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COMMITTEE
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Agenda item 7

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REDUCTION OF GHG EMISSIONS FROM SHIPS

Report of the Steering Committee on the comprehensive impact assessment of the basket of candidate GHG reduction mid-term measures (including the outcome of the tenth and eleventh meetings)

Note by the Secretariat

SUMMARY

Executive summary: MEPC 80 approved the terms of reference and arrangements for conducting a comprehensive impact assessment of the basket of candidate GHG reduction mid-term measures, as set out in annex 16 to document MEPC 80/17/Add.1 and instructed the Secretariat to initiate the impact assessment in accordance with the approved terms of reference, with a view to the submission of a final report for the consideration of MEPC 82. This document contains a summary of the conduct of the comprehensive impact as overseen by the Steering Committee, including conclusions and lessons learned. The executive summaries of tasks 1 to 4 are set out in the addenda to document MEPC 82/7/4, the full reports of each task are provided in document MEPC 82/INF.8 and addendum. This document also contains the outcome of the tenth and eleventh meetings of the Steering Committee.

Strategic direction, if applicable: 3

Output: 3.2

Action to be taken: Paragraph 49

Related documents: MEPC 80/17, MEPC 80/17/Add.1; MEPC 81/7, MEPC 81/7/Add.1; MEPC 82/7, MEPC 82/7/1, MEPC 82/7/2, MEPC 82/7/4/Add.1, MEPC 82/7/4/Add.2, MEPC 82/7/4/Add.3, MEPC 82/7/4/Add.4, MEPC 82/INF.8, MEPC 82/INF.8/Add.1, MEPC 82/INF.8/Add.2, MEPC 82/INF.8/Add.3 and MEPC.1/Circ.885/Rev.1

Introduction

1 This document is submitted as per the relaxed deadline agreed by the Chair of the Committee in accordance with paragraph 6.9 of the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MSC-MEPC.1/Circ.5/Rev.5). The 2023 IMO GHG Strategy outlines

that impacts on States of a measure/combination of measures should be assessed and taken into account as appropriate before adoption of the measure(s), in accordance with the *Revised procedure on assessing impacts on States of candidate measures* (MEPC.1/Circ.885/Rev.1). Particular attention should be paid to the needs of developing countries, in particular least developed countries (LDCs) and small island developing States (SIDS).

2 The Strategy also outlines that, in accordance with the timelines set out in the Strategy, a basket of candidate measure(s), delivering on the GHG reduction targets, should be developed and finalized comprised of both a technical element, namely a goal-based marine fuel standard regulating the phased reduction of marine fuel's GHG intensity, and an economic element, on the basis of a maritime GHG emissions pricing mechanism.

3 The Strategy foresees the approval of the measures by MEPC 83, and their adoption by an extraordinary MEPC session in the autumn 2025. Accordingly, MEPC 80 approved the terms of reference and arrangements for conducting the comprehensive impact assessment (CIA) of the basket of candidate mid-term measures (MEPC 80/17/Add.1, annex 16), and instructed the Secretariat to initiate the impact assessment in accordance with the approved terms of reference, with an interim and a final report to be submitted to MEPC 81 and MEPC 82, respectively.

4 The Committee further instructed the Secretariat to establish a Steering Committee to act as a focal point for the Committee during the conduct of the CIA. Accordingly, the Secretary-General established the Steering Committee on the conduct of the CIA composed of the following 32 Member States: Argentina, Australia, the Bahamas, Belize, Brazil, Canada, Chile, China, the Cook Islands, Denmark, Ecuador, Egypt, Finland, France, Germany, India, Japan, Liberia, the Marshall Islands, Netherlands (Kingdom of the), New Zealand, Norway, the Republic of Korea, the Russian Federation, Singapore, Sweden, Tonga, Türkiye, Tuvalu, the United Arab Emirates, the United Kingdom and the United States (see Circular Letters No.4740 and No. 4766). The Secretariat also received interest in observing the work of the Steering Committee from 17 Member States and one Associate Member State¹ and 17 observer organizations².

