

CONCRETE EXAMPLE OF

INTRODUCING A STAGED RATIFICATION APPROACH IN THE GOTHENBURG PROTOCOL

To explain how a staged ratification approach can be implemented, a concrete example is developed in this paper for illustrative purposes.

The example combines staged ratification with a separate section and a sector based approach for the EECCA countries, WB countries and Türkiye.

It also gives EECCA countries, WB countries and Türkiye the option to accept the more stringent technical requirements, applicable to the other EMEP Parties, over time (a phased approach with as first phase minimum requirements in new dedicated technical annexes that can be ratified gradually and as second phase the more stringent requirements of the updated technical annexes IV- XI).

The example is deliberately a combination of different options/approaches so as to expose the different (legal) issues that could arise from including one or the other option in a revised version of the present Gothenburg Protocol.

In a nutshell, the example in this paper involves the following

- Amending the text of the protocol allowing for a new comprehensive tailored approach for EECCA countries, WB countries and TR. This (potentially) involves amendments to articles 3 (or 3bis), 12, 13, 13bis, 14 and 15;
- Introducing more stringent emission reduction commitments in Annex II for Parties that can accept them, while allowing that emission reduction commitments for EECCA countries, WB countries and TR could be set at a later stage in this Annex (after ratification) and allowing a different base year. This would ensure that current non-Parties can ratify an amended text and Annex II within a reasonable time frame, while at the same time giving these Parties more time to improve their emission inventories, which is a prerequisite for setting meaningful emission reduction commitments;
- Retaining Technical Annexes IV-XI and updating them to more stringent levels (e.g. on the basis of current BAT associated emission levels);
- Making the updated Technical Annexes IV-XI initially applicable only to Parties other than EECCA countries, WB countries and TR. This means for:
 - EU and its 27 MS, EFTA (CH, IS, LI, NO), MC and UK (section A of Annexes);
 - CA and US (sections B and C of Annexes);
- Adding new Technical Annexes specific to EECCA countries, WB countries and TR that can be ratified gradually by these countries (at own pace) and would be structured per sector and potentially could include subsections to further distinguish requirements between these countries as needed. These Annexes would focus on key categories (with sets of minimum standards);

- Including the option for EECCA countries, WB countries and TR to accept the updated and more stringent Technical Annexes IV-XI in a second phase (possibly one at a time), after the newly added Annexes have been ratified and implemented. In the meantime, these Technical Annexes IV-XI can already serve as a benchmark/standard to aim for. The technical annexes IV-XI would thus be optional for EECCA countries, WB countries and TR, unlike for the other countries where these technical annexes would be binding after being adopted (expedited procedure) or after ratification of the revised Protocol (ratification procedure for CH, NO and US).

It includes following separate EB decisions

Applicable to all Parties

- a. EB decision amending **text and annex II**
- b. EB decision amending **annexes I and III**

Applicable to Parties other than EECCA, WB and TR

- c. EB decision for amending **annexes IV-XI**

Applicable to EECCA, WB and TR

- d. EB decision for adding **new annex XII** on limit values for emissions from power and heat plants
- e. EB decision for adding **new annex XIII** on limit values for emissions from industries
- f. EB decision for adding **new annex XIV** on limit values for emissions from medium combustion
- g. EB decision for adding **new annex XV** on limit values for emissions from road and non-road
- h. EB decision for adding **new annex XVI** on control measures for emissions from agriculture
- i. EB decision for adding **new annex XVII** on limit values for emissions from solvent use

EB decision amending text and annex II

EECCA countries, WB countries and TR will have to declare when ratifying the Gothenburg Protocol as again amended by this decision, that their ratification will only apply to the Gothenburg Protocol in its latest amended form, as not to be bound by the provisions of the Gothenburg protocol in its original form or as amended in 2012. In addition, in order not to be bound by future amendments to annexes IV and XI all at once, EECCA countries, WB countries and TR) should (may choose to) declare in their instruments of ratification of the Protocol that they do not accept the expedited procedure set out in article 13bis, paragraphs 6 and 7.

To enable a staged ratification, several articles of the Gothenburg Protocol text need to be amended, as explained below.

