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# **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**

#### **Tenth joint session**

Geneva, 9–13 September 2024 Item 5 (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 2024 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 2024–2025 workplan for the implementation of the Convention on Long-range Transboundary Air Pollution (ECE/EB.AIR/154/Add.1) and the revised mandate of the Centre (Executive Body decision 2019/14). The report reflects progress in emissions reporting under the Convention in the 2024 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 emission inventories in 2024 and the plans for the years 2025 and 2026. It also provides an overview of 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 22 May 2024.



## Introduction

- 1. At its forty-second session (Geneva, 12–16 December 2022), the Executive Body for the Convention on Long-range Transboundary Air Pollution adopted an amended version of the Guidelines for Reporting Emissions and Projections Data under the Convention on Longrange Transboundary Air Pollution (as contained in document ECE/EB.AIR/GE.1/2022/20–ECE/EB.AIR/WG.1/2022/13, as amended during the session) for application in 2024 and subsequent years through its decision 2022/1.¹ The Guidelines contain background information on the reporting requirements, deadlines and procedures for reporting emissions under the Convention and their review.
- 2. The present report reflects the progress of emissions reporting under the Convention in the 2024 reporting round (2022 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 Longrange Transmission of Air Pollutants in Europe (EMEP) in line with the 2024–2025 workplan for the implementation of the Convention (ECE/EB.AIR/154/Add.1). The report also outlines progress in improving the gridding system.
- 3. The report was prepared by the EMEP Centre on Emission Inventories and Projections (CEIP), which is hosted by the Environment Agency Austria. The CEIP was established by the Executive Body of the Convention at its twenty-fifth session<sup>2</sup> (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, 49 had submitted data as at 22 May 2024. All countries reported data in the standard formats (i.e. the Nomenclature for Reporting). No data were received from Bosnia and Herzegovina and the Republic of Moldova. An up-to-date overview of the data submitted by Parties during the 2024 reporting round is provided in the annex to the present document. In addition, the latest version of officially reported emission data is available on the CEIP website.<sup>3</sup> Lastly, 46 Parties also provided the secretariat with the notification form.
- 5. *Timeliness* In all, 45 Parties reported emission data by the due date of 15 February 2024 (or, in the case of the European Union, 29 April 2024) and 4 did so thereafter; 21 Parties resubmitted data, with the most recent provided on 7 May 2024; 40 Parties submitted informative inventory reports by the deadline of 15 March 2024 (or, in the case of the European Union, 30 May 2024) and 7 did so thereafter.
- 6. *Uncertainty* In total, 24 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 A total of 49 Parties submitted inventories for 2022 for the main pollutants  $NO_x$  and  $SO_x$  and 48 for all main pollutants and particulate matter (PM) and 47 did the same for cadmium, mercury and lead emissions; 46 Parties submitted inventories for priority persistent organic pollutants (POPs); and 41 did the same for additional heavy metals. Activity data for 2022 were reported by 43 Parties.
- 8. Black carbon (BC) In all, 43 Parties reported BC emissions (on a voluntary basis) for 2022 and 41 of them submitted emission time series (at least 1990–2022) in 2024.
- 9. Gridded data Gridded data are part of the quadrennial reporting obligation that was not due in 2024. In 2017, 27 Parties reported gridded data, at least for 2015, for the first time in the  $0.1^{\circ}$  x  $0.1^{\circ}$  longitude/latitude resolution; 35 Parties submitted gridded data in this

<sup>&</sup>lt;sup>1</sup> All Executive Body decisions referred to in the present document are available at https://unece.org/decisions.

<sup>&</sup>lt;sup>2</sup> See ECE/EB.AIR/91, para. 27 (f).

<sup>&</sup>lt;sup>3</sup> Available at www.ceip.at/status-of-reporting-and-review-results/2023-submission.

resolution in 2021, while only 12 of them provided updates on historical years; 4 Parties submitted gridded data in 2024.

