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Forty-second session

Geneva, 12–16 December 2022

Item 4 (c) of the provisional agenda

Review of the implementation of the 2022–2023 workplan: compliance

Twenty-fifth report of the Implementation Committee*, **

Submitted by the Implementation Committee

Summary

In accordance with the structure and functions of the Implementation Committee under the Convention on Long-range Transboundary Air Pollution, the Committee is required to report at least once a year on its activities to the Executive Body for the Convention (ECE/EB.AIR/113/Add.1, decision 2012/25, annex, para. 9).

The twenty-fifth report of the Implementation Committee contains information on the Committee's activities in 2022 with regard to compliance by individual Parties to the Protocols to the Convention with their emission reduction and reporting obligations, summarizing the work carried out at the Committee's forty-eighth and forty-ninth sessions (Geneva (online), 3–4 May 2022 and 30–31 August 2022, respectively). The report was prepared by the Implementation Committee with support of the Convention secretariat.

* The present document is being issued without formal editing.

** This document was submitted late due to unforeseen circumstances.



I. Introduction

1. At its fortieth session (Geneva, 18 December 2020), the Executive Body for the United Nations Economic Commission for Europe (ECE) Convention on Long-range Transboundary Air Pollution elected Canada (Ms. Catherine Bloodworth) and Estonia (Mr. Marek Maasikmets) and re-elected Austria (Mr. Manfred Ritter), Belgium (Ms. Wendy Altobello), Croatia (Ms. Kristina Tekić), Norway (Ms. Alice Gaustad), Serbia (Mr. Nebojša Redžić), Spain (Ms. María José Alonso Moya) and Sweden (Ms. Petra Hagström) as members of the Implementation Committee. It re-elected Mr. Manfred Ritter as Chair of the Implementation Committee.
2. The forty-eighth and forty-ninth sessions of the Implementation Committee (Geneva (online), 3–4 May 2022 and 30–31 September 2022, respectively) were serviced by the Convention secretariat.

II. Compliance with emission reduction obligations

3. The Implementation Committee was unable to review compliance by the Republic of Moldova with its emission reduction obligations owing to missing submissions in 2022.

A. Follow-up to Executive Body decisions

1. Protocol on Heavy Metals

Follow-up to Executive Body decision 2018/2 concerning compliance by Liechtenstein with the Protocol on Heavy Metals (ref. 6/17 (Cd))

Background

4. In decision 2018/2, the Executive Body urged the Party to fulfil its obligations under the Protocol on Heavy Metals as soon as possible. It requested Liechtenstein to provide the Implementation Committee, through the secretariat, by 28 February 2019, with:
 - (a) Information on any additional measures that could be taken to reduce emissions of cadmium and a quantitative assessment of their effects;
 - (b) A timetable specifying the year by which Liechtenstein expected to be in compliance.
5. The Executive Body invited the Party to participate in one of the Committee's meetings in 2019 to elaborate on the information provided and requested the Implementation Committee to review the progress and timetable of Liechtenstein, and to report to the Executive Body thereon at its thirty-ninth session (Geneva, 9–13 December 2019).
6. The Implementation Committee considered the case at its forty-second (Stockholm, 7–9 May 2019), forty-third (Geneva, 10–12 September 2019) and forty-fifth (Geneva (online), 15–18 September 2020) sessions. At its forty-fifth session, the Implementation Committee requested the secretariat to send a letter to the Minister of Home Affairs, Education and Environment of Liechtenstein asking her to provide the following information by 15 March 2021:
 - (a) The list of specific measures Liechtenstein intended to take to fulfil its emission reduction obligations; and
 - (b) A timetable specifying the year by which the country expected to be in compliance.
7. In its response dated 15 March 2021, Liechtenstein referred to its previous letters of 2019 and 2018 pointing to wood combustion in small and medium sized combustion plants as the main source and the fivefold growth of its share in energy production between 1998 and 2018. In its letter, Liechtenstein suggested that the division of the increased wood energy consumption into the categories 1A4ai (commercial) and 1A4bi (residential) might be wrong

and noted its plans to review the distribution of wood energy consumption and the emission factors for wood burning appliances in its submission in 2022. Liechtenstein also mentioned the revision of the clean air act as among its measures to reduce emissions. It was not able to provide a timetable for reaching compliance.