Work plan for the comprehensive impact assessment

5 To provide a way forward to carry out the approved terms of reference and in accordance with MEPC.1/Circ.885/Rev.1, the Steering Committee agreed on a work plan³ for each of the five distinct but interrelated tasks comprised in the CIA assessment and on the organizations responsible for or supporting each of them as follows:

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|---------|---|
| Task 1: | Literature review (World Maritime University). |
| Task 2: | Assessment of the impacts of the basket of candidate measures on the fleet (DNV). |
| Task 3: | Assessment of the impacts of the basket of candidate measures on States (UN Trade and Development, UNCTAD). |

¹ Angola, Antigua and Barbuda, Bangladesh, Belgium, Fiji, Ghana, Grenada, Ireland, Malaysia, Morocco, Panama, Peru, Portugal, Saudi Arabia, Solomon Islands, South Africa, Togo, Venezuela (Bolivarian Republic of) and Hong Kong, China.

² World Bank, European Commission, OECD, ICS, OCIMF, CLIA, INTERCARGO, EUROMOT, IPIECA, IPTA, IBIA, The Nautical Institute, Pacific Environment, CSC, IWSA and EDF.

³ The work plans for each task are set out in the annexes to document MEPC 81/7 (Tasks 1, 2 and 3) and MEPC 82/7 (Task 4).

- Task 4: Complementary qualitative/quantitative stakeholder analysis, including relevant illustrative case studies (Starcrest Consulting).
- Task 5: Identification of areas of missing data, quality assurance and quality control (QA/QC), uncertainty and sensitivity analyses and integration between various tasks (External reviewers nominated by members of the Steering Committee).

Selection of policy combinations for modelling purposes

6 The assessments carried out under tasks 2, 3 and 4 are based on various policy combination scenarios as defined by the Steering Committee for the purpose of modelling. On the basis of the "Combinations of technical and economic elements", set out in appendix 2 of the terms of reference of the CIA (MEPC 80/17/Add.1, annex 16) and with a view to facilitating the modelling of impacts of the basket of candidate mid-term measures on the fleet, the Steering Committee developed during its first meeting a methodology for further identifying all possible combinations of technical and economic elements to be assessed. Based on the agreed methodology, the Steering Committee developed all possible combinations of the different technical and economic elements to be modelled. It further agreed, for the purpose of assessing the impact of the basket of candidate measures, on value ranges for the flexibility element, levy/feebate and revenue disbursement under the different policy combination scenarios, as applicable (MEPC 81/7, annex 4).

7 On the basis of this input, the Steering Committee agreed that DNV would undertake modelling under task 2 of two Business as Usual (BAU) Scenarios (one Low Growth, and one High Growth), and 32 policy scenarios, namely 16 policy scenario combinations following the 'Base' GHG reduction trajectory developed by DNV and 16 policy scenario combinations following the 'Strive' GHG reduction trajectory developed by DNV. The two well-to-wake GHG emission trajectories developed by DNV for the purpose of modelling were defined according to the indicative checkpoints and the 2023 Strategy's level of ambition to reach net-zero GHG emissions by or around, i.e. close to, 2050, and taking into account well-to-wake GHG emissions. The 'Base trajectory' reflects the lower ends of the indicative checkpoints, in other words to reduce the total annual GHG emissions from international shipping by 'at least' 20% by 2030 and by 'at least' 70% by 2040, both compared to 2008. The 'Strive trajectory' reflects the upper ends of the indicative checkpoints, in other words 'striving for' reductions of 30% by 2030 and 80% by 2040 compared to 2008. The Steering Committee further agreed to use the results of the Task 2 modelling of a number of selected policy scenarios as input for further modelling under Tasks 3 and 4.

Quality assurance and quality control

8 Under Task 5, each Task leader was required to identify areas of missing data, carry out an internal QA/QC of their draft report, and undergo an uncertainty and sensitivity analyses and integration between various tasks. These findings and analyses of the internal quality control were included in the final reports for each Task.