Decision 2025/1 Amendment of the text of and annex II to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as amended by Decision 2012/2

Article 1 Amendment

The Parties to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as amended by Decision 2012/2, meeting within the forty-fifth session of the Executive Body,

Decide to amend the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution, as amended by Decision 2012/2 (present Gothenburg Protocol), as set out in the annex to this decision:

Article 2: Relationship to the present Gothenburg Protocol

To be completed

Article 3: Entry into force

In accordance with article 13bis, paragraph 3, of the present Gothenburg Protocol, this Amendment shall enter into force on the ninetieth day after the date on which two thirds of the Parties to the present Gothenburg Protocol have deposited with the Depositary their instruments of acceptance thereof.

Annex

A. Amendments to article 3bis

Article 3bis (Flexible transitional arrangements) is replaced by the following:

“Article 3 bis

Staged approach

1. Notwithstanding article 3, paragraphs 2, 3, 5, 7 and 8 the following Parties to the Convention may apply a staged approach in applying limit values for stationary sources, mobile sources, fuels and agricultural sources: Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Russian Federation, Serbia, Türkiye and Ukraine.

2. Any Party under paragraph 1 of this article electing to apply a staged approach shall indicate in its instrument of ratification, acceptance or approval of or accession to the present Protocol that it intends to apply a staged ratification of annexes XII to XVII and does not intend to be bound by annexes IV to XI until it has deposited an instrument of acceptance of annexes IV to XI.

3. Any Party under paragraph 1 of this article electing to apply a staged approach shall apply the limit values and/or control measures specified in each of annexes XII to XVII upon deposit of an instrument of ratification, acceptance, approval or accession for each of these annexes, no later than the timescales specified in each of these annexes.”

B. Amendments to article 12

Article 12 (Annexes) reads as follows:

“The annexes to the present Protocol shall form an integral part of the Protocol”.

The following is added at the end of the sentence in article 12:

“Annexes IV to XI are [recommendatory in character] / [optional] for Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Russian Federation, Serbia, Türkiye and Ukraine. Annexes XII to XVII do not apply to Parties other than Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Montenegro, North Macedonia, Russian Federation, Serbia, Türkiye and Ukraine”.

C. Amendments to article 13

Under article 13, paragraph 1 a Party to the Convention that does not already have emission levels, ceilings and percentage emission reductions in annex II, may propose to add its name to that annex, along with the relevant levels, ceilings and percentage reductions. This procedure is quite useful for EECCA countries, WB countries and TR that still may need more time to improve their emission inventories before accepting and setting emission reduction commitments in annex II. This paragraph should be amended as adding emission ceilings (for 2010 up to 2020) no longer makes sense. It could also be amended to allow adding emission levels and emission reduction commitments with a different timing for each pollutant.

Paragraph 1 is to be replaced by the following:

“Any Party to the Convention may propose an adjustment to annex II to the present Protocol to add to it its name, together with emission levels, ~~emission ceilings~~ and percentage emission reductions for one or more pollutants”.

D. Amendments to article 13 bis

The first sentence of paragraph 3 of article 13bis is replaced by:

“Amendments to the present Protocol other than to annexes I, III and annexes XII to XVII shall be adopted by consensus of the Parties present at a session of the Executive Body, and shall, subject to article 3bis, paragraph 2 enter into force for the Parties which have accepted them on the ninetieth day after the date on which two thirds of those that were Parties at the time of their adoption have deposited with the Depository their instruments of acceptance thereof.”

New paragraphs are added to account for amendments to new technical annexes XII to XVII. Two options are provided: the expedited procedure (with opt-out option) and the ratification procedure.

Option 1: expedited procedure

New paragraphs 8 and 9 are added at the end of article 13bis as follows:

“8. Amendments to annexes XII to XVII to the present Protocol shall be adopted by consensus of the Parties present at a session of the Executive Body. On the expiry of one year from the date of its communication to all Parties by the Executive Secretary of the Commission, an amendment to any such annex shall become effective for those Parties under paragraph 1 of article 3bis which have not submitted to the Depositary a notification in accordance with the provisions of paragraph 9”.