8. The Implementation Committee considered the case at its forty-seventh (Geneva (online), 14–16 September 2021) session. It noted that reported cadmium emissions in 2019 were exceeding the base year level. In light of Liechtenstein's plan to review wood distribution between sectors and emission factors in its 2022 submission, the Committee agreed to continue to review the case of exceedance of cadmium emissions in 2022.

Deliberations

9. The Implementation Committee considered the case at its forty-eighth session. It noted that emissions of cadmium of 0.00311 ton exceeded the base year level of 0.00161 ton.

10. The Committee decided to continue to review the case at its fiftieth session and requested the secretariat to send a letter to the Minister of Home Affairs, Education and Environment of Liechtenstein asking her to provide updated information before 28 February 2023 on the measures described in the letter of 15 March 2021 and potential additional measures to bring Liechtenstein in compliance with its obligations under the Protocol on Heavy Metals, as well as the timetable specifying the year by which the Party expected to be in compliance. The Implementation Committee invited Liechtenstein to participate in the fiftieth session of the Committee.

2. Protocol on Persistent Organic Pollutants

Follow-up to Executive Body decision 2018/2 concerning compliance by Liechtenstein with the Protocol on Persistent Organic Pollutants (ref. 4/17 (HCB))

Background

11. In decision 2018/2, the Executive Body urged Liechtenstein to fulfil its obligations under the Protocol on Persistent Organic Pollutants as soon as possible. It requested Liechtenstein to provide the Implementation Committee, through the secretariat, by 28 February 2019, with:

(a) Information on any additional measures that could be taken to reduce emissions of hexachlorobenzene (HCB) and a quantitative assessment of their effects;

(b) A timetable specifying the year by which Liechtenstein expected to be in compliance.

12. The Executive Body invited the Party to participate in one of the Committee's meetings in 2019 to elaborate on the information provided and requested the Implementation Committee to review the progress and timetable of Liechtenstein, and to report to the Executive Body thereon at its thirty-ninth session.

13. The Implementation Committee considered the case at its forty-second, forty-third and forty-fifth sessions. At its forty-fifth session, the Committee requested the secretariat to send a letter to the Minister of Home Affairs, Education and Environment of Liechtenstein, asking her to provide information by 15 March 2021 on:

(a) The list of specific measures Liechtenstein intended to take to fulfil its emission reduction obligations; and

(b) A timetable specifying the year by which the country expected to be in compliance.

14. In its response dated 15 March 2021, Liechtenstein referred to its previous letters of 2019 and 2018 pointing to wood combustion as the main source of emissions of HCB and the fivefold growth of its share in energy production between 1998 and 2018. In its letter Liechtenstein suggested that the division of the increased wood energy consumption into the categories 1A4ai (commercial) and 1A4bi (residential) might be wrong and noted its plans to review the distribution of wood energy consumption and the emission factors for wood

burning appliances in its submission in 2022. Liechtenstein also mentioned the revision of the clean air act as among its measures to reduce emissions. It was not able to provide a timetable for reaching compliance.

15. The Committee considered the case at its forty-sixth (Geneva (online), 5–6 May 2021) session. It noted that emissions of HCB were still exceeding the base year level. In light of Liechtenstein's plan to review wood distribution between sectors and emission factors in its 2022 submission, the Committee agreed to continue to review the case in 2022.

Deliberations

16. The Committee considered the case at its forty-eighth session. According to the 2022 submission, emissions of HCB in 2020 were 0.00053 kg, exceeding by 8 per cent the base year level of 0.00049 kg. The Committee noted that the reported emissions of HCB were close to the base year level. It agreed to continue to review the case in 2023.