9 In addition, members of the Steering Committee were invited to nominate experts to conduct the required external QA/QC review of the draft final reports of each task. Accordingly, for Task 1 four external reviewers (China, India, Japan and the United Kingdom) were nominated; for Tasks 2 and 3 five reviewers (China, Japan, Singapore, the United Kingdom and the United States); and for Task 4 two reviewers (China and the United Kingdom) were nominated. The comments submitted by the external reviewers have been addressed by the Task leaders in the final reports, as appropriate.

10 The Steering Committee expressed their appreciation to the external reviewers for their valuable input but noted the limited time available for their reviews and that, as external reviewers were not provided with full access to underlying data, modelling tools and disaggregated results, it was not part of their remit to replicate the results of the quantitative analysis presented in the final reports.

Outcome of the tenth and eleventh meetings

11 The Steering Committee met for the first time on 25 September 2023, under the coordination of Mr. Hanqiang Tan (Singapore, Vice-Chair of the Committee), with the presence of observers and experts expected to participate in conducting different tasks for the CIA. Further information and outcomes of the nine first meetings of the Steering Committee are set out in documents MEPC 81/7, MEPC 81/7/Add.1, MEPC 82/7, MEPC 82/7/1 and MEPC 82/7/2.

12 The tenth and eleventh meetings of the CIA Steering Committee were held on 18 and 19 July 2024 (both in-person with remote hybrid participation) and 25 July 2024 (remote meeting), respectively, under the moderation of Mr. Hanqiang Tan (Singapore). Experts from DNV, UNCTAD and Starcrest Consulting were also present.

13 Following the approval of the final reports of Task 1 (Literature review) and Task 2 (Assessment of impacts on the fleet) during its previous meetings, the Steering Committee focused its consideration on the draft reports of Task 3 (Assessment of impacts on States) and Task 4 (Complementary qualitative/quantitative stakeholders' analysis), with a view to approval.

Task 3: Assessment of impacts on States

14 During its tenth meeting, the discussion on Task 3 was overshadowed by a discussion on an article in Lloyds List published on 17 July 2024 commenting on results of the final draft report by UNCTAD, emphasizing some specific policy options as having lesser impacts than other scenarios. Many members of the Steering Committee expressed their strong discontent that draft information on the results on the impact assessment had been leaked to the media, eroding trust amongst members and undermining further work on the development of the basket of candidate mid-term measures both within the Steering Committee and the Committee. Several members explicitly requested the Secretariat to undertake corrective action, notably issuing a statement that the results reported by Lloyds List were not final and asking Lloyds List to issue a rectification as well as to reveal the source.

15 In the discussion following UNCTAD's presentation of their draft final report, several members pointed out that in their view the report was unready and that it required substantial adjustments in some sections before its approval, such as, further elaborating on the methodology used; analysing more thoroughly the impacts of the measures on food security; specifying the effects of the different scenarios, in particular reflecting more clearly the impacts of the measures around the indicative checkpoints stated in the 2023 IMO GHG Strategy (2030 and 2040); providing further information on the assumptions and limitations of the study and addressing the manner in which they influenced the findings; a more neutral and balanced presentation of all scenarios, i.e. those with revenue disbursement and those without; providing further access to underlying data to replicate some of the modelling; and providing additional information on the internal QA/QC process undertaken.

16 Several members were of the view that there were more fundamental issues regarding the methodology used by UNCTAD to conduct the study and the overall presentation of the results leading to the perception that the conclusions of the report might be erroneous

and not comply with the terms of reference of Task 3. Among the problems raised, some members pointed out that in their view the report contained some seemingly non-sensical results incompatible with published literature, the absence of a technical note explaining some of the assumptions and allowing for the verification of calculations, prescriptive language in some parts of the report, revision of first set of results without clear explanations, partial identification of limitations of the study, lack of clarity on how data from different sources has been integrated and adjusted, lack of data validation, lack of sensitivity analysis, lack of transparency in the shock applied, absence of clear determination of results by country and region, poor analysis of impacts on food security and others.