- 10. Large point source data Large point source data are also part of the quadrennial reporting obligation that was not due in 2024. In 2017, 35 Parties submitted data for at least 2015. In 2021, 36 Parties submitted information on large point sources; 4 Parties submitted information on large point source data in 2024.
- 11. *Documentation* In all, 96 per cent of the Parties that submitted air emission inventory data also submitted informative inventory reports in 2024. 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 the CEIP website.<sup>4</sup>
- 12. *Projections* The year 2024 is not a reporting year for projections (quadrennial reporting obligation that started in 2015). Emission projections for at least 2025 and 2030 were submitted or updated by 7 Parties.
- 13. Condensables In 2024, information on the inclusion of the condensable component in emission factors for PM was submitted by 23 Parties. This number has remained fairly stable in recent years.
- 14. Access to the information CEIP makes the Parties' submissions accessible on its website and regularly updates the WebDab emission database and the online interactive data viewer,<sup>5</sup> which can be used to analyse and visualize officially reported emissions data submitted by countries under the Convention. Since 2023, it has been possible to view the reported data at the Nomenclature for Reporting level (around 140 source categories). In addition, CEIP provides information on reporting instructions, the in-depth review, adjustment procedures and adjustment applications on its website.
- 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.<sup>6</sup> 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 RepDab<sup>7</sup> 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 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 1–2) review* The findings of the initial review were communicated to the national designated experts through the country-specific status and assessment reports in March. An overview of the findings for the stage 1 and 2 reviews is summarized in the forthcoming "Inventory Review 2024", 8 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 10–15 days to their tasks, which include preparation, questions for the Parties, participation in the

<sup>&</sup>lt;sup>4</sup> Available at www.ceip.at/iir-awards.

<sup>&</sup>lt;sup>5</sup> Available at www.ceip.at/data-viewer.

<sup>&</sup>lt;sup>6</sup> Available at https://data.worldbank.org/indicator/NY.GDP.MKTP.PP.KD and https://data.worldbank.org/indicator/SP.POP.TOTL.

<sup>&</sup>lt;sup>7</sup> Available at www.ceip.at/repdab.

<sup>&</sup>lt;sup>8</sup> EMEP/CEIP Technical Report 04/2024, *Inventory Review 2024* (forthcoming).

review meeting and follow-up activities, including finalizing the country review reports. CEIP coordinates the entire process, while the review team has full responsibility for findings and recommendations.

- 19. *EMEP roster of review experts* Parties are expected to nominate review experts to the EMEP roster and provide sufficient resources to enable their participation in the process. In all, 130 experts from 31 Parties<sup>9</sup> are listed on the CEIP roster of inventory review experts. The nominated experts are suitably qualified to review submitted inventories.
- 20. Previous review rounds For details and results of the first and second review rounds (respectively, 2008–2012 and 2013–2017) and the third review round (2018–2021), see previous CEIP status reports to the EMEP Steering Body and the country reports, which are available online.<sup>10</sup>
- 21. Stage 3 review 2022–2023 In 2022, the stage 3 review addressed the residential heating and road transport sectors, with a special focus on the condensable component of PM emissions. In 2023, an ad hoc review was performed: agriculture sector emissions, with a special focus on ammonia (NH<sub>3</sub>), non-methane volatile organic compounds (NMVOCs), nitrogen oxides (NO<sub>x</sub>) and fine particulate matter (PM<sub>2.5</sub>). In 2023, for the first time, gridded data for the agriculture sector were reviewed. The results of the reviews performed in 2022 and 2023 were documented in the country reports.<sup>11</sup>
- 22. Stage 3 review 2024 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 2024, an ad hoc review was performed: for all Parties within the EMEP region that had provided a submission before the start of the review there was a review of the sector industrial processes and product use solvents, with a special emphasis on NMVOC emissions including gridded data. In total, inventory submissions of 47 Parties were reviewed. The results of the review will be documented in the country reports. A chapter summarizing the main findings will be included in the forthcoming "Inventory Review 2024".<sup>12</sup>
- 23. A total of 20 experts accepted the invitation to join the in-depth review for 2024: 2 each from Austria, Serbia and the United Kingdom of Great Britain and Northern Ireland and 1 each from Albania, Armenia, Belgium, Croatia, the European Union, Finland, France, Georgia, Germany, the Netherlands, North Macedonia, Norway, Poland and the Republic of Moldova. The review began in mid-April and country reports should be completed and published before the forty-fourth session of the Executive Body (Geneva, 9–12 December 2024).
- 24. Stage 3 review 2025–2026 At their ninth joint session, the Steering Body and the Working Group approved the plan for the ad hoc (in-depth) reviews for the years 2024–2026:
- (a) 2024: Review of the sector, the industrial processes and product use –solvents, with a special emphasis on NMVOC emissions, including gridded data;
  - (b) 2025: Review of projections with clearly defined scope;
- (c) 2026: Review of the transport sector with a special focus on NOx, NMVOCs, carbon monoxide (CO), PM, BC, lead (Pb), cadmium (Cd) and dioxin/furan emissions, including gridded data.