B. Follow-up on submissions and referrals initiated by the secretariat during the period 2014–2021 that are still under consideration

1. 1985 Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent

Follow-up to the referral by the secretariat concerning compliance by North Macedonia with the 1985 Sulphur Protocol (ref. 1/14)

Background

17. The Committee considered the referral by the secretariat concerning compliance of North Macedonia with the 1985 Protocol on the Reduction of Sulphur Emissions or their Transboundary Fluxes by at least 30 per cent (1985 Sulphur Protocol) at its thirty-fourth (Geneva, 8–10 September 2014), thirty-fifth (Budapest, 27–29 May 2015), thirty-sixth (Geneva, 26–28 January 2016), and thirty-ninth (Geneva, 5–7 September 2017) sessions. Representatives of North Macedonia participated in the thirty-ninth session, informing the Committee about plans to reduce sulphur emissions and the approval of the National Emission Reduction Plan by the Government. They furthermore stated that the implementation of the plan was under way and that it was expected that the Party would be in compliance with its obligations in time for the reporting round in 2020.

18. At the request of the Implementation Committee, North Macedonia provided its progress report in 2018, confirming that the implementation of the plans to reduce sulphur was underway and that the emissions had already been reduced. The Party expected to be in compliance with its obligations in reporting year 2020 at the earliest. North Macedonia committed to continuing to inform the secretariat in a timely fashion about progress in the implementation of the plans to reduce sulphur emissions.

19. The Committee continued to consider the case at its forty-first (Geneva, 11–14 September 2018), forty-second, forty-fourth (Geneva (online), 13–14 May 2020) sessions. At its forty-fourth session, the Committee noted the increase in sulphur emissions. It requested the secretariat to send a letter to North Macedonia requesting information on:

(a) The implementation of its national emission reduction plan and the effects this implementation had on emission reduction; and

(b) The year North Macedonia expected to be in compliance with its obligations under the Protocol.

20. At its forty-fifth session, the Implementation Committee noted the information provided by North Macedonia, in which it confirmed its commitment to implement the planned measures to reduce the sulphur emissions. The Party informed the Committee that the negotiations on the permit for the largest power plant were delayed due to the Covid-19 pandemic and the Governmental elections. The Committee decided to continue to review the case in 2022.

Deliberations

21. The Implementation Committee continued its consideration of the case at its forty-eighth session. It noted that, according to the 2022 submission, emissions of sulphur oxides in 2020 reached 93.4 kilotonnes, which was above the emission reduction target of 47 kilotonnes by 98 per cent. The Committee recalled the referral by the secretariat it considered at its forty-seventh session with respect to the sulphur emissions reported by North Macedonia in 2021 for the year 2019 under the Protocol on Further Reduction of Sulphur Emissions (ref.1/21 (SO_x)). North Macedonia noted in its response to the secretariat that the substantial increase in emissions in 2019 could be linked to the quality of measurements and/or the sulphur content in the coal and fuel used. North Macedonia further noted that electricity and heat production was the main source of sulphur emissions and REK Bitola power plant with the largest share in it. It provided information on the planned measures to reduce emissions, which included wet desulphurization, flushing coal, and replacing coal with renewable energy sources. Measures were being planned for the plant REK Bitola in the coming years. However, North Macedonia indicated that the emissions expected to remain high in 2020.

22. The Implementation Committee took into consideration the information provided by North Macedonia in 2021. It noted that the 2020 emissions were 11.3 kilotonnes lower than the emission level in 2019, but still considerably higher than the years preceding 2019. The Committee decided to continue to consider the case at its fiftieth session and requested the secretariat to send a letter to North Macedonia asking it for further information to be provided by 28 February 2023 regarding the progress in the implementation of the planned measures to reduce emissions and a timetable specifying the year by which North Macedonia expected to be in compliance with its emission reduction obligations.

2. Protocol on Persistent Organic Pollutants

(a) Follow-up to the referral by the secretariat concerning compliance by Luxembourg with the Protocol on Persistent Organic Pollutants (ref. 7/16 (HCB))

Background

23. The 2016 submissions of HCB emission data received from Luxembourg indicated an exceedance of the base year emission level by 1 per cent. This information seemed to suggest that Luxembourg was in non-compliance with its obligations under article 3 (5) (a) of the Protocol on Persistent Organic Pollutants. The Committee considered the referral at its thirty-eighth (Leuven, Belgium, 28 February–2 March 2017), thirty-ninth, fortieth (Madrid, 16–18 May 2018), forty-first, forty-second, forty-third, forty-fifth, forty-sixth and forty-seventh sessions. At its fortieth session, the Committee noted the response provided by Luxembourg, where it suggested excluding emissions from secondary iron and steel production and road transportation from compliance checking based on the fact that these were new sources and that, in the case of road transportation, the estimation was based on a non-reliable emission factor.

