

Convention on Long-range Transboundary Air Pollution
60th session of the Working Group on Strategies and Review
Agenda item 4: Review of sufficiency and effectiveness of the Protocol to Abate Acidification,
Eutrophication and Ground-level Ozone
Preparation of the draft report on the review of the Gothenburg Protocol
Comments by the EU and its Member States

6 April 2022

The EU and its Member States welcome the new draft review report. To facilitate discussions during the session, we would like to provide the following advance comments. We reserve the right to provide additional comments in the future. Text suggestions are provided with new text in **bold** and deleted text in ~~strikethrough~~.

We note that the following of our previous comments have not yet been taken into account in the text and should be considered:

- Paragraph 25 still only refers to the old WHO air quality guidelines although the context is a future projection where also the new guidelines would be of relevance.
- The heading VI D should be updated as follows, for clarity:
D. Use of the **inventory** adjustment procedure
- Paragraph 94 is as currently drafted not clearly about synergy opportunities; the first sentence seems to be in contradiction with the editing request sent by the EU and its Member States in connection to EB41 (submitted on 30 November 2021). We propose to update language in the paragraph as follows:
*NH₃ emissions are hardly influenced by energy policy measures, **although some side effects may occur: for example, NH₃ emissions could even increase due to increased use production of biofuels.** ~~However,~~ *A wider ...**

Furthermore, we have the following comments on the new report version:

- Paragraph 4 requires minor editing to more correctly reflect the content of Protocol article 2, paragraph 2, as follows:
*Article 2 also **specifies that Parties should, in implementing measures** ~~covers the implementation of measures by Parties~~ to achieve their national targets for particulate matter (PM), ~~in particular giving~~ **give** priority, to the extent considered appropriate, to emission reduction measures, which also significantly reduce black carbon (BC)*

- Paragraph 17 should be clarified to emphasise that the *decisions* on options for including condensables are ultimately with the Parties, not with the EMEP scientific community. We are however grateful to the EMEP scientific community, and to other subsidiary bodies involved in the issue, for their help to prepare information and options for decision by the Parties in the next step. We propose the following concrete text change:

*Moreover, it is not known whether future PM emissions reporting will include the condensable and/or the semi-volatile component. **It is for the Parties to decide how condensables will be included in reporting and in target setting. From a scientific point of view, there is a clear need to include condensables in the assessment of health aspects. The EMEP scientific community is still discussing ~~different~~ the options for **this inclusion including condensables, but no decision has been made conclusion has been reached within EMEP.** Therefore, guidance cannot be updated/developed accordingly.***

- Reword the title of Section V as follows: “Measured and modelled **atmospheric concentrations, emissions, concentrations** and deposition levels”. To put it in a logical order.
- In paragraph 23: at least for the EU Member States, the primary reference to establish exceedance trends should be the monitoring data rather than model simulations. Also, the blanket statement on local impact from regional/transboundary air pollution needs to be presented more cautiously (cf more detailed and more complex conclusions in the recent JRC Urban PM_{2.5} Atlas¹). The information in this paragraph should therefore be corrected as follows (new text in bold, deleted in strikethrough):

23. *Around half of the EMEP sites have recorded exceedances of the 2005 World Health Organization (WHO) air quality guidelines for PM_{2.5} in recent years. **Air quality data reported by Member States and collated in the annual EEA Air Quality in Europe reports, as well as EMEP Meteorological Synthesizing Centre-West model simulations, show a decrease in exceedances over the past two decades from 2000 to 2018. As ~~l~~Local air quality ~~is~~can be strongly influenced by regional and even transboundary air pollution processes., Furthermore, urban exceedances and associated health risks ~~can~~beare a stimulating driver for additional air quality policy, including for countries that are not parties to the Protocol (average population weighted exposure still has to be calculated).***

¹ <https://publications.jrc.ec.europa.eu/repository/handle/JRC108595>

- It would be useful to clarify in paragraph 25 how many / how large areas are expected to have exceedances of the old WHO air quality guideline values in 2030 (current language “*some areas*” is very vague).
- Paragraph 25 should also be clarified by adding the word “projected” in the first sentence: *Current reduction plans in Europe show relatively small decreases for NH₃ compared to the **projected** emission reductions...*
- Paragraphs 39b and c both concern an analysis of the *With Measures* scenario and could be merged.
- Paragraph 39d: the text “Additional action may be needed...” should be phrased more confidently in view of the quoted findings: “Additional action **is** needed **in several Parties** ...”
- In paragraph 39d, the current text reads as if “adjustment and improvement of the emission inventories” would be among the main reasons for non-achievement of the reduction commitments; this does not seem correct.
- For forthcoming messages in paragraph 42: several specific (technical) barriers are already mentioned in paragraph 39d; avoid duplication/overlap with new messages in paragraph 42; refer to paragraph 39d, or merge paragraph 39d and paragraph 42.
- In paragraph 51, propose to use more neutral language when referring to the North American air quality management systems or else to add similar description also of the EU air quality management framework as being strong, efficient and successful.

