific data flow procedure.

How this may be done?

For example:

- Conduct interviews with persons responsible for recording, retrieving, transmitting and storing information regarding measurements.
- Observation of this specific data flow procedure.
- Enquiry of relevant forms, data management system involved.

- Document inspection if reference made.

4.2. Checking control activities

Verifiers could check whether the control activities listed in the Monitoring Plan(s) are effective at mitigating the risks e.g.

- regarding the requirement for ensuring quality assurance of measuring equipment (Table C.2.8)
- regarding the requirement for ensuring quality and reliability in the IT systems used (Table E.2)
- regarding the requirement for internal reviews and validation of all MRV relevant data (Table E.3)
- regarding the requirement for a clear procedure on how to perform corrections on MRV relevant data and take corrective actions (Table E.4)
- regarding the requirement for clear steps to be followed when document recording and documentation management (Table E.5)

Control activities for example may include Calibration and maintenance of measuring instruments used in accordance with manufacturers' specification (e.g. Flow meters); Methodology to recover potential data gaps related to fuel measurements; Role separation of data input from data check.

How this may be done?

Table C.2.8. Quality assurance of measuring equipment

Shipping companies need to ensure that all relevant measuring equipment is calibrated, adjusted and checked at regular intervals. The required frequency and nature of checks and adjustments may be specified in the Monitoring Plan(s) or in the internal written procedures. In such cases, the verifier for example may:

- confirm that the appropriate checks and adjustments have been carried out;
- review the documentation to ensure that the checks have been performed in accordance with the required standards (if applicable) and procedures.
- check whether corrective action has been taken by the operator if the measurement equipment was found not functioning properly.

5. ASSESSMENT REPORT

The verifier shall communicate to the company the non- conformities in a clear manner.

How this may be done?

For example:

- By providing clear comments and examples as well as adequate description of the non-compliances.
- Clarity in grading the non-conformity (major, minor) could help verifier to communicate the non-conformities to the company.

6. INDEPENDENT REVIEWER

As per article (8) of 2016/2072, the verifier's independent reviewer shall perform a review to ensure that the monitoring plan has been assessed in accordance with the EU regulation 2015/757.

How this may be done?

For example:

- a quality review function to look for technical errors or omissions;
- a final check that due professional care and judgment has been applied in the process and that the verification team has carried out the assessment in line with the EU regulation 2015/757
- an assessment of whether the evidence gathered is sufficient to support the opinion;
- confirmation that all evidence, conclusions and their justification have been properly recorded in the internal verification documentation;

7. SITE VISITS

As per Article 6 (4) of 2016/2072, the verifier shall carry out site visits in order to gain sufficient understanding of the procedures and systems described in the monitoring plan and validate that the information is accurate.

How this may be done?

For example:

- The assessment of a Monitoring Plan conducted at the location where the critical mass of information is stored. This is crucial as verifiers may need to create a concrete understanding of the company's operating environment, procedures and controls in place.
- The content of the assessment activities to take place is left at the verifiers' discretion who is also responsible for determining the time needed to do so.
- The verifier may waive the site visit provided that one of the conditions as described in Article 6 (4) of 2016/2072 is fulfilled and justified in the internal verification document.
- Likewise on board verification is not necessary however if it is inevitable the rationale of this decision may be well documented in the verification plan.
- Verifier may undertake interviews of key staff involved in the EU MRV monitoring and reporting process and observe IT systems used subsequently.

8. RE-ASSESSMENT

The verifier shall re-assess the monitoring plan in case modifications occur as per article 7(2) of Regulation(EU) 2015/757.

How this may be done?

Verifiers need to re-assess any change in the monitoring plan that may affect the accuracy of the determination of CO2 emissions.

Examples of possible reason for re-assessing the monitoring plan:

- Change of Emission sources
- Change of monitoring method or back method
- New fuels used
- Use of new type of measuring equipment
- Change of management system (e.g. shipping company is changing the IT system which may be used for the data flow)