24. The Committee addressed the issue to the Co-Chair of the Task Force on Emissions Inventories and Projections, who provided insights into the inventory preparation in relation to the issues raised by Luxembourg. He pointed out that the information in the EMEP/EEA Guidebook was provided as guidance, and that it was not best practice to omit known emission sources. He further pointed out that there were approaches outlined in the Guidebook for estimating emissions when there was a lack of data or information in the Guidebook. In light of the above, the Committee decided to continue to review the case. It invited the secretariat to send a letter to Luxembourg, informing the Party of these considerations and of the possibility to contact the Task Force for further guidance.

25. At its forty-third session, the Committee acknowledged the recalculation the Party had made and noted the resulting decrease in the exceedance. It requested the secretariat to send a letter to Luxembourg asking it for information to be provided on specific measures to fulfil the emission reduction obligations and a timetable specifying the year by which Luxembourg expected to be in compliance.

26. At its forty-fifth session, the Committee noted the increase in emissions of HCB in 2018 and that there had been no response received from Luxembourg. The Committee asked the secretariat to send a letter to the Minister of Environment, Climate and Sustainable Development of Luxembourg as a reminder to provide the previously requested information. Luxembourg responded pointing to the need to update the EMEP/EEA Guidebook, so that it would either provide an HCB emission factor for each technology, or explicitly state that no HCB emissions occurred for a given technology. The Party noted that it would continue to report HCB emissions for transparency reasons, but it would subtract them for compliance checking. Luxembourg noted that, based on the 2020 reported data and by subtracting HCB emissions from secondary iron and steel production from the national total emissions, it would be in compliance with its obligations.

27. Luxembourg participated in the forty-seventh session at the Committee's invitation and informed the Committee that the two electric arc furnace plants, which accounted for 70 per cent of the HCB emissions in Luxembourg, applied the best available techniques for that source category. Waste incineration for electricity and heat production was another source of HCB and could be looked into to see if measures could reduce emissions. Luxembourg reiterated the need to update the EMEP/EEA Guidebook. The Implementation Committee decided to continue to review the case in 2022.

Deliberations

28. The Committee considered the case at its forty-eighth and forty-ninth sessions. It noted that the emissions of HCB were below the base year emission level and decided that there was no reason to continue reviewing the case.

(b) Follow-up to the referral by the secretariat concerning compliance by Serbia with the Protocol on Persistent Organic Pollutants (ref. 2/21 (PAH, PCDD/F))

Background

29. The 2021 submission of emission data for PAH and dioxins/furans (PCDD/F) received from Serbia indicated that there was an exceedance of the base year emission level for dioxins/furans by approximately 1 per cent and for PAH by approximately 0.3 per cent : in 1990, which is the base year for Serbia, emissions of PCDD/F were 595 g, while in 2019 they reached 602.4 g, and emissions of PAH in 1990 were 465.3 tonnes, whereas in 2019 they reached 466.6 tonnes. This information seemed to suggest that Serbia was in non-compliance with its obligations under article 3, paragraph 5(a) of the Protocol on Persistent Organic Pollutants.

30. The secretariat informed Serbia of its intention to refer the issue to the Implementation Committee unless it could provide information to resolve the issue by showing that it was in fact in compliance with the Protocol on POPs. Serbia noted that it would re-evaluate the full time series for PAH and dioxins/furans for the submission of emission data in 2022 and determine the reason for an increase in their emissions. The secretariat informed the Party of the referral of the case to the Implementation Committee.

31. The Committee considered the referral at its forty-seventh session. A representative of Serbia informed the Committee about its steps in re-evaluating the full time series for PAH and PCDD/F for the submission of emission data in 2022 and to determine the reason for an increase in emissions in 2019. The Committee decided to review the case in 2022.

Deliberations

32. The Committee considered the referral at its forty-ninth sessions and noted that the 2020 inventory data provided by Serbia shows an increase in PCDD/F emissions compared to the base year 1990. The Committee requested the secretariat to send a letter to Serbia requesting information on the results of the re-evaluation of the full time series by February 2023 and decided to review the case again in 2023.