17 Several other members were of the view that UNCTAD's draft final report did not contain material errors, the modelling was not out of line with similar other published results, and modelling results were consistent and could be fully explained, and therefore considered the draft final report to be in line with the terms of reference as the modelling results reflected the potential impacts on GDP, trade and consumer price changes without being policy prescriptive. These members also considered the method followed by UNCTAD as robust, also stating that the method used to evaluate the impacts on States was in line with the procedure outline in MEPC.1/Circ.885/Rev.1, and recalled that the Steering Committee had agreed on using the Global Trade Analysis Project (GTAP) model for this assessment, while being aware of its limitations. These members were confident that in their view, following the inclusion of the comments raised during the tenth meeting, the Steering Committee would be in a position to approve the Task 3 report at its next meeting.

18 As a way forward, the Steering Committee requested UNCTAD to provide a revised report to be considered during a final meeting of the Steering Committee, to be held on Thursday, 25 July.

19 At its eleventh meeting, the Steering Committee noted that UNCTAD had prepared a revised draft final report, reflecting many of the comments raised during the tenth meeting as well as those received afterwards. The Steering Committee noted that UNCTAD had incorporated, inter alia, the following amendments into the revised report:

- .1 additional data on agricultural products to help the understanding of the possible impacts on food security;
- .2 expanded the section on limitations of the modelling, and moved it to the beginning of the report;
- .3 carefully redrafted the findings on 'impacts' to avoid they would be interpreted as policy recommendations, and ensure they were neutral, clear and accessible;
- .4 added additional illustrations to facilitate the understanding of the report;
- .5 elaborated on various requests to enhance transparency, such as further clarifying assumptions and inputs;
- .6 added further sensitivity analysis;
- .7 included a specific section on the QA/QC undertaken; and
- .8 provided additional information on imports and exports.

20 UNCTAD further reiterated that in their view they had fulfilled the terms of reference, as well as all instructions and inputs given by the Steering Committee.

21 The Steering Committee expressed their appreciation of UNCTAD's hard work undertaken since the last meeting of the Steering Committee which had improved the report, further acknowledging the various constructive technical exchanges the Steering Committee has had on the draft Task 3 final report.

22 Several members of the Steering Committee were of the view that the revised final report was more balanced, neutral in language and not policy prescriptive. These members also further stated that the findings within the report were consistent and solid, and were consistent with the findings of the report of Task 2 as well as with published literature. These members believed that the report fulfilled the terms of reference and the methodology agreed by the Steering Committee for the conduct of Task 3, noting the assumptions and limitations clearly stated in the report, and were in a position to approve the report.

23 Several members supported the approval of the report, in general, subject to an overall editorial review of the report and the inclusions of a number of additional clarifications, caveats and rewording of language, such as, to further frame the limitations of the GTAP modelling, specify that the policy scenarios, including the revenue disbursement scenarios, were hypothetical, and that the assessment should focus on all States, not only developing States.

24 Several members welcomed that UNCTAD had addressed concerns raised during the tenth meeting, but were not in a position to approve the report, referring in particular to outstanding concerns and clarifications with respect to the methodological approach and the limitations of the GTAP model with respect to the modelling of revenue disbursement, and the need for the outcomes of all scenarios that include a revenue generating component to be more balanced, not just those which include a 'levy' component, but also those with a 'flexibility mechanism'. These members pointed out an overemphasis in the findings of the report of the impacts of the levy as a means to compensate negative impacts, while in their view the findings in the report should rather reflect the findings before the disbursement of revenue, leading to policy prescriptive conclusions in the report. These members raised their additional concerns with respect to the need for additional sensitivity analysis, additional descriptions and addressing the concerns on modelling assumptions, notably the 'shock' applied in the model. In view of the remaining concerns with regard to the overall methodological approach taken under Task 3, these members were of the view that the description of modelling limitations in the report would not provide a sufficient safeguard for the main findings in the report. In view of these concerns, these members were not in a position to approve the report, but suggested that further technical exchanges on the draft findings of the report could continue to address a number of these issues, including by additional sensitivity analysis and data validations, with a view to informing the Fifth GHG Expert Workshop on the Further development of the basket of mid-term measures (GHG-EW 5).