“9. Any Party under paragraph 1 of article 3bis that is unable to approve an amendment to any of annexes XII to XVII shall so notify the Depositary in writing within 90 days from the date of the communication of its adoption. The Depositary shall without delay notify all Parties of any such notification received. A Party may at any time substitute an acceptance for its previous notification and, upon deposit of an instrument of acceptance with the Depositary, the amendment to such an annex shall become effective for that Party.”

Option 2: ratification procedure

A new paragraph 8 is added at the end of article 13bis as follows:

“8. Amendments to annexes XII to XVII to the present Protocol shall be adopted by consensus of the Parties present at a session of the Executive Body. An amendment to any of these annexes shall enter into force for any Party under paragraph 1 of article 3bis which has accepted such an amendment on the ninetieth day after the date on which that Party has deposited with the Depositary its instrument of acceptance thereof.

E. Amendments to article 14

Article 14 specifies that the present Protocol is open for signature by States that are Parties to the Convention and are listed in annex II.

Annex II to the amended Gothenburg Protocol does not list all Parties anymore that provided a signature for the original Gothenburg Protocol.

No amendments proposed at the moment, although the condition ‘listed in annex II’ could be deleted if that would be needed to allow current non-Parties to propose emission reduction commitments, pursuant to article 13, paragraph 1, after their ratification of the revised Protocol Both paragraph 2 of article 15 (conditions to be open for accession) and paragraph 2 of article 17 (conditions to entry into force) require to meet the requirements of article 14, paragraph 1 (i.a. to be listed in annex II). Potentially these provisions are considered ‘spent’.

F. Amendments to article 15

A new paragraph 5 is added at the end of article 15 as follows:

“5. A State to which article 3bis applies shall declare in its instrument of ratification, acceptance, approval or accession if it does not intend to be bound by annexes IV to XI.”

G. Amendments to Annex II

Paragraph 1 of Annex II is replaced by the following:

“The emission reduction commitments listed in the tables below relate to the provisions of article 3, paragraphs 1 and 10, and of article 3bis, of the present Protocol”.

Paragraph 3 of Annex II is replaced by the following:

“Tables 2–6 include emission reduction commitments for SO₂, NO_x, NH₃, VOCs and PM_{2.5} for 2020 up to [2035] and for [2035] and beyond. These commitments are expressed as a

percentage reduction from the 2005 emission level, or from the emission level of an alternative year between 2005 and the year of the entry into force of the Protocol for a Party and as specified by that Party upon ratification, acceptance, approval or accession

The first sentence of paragraph 4 of Annex II is replaced by the following:

“The emission estimates for 2005 or alternative year, listed in tables 2–6, are in thousands of tonnes and represent the latest best available data reported by the Parties in 2025.”

Tables 2 to 6 should list the names of all Parties to the Convention, leaving blank spaces for EECCA countries, WB countries and TR (if necessary) to fill in the base year emission levels and emission reduction percentages upon or after ratification, and possibly adding footnotes to provide further specifications/clarifications as necessary.

EB decision amending annexes I and III

Pursuant to article 13bis, paragraphs 4 and 5 amendments to annexes I and III enter into force automatically for Parties, if not objected to in time. An objection can always be reversed by a Party. New incoming Parties to the Gothenburg Protocol, like EECCA countries, WB countries and TR, would automatically also be bound by any new amendments to annexes I and III (ratification not required).

Decision 2025/2 Amendment of annexes I and III to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as amended by Decision 2012/2

Article 1 Amendment

The Parties to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as amended by Decision 2012/2, meeting within the forty-fifth session of the Executive Body,

Decide to amend annexes I and III to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution, as amended by Decisions 2012/1 and 2012/2 (present Gothenburg Protocol), as set out in the annex to this decision:

Article 2: Entry into force

In accordance with article 13bis, paragraph 4, of the present Gothenburg Protocol, this amendment shall become effective for those Parties which have not submitted a notification to the Depositary in accordance with article 13bis, paragraph 5, of the Protocol on the expiry of one hundred and eighty days from the date of its communication to all Parties by the Executive Secretary of the Commission, provided that at least sixteen Parties have not submitted such a notification.