C. New submissions and referrals initiated in 2022

33. The Implementation Committee was informed by the secretariat that eleven cases of exceedance of emission reduction commitments had not been addressed by the secretariat in 2022. The related cases of potential non-compliance could therefore not be referred to and reviewed by the Committee and are not part of this report but will have to be addressed by the Implementation Committee at its future meetings.

1. The Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (the Gothenburg Protocol), as amended in 2012

(a) Submission by Norway concerning its compliance with the Gothenburg Protocol, as amended in 2012 (ref. 5/22 (VOCs, NH₃))

Background

34. The secretariat received a letter dated 8 July 2022 from Norway concerning its compliance with the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (the Gothenburg Protocol), as amended in 2012, with respect to VOCs and NH₃ emissions. The latest submission of emission data received from Norway indicated that it had not met its 2020 reduction commitments for VOCs and ammonia: the indicated reduction commitment for VOCs was 40 per cent from the 2005 base year level of 249.3 kilotonnes, while the reported emissions in 2020 amounted to 152.9 kilotonnes, which was above the reduction commitment by approximately 1.3 per cent. The indicated reduction commitment for NH₃ was 8 per cent from the 2005 base year level of 30.5 kilotonnes, while the reported emissions in 2020 amounted to 28.6 kilotonnes, which was above the reduction commitment by approximately 2 per cent.

35. In the report on VOCs, enclosed to its letter, Norway pointed to the downward trend in emissions in general and to the production of sanitizers during the COVID-19 pandemic as the reason for exceedance. In its report on ammonia emissions, Norway provided information on sources, trends, improvements of the emission inventory, projections and policy measures (current and planned) to meet its obligations under the Protocol.

Deliberations

36. The Committee noted the information provided by Norway at its forty-ninth session. The representatives from the Ministry of Climate and Environment of Norway, the Ministry of Agriculture and Food and the Norwegian Environment Agency participated in the forty-ninth session. In their presentation, representatives of Norway provided additional information on VOCs and ammonia emissions to meet its obligations under the Gothenburg Protocol.

37. A representative of Norway pointed to the use of sanitizers during the COVID-19 pandemic as the reason for exceedance of emissions of VOCs, and noted that emissions were expected to be reduced as soon as the pandemic ends. As for ammonia emissions, the representative of Norway noted the need for additional policy measures to meet Norway's emission reduction commitments.

38. The Committee appreciated the information provided by Norway with regards to the steps being taken to resolve the non-compliance issue. The Committee looked forward to receiving a timetable specifying the year by which Norway expected to be in compliance with the Gothenburg Protocol, as amended in 2012. The Committee decided to continue to review the case at its meetings in 2024.

(b) **Referral by the secretariat concerning compliance of Lithuania with the Gothenburg Protocol, as amended in 2012 (ref. 2/22 (NOx))**

Background

39. The 2022 submission of emission data for NO_x received from Lithuania indicated that it had not met its 2020 reduction commitment under the Gothenburg Protocol as amended in 2012: the agreed reduction commitment was 48 per cent from the 2005 base year level of 56.83 Gg, while the reported emissions in 2020 amounted to 44.24 Gg, which corresponded to a 22 per cent reduction only. This information seemed to suggest that Lithuania was not in compliance with its obligation under article 3, paragraph 1 of the Gothenburg Protocol, as amended in 2012.

40. The secretariat informed the Party in a letter addressed to its national focal points about its intention to refer the issue to the Implementation Committee unless the Party could provide information to resolve the issue by showing that it was in fact in compliance with the Protocol. The secretariat then informed the Party of the referral of the case to the Implementation Committee. Lithuania responded providing information on its measures to reach compliance under the Protocol with respect to NO_x emissions.

Deliberations

41. The Committee considered the case at its forty-ninth session. It noted that reported NO_x emissions in 2020 were not in compliance with the obligation under article 3, paragraph 1 of the Gothenburg Protocol, as amended in 2012. It noted that Lithuania had responded to the letter by the secretariat. Taking into account the response, the amended National Air Pollution Control Programme to be approved by Lithuania, and the emission projections Lithuania was expected to provide in 2023, the Committee agreed to continue to review the case in 2024.