25 Several members appreciated the additional information on impacts on agricultural goods provided in the report since its last version, but requested additional clarifications to be added in the report on food security stating this was not directly addressed, but rather reflected by using impacts on agricultural commodities as a proxy; further requesting additional information on remoteness, transport dependency, impacts on trade volumes; impacts on maritime logistics costs and consumer price indexes, and to add maps and graphs to the report.

26 Several members were of the view that the report of Task 3 fulfilled the terms of reference provided by the Committee, and the further work plan and instructions given by the Steering Committee, and could be submitted to MEPC 82 in the context of its further development of the basket of candidate mid-term measures, but that it would not have to be approved by the Steering Committee, while endorsing that some additional analysis could be done ahead of GHG-EW 5.

27 Following the exchange of views, the moderator, in referring to the usual IMO spirit which prevailed throughout the course of work of the Steering Committee and noting that many members supported undertaking some additional work ahead of GHG-EW 5, stressed the need of reaching wide consensus among the members on the outcome of Task 3. Consequently, the Steering Committee endorsed the moderator's suggestions:

- .1 that UNCTAD should address the comments and concerns expressed during the eleventh meeting to the extent as they deem possible by Friday, 26 July 2024;
- .2 that UNCTAD should undertake further methodological validation and reporting improvements, and in this regard, interested members were invited to nominate experts to engage with UNCTAD on this matter; to instruct the Secretariat to develop the scope of work for this group of experts, and to invite UNCTAD to report the findings of this group to GHG-EW 5; and
- .3 that the report of Task 3, together with the collation of substantive comments by members of Steering Committee and external QA/QC reviewers and responses provided by UNCTAD, be submitted to MEPC 82.

28 In this regard, some members expressed the view that they would like to have another meeting of the Steering Committee before GHG-EW 5.

Task 4: Complementary qualitative/quantitative stakeholders' analysis

29 At its tenth meeting, the Steering Committee considered and approved, in principle, Starcrest Consulting's draft final report, taking into account comments received ahead of the meeting from members of the Steering Committee and external QA/QC reviewers. Considering the conditions and deadlines within which it was conducted, the Steering Committee expressed its overall satisfaction with the draft final report. However, several members requested to add as a modelling limitation the fact that while the report is based on DNV's modelled scenarios on impacts on the fleet, due to time constraints it does not use as basis the further modelling of revenue disbursement as carried out by UNCTAD. In response, several other members of the Steering Committee recalled that Task 4 modelling purpose is to reflect the potential impacts of the candidate mid-term measures on representative commodities that aim to represent the whole economy, without providing a global perspective on the potential impacts on the fleet or States, therefore they do not consider the exclusion of revenue disbursement scenarios as a limitation of the modelling conducted under Task 4.

30 During its eleventh meeting, the Steering Committee approved Starcrest's final report, having noted that comments made during and following the tenth meeting had been addressed as appropriate, and requested the Secretariat to carry out a final editorial check before publication of the report.

Conclusions of the comprehensive impact assessment

31 Jointly, the reports for the distinct but interrelated Tasks 1 to 4 undertaken according to the work plans agreed by the Steering Committee and in accordance with the terms of reference approved by MEPC 80 constitute the CIA of the basket of candidate mid-term measures. The results of the QA/QC process undertaken under Task 5 were directly integrated into the reports of each task.

32 The executive summaries for each task are set out in the addenda to this document. The full reports of all the tasks, as well as the collation of substantive comments by members of the Steering Committee and external QA/QC reviewers and responses provided by UNCTAD on Task 3, are set out in document MEPC 82/INF.8 and addendum.

33 While the reports under each task were commissioned by the Organization, the information contained within the reports represents the views of the authors only. It should not be interpreted as representing the views of the Organization, the Steering Committee on the comprehensive impact assessment, or the States that were represented on the Steering Committee. In accordance with the terms of references approved by MEPC 80, the CIA of the basket of candidate mid-term GHG reduction measures has been undertaken solely to assist MEPC in making evidence-based decisions.