<sup>&</sup>lt;sup>9</sup> Albania, Armenia, Austria, Belgium, Croatia, Czechia, Denmark, Estonia, the European Union, Finland, France, Georgia, Germany, Greece, Ireland, Italy, Kazakhstan, Latvia, the Netherlands, North Macedonia, Norway, Poland, Portugal, the Republic of Moldova, the Russian Federation, Serbia, Slovakia, Spain, Sweden, Türkiye and the United Kingdom of Great Britain and Northern Ireland.

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

<sup>11</sup> See www.ceip.at/status-of-reporting-and-review-results/2024-submission.

<sup>&</sup>lt;sup>12</sup> EMEP/CEIP Technical Report 04/2024, *Inventory Review 2024* (forthcoming).

25. Plans for the review from 2027 onwards were discussed at the TFEIP annual meeting (Dessau, Germany, 14–16 May 2024). A poll during the meeting confirmed that the majority of the participants <sup>13</sup> welcomed the approach of focusing on sectors. Slightly over 50 per cent of participants supported the idea of reviewing inventories of low quality more frequently and the vast majority of participants welcomed the idea of organizing in-country reviews for countries where inventories need major improvement. The idea of reviewing the "National Inventory System" was also supported by the majority of participants. In addition, a number of issues were identified for in-depth review. Based on the results of the poll, CEIP will develop proposals for the organization of inventory reviews from 2027 onwards before the joint session of the Steering Body and the Working Group in 2025.

## III. Emission data for modellers

- 26. Gap-filled and gridded data sets Gap-filled and gridded data sets for the main pollutants and PM for the years 1990–2022 and for heavy metals and POPs for 2022 were calculated in May and June 2024. The gap-filling and gridding was done on aggregated sectors (Gridding Nomenclature for Reporting 14) with a grid resolution of 0.1° x 0.1° longitude/latitude grid resolution, based on the gridding system developed by CEIP.
- 27. Where reported data were not available or the data quality was insufficient, gap-filling was carried out. The gap-filling methods are documented in CEIP Technical Reports Nos. 01/2024 and 02/2024 (forthcoming) and are published on the CEIP website.<sup>14</sup>
- 28. The higher spatial resolution (0.1° x 0.1°) gridding system developed by CEIP is module-based and uses reported gridded emission data as a first step. Where reported gridded data at 0.1° x 0.1° resolution are not available, proxies from the Copernicus Atmosphere Monitoring Service (CAMS) and the Emission Database for Global Atmospheric Research are used and upgraded by point source information available from the European Industrial Emissions Portal. The gridding system developed by CEIP also uses global shipping emissions from the Finnish Meteorological Institute. These emissions are modelled using the Ship Traffic Emission Assessment Model, which is based on Automatic Identification System tracking data.
- 29. Shipping emissions Emissions for the sea regions were calculated using the CAMS global ship data set for the years 2000–2022 (Finnish Meteorological Institute, 2022), provided via Emissions of Atmospheric Compounds and Compilation of Ancillary Data; CAMS\_GLOB\_SHIP v3.2 (updated at ECCAD 4 February 2023) annual basis, total teragram. <sup>16</sup> This year, the following changes were made to the consolidation of shipping emissions.
- 30. CAMS-GLOB-SHIP EC emissions were assumed 1:1 to be emissions BC 1:1. Previously, BC emissions had been estimated from CAMS-GLOB-SHIP emissions of PM<sub>2.5</sub> using PM<sub>2.5</sub>: BC shipping ratios from GAINS. SO<sub>x</sub> emissions were calculated by aggregating the CAMS-GLOB-SHIP SO<sub>2</sub> and SO<sub>4</sub> emissions, while PM<sub>2.5</sub> emissions were calculated by aggregating the CAMS-GLOB-SHIP Ash, elemental carbon (EC) and organic carbon (OC) emissions.
- 31. Access to gridded data Gap-filled and gridded emission data will be distributed to the modellers and should be publicly available on the CEIP website in summer 2024.<sup>17</sup> In addition, a list of Parties clearly documenting that the condensable component is included in the PM emission estimates for the residential heating sector will be prepared.
- 32. *Improvement of gridded data* In the autumn of 2024, new data sources will be explored to improve the spatial distribution of emissions and to ensure consistency across

<sup>&</sup>lt;sup>13</sup> About 65 participants took part in the poll held during the TFEIP meeting.

