



Economic Commission for Europe

Executive Body for the Convention on Long-range
Transboundary Air Pollution

**Steering Body to the Cooperative Programme for
Monitoring and Evaluation of the Long-range
Transmission of Air Pollutants in Europe**

Working Group on Effects

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Item 10 (a) of the provisional agenda

**Progress in activities of the Cooperative Programme for Monitoring and
Evaluation of the Long-range Transmission of Air Pollutants in Europe
in 2022 and future work: improvement and reporting of emission data and
adjustments under the Protocol to Abate Acidification, Eutrophication and
Ground-level Ozone**

**Present state of emission data, review process and
data for modellers**

Report of the Centre on Emission Inventories and Projections

Summary

The present report was prepared by the Centre on Emission Inventories and Projections in line with the 2022–2023 workplan for the implementation of the Convention on Long-range Transboundary Air Pollution (ECE/EB.AIR/148/Add.1, items 1.1.1.2, 1.1.2.1, 1.1.2.5, 1.1.2.6, 1.1.2.7, 1.1.2.9, 1.1.2.10, 1.2.2, 1.3.3, 3.1 and 3.2) and the revised mandate of the Centre (Executive Body decision 2019/14).^a

The report reflects progress in emissions reporting under the Convention in the 2022 reporting round. It summarizes the main conclusions of the annual review of emission data carried out under the Cooperative Programme for Monitoring and Evaluation of the Long-range Transboundary Transmission of Air Pollutants in Europe and presents details of the stage 3 in-depth reviews of national inventories in 2022 and the plans for the year 2023 onwards. It also looks at the review of adjustment applications submitted by Parties and progress in the development and improvement of gridded data and the gridding system.

Annexed to the present document is a table summarizing the status of emission reporting by Parties as at 18 May 2022.

^a All Executive Body decisions referred to in the present document are available at <https://unece.org/decisions>.



Introduction

1. At its thirty-second session (Geneva, 9–13 December 2013), the Executive Body for the Convention on Long-range Transboundary Air Pollution adopted the Guidelines for Reporting Emissions and Projections Data under the Convention on Long-range Transboundary Air Pollution (Reporting Guidelines) (ECE/EB.AIR/125) through its decisions 2013/3 and 2013/4. The Reporting Guidelines were adopted for application in 2015 and subsequent years and contain background information on the reporting requirements, deadlines and procedures for reporting emissions under the Convention and their review.
2. The present report reflects progress in emissions reporting under the Convention in the 2022 reporting round (2020 emission data, including resubmissions for previous years since 1990, activity data and projections, and gridded and large point source data). It summarizes the main conclusions of the annual review and the review of emission data carried out under the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) in line with the 2022–2023 workplan for the implementation of the Convention (ECE/EB.AIR/148/Add.1). The report also outlines progress in improving the gridding system and developing historical data sets for modellers in the new resolution.
3. The report was prepared by the EMEP Centre on Emission Inventories and Projections (CEIP), which is hosted by the Environment Agency Austria, was established by the Executive Body of the Convention at its twenty-fifth session¹ (Geneva, 10–13 December 2007) and began operating on 15 January 2008.

I. Present state of emission data

4. *Completeness* – Of the 51 Parties to the Convention, 47 had submitted data up to 18 May 2022. All countries reported data in the standard formats (i.e. the Nomenclature for Reporting). No data were received from Azerbaijan, Bosnia and Herzegovina, Kyrgyzstan or the Republic of Moldova. A current overview of the data submitted by Parties during the 2022 reporting round can be found in the annex to the present document. In addition, the latest version of officially reported emission data can be accessed through the CEIP website.² Most of the Parties that submitted data (39) also provided the secretariat with the notification form.
5. *Timeliness* – Forty-four Parties reported emission data by the due date of 15 February (or, in the case of the European Union, 29 April) 2022 and three did so thereafter. Twenty-seven Parties resubmitted data, with the most recent provided on 30 March 2022. Thirty-eight Parties submitted informative inventory reports by the deadline of 15 March and five did so thereafter.
6. *Uncertainty* – Twenty-one Parties included quantitative information on uncertainty estimates for the main pollutants in their informative inventory reports. Almost all of these Parties report both trend and level uncertainty estimates.
7. *Pollutants* – Forty-seven Parties submitted inventories for 2020 for the main pollutants and particulate matter (PM) and forty-five did the same for cadmium, mercury and lead emissions. Forty-four Parties submitted inventories for priority persistent organic pollutants (POPs); and forty did the same for additional heavy metals. Activity data for 2020 were reported by forty-five Parties.
8. *Black carbon (BC)* – Forty-two Parties reported BC emissions (on a voluntary basis) for 2020 and thirty-nine of them submitted emission time series (at least 2000–2020) in 2022.
9. *Gridded data* – Gridded data are part of the quadrennial reporting obligation that was not due in 2022. In 2017, twenty-seven Parties reported gridded data, at least for 2015, for the first time in the 0.1° x 0.1° longitude/latitude resolution. Thirty-five Parties submitted