34 The Steering Committee emphasizes that policy combination scenarios, including revenue disbursement schemes where applicable, and any other information included in the reports were provided solely for analytical purposes and are hypothetical scenarios used for modelling purposes and should not be interpreted as suggestions or recommendations for how the basket of mid-term GHG reduction measures should be designed.

Assumptions, uncertainties and limitations in the modelling

35 The Steering Committee also emphasizes that due to the limited time available to carry out the CIA, the different Task leaders had to simplify certain modelling inputs, and make some assumptions, and that the results of the analysis are subject to some uncertainties, which should be taken into account when considering the findings of each task. The assumptions and uncertainties are described in the full reports of each task, as appropriate.

36 The Steering Committee further emphasizes that while all eight impact criteria set out in the Strategy have been commented on across the different CIA reports, due to time and modelling constraints, this has been done at different levels of detail, and recognized that modelling and a more in-depth analysis of the impacts on certain criteria, in particular food security, geographic remoteness of and connectivity to main markets, cargo value and type, and transport dependency could not be accommodated.

37 In addition, Steering Committee members expressed caution about certain assumptions, uncertainties and other limitations in the modelling of scenarios, such as:

- .1 relating to the use of onboard carbon capture and storage as a compliance method;
- .2 revenue disbursement scenarios in Task 3 were based on the assumption that most of the revenue remaining after rewarding eligible fuels is disbursed out of the shipping sector; and because of the limitations of the GTAP model, and constraints of time and resources, in-sector revenue distribution was not modelled;

- .3 scenarios with a flexibility mechanism but no levy were not modelled among the revenue distribution scenarios of Task 3; however this does not imply that the impacts of revenues under these scenarios should be underestimated; and
- .4 sensitivity analysis has not been conducted under Task 3, and the impact of changes in relevant factors on one or a group of key indicators has not been studied from a quantitative analysis perspective.

38 Specifically, with regard to the modelling under Task 2, the member from China expressed concerns on the finding in that report stating that the "lowest increases in cost come in scenarios with a high levy and a GFI flexibility mechanism", putting forward that the process of calculation was not sufficiently demonstrated to show exactly how it was calculated to arrive at such a conclusion, adding that the sensitivity analysis showed that using the projected range of fuel prices from literature the cost intensity increases spans from 12% to 60% relative to BAU in 2030, meaning that slight change of inputs and assumptions alone can lead to very different results.

Use of GTAP

39 The Steering Committee also points out that, whilst MEPC.1/Circ.885/Rev.1 recommends the use of a CGE model and the Steering Committee had agreed to use the GTAP as the model for Task 3, it has identified some limitations with the use of GTAP, in particular that it does not cover the economies of all States at an individual country level requiring the disaggregating of information for some economies, notably SIDS, by using additional information/estimations from sources outside of GTAP, it has limitations to model revenue disbursement across specific sectors, in particular the inability to model the possible allocation of revenues for the use in specific sectors ('in-sector use'), such as international maritime transport, and the static nature of GTAP, which implies uncertainties in forecasting impacts in the longer-term, in particular closer to 2050. With regards to the possible allocation of revenues, the Steering Committee recalled that the modelling under Tasks 2 and 3 could not assess the allocation of revenue for revenue category D1 (R&D) as envisaged, and instead the amount of revenue allocated to D1 had been set at zero in the modelling.

Press leak

40 The Steering Committee expressed its strong discontent about a press article published on 17 July 2024 commenting on the results of the final draft report by UNCTAD, emphasizing that some specific policy options as having a lesser impact than other scenarios, and stressing that sharing information on the non-approved results on the impact assessment would erode trust amongst members and undermine further work on the development of the basket of candidate mid-term measures both within the Steering Committee and the Committee. The Steering Committee further noted that following action undertaken by the Secretariat, the news outlet had issued a statement that the results reported from their source were not final and based on a draft report.

