

Rebecca Bax: The impact of the introduction of the CII "carbon intensity indicator" for both owners and charterers

The Club has produced an article to inform Members about the impact of the introduction of the CII "carbon intensity indicator", both to an owner and charterer, and how BIMCO's new "CII Operations Clause for Time Charter Parties" seeks to address the challenges.

Introduction

Amendments to the International Convention for the Prevention of Pollution from Ships (MARPOL) Annex VI (the **Regulations**), which came into force on 1 November 2022, have put in place technical and operational amendments required to ships to improve their energy efficiency in the short term, thereby working towards reaching the IMO's future greenhouse gas reduction measures. In line with its goal to reduce the carbon intensity of all ships by 40% by 2023 compared to 2008, from 1 January 2023 it will be mandatory for all ships to calculate their attained Energy Efficiency Existing Ship Index (EEXI) to measure their energy efficiency – the "technical carbon intensity requirements"^[1] and to initiate the collection of data for the reporting of their annual operational carbon intensity indicator (CII) and CII rating – the "operational carbon intensity requirements"^[2].

What is the Carbon Intensity Indicator?

The Carbon Intensity Indicator (CII) is a measure of how efficiently a ship transports goods or passengers and is given in grams of CO₂ emitted per cargo-carrying capacity and nautical mile.

The CII Regulation sets out obligations on passenger, cargo and ro-ro vessels of 5,000 GT and above, trading internationally, to calculate two CII figures:

1. The **required annual operational CII**, which is the target value of attained annual operational CII in accordance with regulation 28(4) of the Regulation for the specific ship type and size.
2. The **attained annual operational CII**, which is calculated over a 12-month period using the data collected in accordance with the IMO Data Collection System (IMO DCS) on-board the vessel.^[3]

Within three months of the end of the calendar year, a vessel shall report its **attained annual operational CII** to its flag state administration where it is documented and verified against the **required annual operational CII** to determine a vessel's **carbon intensity rating**. The ratings range from A to E, indicating a major superior, minor superior, moderate, minor inferior, or

inferior performance level. Vessels are required to aim at achieving at least the **required annual operational CII** which is the middle point of rating level C. Any vessel rated as D for three consecutive years, or rates at E at any point, is required to develop a plan of corrective actions to achieve the **required annual operational CII**. An implementation plan must be developed as part of the approved SEEMP to document for each ship how the **required annual operational CII** will be achieved over the next three years.

The IMO's objective is to continuously improve a vessel's operational carbon intensity and therefore a phased approach has been adopted whereby the carbon intensity limits will progressively reduce by 2% each year. This requires owners and managers to continuously work on improving a vessel's carbon intensity, or else her rating could degrade over time.

Contractual Considerations

Under a time charterparty the owner puts the vessel at the disposal of the charterer, who can choose for himself what cargo he shall load and where he shall send the ship, provided that the limits prescribed by the contract are not exceeded.^[4] The master, although appointed by owners, is under the orders and direction of the charterer as regards employment of the vessel, agency or other arrangements. The charterer of a vessel will seek to engage a vessel in the most profitable manner which, due to the way in which the **attained annual operational CII** is calculated, could conflict with steps that the owner may wish to take in order to comply with the CII Regulation.

The attained annual operational CII is calculated, in a simple form formula, as follows^[5]:

$$\text{CII} = \frac{\text{Annual fuel consumption} \times \text{CO}_2 \text{ emission factor}}{\text{Annual distance sailed} \times \text{Capacity}}$$

The attained annual operational CII could be positively affected by several factors including burning fuels with a lower carbon emission factor or utilising a vessel's energy efficient technologies, shorter stays in port, or sailing at a slower speed to burn less fuel. However, some of these factors are not always within the control of an owner and could, depending on the terms of the contract, be considered a breach of contract.

A decision to slow-steam or reduce the vessel's speed by an owner could result in an owner breaching their obligation to proceed with utmost despatch or breach of speed and performance warranties contained within the charterparty. A decision to deviate or alter the voyage route to make energy efficiency accommodations could result in a breach of contractual obligations under both the charterparty and the bill of lading, if considered to be a deviation. Similarly, an owner's decision to reduce the amount of cargo the vessel is carrying – where that decision is not for safety reasons – could place an owner in breach of their cargo warranties. Both

practically and legally, compliance with the Regulation will require adjustments to how a vessel is operated and may impact the traditional rights enjoyed by the parties under a charterparty.

The BIMCO CII Operations Clause for Time Charter Parties Clause

The BIMCO CII Operations Clause for Time Charter Parties ('the Clause') aims to provide a clear framework under which an owner and charterer can manage the risk and practical considerations that come with complying with the CII Regulations.

General Obligations

The Clause sets out a general duty of both parties to *"cooperate and work together in good faith to (i) share any findings and best practices that they may identify on potential improvements to the Vessel's energy efficiency; and (ii) collect, share and report on a daily basis any relevant data that may assist the monitoring and assessment of the Vessel's compliance with the MARPOL Carbon Intensity Regulations and for planning prospective voyages"* (clause (b)).

