

INCEPTION IMPACT ASSESSMENT			
TITLE OF THE INITIATIVE	Revision of the Shipping MRV Regulation		
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LIKELY TYPE OF INITIATIVE	Commission legislative proposal		
INDICATIVE PLANNING	2 <sup>nd</sup> quarter 2018		
ADDITIONAL INFORMATION	http://ec.europa.eu/clima/policies/transport/shipping_en		

# A. Context, Problem definition and Subsidiarity Check

#### Context

The legal framework for EU monitoring, reporting and verification (MRV) of shipping emissions, based on the MRV Shipping Regulation of 2015<sup>1</sup>, has been completed in 2016 with the adoption of four Delegated and Implementing Regulations.

Article 22 of the Shipping MRV Regulation contains a review clause requiring that "In the event that an international agreement on a global monitoring, reporting and verification system for greenhouse gas emissions (...) is reached, the Commission shall review this Regulation and shall, if appropriate, propose amendments to this Regulation in order to ensure alignment with that international agreement."

In October 2016, the International Maritime Organisation's (IMO) Marine Environment Protection Committee (MEPC) adopted amendments to the MARPOL Convention establishing the legal framework for a global data collection system for fuel consumption of ships. Details and implementing modalities of the system remain to be agreed in IMO through "guidelines" expected to be adopted by MEPC 71 in July 2017.

While the final IMO steps are still pending, the preparation of the review of the Shipping MRV Regulation can already be launched. Given that the monitoring and reporting obligations under the Regulation have not started yet, there is no data available yet to evaluate the performance of the MRV Regulation. This, together with the limited scope of the exercise ("to ensure alignment with that international agreement") is reflected in the baseline (no changes to the current legal framework – See section B below).

### Problem the initiative aims to tackle

In 2010 the total  $CO_2$  emissions related to European maritime transport activities (including intra EU routes, incoming voyages to the EU and outgoing voyages from the EU) were estimated to be of the order of 180 Mt  $CO_2$ . Despite of the introduction of minimum energy efficiency standards for certain categories of new ships ("Energy Efficiency Design Index", EEDI) by the IMO in  $2011^2$ , the  $CO_2$  emissions are expected to increase. Main driver is the still expected increased demand for maritime transport triggered by growth of world trade. This projected growth is expected to happen despite the availability of operational measures and existing technologies to reduce the specific energy consumption and  $CO_2$  emissions of ships by up to 75% (according to the  $2^{nd}$  IMO GHG study<sup>3</sup>). A significant part of these measures can be regarded as cost-effective as the reduced fuel costs ensure the pay-back of any operational or investment costs.

Regulation (EU) 757/2015 on MRV for shipping's CO<sub>2</sub> emissions at EU level<sup>4</sup> was adopted in 2015 to collect data on shipping emissions and to incentivise emission reductions. Due to the lack of monitoring and reporting of EU-

Regulation (EU) 2015/757 of the European Parliament and 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.

Revision of MARPOL Annex VI

<sup>&</sup>lt;sup>3</sup> http://www.imo.org/blast/blastDataHelper.asp?data\_id=27795

<sup>&</sup>lt;sup>4</sup> COM (2013) 480; https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/com 2013 480 en.pdf

related maritime transport emissions, the amount of  $CO_2$  and other greenhouse gas emissions is not known (first reports are due in 2019). Furthermore, a robust MRV system was also deemed to contribute to the removal of market barriers, in particular related to the lack of information on ship efficiency. Based on the results of the impact assessment prepared for the 2013 proposal<sup>5</sup>, it is expected that by introducing MRV, greenhouse gas emission reductions of up to 2% compared to business-as-usual and net costs reduction of up to  $\in$  1.2 billion in 2030 could be achieved.

In line with the Commission's preference for measures taken at global level, the EU MRV also aimed at serving as example for a global MRV and at speeding up the international discussions. It triggered a new discussion process in the IMO in 2014 leading to the adoption of the legal framework for a global fuel consumption data collection system in October 2016.

The future existence of two similar systems raises the concern about possible double reporting requirements for the shipping sector and hence additional administrative burden. This problem could in principle be addressed by an alignment of the requirements. Nevertheless, the effectiveness and potential impacts of such alignment have to be assessed during the review process.

### Subsidiarity check (and legal basis)

As for Regulation (EU) 2015/757, the legal basis for a legislative proposal would be Article 192(1) of the TFEU.

The basis of the proposal is EU legislation and any alignment would need to be carried out by changing existing EU legislation.

## **B.** Objectives and Policy options

The review aims at aligning the EU MRV with the global data collection system (DCS) to the extent considered feasible while ensuring its effectiveness and efficiency.

For the development of policy options, the two systems need to be compared and analysed. Although the legal framework for the global system is not yet completed (two IMO Guidelines on data base management and verification need to be developed and agreed, most probably in July 2017), some observations can already be made.

