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From: Secretary-General of the European Commission, signed by Ms Martine DEPREZ, Director

date of receipt: 19 June 2024

To: Ms Thérèse BLANCHET, Secretary-General of the Council of the European Union

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Subject: COMMISSION STAFF WORKING DOCUMENT Union submission to the 82nd session of the International Maritime Organization's Marine Environment Protection Committee on further considerations on ships' GHG emissions data quality and integrity as a basis for current and future IMO GHG regulatory measures

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Delegations will find attached document SWD(2024) 152 final.

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Brussels, 19.6.2024  
SWD(2024) 152 final

**COMMISSION STAFF WORKING DOCUMENT**

**Union submission to the 82nd session of the International Maritime Organization's  
Marine Environment Protection Committee on further considerations on ships' GHG  
emissions data quality and integrity as a basis for current and future IMO GHG  
regulatory measures**

## **Union submission to the 82<sup>nd</sup> session of the International Maritime Organization's Marine Environment Protection Committee on further considerations on ships' GHG emissions data quality and integrity as a basis for current and future IMO GHG regulatory measures**

### **PURPOSE**

This Staff Working Document contains a draft Union submission to the International Maritime Organization's (IMO) 82<sup>nd</sup> session of the Marine Environment Protection Committee (MEPC 82). The IMO has indicatively scheduled MEPC 82 from 30 September to 4 October 2024.

The draft submission provides further considerations on data quality and integrity of the IMO DCS, in the context of the revision of the IMO GHG short-term measures and the ongoing development of mid-term measures. It builds on previous contributions in relation to continuous improvement of the Data Collection System. This process consists of multiple steps, with the ultimate goal of ensuring that data relating to ships' fuel consumptions and GHG emissions is at a sufficient level of quality and integrity, and that there is a sound verification process in place. In particular, the document outlines the main features of the EU "Monitoring, Reporting and Verification" (EU MRV) system for maritime transport currently in its seventh implementation year. Moreover, it suggests a possible approach to ascertain the fitness of the IMO DCS as a compliance control tool. Finally, this document invites IMO Parties to undertake an independent study on DCS data quality and integrity.

### **EU COMPETENCE**

Regulation (EU) 2015/757<sup>1</sup> (EU MRV Regulation) establishes the legal framework for an EU system to monitor, report and verify (MRV) GHG emissions. The regulation aims to deliver robust and verifiable GHG emissions data and energy efficiency indicators, inform policy makers and stimulate the market uptake of energy efficient technologies and behaviours. It does so by addressing market barriers such as the lack of information. It entered into force on 1 July 2015.

The EU Climate Law<sup>2</sup> sets a binding Union climate target of a reduction of net greenhouse gas emissions—emissions after deduction of removals—by at least 55% by 2030 compared to 1990. It also includes the aim of climate neutrality by 2050 and an aspirational goal for net negative emissions after this time.

Based on the Commission's proposals of the *Fit for 55* package to reduce GHG emissions, the EU legislators adopted the following legal acts specifically targeting GHG emissions from the shipping sector:

- the revision of the EU Emission Trading System (ETS) Directive (EU) 2023/959<sup>3</sup> to extend the EU ETS to the maritime transport sector to apply as of 1 January 2024, (together with the necessary amendments to the EU MRV Regulation,<sup>4</sup> to revise monitoring and reporting rules,

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<sup>1</sup> Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport, and amending Directive 2009/16/EC, OJ L 123, 19.5.2015, p. 55–76

<sup>2</sup> Regulation (EU) 2021/1119 of the European Parliament and of the Council of 30 June 2021 establishing the framework for achieving climate neutrality and amending Regulations (EC) No 401/2009 and (EU) 2018/1999 ('European Climate Law'); OJ L 243, 9.7.2021, p. 1–17

<sup>3</sup> Directive (EU) 2023/959 of the European Parliament and of the Council of 10 May 2023 amending Directive 2003/87/EC establishing a system for greenhouse gas emission allowance trading within the Union and Decision (EU) 2015/1814 concerning the establishment and operation of a market stability reserve for the Union greenhouse gas emission trading system, OJ L 130, 16.5.2023, p. 134–202