<sup>&</sup>lt;sup>14</sup> See www.ceip.at/ceip-reports.

<sup>15</sup> See https://industry.eea.europa.eu/.

<sup>&</sup>lt;sup>16</sup> See https://eccad.sedoo.fr/#/metadata/462; download 19 March 2024.

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

pollutants. In addition, a comparison of EMEP gridded emissions with other sources (CAMS, Greenhouse Gas-Air Pollution Interactions and Synergies (GAINS), Emissions Database for Global Atmospheric Research (EDGAR)) is planned.

## IV. Review of submitted adjustment applications

- 33. Review of adjustment applications Czechia and Denmark submitted new adjustment applications to the secretariat in 2024. Denmark, France, the Netherlands and the United Kingdom of Great Britain and Northern Ireland submitted previously approved adjustment applications to the secretariat in 2024. 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. All submitted applications will be reviewed by the expert review team in May and June 2024 and recommendations to the EMEP Steering Body are provided in a special status report on adjustments.<sup>18</sup>
- 34. *Adjustment tool* Approved adjustments reported in previous years have been imported into a website tool, <sup>19</sup> where all information is documented.

## V. Conclusions

- 35. Timeliness and completeness In 2024, 49 Parties submitted their inventories. This is the highest number since the start of reporting on air emissions under the Convention. While the completeness of information on priority pollutants is relatively good and improving, not all Parties reported activity data and (voluntarily) additional data on heavy metals and BC. The continuing problem of data completeness and quality, particularly in the eastern part of the EMEP area, has not been resolved but the situation is improving. 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 aims to improve the situation.
- 36. *Missing reporting* Bosnia and Herzegovina has not to date reported any emission data to CEIP. The Republic of Moldova did not submit any data in 2024. Twice 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 2024. In the 2024 reporting round, 4 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 approximately 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 organized the 2024 stage 3 review and adjustment review as a remote desk and in-person centralized review in Vienna by reviewing the sector industrial processes and product use solvents with a special emphasis on NMVOC emissions including gridded data for all 47 Parties that submitted an inventory before the start of the review.
- 40. Review of adjustment applications The assessment of new (2 Parties) and previously approved (4 Parties) adjustment applications submitted in 2024 was 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–WG.1/2024/INF.6.

<sup>&</sup>lt;sup>18</sup> ECE/EB.AIR/GE.1-WG.1/2024/INF.6

<sup>&</sup>lt;sup>19</sup> See www.ceip.at/gothenburg-protocol/adjustment-tool.

- 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. The EMEP Steering Body 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, as well as from countries of the Western Balkans. The travel/accommodation for four experts from the Western Balkans region and three experts from the Eastern Europe, the Caucasus and Central Asia region were supported by two European Union-funded projects. The continuation of such support would be greatly appreciated.
- 42. 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° x 0.1° resolution in 2021, 2022, 2023 or 2024 do so in 2025. Parties are encouraged to update their gridded data and report annually where changes in spatial patterns have occurred, so that the EMEP models can represent the most up-to-date information.<sup>20</sup>

Guidelines for Reporting Emissions and Projections Data under the Convention on Long-range Transboundary Air Pollution (as contained in document ECE/EB.AIR/GE.1/2022/20–ECE/EB.AIR/WG.1/2022/13, as amended during the session) for application in 2024 and subsequent years through its decision 2022/1.

Annex
Status of emission reporting by Parties as at 22 May 2024

	Annual reporting	Annual reporting submission date				orting submission da	Adjustments		
Party	Annex I	Latest resubmission	IIR	Notification form	Projections	Gridded data	Large point sources	New adjustment application	Previously approved adjustment application
Albania	15 Feb. 2024		15 Mar. 2024	X					
Armenia	7 Feb. 2024		9 Mar. 2024	X					
Austria	15 Feb. 2024	14 Mar. 2024	14 Mar. 2024	X					
Azerbaijan	14 Feb. 2024			X					
Belarus	12 Feb. 2024		16 May 2024	X					
Belgium	15 Feb. 2024	15 Mar. 2024	15 Mar. 2024	X					
Bosnia and Herzegovina									
Bulgaria	15 Feb. 2024	15 Mar. 2024	15 Mar. 2024	X					
Canada	15 Feb. 2024		15 Mar. 2024	X	15 Feb. 2024				
Croatia	30 Jan. 2024		8 Mar. 2024	X	26 Feb. 2024				
Cyprus	14 Feb. 2024	14 Mar. 2024	14 Mar. 2024	X					
Czechia	15 Feb. 2024	14 Mar. 2024	15 Mar. 2024	X				16 Feb. 2024	
Denmark	15 Feb. 2024		15 Mar. 2024	X				15 Feb. 2024	19 Feb. 2024