Agreed CII and C/P Attained CII

Under the Clause the parties agree a "Agreed CII Value" for each calendar year (clause d(i)). BIMCO recommends this Agreed CII Value be the Required CII or better, consistent with the Regulations. The Required CII being the middle point of CII Rating level C as set out in the Regulations. If there is any failure to complete the table, the default Agreed CII is the Required CII (clause (d)(ii)).

The owner is required to *"monitor and calculate the actual consumption of the Vessel on a daily basis and provide the Charterers with details of the types and quantities of fuels consumed and distance travelled as required by the Charterers and any other relevant data the Charterers may reasonably request for the purpose of this Clause. This data shall be used to calculate the C/P Attained CII value which shall be compared against the Agreed CII for the relevant calendar year or charter period and shared with the Charterers"* (clause f(ii)).

The Clause relies on open and transparent co-operation between the parties, with an owner required to monitor and calculate the actual consumption of the vessel on a daily basis. How this will work in practice remains to be seen as an owner will, while there are not tested methods readily available to adopt, need to develop processes in order to collate the required information. The training and upskilling of crew will be vital to ensure compliance with the Clause and Regulations and we expect to see owners implementing ongoing support, guidance and training within the next few years.

Charterer's Obligations – Clause (c)

The primary obligation for compliance with the Regulation is placed on the charterer who is required at Clause (c)(i) to:

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3. *“operate and employ the Vessel (including the planning of voyages and supply and selection of fuel) in a manner which is consistent with the MARPOL Carbon Intensity Regulations and subclause (c)(i)(2), which may require alternative or adjusted voyage or employment orders, instructions or sailing directions to be issued to and performed by the Vessel from time to time during the charter period” and*
 4. *“not permit the C/P Attained CII to exceed the Agreed CII by the end of each relevant calendar year”*

The charterer does however maintain their discretion to provide order or instructions to adjust the vessel's speed or RPM (main engine Revolutions Per Minute) to meet a specified time of arrival, or closest thereto, at a particular destination or to proceed at a specified main engine fuel consumption, subject to safety and operational limits (clause e).

The charterer also retains the right to rely on *“any existing warranties as to despatch, speed and consumption or to maintain the Vessel's description provided for elsewhere in the Charter Party shall continue to apply to the Charter Party”* and may pursue a separate claim for breach (clause c(ii)). The Clause does however make it clear that the charterer cannot bring a claim for breach where the warranties fail to be met because of a valid invocation of clause (g), or where it is used as grounds to avoid meeting their obligations under the Clause.

We envision that to comply with the Clause, a charterer will find themselves with less flexibility than they may have enjoyed under a traditional time charterparty. A charterer will need to ensure that they evaluate the CII of any voyage before execution and may find themselves making decisions in relation to their choice of fuel, route and speed that may seem commercially disadvantageous. The “just in time” arrival scheme could become common place within time charters, as the parties seek to reduce waiting times at ports, and it may be that we soon see a variation of the BIMCO Just in Time Arrival Clause 2021 that is used in voyage charter parties.

Also, we may begin to see owners becoming more selective in the charterparties they enter throughout the year and, as assessment for CII Regulations takes place at the end of the calendar year, if parties are entering into a charterparty late in the calendar year, an owner may prefer to agree only short term or time-trip charters where the voyages are known in advance and contractually agreed.

Owner's Obligations – Clause (f)(i)

Whilst primary responsibility rests with the charterer, the owner is under an obligation to exercise due diligence to ensure that the Vessel is operated in a manner which minimises fuel consumption, including but not limited to:

1. maintaining the Vessel, its engines and hull, and any of its equipment relevant to the Vessel's energy efficiency, subject to any express provisions elsewhere in the Charter Party that place maintenance obligations on the Charterers, and reporting any associated deficiencies to the Charterers;
2. when passage planning, adjusting the Vessel's trim and operating the Vessel's main engine(s) and auxiliary engine(s);

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3. making optimal use of the Vessel's navigation equipment and any additional aids provided by the Charterers, such as weather routing, voyage optimisation and performance monitoring systems; and
 4. unless otherwise instructed by the Charterers, proceeding by the most fuel-efficient route, but the Master may deviate from the route if he has reasonable grounds to believe that such a route shall compromise the safe navigation of the Vessel or the safety of the Vessel, crew or operation of equipment.

An owner will traditionally find themselves under an obligation to maintain the vessel elsewhere within the charterparty, so Clause f(i)(1) does not necessarily increase the burden on the owner. However, given that an owner may wish to consider additional maintenance or even re-fit to improve the energy efficiency of the vessel, they may wish to consider more closely involving the charterer in their schedule for maintenance of the vessel. This is not addressed within the Clause but could be included elsewhere in the charterparty.

