

3 August 2023

**Convention on Long-Range Transboundary Air Pollution (CLRTAP)
61st session of the Working Group on Strategies and Review
(Geneva, 4-6 September 2023)**

**Draft Guidance document on technical measures for reduction of
emissions from shipping**

Comments by the EU and its Member States

The EU and its Member States thank the Task Force on Techno-economic Issues for preparing the present document.

To facilitate discussions during the 61st session of the WGSR, we provide the following advance comments. Text suggestions are provided with new text in **bold** and deleted text in ~~striketrough~~.

We reserve the right to provide additional comments in the next step.

- The title of the document is ambiguous: it should be clarified that the guidance document is about *air pollution* emissions from shipping.
- In line with the above comment, please restructure several of the chapters and paragraphs to more clearly focus on the air pollution emissions, presenting information on greenhouse gas reduction and decarbonisation as a reduction co-benefit rather than as a main issue (Air Convention scope). E.g. the chapter on hydrogen does not seem to provide much relevance from the air pollution perspective.
- Paragraphs 1 and 3: please add “air pollution” to specify which shipping emissions are referred to.
- Paragraph 2 should include the following addition: “Where relevant, this guidance also provides information on the co-benefits for reduction of greenhouse gas emissions.”
- Paragraph 4a: it should be specified which guidebook is referred to (the air pollutant emission inventory guidebook) as this might not be clear for a non-Convention audience. A footnote with document reference would also be helpful.
- Paragraph 4c: should also mention the establishment of the Mediterranean Sea Emission Control Area for sulphur oxides and particular matter, adopted at the 79th session of the IMO Marine Environment Protection Committee on 15 December 2022, with effect from 1 May 2025. Similarly, North East Atlantic ECAs and the Canadian ECA in the Arctic currently under development/discussion could also be mentioned.

- Paragraph 4c and beyond: the 2018 IIASA study on emission reductions from shipping via ECAs could be used and referenced: Janusz Cofala and others, “The potential for cost-effective air emission reductions from international shipping through designation of further Emission Control Areas in EU waters with focus on the Mediterranean Sea” (n.p., International Institute for Applied Systems Analysis, 2018).
- Paragraph 5: it is not clear why the EU amount of seaborne freight is singled out as example here, is there any possibility of a UNECE-wide or global figure, or else to add another example e.g. from North America for geographical balance in the report?
- Paragraphs 5, 7, 14, and the table on page 8: please clarify if you mean “ton” or “tonnes”. If the text refers to metric tons (which we recommend), the term “tonne” should be consistently used throughout the report.
- Paragraph 7 shows the comparison between shipping and road transport in terms of tonne-kilometer. It would also be useful to see the comparison in total number of kilotonnes to identify the shipping total share of emissions.
- Paragraph 7, last sentence is not sufficiently clear. What does “total emissions” refer to in this sentence – total air pollutant emissions from the entire shipping sector? Please redraft for clarity.
- Paragraph 14: does the “share of delivered LNG-powered ships” refer to global percentages – is this a global trend or UNECE related?
- Paragraph 18 (and other paragraphs on methane emissions, as relevant) should not only refer to methane as a greenhouse gas but, importantly, as an ozone precursor (air pollution focus).
- Paragraphs 29-31: as in many other sections, the text does not seem to focus on the air pollution impacts. Can this part be reassessed for more priority to the air pollution angle? Has TFRN been consulted on this chapter (cf. proposed item 2.1.8. of the draft 2024-2025 work plan)?
- The table on page 8 summarising the information from subsection V.A is very useful. Similar summary tables for subsections V.B and V.C would be appreciated.
- Section V.A: the ongoing discussion in IMO on a ban on heavy fuel oils in the Arctic to reduce notably black carbon emissions seem to be omitted; HFO ban/switch should be listed among the possible emission reduction measures.
- The entire segment on scrubbers (wet and dry), paragraphs 44-50 should be updated to latest discussions in IMO including on a possible ban/limitations of, in particular, open loop wet scrubbers.
- Paragraph 49: this section introduces the concept “exhaust gas cleaning system (EGCS)”, however EGCS (“scrubbers”) also include wet EGCS/scrubbers so the concept and acronym should appear already as from paragraph 44. The language should be similar in both headings and texts (wet and dry systems); either use the term “scrubber” for both sections or “exhaust gas cleaning systems” for both sections.

- Paragraph 63: An indication on the impact of the application of BAT in ports would be useful.
- Paragraph 64: are there any studies, results for the effects of optimisation, automated mooring systems etc?
- Paragraph 65: propose to add the argument that the reduction of pollution by OPS is important in particular for port cities who often have high population concentration.
- Paragraph 66: please note that the EU is in the process of introducing a regulatory regime making OPS mandatory¹. The European Maritime Safety Agency has also published guidance on OPS² which could be referenced. The uptake of OPS in the entire UNECE region / globally would help move the shipping sector to these solutions and reduce costs as they could make use of on-board OPS equipment also in stops beyond the EU.
- Paragraph 67: we believe that ferries (ro-pax) also should be added in the list of vessels being candidates for OPS.
- Paragraph 68: the EAFO has information on OPS infrastructure in Europe; this could be considered for text update, or at least added as a reference in footnote: <https://alternative-fuels-observatory.ec.europa.eu/transport-mode/maritime-sea/ports-and-infrastructure>
- Paragraph 69: the barge option also has the advantage of less infrastructure investments compared with OPS (less cables, substations etc). It is less “intrusive” to port operations during installation. A source for the figures indicated would also be welcome in this paragraph.
- Paragraph 70-71: this technology option is indeed not yet mature and may not be practical or cost-effective in the end.
- Paragraph 73: the link between capital costs and the need for regulations is not clear. The legislative framework needs to be more clearly presented. We propose the following changes (additions in bold, deletions in strike-through):

*73. ~~Moreover, shipowners must meet capital costs, and t~~There is a need for regulation at the international level, mainly in the frame of the MARPOL Convention. **Some aspects can also be addressed at local, national or regional level.** ~~Nevertheless, a~~At least in some areas of the United Nations Economic Commission for Europe region (e.g., the European Union subregion), regulations have been introduced to control marine fuel quality, and, at the local level, in some ports, onshore power supply projects are being pursued. Measures implemented at the local level, especially on the quality and type of fuels and on port infrastructure, are of the utmost importance in improving air quality in the concerned cities.*

- Paragraph 75: the current text might cause misunderstandings regarding what can be done at what level (to what extent Parties could legislate nationally on issues

¹ https://eur-lex.europa.eu/procedure/EN/2021_210 and https://eur-lex.europa.eu/procedure/EN/2021_223

² <https://www.emsa.europa.eu/electrification/sse.html>

covered by the IMO framework). For clarity, we propose the following changes (additions in bold, deletions in strike-through):

*75. It is recommended that the Parties' experts take into due consideration the techniques illustrated in the present guidance document when **participating in further discussions and developments of international rules (e.g. MARPOL, UNCLOS) and in** developing their national emission reduction plans ~~and decarbonization processes~~, also considering synergies tackling air pollution and climate change/**decarbonisation** simultaneously*

- Costs are mostly given in EUR but sometimes in USD (paragraphs 28, 68, 69, 71). It would help to keep consistently to one currency for comparability of numbers throughout the report.
- In several paragraphs, abbreviations are introduced but only used once or twice. For readability, it would be better to avoid those abbreviations (e.g. DOC, ABS).