<sup>4</sup> Regulation (EU) 2023/957 of the European Parliament and of the Council of 10 May 2023 amending Regulation (EU) 2015/757 in order to provide for the inclusion of maritime transport activities in the EU

- also through the revision of the relevant implementing and delegated acts).
- Regulation (EU) 2023/1805<sup>5</sup> (FuelEU Maritime Regulation) focuses on the use of renewable and low-carbon fuels in the maritime sector and mandates the uptake thereof by ships calling at EU ports to apply as of 1 January 2025.

Compliance with the new obligations stemming from the extension of the EU ETS to maritime transport and the FuelEU Maritime Regulation will build on the monitoring, reporting, and verification system established by the EU MRV Regulation.

These EU acts are in turn strongly linked with the IMO measures on GHG such as the IMO Data Collection System, the Energy Efficiency Existing Ship Index (EEXI), and the Carbon Intensity Indicator (CII) aiming to collect and publish information on the technical and operational energy efficiency of ships on a per-ship basis.

Any IMO measure on GHG matters, which will require the monitoring, verification and reporting of GHG emissions from shipping, could affect the EU MRV Regulation as well as the EU ETS Directive and the FuelEU Maritime Regulation. Therefore, the EU has exclusive competence for GHG emissions in shipping.

In light of all of the above, the present draft Union submission falls under EU exclusive competence, pursuant to article 3(2) TFEU.<sup>6</sup> This Staff Working Document is presented to establish an EU position on the matter and to transmit the document to the IMO prior to the required deadline of 28 June 2024.

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Emissions Trading System and for the monitoring, reporting and verification of emissions of additional greenhouse gases and emissions from additional ship types , OJ L 130, 16.5.2023, p. 105–114

<sup>5</sup> Regulation (EU) 2023/1805 of the European Parliament and of the Council of 13 September 2023 on the use of renewable and low-carbon fuels in maritime transport, and amending Directive 2009/16/EC, OJ L 234, 22.9.2023, p. 48–100

<sup>6</sup> An EU position under Article 218(9) TFEU is to be established in due time should the IMO Marine Environment Protection Committee eventually be called upon to adopt an act having legal effects as regards the subject matter of the said draft Union submission. The concept of ‘*acts having legal effects*’ includes acts that have legal effects by virtue of the rules of international law governing the body in question. It also includes instruments that do not have a binding effect under international law, but that are ‘*capable of decisively influencing the content of the legislation adopted by the EU legislature*’ (Case C-399/12 Germany v Council (OIV), ECLI:EU:C:2014:2258, paragraphs 61-64). The present submission, however, does not produce legal effects and thus the procedure for Article 218(9) TFEU is not applied.

## ENERGY EFFICIENCY OF SHIPS

### Further considerations on ships' GHG emissions data quality and integrity as a basis for current and future IMO GHG regulatory measures

Submitted by Austria, Belgium, Bulgaria, Croatia, Cyprus, Czechia, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands (Kingdom of the), Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the European Commission acting jointly in the interest of the European Union

#### SUMMARY

*Executive summary:* This document provides further considerations on data quality and integrity of the IMO DCS, in the context of the revision of the IMO GHG short-term measures and the ongoing development of mid-term measures. It builds on previous contributions in relation to continuous improvement of the Data Collection System. This process consists of multiple steps, with the ultimate goal of ensuring that data relating to ships' fuel consumptions and GHG emissions is at a sufficient level of quality and integrity, and that there is a sound verification process in place. In particular, the document outlines the main features of the EU "Monitoring, Reporting and Verification" (EU MRV) system for maritime transport currently in its seventh implementation year. Moreover, it suggests a possible approach to ascertain the fitness of the IMO DCS as a compliance control tool. Finally, this document invites IMO Parties to undertake an independent study on DCS data quality and integrity.