The IMO system is designed on the same principles and has a similar technical scope as the EU one (ships above 5000 gross tonnes), obliges the same actors to report annually for their ships and introduces a document to demonstrate compliance.

However, besides the geographical scope, there are a number of differences:

- Data to be monitored: The EU system is using data about the <u>actual</u> cargo carried as one of the parameters
  used to give accurate information on ships' energy efficiency. Instead of using "actual cargo" information, the
  IMO system has opted for the cargo carrying <u>capacity</u> of ships.
- Level of transparency: The EU system includes the publication (by the Commission) of the reported data on a per ship basis, aggregated at annual level. The IMO central database will only include anonymous datasets (without the possibility to identify individual ships) and will only be accessible to IMO Member States, but will not be made available to the public.
- **Verification**: The EU-MRV applies to all ships calling at ports in the EEA and therefore does not function without a third party verification layer. It uses a robust verification system similar to the one applied in the EU Emissions Trading System (ETS), based on internationally agreed verification approaches. The verification approach to be used in the global system has to be specified in the forthcoming IMO Guidelines.
- **Reporting:** The EU-MRV requires reporting directly to the central database and links this step to the issuance of compliance documents. Under the IMO system, companies report to their Flag Administration and receive a compliance statement. In a second reporting step, Flag Administrations submit the data collected to the central IMO database.

For the purpose of the review, no changes to the current legal framework should be considered as baseline scenario. The following basic options could be envisaged:

- A. **No alignment**: Both systems co-exist and ships using European Economic Area (EEA) ports have to report within both systems. Two sets of data are to be monitored, two different verification approaches are applied and EU data are to be published.
- B. Full alignment: The EU-MRV is fully aligned to the IMO data collection system but ships using EEA ports

<sup>&</sup>lt;sup>5</sup> SWD (2013) 236; https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/swd 2013 236 en.pdf

have to submit reports in both systems with the reports for the EU system only covering voyages from and to EEA ports. Verification is in principle carried out according to IMO rules. EU data will not be published.

- C. Partial alignment: EU MRV is maintained, including all elements (monitoring, reporting, verification and publication). Similar elements are harmonised in order to minimize administrative burden. These may in particular include responsibilities for actors involved, the scope, the list of data to be monitored as well as monitoring plan templates, reporting formats and procedures. More specifically, the following sub-options could be considered:
  - (C1) alignment of data to be monitored: the EU MRV scheme is modified to provide for reporting of the same data reported under the IMO system; and/or
  - (C2) alignment of the level of transparency: data reported under the EU MRV scheme will not be published; and/or
  - (C3) alignment of the verification procedures: the verification procedures under the IMO DCS will be used within the EU MRV scheme; and/or
  - (C4) alignment of reporting requirements in terms of harmonising reporting formats and procedures between the two systems.

Variations within the options and sub-options are also possible, e.g. a full alignment with the option for companies to submit to the Commission their global reports (instead of reports on the EEA scope only) or partial alignment with the same data to be reported under the two systems and the same verification procedures being applied, while the transparency of the EU data is maintained.

### C. Preliminary Assessment of Expected Impacts

# Likely economic impacts

The 2013 impact assessment identified the lack of accurate, comparable and standardised information about fuel consumption as one of the market barriers to cost effective GHG emission reductions in the maritime sector and therefore to a reduction of fuel cost. Removing this market barrier by providing information on ships' energy efficiency can trigger an improvement in energy efficiency of the ships. The introduction of MRV was therefore expected to trigger a decrease of the fuel consumption of 2% compared to the baseline. This translates into a reduction of fuel cost of €9.4 billion up to 2030. However, the other operational costs will slightly increase due to the administrative requirements related to the monitoring of emissions and verification of the emission reports.

The 2013 impact assessment estimated the total administrative costs (including verification) at 7400 € per ship and year adding up to around 80 million € per year for the entire sector leading to a savings – cost ratio for MRV of 16:1.

A key aspect for the assessment of economic impacts of the different alignment options will be their contribution to transparency on energy efficiency of ships.

#### Likely social impacts

According to the 2013 impact assessment, the introduction of MRV was expected to lead to positive impacts on human health thanks to reduced emissions of NO<sub>x</sub>, SO<sub>x</sub> and PM due to reductions in bunker fuel consumption.

For the different alignment options, these positive impacts on health would depend on the reductions in fuel consumption to be achieved and therefore on their contribution to transparency on energy efficiency of ships.

No additional social impacts have been identified for the EU-MRV compared to 'doing-nothing' which has been used as baseline scenario.

### Likely environmental impacts

The estimated 2% reduction of fuel consumption as impact of the implementing of MRV directly translates proportionally into reduced CO<sub>2</sub> emissions (cumulative emission reduction of around 56 Mt CO<sub>2</sub> up to 2030).