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	Annual reporting submission date				Quadrennial repo	orting submission da	Adjustments		
Party	Annex I	Latest resubmission	IIR	Notification form	Projections	Gridded data	Large point sources	New adjustment application	Previously approved adjustment application
Estonia	13 Feb. 2024	14 Mar. 2024	14 Mar. 2024	X					
European Union	16 Apr. 2024		16 Apr. 2024	X					
Finland	14 Feb. 2024		15 Mar. 2024	X	15 Mar. 2024	30 Apr. 2024	30 Apr. 2024		
France	9 Feb. 2024		13 Mar. 2024	X					9 Feb. 2024
Georgia	15 Feb. 2024	07 May 2024	7 May 2024	X					
Germany	14 Feb. 2024		15 Mar. 2024	X					
Greece	13 Feb. 2024		15 Mar. 2024	X					
Hungary	16 Feb. 2024	19 Apr. 2024	19 Apr. 2024	X					
celand	16 Feb. 2024	15 Mar. 2024	15 Mar 2024	X					
reland	15 Feb 2024		15 Mar 2024	X	15 Mar 2024				
Italy	15 Feb 2024	30 Apr 2024	15 Mar 2024	X					
Kazakhstan	14 Feb 2024		15 Feb 2024	X					
Kyrgyzstan	14 Feb 2024								
Latvia	15 Feb 2024	15 Mar 2024	15 Mar 2024	X					
Liechtenstein	09 Apr 2024		12 Apr 2024	X					
Lithuania	15 Feb 2024	13 Mar 2024	15 Mar 2024	X					
Luxembourg	10 Feb 2024	14 Mar 2024	14 Mar 2024	X					
Malta	06 Feb 2024	15 Mar 2024	15 Mar 2024	X					

	Annual reporting	g submission date			Quadrennial reporting submission date			Adjustments	
Party	Annex I	Latest resubmission	IIR	Notification form	Projections	Gridded data	Large point sources	New adjustment application	Previously approved adjustment application
Monaco	13 Feb 2024		14 Mar 2024	X	13 Feb 2024	13 Feb 2023	13 Feb 2023		
Montenegro	15 Feb 2024	15 Apr 2024	15 Mar 2024	X					
Netherlands	14 Feb 2024		15 Mar 2024	X					15 Feb 2024
North Macedonia	14 Feb 2024	04 Mar 2024	12 Apr 2024	X					
Norway	05 Feb 2024		13 Mar 2024	X					
Poland	12 Feb 2024		13 Mar 2024	X					
Portugal	15 Feb 2024	15 Mar 2024	15 Mar 2024	X					
Rep. of Moldova									
Romania	14 Feb 2024	13 Mar 2024	13 Mar 2024	X					
Russian Federation	12 Feb 2024		12 Feb 2024	X					
Serbia	14 Feb 2024	21 Mar 2024	15 Mar 2024	X					
Slovakia	15 Feb 2024	15 Mar 2024	15 Mar 2024	X					
Slovenia	06 Feb 2024		13 Mar 2024	X					
Spain	14 Feb 2024		14 Mar 2024	X		26 Apr 2024	26 Apr 2024		
Sweden	16 Jan 2024		26 Feb 2024	X					
Switzerland	15 Feb 2024		15 Mar 2024	X	21 Feb 2024	15 Feb 2024	15 Feb 2024		
Türkiye	15 Feb 2024		15 Mar 2024	X					

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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	Previously approved adjustment application
Ukraine	12 Feb 2024		14 Mar 2024	X					
United Kingdom	14 Feb 2024		14 Mar 2024	X	14 Mar 2024				14 Mar 2024
United States	29 Feb 2024	22 Mar 2024	22 Mar 2024	X					

Abbreviations: IIR, informative inventory report.