¹ See ECE/EB.AIR/91, para. 27 (f).

² Available at www.ceip.at/status-of-reporting-and-review-results/2021-submission.

gridded data in this resolution in the year 2021, while only twelve of them provided updates on historical years. Three Parties submitted gridded data in 2022.

10. *Large point source data* – Large point source data are also part of the quadrennial reporting obligation that was not due in 2022. Thirty-five Parties submitted data for at least 2015 in 2017. In 2021, thirty-six Parties submitted information on large point sources. Three Parties submitted information on large point source data in 2022.

11. *Documentation* – Only 82 per cent of the Parties submitted informative inventory reports in 2022. CEIP evaluates the informative inventory reports annually and the best national teams receive awards during the meetings of the Task Force on Emission Inventories and Projections (TFEIP). The names of countries receiving awards are published on CEIP website.³

12. *Projections* – In 2022, emission projections for at least 2025 and 2030 were submitted or updated by 7 Parties.

13. *Condensables* – In 2022, information on the inclusion of the condensable component in emission factors for PM was submitted by 23 Parties.

14. *Access to the information* – CEIP updated its website to reflect revisions in the reporting instructions and to improve the transparency and accessibility of data for Parties, the EMEP Steering Body, the Implementation Committee and the public. Websites with information on adjustment procedures, adjustment applications, review, findings and approved adjustment have also been updated. In addition, CEIP provides its users with an online interactive data viewer⁴ that can help with the analysis and visualization of officially reported emissions data submitted by countries under the Convention.

15. *Emissions per capita and emissions per gross domestic product (GDP)* – These indicators are calculated for all Parties that submit total national emissions of main pollutants, PM, heavy metals and POPs by using information on population and GDP available from the World Bank Group database.⁵ Significant differences are observed across Parties and years.

II. Technical review of inventories

16. *Main objective* – The main objective of the technical review of inventories is to assist countries in improving their data for the next reporting round. All inventories submitted by Parties were tested via RepDab⁶ and imported into the CEIP central database. As a next step, a technical review of all inventories was carried out. At each stage of the review, Parties had the opportunity to clarify issues and to provide additional information. The process is seen by Parties as valuable and feedback is provided to CEIP by means of email communications and during TFEIP meetings.

17. *Initial (Stages 1 and 2) review* – The findings of the initial review were communicated to the national designated experts through the country-specific status and assessment reports in March and May. An overview of the findings for the stage 1 and 2 reviews is summarized in the forthcoming “Inventory Review 2022”,⁷ to be made available on the CEIP website.

18. *In-depth (stage 3) review* – The in-depth review of inventories supports Parties in compiling and submitting high quality inventories and increases confidence in the data used for air pollution modelling. Resources are required from the expert review team, the reviewed Parties and CEIP. It is estimated that members of the expert review team devote about 10 to 15 days to their tasks, which include preparation, questions for the Parties, participation in the review meeting and follow-up activities, including finalizing the country review reports.

³ Available at www.ceip.at/iir-awards.

⁴ Available at www.ceip.at/data-viewer.

⁵ Available at <https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.KD> and <https://data.worldbank.org/indicator/SP.POP.TOTL>.

⁶ Available at www.ceip.at/repdab.

⁷ Sabine Schindlbacher and others, *Inventory Review 2022: Review of emission data reported under the LRTAP Convention and NEC Directive*, Centre on Emission Inventories and Projections Technical Report No. 3/2022 (Vienna, Environment Agency Austria, 2022) (forthcoming).

CEIP coordinates the entire process, while the review team has full responsibility for findings and recommendations.

19. Parties are expected to nominate review experts to the EMEP roster and provide sufficient resources to enable their participation in the process. One hundred and eleven reviewers from 29 Parties⁸ are listed on the CEIP roster of inventory review experts.⁹ The nominated experts are suitably qualified to review submitted inventories.