*Strategic direction, if applicable:* 3

*Output:* 3.2

*Action to be taken:* Paragraph 21

*Related documents:*

#### Introduction

1 The IMO Data Collection System has been subject to recent developments. Following continued work from the GHG Working Group, both MEPC 80 and MEPC 81 adopted amendments on new types of data to be submitted (inclusion of the attained and required Carbon Intensity Indicator (CII) values, the CII rating and attained Energy Efficiency

Design Index for existing ships (EEXI) in the required information to be submitted to the DCS). In addition, amendments were also adopted on data granularity and on accessibility of data, in an effort to modernise the system and to make it more efficient as a basis for GHG emission reduction measures.

2 Document MEPC 81/6/5 (Austria et al.) pointed out the main stakes related to data quality, integrity and the verification process of the DCS. It also underlined potential risks and vulnerabilities of the current system for further analysis and actions that could be investigated to substantiate and address such risks, as appropriate. Finally, the document proposes to reflect on ways to improve data quality and integrity to support the implementation and enforcement of current and future regulatory GHG measures. MEPC 81/6/5 received positive feedback by a number of delegations. Therefore, the Committee, recognising the relevance of the interrogations put forward by the co-sponsors, invited the Secretariat to conduct, as soon as possible, a review of the IMO DCS in the context of the implementation and enforcement of current and future regulatory GHG measures. The Secretariat took note of that request and initiated a tender process in response to it.<sup>7</sup> The Committee shall be informed of the progress of this initiative during MEPC 82.

3 Meanwhile, at MEPC 81, discussions on the development of mid-term measures (MTM) to decarbonise international shipping came to a critically important step. As MEPC 83 approaches, delegations were invited to work intersessionally on the IMO Net Zero Framework to produce legal text, in order for the 82<sup>nd</sup> Committee to be able to discuss on a base document including draft amendments to MARPOL Annex IV. In parallel, debates relating to the revision of the short-term measure, and in particular the Carbon Intensity Index, are also due to continue and intensify during MEPC 82, in the perspective of a review of the instrument that should take place by the end of 2025. In this context, the co-sponsors re-affirm that continuous improvement of the IMO DCS, together with improvement actions by flag States, who are ultimately responsible of the data provided to the system, will be of crucial importance to secure there is transparent, robust and verifiable data on ships' consumptions and emissions and therefore, ensure environmental integrity and a level playing field.

4 The aim of this document is to contribute further to the reflection on continuous improvement of the IMO DCS, by:

- .1 offering a description of the EU MRV system in place in the European Union for delegations who would be interested in learning about the features of a tool already used for regulatory compliance control,
- .2 deepening the analysis of risks and vulnerabilities presented in document MEPC 81/6/5, also taking into account the IMO Secretariat's response to the request of the Committee in relation to the DCS at MEPC 81,
- .3 suggesting some possible ways to progress on the assessment of current IMO DCS rules and their continuous improvement, including through specific studies conducted by Member States or on their behalf.

### **Main features of the EU MRV system and relevance for the decarbonisation of maritime transport**

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<https://wwwcdn.imo.org/localresources/en/About/Procurement/Documents/Tenders/Procurement%20Notice%20OGISIS%20PLATFORM.pdf>

5 The EU MRV system was established in 2015<sup>8</sup> with the primary aim to monitor greenhouse gas emissions in the maritime transport and therefore drive the decarbonisation of the sector. The system requires companies to monitor and report fuel consumption, greenhouse gas emissions, and other key parameters relevant to energy efficiency for their ships when sailing to/from and between ports of the European Economic Area (EEA), i.e., including EU Member States, Norway and Iceland).

6 In December 2019, the European Green Deal, a political initiative aimed at bringing the European Union to climate neutrality in 2050, was launched. This vision was implemented by means of a first series of regulations, known as the “Fit for 55” package, consisting of twelve legislative proposals to reach a 55% reduction of GHG emissions in 2030 and, by 2050, net zero. Among these, two main regulations concern shipping, namely the Fuel EU Maritime regulation on GHG intensity of the energy used on-board ships, and the EU Emission Trading System (ETS) revised directive now integrating maritime transport in the European carbon market. The ETS extension to maritime applies as of 1 January 2024 and Fuel EU Maritime will apply starting 2025. The two regulations rely on the existing monitoring and reporting system for maritime transport emissions, the EU MRV.