Annex

A. Amendments to Annex I

Annex I determines critical loads and levels of acidity, the critical loads of nutrient nitrogen, the critical levels of ozone and the critical levels of particulate matter. It currently distinguishes between Parties within the geographical scope of EMEP and Parties in North America. Separate sections for EECCA countries, WB countries and TR in Annex I have not been considered in the Gothenburg Protocol review or any discussion so far, but could theoretically be established.

B. Amendments to Annex III

Annex III lists the PEMA's under the conditions laid down in article 3, paragraph 9. A PEMA can only be established for Parties whose total land area is greater than 2 million square kilometres. Of the current non-Parties, only Russia and Kazakhstan qualify because of this condition. For Russia a PEMA is already listed in Annex III. Kazakhstan could also consider the use of a PEMA under the conditions of article 3, paragraph 9.

EB decision for amending annexes IV-XI

Note that the automatic entry into force procedure pursuant to article 13bis, paragraph 7, as regards amendments of annexes IV-XI, was not accepted by CH, NO and US. Accordingly for amendments to these annexes the procedure set out in paragraph 3 of article 13bis applies for these three Parties.

New amendments to the technical annexes (updates) should adequately address the conclusions of the Gothenburg Protocol review.

Useful reference material: TFTEI background informal technical document for the Review of the Gothenburg Protocol for Industrial Processes Annexes IV, V, VI, X and XI: see [here](#)

Decision 2025/3 Amendment of annexes IV to XI to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as amended by Decision 2012/2

Article 1 Amendment

The Parties to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as amended by Decision 2012/2, meeting within the forty-fifth session of the Executive Body,

Decide to amend the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution, as amended by Decision 2012/2 (present Gothenburg Protocol), as set out in the annex to this decision:

Article 2: Relationship to the present Gothenburg Protocol

To be completed

Article 3: Entry into force

For those Parties having accepted the procedure set out in article 13bis, paragraph 7, of the present Gothenburg Protocol and have not submitted a notification to the Depositary in accordance with article 13bis, paragraph 7(a), this amendment shall become effective on the expiry of one year from the date of its communication to all Parties by the Executive Secretary of the Commission, provided that at least sixteen Parties have not submitted such a notification or have not accepted the procedure and not yet deposited an instrument of acceptance in accordance with the provisions of article 13bis, paragraph 3.

For those Parties not having accepted the procedure set out in article 13bis, paragraph 7, of the present Gothenburg Protocol, this Amendment shall, in accordance with article 13bis, paragraph 3, of the present Gothenburg Protocol, enter into force on the ninetieth day after the date on which two thirds of the Parties to the present Gothenburg Protocol have deposited with the Depositary their instruments of acceptance of amendments to the present Protocol other than to annexes I, III and XII to XVII.

Annex

A. Amendments to Annex IV

Updating the outdated limit values for SO₂ emissions from stationary sources based on emission levels associated with current and more advanced BAT, as a means to achieve the newly accepted emission reduction commitments for SO₂ set out in the amended Annex II.

B. Amendments to Annex V

Updating the outdated limit values for NO_x emissions from stationary sources based on emission levels associated with current and more advanced BAT, as a means to achieve the newly accepted emission reduction commitments for NO_x set out in the amended Annex II.

C. Amendments to Annex VI

Updating the outdated limit values for VOC emissions from stationary sources based on emission levels associated with current and more advanced BAT, as a means to achieve the newly accepted emission reduction commitments for VOC set out in the amended Annex II.

D. Amendments to Annex VII

Amending the timescales for the application of the limit values referred to in article 3 as appropriate. Alternatively, Annex VII can be deleted by specifying the timescales for the application of the limit values in each of the technical annexes separately (as is already the case for Annex IX on NH₃).

E. Amendments to Annex VIII

Updating the outdated limit values for fuels and mobile sources in line with technological developments and current/new standards.

F. Amendments to Annex IX

Updating and extending annex IX on measures for the control of NH₃ emissions from agricultural sources, which is over 20 years old and can no longer be considered to be state-of-the-art. Strengthen existing measures on, for example, manure application, manure storage and animal housing in annex IX and extend its scope (e.g., by lowering current thresholds and/or including cattle).

G. Amendments to Annex X

Updating the outdated limit values for PM emissions from stationary sources based on emission levels associated with current and more advanced BAT, as a means to achieve the newly accepted emission reduction commitments for PM set out in the amended Annex II.