III. Compliance with reporting obligations

42. In line with item 3.1 of the 2022–2023 workplan for the implementation of the Convention, the Committee evaluated compliance by Parties with their emission data reporting obligations on the basis of information provided by the secretariat and responses by Parties. The information on reporting compiled by the Centre on Emission Inventories and Projections and provided by the secretariat is presented in informal document No.3¹ and covers data reported up to 1 August 2022.

A. Follow-up to Executive Body decisions

Follow-up to decision 2013/19 concerning compliance by the Republic of Moldova with its obligation to report gridded emission data

43. In decision 2013/19, paragraph 4 (c), the Executive Body urged the Republic of Moldova to provide its missing gridded data for 2005 and 2010 under the Protocols on Persistent Organic Pollutants and Heavy Metals. The secretariat informed the Committee that, as of 1 August 2022, the Republic of Moldova had not provided its missing gridded data under either Protocol.

44. The Committee recalled the information provided by the Party in 2019 and its previous consideration of the case and further encouraged the Republic of Moldova to continue efforts to develop its gridded data. The Committee agreed to continue to review the case in 2023.

¹ Available from the web page for the Executive Body's forty-second session: <https://unece.org/info/Environmental-Policy/Air-Pollution/events/367824>.

B. Referrals concerning reporting of emission data

1. Referrals initiated in 2015–2021 still under consideration

45. At its thirty-sixth, thirty-seventh (Geneva, 13-15 September 2016), thirty-ninth, forty-first, forty-third, forty-fifth, forty-seventh and forty-ninth sessions, the Committee considered referrals submitted by the secretariat in 2015–2021.

Liechtenstein

46. The Committee continued to consider the referrals by the secretariat concerning compliance by Liechtenstein with its obligations to report its gridded data under the 1994 Sulphur Protocol, the Protocol on Volatile Organic Compounds, the Protocol on Persistent Organic Pollutants and the Protocol on Heavy Metals (R10/17, R16/17, R22/17, R34/17, R2/21). The Party had not provided its missing data for 2015 and 2019. The Committee agreed to continue to review the case in 2023.

Montenegro

47. The Committee continued to consider the referrals by the secretariat concerning compliance by Montenegro with its reporting obligations under the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants (gridded data) (R23/17, R35/17, and R6/21). The Party had not provided its missing data for 2015 and 2019. The Committee agreed to continue to review the case in 2023.

North Macedonia

48. The Committee continued to consider the referral by the secretariat concerning compliance by North Macedonia with its reporting obligations under the Gothenburg Protocol (R12/15) with missing projections for 2020 for NH₃, as well as projections for 2025 and 2030 for all pollutants. The Party had not provided its missing data. The Committee agreed to continue to review the case in 2023.

Republic of Moldova

49. The Committee continued to consider the referrals by the secretariat concerning compliance by the Republic of Moldova with its obligations under the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants to report gridded data (R25/17, R37/17, R7/21). The Party had not provided its missing data for 2015 and 2019. The Committee agreed to continue to review the case in 2023.

Serbia

50. The Committee continued to consider the referrals by the secretariat concerning compliance by Serbia with its obligations under the Protocol on Heavy Metals and the Protocol on Persistent Organic Pollutants to report gridded data (R27/17, R39/17 and R9/21). The Party had not provided its missing data for 2015 and 2019. The representative of Serbia informed the Committee of the Party's plans to report the missing gridded data by the end of 2022. The Committee agreed to continue to review the case in 2023.

Romania

51. The Committee continued to consider the referral by the secretariat concerning compliance by Romania with its obligations under the Protocol on Heavy Metals, the Protocol on Persistent Organic Pollutants and the Gothenburg Protocol to report gridded data (R8/21). The Party had not provided its missing data for 2019. The Committee agreed to continue to review the case in 2023.

2. Referral initiated in 2022 under the Protocols to the Convention

52. At its forty-ninth session, the Committee considered the referral by the secretariat concerning compliance by the Republic of Moldova with its obligation under the the Protocol on Heavy Metals and the Protocol on POPs to report its 2020 annual data. The Committee

noted the response by the Republic of Moldova to the query by the secretariat and agreed to continue to review the case in 2023.