7 The EU MRV System is based on a set of specific guiding principles: completeness, consistency and comparability, transparency, accuracy, integrity (both of methodology and of the reported data), and continuous improvement. Such principles are derived from the experience of the monitoring and reporting system for stationary installations under the general EU Emissions Trading System (EU ETS), which covers stationary installations in Europe since 2005. The system is also based on relevant international rules and international and European standards, such as ISO international standards (e.g., ISO 14064, ISO 14065, ISO 14066, ISO 17011, etc.) as well as technological and scientific developments.

8 The application of the EU MRV system to maritime transport since 2018 has led to the collection and publication verified CO<sub>2</sub> emissions data. It contributed to an enhanced understanding of the climate impact of the shipping sector in relation to EEA related maritime transport activities and it enabled informed policy making decisions. The system now directly supports the implementation of two key legislative initiatives adopted in the European Union to further drive the decarbonisation of maritime transport: the EU ETS Directive and the FuelEU Maritime Regulation. Both measures will rely on the data collected and reported under the EU MRV, which will therefore inform the determination of compliance costs for the regulated entities<sup>9</sup>.

9 The EU MRV system is a multi-actor and multi-step process, in which different actors (shipping companies, Flag States, Administering Authorities of Member States, accredited verifiers) are called to take actions according to a specific timeline, thus establishing a periodic compliance cycle.

10 The main duty of shipping companies is to carry out, during the year, continuous monitoring of emissions, which shall be based on a robust methodology, detailed in the ship-specific monitoring plan. The monitoring plan ensures a high level of quality by requesting e.g., procedures, systems and responsibilities used to update the completeness of emission sources, procedures for ensuring quality assurance of measuring equipment, methods to be

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<sup>8</sup> Refer to Regulation (EU) 2015/757 of the European Parliament and of the Council of 29 April 2015 on the monitoring, reporting and verification of greenhouse gas emissions from maritime transport, and amending Directive 2009/16/EC (text with EEA relevance)

<sup>9</sup> The EU MRV underwent a revision, adopted in 2023, to better fit for this purpose, for instance to cover the monitoring of non-CO<sub>2</sub> greenhouse gases, and to ensure the reporting of emissions data at fleet level.

used to treat data gaps or procedures for regular check, quality assurance, internal reviews, correction and corrective actions and documentation. The monitoring plan under EU ETS needs to be assessed as being in conformity by an independent accredited verification company. The role of verifiers is further explained in paragraphs 11 to 13. Then, for ships falling within the scope of the EU ETS Directive, the Administering Authority should also approve the monitoring plan.

11 In accordance with the monitoring plan, the shipping company monitors emissions and other relevant data for the ships under its responsibility over the year. After the end of the reporting period, the shipping company produces ship-specific emissions reports to be submitted to the verifier for assessment. In addition, for activities covered within the EU ETS system, the shipping company prepares a company-level emissions report for all ships within its fleet, which will notably determine the amount of EU allowances to be surrendered. This company-level report, together with the ship-specific emissions reports, are submitted to verifiers and then further submitted to the Administering Authority. Compliance with MRV obligations shall be demonstrated through a 'Document of Compliance', which needs to be carried on board the ship during compliance inspections in ports; while compliance with ETS obligations is demonstrated through the account balance status in the Union Registry, the dedicated IT system established to manage the transfer of the due EU allowances. Under the FuelEU Maritime, at the end of the reporting period, the company submits a ship-specific report (the 'FuelEU report') to the verifier for its assessment. Following the positive assessment of the "FuelEU report", the verifier will issue a "verification report," and a "FuelEU document of compliance" for the ship concerned.