20. During the first and second review rounds (respectively, 2008–2012 and 2013–2017), 44 Parties were reviewed in each round. Reviewers identified areas for improvement in all the inventories that were checked. The Parties had an opportunity to provide comments before the reports were published. The results are posted on the CEIP website.¹⁰

21. During the third review round (2018–2021), 21 Parties were reviewed. The updated long-term plan for in-depth (stage 3) reviews for the period 2018–2021 was approved by the EMEP Steering Body at its sixth joint session with the Working Group on Effects (Geneva, 14–17 September 2020)¹¹ and focuses on Parties not member States of the European Union. It reflects review activities under the European Union National Emission Ceilings Directive¹² and, in order to minimize duplication of work, focuses on non-European Union countries, including in Eastern Europe, the Caucasus and Central Asia.

22. Submission of emissions data and an informative inventory report is a prerequisite for a Party to be included in the stage 3 in-depth review.¹³ For further details and results of the review, see previous CEIP status reports to the EMEP Steering Body and the country reports, which are available online.¹⁴

23. Paragraph 7 (c) of the annex to Executive Body decision 2018/1 on updated methods and procedures for the technical reviews of air pollutant emission inventories reported under the Convention states that stage 3 reviews may be annual centralized reviews or ad hoc reviews. In 2022, an ad hoc review was performed: for all Parties that provided an informative inventory report the sectors residential heating and road transport with a special focus on the condensable component of PM emissions were reviewed. In addition, a follow-up review was performed for the Parties reviewed in 2021 (Kazakhstan, Liechtenstein, Monaco and Montenegro). This plan was approved by the EMEP Steering Body at its seventh joint session with the Working Group on Effects (online, 13–16 September 2021).¹⁵ Further to the country reports, a report summarizing the main findings of the review will be compiled, also including an overview of the emission factors used.

24. Plans for the review in 2023 were discussed at the annual meeting of TFEIP (online, 9–12 May 2022) and will be decided at the eighth joint session (Geneva, 12–16 September 2022). Proposed options are: a full in-depth review of a subset of Parties, such as in previous review rounds; or, a review dedicated to a certain topic (ad hoc review). Proposed topics are: a review of gridded data; a review of projections; a review of ammonia (NH₃) emissions from agriculture; or a review of uncertainty estimates.

25. A total of 22 experts accepted the invitation to join the in-depth review for 2022: 3 from the United Kingdom of Great Britain and Northern Ireland, 2 each from Albania, Austria, the European Union, the Netherlands, North Macedonia, Poland and Serbia; and 1 each from Croatia, Finland, France, Portugal and Türkiye. The review began in mid–April

⁸ Albania, Armenia, Austria, Belgium, Croatia, Czechia, Denmark, Estonia, the European Union, Finland, France, Germany, Greece, Ireland, Italy, Kazakhstan, Latvia, the Netherlands, North Macedonia, Norway, Poland, Portugal, the Russian Federation, Serbia, Slovakia, Spain, Sweden, Türkiye and the United Kingdom of Great Britain and Northern Ireland.

⁹ See www.ceip.at/fileadmin/inhalte/ceip/3_review/0_roster_2020.pdf.

¹⁰ See www.ceip.at/review-of-emission-inventories/in-depth-review-of-ae-inventories.

¹¹ See ECE/EB.AIR/GE.1/2020/2–ECE/EB.AIR/WG.1/2020/2, para. 44 (f).

¹² Directive (EU) 2016/2284 of the European Parliament and of the Council of 14 December 2016 on the reduction of national emissions of certain atmospheric pollutants, amending Directive 2003/35/EC and repealing Directive 2001/81/EC, *Official Journal of the European Union*, L 344 (2016), pp. 1–31.

¹³ See Executive Body decision 2018/1, annex, para. 17.

¹⁴ See: www.ceip.at/ms/ceip_home1/ceip_home/review_process/stage3_country_reports/index.html.

¹⁵ ECE/EB.AIR/GE.1/2021/2–ECE/EB.AIR/WG.1/2021/2, para. 43 (d).

and country reports should be completed and published before the forty-second session of the Executive Body (Geneva, 12–16 December 2022).

III. Emission data for modellers

26. *Gap-filled and gridded data sets* – Gap-filled and gridded data sets for main pollutants and PM for the years 1990–2020 and for heavy metals and POPs for 2020 will be calculated in June 2022.