Lessons learned

41 The Steering Committee met in total 11 times between MEPC 80 and MEPC 82 under the coordination of Mr. Hanqiang Tan to oversee the conduct of the CIA and provided valuable input to the Task leaders allowing them to carry out their respective tasks in accordance with its terms of reference and detailed workplans developed by the Steering Committee for each task. The Steering Committee had both in-person with remote hybrid participation and fully remote meetings.

42 At its ninth meeting, the Steering Committee provided comments and feedback on the general process of the CIA. In general, the Committee expressed its satisfaction with the new process as set out in MEPC.1/Circ.885/Rev.1, noting in particular some of the main changes that had been integrated in the process following the revision of the procedure, notably the enhanced focus on external QA/QC, the use of a computable general equilibrium (CGE) model, i.e. GTAP for Task 3, as well as the additional guidance provided in the revised procedure on how to carry out all distinct but interrelated tasks of the CIA.

43 The Steering Committee also welcomed the use of IMOSPACE as a transparent, online means to exchange information, while noting the need for making the platform more user-friendly, in particular by allowing for a more structured approach in saving and organizing various documents.

44 While working within the time frames agreed by MEPC 80, both the Steering Committee and the Task leaders were faced with significant time pressure to deliver and review the various tasks on time, and stressed the overall time constraints experienced in the conduct of the CIA and the resulting need to improve time management. In this regard, the Steering Committee provided various suggestions, such as, outlining to the Committee the necessary time required to conduct a CIA of such magnitude; ensuring that the CIA process can start as soon as possible after the Committee has approved the Terms of Reference of a CIA; to provide more clarity upfront on the timeline of Steering Committee meetings and deadlines for Task leaders and members of the Committee; enhance the version control of draft reports (e.g. by use of track changes) for Steering Committee members, facilitating and streamlining the procurement process, including by considering the option to contract a consortium to carry out the CIA instead of contracting individual Task leaders as this could reduce the necessary time needed for contracting and would further enhance the exchange of information, data, and modelling input and results of the different tasks.

45 The Steering Committee noted that more time would be required for the conduct of internal and external QA/QC, while also allowing external reviewers more access to data, modelling tools and disaggregated results in order to ensure transparency and replicability of the work carried out by the task leaders, and recommended to insert specific provisions in the respective contracts with task leaders to that purpose in the future.

46 The member of the Cook Islands, supported by several other members, expressed the view that the need to improve time management did not properly reflect the difficulties faced by the Steering Committee due to time constraints linked to arbitrary and inadequate timelines set by the Committee.

47 In addition, while respecting the *Organization and method of work of the Maritime Safety Committee and the Marine Environment Protection Committee and their subsidiary bodies* (MESC-MEPC.1/Circ.5/Rev.5) and the Organization's guidance to facilitate remote sessions, several members suggested conducting Steering Committee meetings as much as possible as fully remote sessions in order to facilitate a broader participation, to meet for more days but with reduced meeting hours, also accommodating the working-hours in different time-zones. Other members recalled the importance of having in-person meetings to facilitate discussions enabling progress on sensitive issues. Overall, the Steering Committee was of the view that defining a clear meeting schedule at the beginning of the CIA process and a practical balance between 'in-person with hybrid participation' and 'fully remote meetings', could facilitate and enhance the inclusiveness of the work of the Steering Committee.

48 In this regard, several members expressed their appreciation to the Secretariat for enabling the use of the Voluntary Trust Fund for the participation in IMO GHG meetings for some members from developing States to participate in-person in various Steering Committee meetings.