12 A key feature of the EU MRV system is the robustness of the reported data, in terms of both data integrity and data quality. To this end, accredited verifiers are requested to corroborate the data reported by companies as in the emissions report, by assessing the reliability, credibility, and accuracy of the reported data and information in line with the procedures defined in the EU MRV legislation<sup>10</sup>. The positive assessment of the verifier is a prerequisite for the successful completion of the compliance cycle by the shipping company.

13 The robustness of the verification services provided by MRV verifiers is first guaranteed by the requirement for the verifiers to obtain an initial ad hoc accreditation, subject to periodic review, by national accreditation bodies, in accordance with defined independence, quality and process standards<sup>11</sup>. In addition, the same national accreditation bodies should regularly check, through annual surveillance activities on the verifier, the implemented verification process and procedures, which could eventually result in the suspension or withdrawal of the accreditation.

14 Every year, the European Commission publishes a report on the implementation of the EU MRV system. According to the available data and experience, improvements in the quality and completeness of the reported data were recorded since the first reporting period (2018), as the number of emissions reports which have been positively verified without need of additional revision has continuously increased over time. Furthermore, data quality and the punctuality in the submission of data to obtain a valid document of compliance have improved over time.

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<sup>10</sup> Refer to Commission Delegated Regulation (EU) 2023/2917 of 20 October 2023 on the verification activities, accreditation of verifiers and approval of monitoring plans by administering authorities pursuant to Regulation (EU) 2015/757.

<sup>11</sup> Refer to Regulation (EC) No 765/2008 setting out the requirements for accreditation and market surveillance relating to the marketing of products as well as to the above-mentioned Delegated Regulation (EU) 2023/2917.

15 The quality of the EU MRV data, with around 13 000 ships reporting to the system each year, is recognised as an asset including beyond the EU itself. In fact, most of the reported data made publicly available in a non-rounded and non-anonymised format have been used as an analytical basis by a wide range of stakeholders, including academia, policy makers, industry, also to prepare proposals to MEPC and other relevant work on greenhouse gas emissions reduction at IMO<sup>12</sup>.

### **Possible ways to progress on the continuous improvement of the IMO DCS**

16 In document MEPC 81/6/5, the co-sponsors have argued that it is essential to continuously improve the DCS system by means of regular checks of its functioning and to implement procedures to secure data quality and prevent undesirable events. In fact, any data collection system can have vulnerabilities and might be subject to risks, such as *data gaps, monitoring and/or reporting errors going undetected, fraudulent misreporting* (e.g., under-reporting), *failure of the verification process, insufficient or unsuitable internal data management procedures* (e.g., in relation to the DCS module of GISIS). *Cyber-security* and the *capacity of stakeholders to adapt* to a revised, more demanding system would also have to be considered. In this perspective, the co-sponsors think that a precise analysis with a holistic approach (e.g., including development and enforcement future measures) is needed to substantiate and better understand the potential risks and possible solutions to those.

17 This analysis could take the form of a study, contracted by a number of voluntary Member States, keen on sharing their own IMO DCS sets of data, with an independent third party (e.g., one or more consultants). The scope and results of the study – ideally to be completed by MEPC 83 – would be broader than the process launched by the IMO Secretariat and, therefore, complementary.

18 Draft terms of reference including the purpose, possible scope, methodology, necessary expertise, expected deliverables and possible timeline of the study are presented in Annex 1. Delegations interested in taking part in the study, by providing sets of data and answering to questionnaires and interviews, are invited to reach out to one of the co-sponsors of this document.

19 Once the results of the study will be known, the co-sponsors will submit a document summarising its main conclusions, and suggest possible next steps for the consideration of the Committee regarding continuous improvement of the IMO DCS, e.g.:

- .1 Possible MARPOL amendments related to the DCS,
- .2 Revision of SEEMP Guidelines / DCS verification Guidelines,
- .3 Any other appropriate action, such as additional levels of verification in the verification process, use of alternative data sources (e.g., AIS), artificial intelligence or automated controls, suggestions on additional actions by Port States, etc.