- Paragraph 52: Information on the barriers to implementation of annex IX could be interesting to ensure that a revised annex would have higher success rate and emission reduction impact. The paragraph should be somewhat rephrased to keep focus on the revision currently at hand - the Parties' decision not to agree on amended text in 2012 is not per se relevant for the revision assessment. We therefore propose the following language:
52. ~~Although m~~**Many options to update annex IX were discussed already in the 2012 process to amend the Protocol were discussed, Parties did not agree on an amended text; instead, and** its review was prioritized for the present review via article 10 (4) of the amended Protocol. ~~Thus, a~~**Annex IX is over 20 years old and can no longer be considered state-of-the-art. Even so, many Parties appear not to have fully implemented its requirements. Its implementation is not technically demanding, as has been demonstrated by actions taken by a few Parties. Considering substantial progress in technical capability, availability of cost-effective measures, and recognition that measures are needed to meet NH₃ emission reduction commitments, a comprehensive revision of annex IX is overdue. When doing so, it is recommended to take into account sustainable management practices in the context of the wider N cycle.**
- Section VIII does not address the relevance of shipping (or aviation) emissions in relation to the GP objectives (cf. section heading; review question 3.4).
- Paragraph 55 has a reference to paragraph 55, should be updated to paragraph 54 (following paragraph renumbering).
- Paragraph 57: For the sake of clarity, we propose to amend paragraph 57 as follows: “*Non-exhaust emissions from the transport sector needs more attention, ~~in the future~~, because of PM resuspension and emissions from tyres and brakes which are becoming dominant ~~sources~~ as compared to exhaust gas emissions in the transport sector and are also a source of BC*”
- Paragraph 60: are the costs of measures / difficulties for investments in new agricultural equipment also an important barrier to NH₃ reduction by Parties?
- Paragraph 66 refers to meat and dairy consumption in Europe contributing to nitrogen pollution, presumably this is not only the case in Europe – should be corrected/nuanced.
- Section X offers some opportunities for shortening text to avoid repetitions, notably information in paragraphs 69 and 70 repeated in paragraph 72.

- In paragraph 76, as the WHO guidelines are not *obligations*, propose to not use the word *compliance*. An option could be to rewrite as follows:
76. *Air pollution monitoring, **allowing observed ambient concentrations to be checked compared to the** ~~for compliance with~~ (new) WHO air quality guidelines, ...*
- Paragraph 76 applies of course to all Parties (importance of monitoring and development of action plans), but is in particular relevant for the non-Parties. Therefore suggest to add the following, to better justify its place under section XI: “*Air pollution monitoring, allowing observed ambient concentrations to be checked **compared to the** ~~for compliance with~~ (new) WHO air quality guidelines, is also a key element to improving awareness, **both for the Parties and for the non-Parties to the Protocol.**”*
- Paragraph 85 should be complemented to mention also *behavioural changes* in addition to economic development and the use of emission control technologies. Behavioural changes e.g. in dietary preferences and consumption patterns will also affect the trend.
- Paragraph 92, last sentence should refer to “synergetic benefits” rather than “synergetic impacts” (positive connotation).
- Paragraph 93, last sentence, seems to be already a recommendation for action and not directly linked to the GP; should be rephrased.
- Paragraph 99 would be strengthened by also referring to the inputs sent by Parties (including the EU and its Member States) on 30 September 2021 with already identified key articles no longer fully adequate or up to date.
- The reference to issues that “should be considered” in revised articles in the second half of paragraph 100 will require careful discussion and further assessment by Parties; we will not at this stage confirm or agree that this list of aspects would be recommended for any revision considerations.

Clarification would also be useful on the following:

- In the past, GAINS analyses were carried out with respect to health impacts from PM_{2.5} and O₃. NO₂ concentrations and exposure were not part of the analysis. Do the GAINS runs now include NO₂ and the related health impacts?