Monitoring of the C/P Attained CII – Clause (g)

Clause g address a scenario where, based on the data shared in accordance with this Clause, the trajectory of the C/P Attained CII is deviating from the Agreed CII, and therefore suggests that there is a reasonable likelihood that the Charterers may fail to meet their obligations under the Clause. It sets out that:

- i. *The Owners shall request in writing and the Charterers shall provide to the Owners within two (2) working days of Owners' written request, a written plan detailing any proposed commercial operation of the Vessel for at least the next voyage.*
- ii. *If, upon assessment of a Charterers' written plan, the Owners can reasonably show that following this written plan will result in the Charterers failing to meet their obligations under subclause (c) and that, on the basis of the Projected Attained CII, the Agreed CII for the relevant calendar year (or for the charter period should redelivery be sooner than the end of the calendar year) would be exceeded, then the Owners shall communicate this in writing to the Charterers within two (2) working days of receipt of the Charterers' written plan. The Parties shall cooperate and work together in good faith to agree within two (2) working days thereafter an adjusted written plan for the next voyage or voyages which brings the C/P Attained CII in line with the Agreed CII. Any such adjusted written plan agreed between the Parties shall be deemed to constitute the Charterers' orders as if they had been given by the Charterers at the outset.*
- iii. *Until such time that the Parties agree an adjusted written plan (or where a written plan is not received from the Charterers as per subclause (g)(i)), the Owners shall, where they have validly exercised their rights under this subclause (g), be entitled:*
 - a. *not to follow a Charterers' order and/or a written plan and/or an adjusted written plan (which has not been agreed), without being in breach of any of the Owners' obligations under the Charter Party, and with the Vessel remaining on hire throughout, and instead*
 - b. *to reduce the Vessel's speed or, where a speed reduction is anticipated by the Owners to be insufficient, to require the Charterers to provide all requisite instructions, orders and sailing directions to the Vessel which bring the C/P Attained CII in line with the*

Agreed CII for the relevant calendar year (or the charter period should redelivery be sooner than the end of the calendar year).

The Clause imposes a tight deadline of two working days in which a charterer is required to submit a written plan. The intention of the clause is to resolve any disputes promptly, but it remains to be seen whether this will be a realistic timeframe for a response. Where there are charterparties down the chain, with back-to-back terms, a timeframe of two days may not be sufficient to liaise with all the parties involved.

We expect that disputes will arise as to whether an owner has “reasonably” refused to follow an order or plan; unfortunately, the Clause does not go as far as to address the next step, if the parties cannot work together in good faith to agree an adjusted written plan. The parties could resolve this by agreeing in advance, in an additional clause, to the appointment of a suitable independent expert to assess the proposed written plan and provide recommendations to improve the CII.

Clause g provides an owner with certainty that they can, if a charterer fails to operate the vessel in a which ensures compliance with the Regulations, refuse to follow charterers’ orders, reduce the vessel’s speed or take other necessary steps to improve the Attained CII. This is in addition to the owner’s general right under clause (j) to bring claims for losses suffered as a result of the charterer’s breach of the Clause.

Whilst an owner does have an express right to claim damages for a breach by a charterer to comply with the Clause, they remain ultimately responsible for compliance with the Regulations. It is currently unclear what the consequences of a vessel being receiving a D or E rating are, apart from the requirement for a Corrective Action Plan to be implemented, and the IMO will not review the Regulations from an enforcement point of view until 2026. How this will impact the market is unclear but it is recommended that even before 2026 parties seek to ensure their vessels are performing to their optimal energy efficiency.

Conclusion

The intention of the BIMCO CII drafting committee has always been to produce a balanced clause to address contractually the potential challenges faced by the implementation of the CII Regulation, when this comes to effect in 2023. This has been a very complex exercise, with a lot of moving parts and different issues to consider.

The Clause has undoubtedly raised a number of questions across the industry and now places compliance with the Regulations at the forefront of parties’ minds when entering into a contract. How popular it will be, remains to be seen and only time will tell if this is going to be widely adopted. It may be the case that charterers with greater bargaining power will attempt introducing a different wording, which would alleviate some of the obligations placed upon them by the BIMCO Clause.

We consider the BIMCO CII Clause to be a good starting point, which encourages discussion,

cooperation and a good working relationship between the different parties, in order to tackle collectively the risk distribution and challenges of the new CII legal framework.

[1] (EEDI /EEXI– Regulations 22, 23, 24, 25)

[2] (SEEMP/CII - Regulations 26, 27, 28).

[3] All vessels subject to the Regulations are required to keep on-board a specific Ship Energy Efficiency Management Plan (SEEMP), which shall include a description of the methodology that will be used to collect that data required by the IMO Data Collection System.

[4] Island Archon [1993] 2 Lloyd's Rep. 387 at 407

[5] There are some limited correction factors and voyage adjustments, which could be considered when applying the below formula