20 A reliable, robust verification process and high-quality data sets are of crucial importance for the ongoing work on GHG emission reduction. These two elements justify the need to improve continuously the IMO DCS, while keeping in mind that ultimately, the responsibility of the data sets that go into the system fall within the flag States' responsibility.

### **Action requested to the Committee**

21 The Committee is invited to:

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<sup>12</sup> Including the IMO Correspondence Group on CII guidelines development, the Fourth IMO GHG Study 2020 and its comprehensive impact assessment.

- consider the elements presented in this document and the draft terms of reference annexed, and
- suggest to interested delegations to liaise with the co-sponsors of the document if they intend to take part in a study on DCS data quality and integrity, as described in paragraphs 17 to 19.

**Annex 1**  
**Draft Terms of Reference for an independent study on DCS data quality and integrity**  
**contracted by voluntary IMO Member States**

**1. Purpose of the study**

The study should aim at independently evaluating the possibility to reinforce IMO DCS data quality and integrity, considering that the IMO DCS is central to the implementation of the short-term measures and that it could evolve into a regulatory compliance tool for the mid-term measures. In particular, the study should assess and provide recommendations to minimise at least the following main risks, keeping in mind that the responsibility of the data provided to the DCS ultimately belong to Flag States:

- Errors in monitoring and/or reporting relevant data (e.g., fuel oil consumption, distance etc.) going undetected and how to address them (which implies the definition of ‘materiality’ thresholds),
- Fraudulent misreporting (e.g., “underreporting”),
- Failure or insufficiencies of the verification process by the Administration or recognised organisation,
- Insufficient or unsuitable internal data checks / data management procedures by the shipping company.

An additional objective of the study could be to analyse how the following elements (e.g.) can be integrated into the DCS, as they will be essential for future measures (to be discussed with contractors):

- Well-to-Tank emissions / energy intensity (Austria et al. proposal) or fuel classification into emission categories (China et al. proposal),
- Energy content of fuel,
- Reporting of emission reduction by other technical solutions such as solar, wind and OCCS.

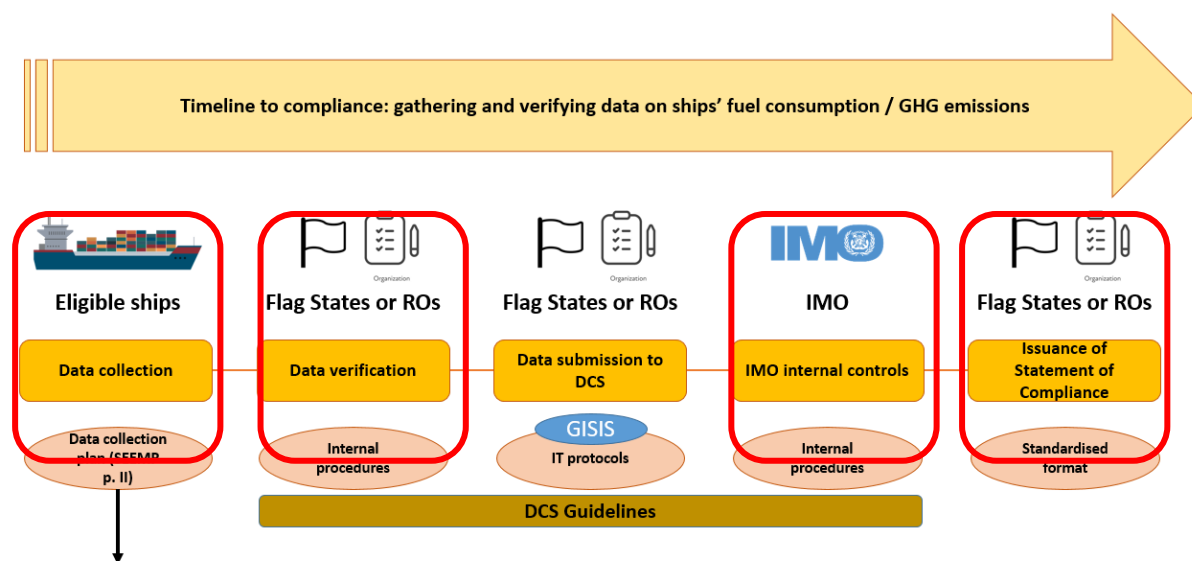
Lastly, other aspects, such as cyber-security vulnerabilities and adaptation issues (as described in document MEPC 81/6/5) should be included in the analysis.