Action requested of the Committee

49 The Committee, when considering the proposed basket of candidate mid-term GHG reduction measures, is invited to:

- .1 note that the Secretariat initiated and facilitated the process of conducting the comprehensive impact assessment in accordance with the terms of reference approved by MEPC 80;
- .2 note the outcome of the tenth and eleventh meetings of the Steering Committee, in particular the approval of the report of Task 4 following the approval of the reports of Tasks 1 and 2 at their previous meetings, and the Steering Committee's recommendations on the way forward with regard to Task 3 as set out in sub-paragraph .3 below;
- .3 note that the moderator, in referring to the usual IMO spirit which prevailed throughout the course of work of the Steering Committee and noting that many members had supported undertaking some additional work on Task 3 ahead of GHG-EW 5, stressed the need of reaching wide consensus among the members on the outcome of Task 3; and consequently, the Steering Committee had endorsed the moderator's suggestions:
 - .1 that UNCTAD should address the comments and concerns expressed on the report of Task 3 during the eleventh meeting to the extent as they deem possible by Friday, 26 July 2024;
 - .2 that UNCTAD should undertake further methodological validation and reporting improvements, and in this regard, interested members were invited to nominate experts to engage with UNCTAD on this matter; and to instruct the Secretariat to develop the scope of work for this group of experts, and to invite UNCTAD to report the findings of this group to GHG-EW 5; and
 - .3 the report of Task 3, together with the collation of substantive comments by members of Steering Committee and external QA/QC reviewers and responses provided by UNCTAD, be submitted to MEPC 82.
- .4 note that the Steering Committee concluded that the comprehensive impact assessment of the basket of candidate mid-term measures fulfilled in general the terms of reference and timelines agreed by MEPC 80 while recognizing that Task 3 requires further work as indicated in the paragraph 27;
- .5 note that due to the limited time available to carry out the CIA, the different task leaders had to simplify certain modelling inputs, make some assumptions, and that the results of the analysis are subject to some uncertainties, which should be taken into account when considering the findings of each task; note also that the assumptions and uncertainties are described in the full reports of each task;
- .6 note that while all eight impact criteria set out in the Strategy have been commented on across the different CIA reports, due to time and modelling constraints, this has been done at different levels of detail, and that the Steering Committee recognized that modelling and a more in-depth analysis of the impacts on certain criteria, in particular food security, geographic remoteness of and connectivity to main markets, cargo value and type, and transport dependency could not be accommodated;

- .7 consider the report on the comprehensive impact assessment as set out in this document and its addenda in conjunction with meeting reports and further information to be provided in relation to Task 3 presented to GHG-EW 5, as appropriate, in the further development of the basket of candidate mid-term GHG reduction measures;
- .8 note the considerations by the Steering Committee on 'lessons learned' in conducting the comprehensive impact assessment, in particular:
 - .1 its satisfaction, in general, with the new process as set out in the *Revised procedure for assessing impacts on States of candidate measures* (MEPC.1/Circ.885/Rev.1);
 - .2 the use of IMOSPACE as a transparent, online means to exchange information, while noting the need for making the platform more user-friendly;
 - .3 the overall time constraints experienced in the conduct of the comprehensive impact assessment and the resulting need to review overall time required for the conduct of a CIA, to improve time management during the CIA, also taking into account the recommendations by the Steering Committee in this regard;
 - .4 the need to further consider a practical balance between 'in-person with hybrid participation' and 'fully remote meetings' to facilitate and enhance the inclusiveness of the work of the Steering Committee; and
 - .5 the need to prevent future leaks of information, which also could denote bias, produce misinformation and influence negatively future negotiations as well as trust among delegations, and for all parties involved in comprehensive impact assessment process to respect in good faith their commitment to hold in trust and confidence any confidential information or documents to which they gain access as a result of that involvement; in the comprehensive impact assessment.
- .9 express its appreciation to all the experts, in particular, WMU, DNV, UNCTAD, Starcrest Consulting and the nominated external QA/QC reviewers, having contributed to the comprehensive impact assessment, to the coordinator (Mr. Hanqiang Tan of Singapore), and the members of the Steering Committee for having overseen the conduct of the assessment;
- .10 express its appreciation to the donors to the GHG TC-Trust Fund enabling the funding of the comprehensive impact assessment and to the Voluntary Trust Fund for financial support to attend IMO GHG meetings enabling the in-person participation of some members of the Steering Committee in its meetings; and
- .11 approve in general this report.