H. Amendments to Annex XI

Based on TFTEI's review of the technical annexes, no significant new information was discovered that would justify updating the current requirements in Annex XI.

EB decisions for adding new annexes XII-XVII

These decisions add new Technical Annexes specific to EECCA countries, WB countries and TR, which they can ratify gradually (at their own pace). In this example, the newly added Technical Annexes are structured by sector and contain two subsections, one applicable to WB countries and another applicable to EECCA countries and TR. Other subdivisions are of course possible. The newly added Technical Annexes focus on a limited list of key sectors (sets of minimum requirements). The technical annexes to the 2012 version of the Gothenburg Protocol could be used as a reference for these sets of minimum requirements (by reducing the number of provisions and focusing on the key categories, in combination with sufficient flexibilities to avoid expensive retrofitting).

The staged ratification of these new Technical Annexes requires that the new procedure added to article 3bis by Decision 2025/1 (amending the text of and annex II to the GP) has already entered into force, so that it can be applied by the new incoming Parties (EECCA countries, WB countries and TR).

The new Technical Annexes can be negotiated and adopted at a later stage. In this example we assume that they will be adopted one year later, i.e. in December 2026.

Decision 2026/1 Addition of new annex XII to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as last amended by Decision 2025/1

Article 1 Amendment

The Parties to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone, as last amended by Decision 2025/1, meeting within the forty-fifth session of the Executive Body,

Decide to amend the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone to the Convention on Long-range Transboundary Air Pollution, as last amended by Decision 2025/1, as set out in the annex to this decision:

Article 2: Relationship to the present Gothenburg Protocol

To be completed

Article 3: Entry into force

In accordance with article 13bis, paragraph 8, of the Gothenburg Protocol as last amended in 2025, this Amendment shall enter into force for any Party under paragraph 1 of article 3bis on the ninetieth day after the date on which that Party has deposited its instrument of acceptance thereof.

Annex

A new annex XII is added as follows:

Annex XII - Limit values for emissions from power and heat plants

1. Section A applies to Albania, Bosnia and Herzegovina, North Macedonia, Montenegro and Serbia. Section B applies to Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Ukraine and Türkiye.
2. This annex specifies emission limit values for SO₂, NO_x and PM for public electricity and heat production plants with a thermal input exceeding 50 MWth. The timescales for applying these emission limit values are laid down in this annex.
 - A. Albania, Bosnia and Herzegovina, North Macedonia, Montenegro and Serbia
3. Emission limit values for large combustion plants (> 50 MW): SO₂, NO_x and PM

4. Emission limit values for large gas turbines (> 50 MW): NO_x
- B. Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Russian Federation, Ukraine and Türkiye
5. Emission limit values for large combustion plants (> 50 MW): SO₂, NO_x and PM
6. Emission limit values for large gas turbines (> 50 MW): NO_x

Decisions 2026/2 to 6 to add new annexes XIII to XVII

For new Annexes XIII to XVII, decisions similar to the decision for new Annex XII can be prepared and adopted, with for example, a focus on the following sectors and pollutants:

EB decision 2006/2 for adding **new annex XIII** on limit values for emissions from industries

- Refineries: SO₂, NO_x, PM and VOC
- Iron and steel: SO₂, NO_x and PM
- Cement industry: SO₂, NO_x and PM

EB decision 2006/3 for adding **new annex XIV** on limit values for emissions from medium combustion

- Medium combustion plants (5-50 MW): SO₂, NO_x and PM
- Stationary engines (> 1 MW): NO_x

EB decision 2006/4 for adding **new annex XV** on limit values for emissions from road and non-road

- Passenger cars and vans: NO_x, PM, HC, ...
- Heavy duty vehicles: NO_x, PM, ...
- Non-road mobile machinery: NO_x, PM, ...

EB decision 2006/5 for adding **new annex XVI** on control measures for emissions from agriculture

- Fertilizer use: NH₃
- Manure application: NH₃
- Manure storage: NH₃
- Animal housing: NH₃

EB decision for 2006/6 adding **new annex XVII** on limit values for emissions from solvent use

- Vehicle coating: VOC
- Industrial coating: VOC
- Coating manufacturing industry: VOC