**2. Scope of the study**

The study should focus on:

- The assessment of risks identified above regarding IMO DCS, on:
  - upstream processes (the monitoring, collection and reporting of data by companies, data verification and submission by Administrations or entities acting on their behalf); and
  - downstream processes (the data management processes performed by Flag States or on their behalf).
- The use of the DCS database in future GHG regulatory measures as a compliance tool that ensures regulatory certainty and facilitates a level playing field.
- Proposing potential solutions to address the risks identified and assessed, either through enhancing existing IMO processes or developing new tools/processes such as further digitalisation of the data collection and processing.

The figure below presents areas of interest for the study (circled in red).



- Three methods to collect data (bunker delivery notes, flowmeters, bunker fuel tank monitoring),
- Data quality control measures which should be incorporated into the existing Ship Management System,
- Procedures for identification of data gaps and correction thereof,
- Procedures to address data gaps.

### 3. Possible methodology

It is essential that the study not only focuses on current risks but also foresees future risks, i.e., risks associated with the use of the DCS for the future measures, which are currently being developed. To this end, the contractors should be in close contact with the IMO Secretariat and/or selected voluntary Member States to understand how the MARPOL Annex VI framework could evolve in the future. Access to relevant submissions to the IMO, e.g., relating to the review of short-term measures and the development of mid-term measures, should also be granted to the contractors.

The study should use a variety of methods, as appropriate, both quantitative and qualitative, such as:

- Risk assessment of the current IMO DCS regarding the risks identified above,
- Data sampling according to standard auditing practices,
- Data analysis with the relevant level of depth,
- Process review, process mapping,
- Interviews and questionnaires to relevant stakeholders.

The contractors should be able to define and propose a level of 'materiality' (i.e., a threshold above which errors or misreporting become relevant or "material", taking into account not only individual instances but also possible cumulative effects of different instances).

Finally, the contractors should refer to the IMO DCS Guidelines, as appropriate, and question when relevant the suitability of these documents, as well as propose ways for their amendment. The study should also assess whether new guidelines may be necessary to complement the solutions identified, including proposing the potential scope to be included in said guidelines.

#### **4. Necessary expertise**

The contractors should have extensive and proven expertise in the fields of data science and quantitative methods, organisational audit, risk assessment, and in the fields of IT and cyber-security. They should have good knowledge of international maritime transport, including from an organisational, technical and market points of view. In addition, legal expertise and knowledge of the functioning of UN institutions would be an asset.

#### **5. Expected deliverables and possible timeline**

##### *Expected deliverables*

The study should deliver at least the following items for consideration of the contracting Member States:

- A final report assessing the risks and vulnerabilities described at point 1, including an analysis of detected errors/discrepancies within the sets of data, together with a methodological note on how the study was performed,
- A mapping of the different processes under the DCS cycle which were analysed and the detected weaknesses and vulnerabilities found in each one,
- A list of detailed recommendations to improve the quality of the IMO DCS, also with regards to its application in relation to current and future GHG regulatory measures, including, as appropriate, recommendations for changes in legal texts and guidelines,
- Anonymised interview reports/summaries.

The contractors should consider cost-effectiveness and/or timely implementation and/or phased approach regarding the solutions and new tools they will propose. This will render operationalisation of solutions by IMO easier, thanks to an organisation of the works and/or deployment of a DCS system that functions in the interim by incorporating the least time-consuming solutions/new tools.

##### *Possible timeline*

MEPC 82	Presentation of Draft ToR to the Committee; interested delegations reach out to co-sponsors
Between MEPC 82 and 83	Conduction of the study
MEPC 83	Final report of the study – co-sponsors submit conclusions to the Committee
After MEPC 83	Work on potential improvements to IMO DCS