27. Where sufficient reported data are not available or data have to be replaced, expert estimates (from, e.g., the Greenhouse Gas and Air Pollution Interactions and Synergies model (GAINS, ECLIPSE v6b data set), the Global Mercury Assessment 2018, the POPCYCLING-Baltic project or the Global atmospheric emission inventory of polycyclic aromatic hydrocarbons) will be used for gap-filling. The gap-filling and gridding will be done on aggregated sectors (Gridding Nomenclature for Reporting 14) in 0.1° x 0.1° longitude/latitude grid resolution, based on the gridding system developed by CEIP. The gap-filling methods are documented in CEIP technical reports Nos. 01/2022, 02/2022 and 03/2022 (forthcoming) and are published on the CEIP website.¹⁶

28. Gap-filled and gridded emission data will be distributed to the modellers and should be publicly accessible on the CEIP website in summer 2022. In addition, a list with Parties that clearly document that the condensable component is included in the PM emission estimates for the residential heating sector will be prepared. This list will also consider the outcome of the in-depth review.¹⁷

29. *Shipping emissions* – Emissions for the sea regions were calculated using the Copernicus Atmosphere Monitoring System global ship data set for the years 2014–2020 (Finnish Meteorological Institute, 2021), provided via Emissions of atmospheric Compounds and Compilation of Ancillary Data; CAMS_GLOB_SHIP (v3.1 model version: STEAM 3.5.4 (updated 4 November 2021); yearly basis, total TG).¹⁸

IV. Gridding system in 0.1 x 0.1 longitude/latitude resolution

30. The gridding system in higher spatial resolution (0.1° x 0.1°) developed by CEIP is module-based and uses reported gridded emission data as a first step. Where no reported gridded data in the 0.1° x 0.1° resolution are available, Copernicus Atmosphere Monitoring System and Emission Database for Global Atmospheric Research proxies are used and upgraded by point source information available from the European Industrial Emissions Portal.¹⁹ The system also uses global shipping emissions from the Finnish Meteorological Institute. Those emissions are modelled using the Ship Traffic Emission Assessment Model, which is based on automatic identification system tracking data.

31. *Update of historical emissions* – In 2022, gridded data for the whole time series from 1990 to 2020 will be prepared for main pollutants. For heavy metals and POPs, gridded data for the year 2020 will be prepared.

V. Review of submitted adjustment applications

32. Denmark, France, the Netherlands and the United Kingdom of Great Britain and Northern Ireland submitted new adjustment applications to the secretariat in 2022. The amended Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol) requires Parties to demonstrate compliance with emission reduction commitments for 2020 onwards. Inventory adjustments that are applicable to emission

¹⁶ See www.ceip.at/ceip-reports.

¹⁷ Emissions as used in EMEP models, available at www.ceip.at/webdab-emission-database/emissions-as-used-in-emep-models.

¹⁸ See <https://eccad.aeris-data.fr>.

¹⁹ See <https://industry.eea.europa.eu/>

reduction commitments (rather than ceilings) require different considerations and the submission of additional supporting information. A guidance document was prepared by TFEIP and CEIP in January 2022 and a new reporting template has been developed (annex IIa to ECE/EB.AIR/130).²⁰ Approved adjustments reported in previous years in annex VII have been imported into the website tool,²¹ where all information is documented. New adjustments reported in annex IIa will be imported into the website tool in summer 2022. All submitted applications will be reviewed by the expert review team in May and June 2022 and recommendations to the EMEP Steering Body are provided in a special status report on adjustments.²² The activity was covered by EMEP mandatory contributions.

VI. Updating Guidelines for reporting emissions and projections data under the Convention

33. CEIP sent comments to the Guidelines for Reporting Emissions and Projections Data under the Convention (ECE/EB.AIR/125) to TFEIP, and the comments and the updates of the Guidelines were discussed at the annual TFEIP meeting (online, 9–12 May 2022). TFEIP, with a contribution from CEIP, will finalize the update of the Guidelines.

34. The European Commission organized a workshop on “Condensables in Air Convention reporting” in cooperation with the EMEP Steering Body and CEIP (Brussels, 26–27 April 2022). The workshop was attended (remotely, or in person) by approximately 90 experts from 36 Parties. The workshop identified several points that should be followed up by the Ad hoc group on condensables and TFEIP. The conclusions of the workshop will be circulated to participants in summer 2022.