Likewise, the expected reduction in fuel consumption would also result in a reduction of other pollutants, such as sulphur oxides (SOx), nitrogen oxides (NOx) and particulate matter (PM), as well as other climate forcing agents such as black carbon (BC).

For the different alignment options, these positive impacts on reducing GHG emissions and air pollution would depend on the reductions in fuel consumption to be achieved and their contribution to transparency on energy efficiency of ships.

# Likely impacts on fundamental rights

No impacts on fundamental rights can be expected given that MRV fully ensures the protection of personal data.

## Likely impacts on simplification and/or administrative burden

With the start of monitoring and reporting obligations under the IMO data collection system in January 2019, the limited administrative burden (see section on economic impacts) for the shipping sector will increase compared to the situation in 2018 with obligations only under the EU-MRV.

The aim of an alignment is to minimise the additional burden. The different policy options are expected to show differences in impacts depending on the degree of alignment.

For the EU-MRV, there is hardly any administrative burden on public administrations expected as they only deal with enforcement issues using existing mechanisms for this purpose. Most relevant practical consequence of EU-MRV is that in case of port State control inspections, the existence of one additional document has to be checked (in addition to more than 50 others). However, flag Administrations have a stronger role in the global fuel consumption data collection system and impacts of policy options are to be assessed in this respect.

### D. Data Collection and Better Regulation Instruments

#### Impact assessment

An impact assessment is being prepared to support the preparation of this initiative and to inform the Commission's decision.

#### **Data collection**

The impact assessment carried out for the 2013 proposal for the MRV Regulation<sup>6</sup> as well as the supporting study<sup>7</sup> and a study on market barriers<sup>8</sup> contain data estimating the economic, environmental and social impact of MRV compared to business-as usual. Another study assessed potential impacts of MRV design choices in the context of the preparation of Delegated and Implementing Regulation for MRV. It might be necessary to update these estimates on impacts where possible. For the preparation of monitoring plan and for verification, first cost data should be available in the course of 2017.

Additional data will be collected from stakeholders during the stakeholder consultation (see next sections for more details).

Furthermore, a supporting study for the impact assessment will be commissioned. The focus will be on the quantification of future economic and environmental impacts. For this purpose, possible impacts of policy options on existing market barriers for the uptake of cost-effective efficiency technologies, emerging technologies and practices need to be analysed, including consideration of relevant research and innovation outcomes such as those supported by Horizon 2020.

### Consultation strategy

The impact assessment for the review of the MRV Regulation will include intensive stakeholder consultations to gather data and other information as well as to understand views and validate analysis on policy options for alignment and their impacts.

Key elements of the consultation will be a 12-week open public consultation, and at least one dedicated ad-hoc

<sup>&</sup>lt;sup>6</sup> Impact assessment accompanying the proposal for a Regulation of the European Parliament and of the Council on the monitoring, reporting and verification of carbon dioxide emissions from maritime transport and amending Regulation (EU) N° 525/2013; SWD (2013) 237;

https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/swd\_2013\_237\_1\_en.pdf

<sup>&</sup>lt;sup>7</sup> Ricardo-AEA: Support for the impact assessment of a proposal to address maritime transport greenhouse gas emissions, study carried out for the European Commission, 2013; https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/ghg\_maritime\_report\_en.pdf

<sup>&</sup>lt;sup>8</sup> Maddox Consulting: Analysis of market barriers to cost effective GHG emission reductions in the maritime transport sector; study carried out for the European Commission, 2012; https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/market barriers 2012 en.pdf

<sup>9</sup> PWC, Marena, CE Delft: Study on potential impacts of design choices for monitoring, reporting and verification of CO<sub>2</sub> emissions from maritime transport, study carried out for the European Commission, 2016; https://ec.europa.eu/clima/sites/clima/files/transport/shipping/docs/assessment\_of\_impact\_delegated\_implementing\_acts\_ en.pdf

experts' workshop. Stakeholder groups to be consulted will include the shipping industry (owners and operators, ports, logistic companies), marine equipment providers, public authorities with a particular focus on maritime administrations and national accreditation bodies, science and technology experts, MRV shipping verifiers and civil society in general. Given that this is a highly technical issue with no major broad interest, the linguistic regime of the consultation documents and questionnaires will be English, French and German.

A dedicated consultation strategy is being prepared.

The launch of stakeholder consultations related to this initiative will be announced in the consultation planning that can be found at <a href="http://ec.europa.eu/yourvoice/consultations/docs/planned-consultations\_en.pdf">http://ec.europa.eu/yourvoice/consultations/docs/planned-consultations\_en.pdf</a>.

### Will an Implementation plan be established?

No implementation plan is established as the provisions of this Regulation are directly applicable without transposition. Furthermore, the MRV Regulation hardly imposes any obligation on Member States with the exception of inspections and penalties which are in most cases already covered by existing national legislation.