VII. Conclusions

35. *Timeliness and completeness* – In 2022, 47 Parties submitted their inventories. While the completeness of information on the priority pollutants is relatively good and is improving, not all Parties reported (voluntary) additional heavy metals, BC and activity data. The persisting problem with data completeness and quality, particularly in the eastern part of the EMEP domain, could not be resolved. The capacity-building and awareness-raising programme of the United Nations Economic Commission for Europe (ECE) in countries of Eastern Europe, the Caucasus and Central Asia and the Western Balkans seeks to improve the situation.

36. *Missing reporting* – Bosnia and Herzegovina has not to date reported any emission data to CEIP. Azerbaijan and the Republic of Moldova did not submit any data in 2022. Several times a year, CEIP provides the Implementation Committee under the Convention with detailed information on how the Parties to the Protocols to the Convention are fulfilling their reporting obligations.

37. *Gridded data and large point sources* – Gridded and large point sources are part of the quadrennial reporting obligation. Reporting was not due in 2022. In the 2022 reporting round, three Parties submitted gridded data and large point source data.

38. *Recalculations of emissions. Uncertainty* – The review of submitted inventories still identifies significant recalculations every year. This fact seems to indicate relatively high uncertainty of emission estimates at the sectoral or country level. However, only roughly half of the Parties provide quantitative information on uncertainty estimates. Currently, it is not possible to use the information provided for the calculation of the uncertainty of the emissions in the EMEP domain.

39. *Stage 3 in-depth reviews* – CEIP will organize the 2022 stage 3 review and adjustment review as a remote desk and in-person centralized review in Vienna in 2022 by reviewing the residential heating and road transport sectors, with a special focus on the condensable

²⁰ See www.ceip.at/technical-guidance-adjustments-erc.

²¹ See www.ceip.at/gothenburg-protocol/adjustment-tool.

²² See www.ceip.at/gothenburg-protocol/review-of-adjustments.

component of PM emissions for all 40 Parties that submitted an informative inventory report before the start of the review. In addition, a follow-up review will be performed for the Parties reviewed in 2021 (Kazakhstan, Liechtenstein, Monaco and Montenegro). While most of the Parties reviewed clearly recognize the value of the review process in terms of improving the quality of their national inventories, difficulties are often encountered when EMEP requests complete inventory data and relevant explanatory information in a transparent format.

40. *Review of adjustment applications* – The assessment of adjustment applications submitted by 4 Parties in 2022 will be organized in line with Executive Body decisions 2012/3, 2012/12 and 2014/1. Details on the process and findings are provided in document ECE/EB.AIR/GE.1/2022/10–ECE/EB.AIR/WG.1/2022/21.

41. *Resource limitations* – A persistent key constraint for both reviews is the limited nature of the resources provided to invited experts by Parties. Each year, a subset of the nominated experts cannot accept the invitation owing to technical issues or lack of resources. EMEP may wish to consider how to financially support the participation in the review process of experts from countries of Eastern Europe, the Caucasus and Central Asia and the Western Balkans. The European Environment Agency covered the travel costs of seven experts (from Czechia, Estonia, Greece, Kazakhstan and Latvia) and two trainees (from North Macedonia and Serbia) during the period 2010–2012, and of one expert from North Macedonia in 2018, in order to enable them to participate in stage 3 reviews. The European Union provided financial support in terms of travel and accommodation for seven experts from the Western Balkans and Türkiye attending the review meeting in 2022, via a European Union neighbourhood programme. The continuation of this support would be greatly appreciated.

42. *The gridding system* – The production of gridded data in high resolution ($0.1^\circ \times 0.1^\circ$, World Geodetic System 1984 (a geographic coordinate system)) requires a huge amount of annual gap-filling and gridding work on the part of CEIP and to do this in the limited time period between the submission of data (15 March for inventory data and 1 May for gridded data) and the deadline for the production of gridded data (May) is a big challenge.

43. *Increasing reliability of gridded data* – In order to increase the reliability of emission data for modellers, it is extremely important that those Parties that did not submit gridded data in the $0.1^\circ \times 0.1^\circ$ resolution in 2021 or 2022 do so in 2023. It is also important that Parties regularly update their gridded emissions for the years 1990 and 1995 (voluntary), 2000, 2005, 2010, 2015 and 2019, as encouraged in the Reporting Guidelines²³ and invited to do in the fifth joint session of the Steering Body to EMEP and the Working Group on Effects (Geneva, 9–13 September 2019).²⁴

²³ See ECE/EB.AIR/125, para. 47.

²⁴ See ECE/EB.AIR/GE.1/2019/2–ECE/EB.AIR/WG.1/2019/2, para. 24.

Annex

Status of emission reporting by Parties as at 18 May 2022

Party	Annual reporting submission date				Quadrennial reporting submission date			Adjustments
	Annex I	Latest resubmission	IIR	Notification form	Projections	Gridded data	Large point sources	New adjustment application
Albania	15 Feb. 2022							
Armenia	23 Feb. 2022		14 May 2022	X				
Austria	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Azerbaijan								
Belarus	15 Feb. 2022		15 Mar. 2022					
Belgium	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Bosnia and Herzegovina								
Bulgaria	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Canada	15 Feb. 2022		15 Mar. 2022	X	15 Mar. 2022			
Croatia	14 Feb. 2022		10 Mar. 2022	X				
Cyprus	14 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Czechia	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Denmark	15 Feb. 2022		15 Mar. 2022	X				X
Estonia	11 Feb. 2022	16 Mar. 2022	15 Mar. 2022	X				
European Union	28 Apr. 2022			X				
Finland	14 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X	15 Mar. 2022	1 May 2022	28 Apr. 2022	

Party	Annual reporting submission date				Quadrennial reporting submission date			Adjustments
	Annex I	Latest resubmission	IIR	Notification form	Projections	Gridded data	Large point sources	New adjustment application
France	11 Feb. 2022		15 Mar. 2022	X				X
Georgia	10 Feb. 2022	05 May 2022	5 May 2022	X				
Germany	8 Feb. 2022			X				
Greece	18 Feb. 2022		15 Mar. 2022	X				
Hungary	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Iceland	14 Feb. 2022		8 Mar. 2022	X				
Ireland	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X	13 Apr. 2022			
Italy	15 Feb. 2022	15 Mar. 2022	22 Mar. 2022	X				
Kazakhstan	10 Feb. 2022	30 Mar. 2022	14 Mar. 2022		14 Mar. 2022			
Kyrgyzstan								
Latvia	15 Feb. 2022	13 Apr. 2022	15 Mar. 2022	X				
Liechtenstein	30 Mar. 2022							
Lithuania	15 Feb. 2022		16 Mar. 2022	X				
Luxembourg	11 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Malta	14 Feb. 2022	29 Mar. 2022	29 Mar. 2022					
Monaco	15 Feb. 2022		15 Mar. 2022	X	15 Mar. 2022	15 Feb. 2022	15 Feb. 2022	
Montenegro	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Netherlands	15 Feb. 2022	15 Mar. 2022	28 Mar. 2022	X				X
North Macedonia	14 Feb. 2022	07 Mar. 2022		X				
Norway	11 Feb. 2022	08 Mar. 2022	15 Mar. 2022	X	15 Mar. 2022			

Party	Annual reporting submission date				Quadrennial reporting submission date			Adjustments
	Annex I	Latest resubmission	IIR	Notification form	Projections	Gridded data	Large point sources	New adjustment application
Poland	9 Feb. 2022		14 Mar. 2022	X				
Portugal	15 Feb. 2022	15 Mar. 2022	15 Feb. 2022	X				
Rep. of Moldova								
Romania	15 Feb. 2022	15 Mar. 2022	12 Mar. 2022	X				
Russian Federation	15 Feb. 2022		15 Feb. 2022	X				
Serbia	14 Feb. 2022	13 Apr. 2022	15 Mar. 2022	X				
Slovakia	15 Feb. 2022	15 Mar. 2022	15 Mar. 2022	X				
Slovenia	5 Feb. 2022		12 Mar. 2022	X				
Spain	15 Feb. 2022	14 Mar. 2022	14 Mar. 2022	X				
Sweden	14 Feb. 2022		11 Mar. 2022	X				
Switzerland	10 Feb. 2022		10 Mar. 2022		11 Feb. 2022	10 Feb. 2022	10 Feb. 2022	
Türkiye	14 Feb. 2022	14 Mar. 2022	15 Mar. 2022					
Ukraine	14 Feb. 2022	14 Mar. 2022	14 Mar. 2022					
United Kingdom	14 Feb. 2022		15 Mar. 2022	X				X
United States	15 Feb. 2022	22 Mar. 2022	16 Mar. 2022	X				

Abbreviations: IIR, informative inventory report.