

# UNECE AIR CONVENTION

## 10<sup>th</sup> TFTEI annual meeting

17 October 2024

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Policy options to revise the technical annexes to the  
amended GP

# Problems with present technical annexes? Why thorough revision needed?

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## Barriers to ratification and implementation of present GP

- Technical annexes are too complex
- Large number of requirements in technical annexes
- Requirements that demand expensive retrofitting
- Unrealistic requirements for low-income countries on sectors affecting citizens (e.g. transport, residential heating) (no unpopular measures)
- Few requirements not in line with key drivers like EU association agreements
- Uniform requirements: not compatible with wide variety of applied technologies in industrial sectors
- Inadequate flexibility provisions (additional/different flexibilities needed)

Also political, financial, institutional, regulatory, capacity and knowledge barriers

# Policy options to revise the technical annexes

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## Possible policy options

- Documents: [POD](#), [Informal Document WGSR 62](#)
- Apply following new approaches
  - Staged ratification approach
  - Phased commitment approach
  - Separate section approach
  - Sector-based approach
  - Individual commitment approach
- New approaches to be used as stand-alone approaches or in combination
- New approaches to be combined with other changes and options that can be considered for the technical annexes

# Policy options to revise the technical annexes

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- Considering new approaches with other changes / options for the TA
  - Moving (parts of) mandatory TA to non-mandatory GD
  - Include (dynamic) references to domestic legislation (EU, NA ...) in TA
  - Targeted changes to TA (e.g. removing certain ELVs, adding derogations),
  - Maintaining sets of minimum standards in the TA,
  - Focussing on (prioritizing) key categories / new installations / most cost-effective solutions; avoiding expensive retrofitting
  - Improving current flexibility provisions, adding new flexibility provisions
  - Allowing more time for decommissioning old installations (remove limits)
  - Sectoral ERCs for certain sectors/pollutants (instead of ELVs / national ERCs)

# Staged ratification approach

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Includes ratification of technical annexes (or parts of) in gradual steps, with one annex at a time, or in bundles.

Staged ratification of ELVs could be accomplished by series of separate EB amendment decisions to GP, to be ratified gradually over time, e.g.:

- Separate EB decisions amending existing annexes IV-XI  
(a separate decision for each annex or some bundled)  
(potentially with separate sections for EECCA/WB/TR, focus), or
- Separate EB decisions adding new annexes  
(a separate decision for each new annex)  
(potentially per sector / subsections / focus)

**Staged ratification of ERCs (annex II): less obvious**

- Use of adjustment procedure pursuant to article 13(1) and (2)

# Phased commitment approach

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Includes ratification of the whole Protocol at one time, with the basic obligations phased in over time (with increasing ambition) and explicitly described in the Protocol itself.

Requires setting commitments in different phases, with different target years: e.g. a first phase by 2035, a second phase by 2040

- Phased approach to ERCs (annex II) (use of adjustment procedure pursuant to article 13(1) and (2))
- Phased approach to ELVs / measures (annexes IV-VI / VIII-XI)

Challenge: setting ERCs in phases, aligned with phased in ELVs  
(pollutant versus sector)

# Separate section approach

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Currently, TA IV, V, VI, VIII, X and XI are divided into three sections: one for EMEP region, one for CA and one for US. Annex IX (NH<sub>3</sub>) only applies to EMEP region.

An option is to also provide separate section(s) or annex(es), with their own requirements, for EECCA, WB and TR.

Possible options are i.a. (can be combined with other approaches):

- Adding one separate section for EECCA, WB and TR (considered as one group) in each or some of the technical annexes
- Adding more than one separate section for EECCA, WB and TR (more than one group) in each or some of the technical annexes (more than one group)
- Adding (a) new technical annex(es) specific to EECCA, WB and TR, possibly with subsections for groups of countries / stages of commitment

# Sector-based approach

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A sector-based approach could be achieved by reorganizing the technical annexes by sector (source category) instead of by pollutant.

## Currently

- TA IV, V, VI, and X: stationary sources by pollutant (SO<sub>2</sub>, NO<sub>x</sub>, VOC, PM)
- TA IX: agricultural sources (NH<sub>3</sub>).
- TA VIII: mobile sources and fuels (multiple pollutants)
- TA XI: products (limit values for the VOC content of products)

Large preference for sector-based approach of the TA

Aligns better with sector-based practice of guidance documents, BAT, domestic legislation.

Can be combined with other approaches.



# Individual commitment approach

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An individual commitment approach for EECCA, WB and TR could be achieved in several ways.

An option is to allow each of these states to submit, upon ratification, their own emission requirements to which they can commit (supplementary to minimum requirements already included in revised GP).

These (supplementary) requirements could be mandatory or indicative and be subject to review/scrutiny or not.

- Automatic incorporation of submitted ERCs upon ratification into annex II (not subject to review)
- Automatic incorporation of submitted ELVs upon ratification into TA (not subject to review)
- Adding names and ERCs to annex II upon ratification in accordance with article 13(1) (subject to review)

# Key messages from discussions with / feedback of non-Parties

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## Present protocol

- Non-Parties have made real progress towards ratification and implementation of the present protocol
- But more needs to be done
- Non-Parties are moving at different speeds and have different needs (no one fit solution)
- For EU candidates: EU accession is important driver
- A substantial revision of protocol and its annexes is needed to address barriers and make further progress

# Key messages from discussions with / feedback of non-Parties

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## Future revised protocol

- Preference for new approach to address many barriers, need for new flexibilities
- Large preference for separate, sector-based sections in technical annexes, potentially combined with other approaches (staged, individual, ...)
- Revised protocol more adapted to individual capabilities of non-Parties
- Revised protocol to be realistic; concern about increasing ambition and adding new barriers (e.g. on CH<sub>4</sub>)
- Mixed response on nature of technical annexes to a revised protocol (mandatory / non-mandatory / mandatory but less stringent)
- Preference for a more recent base year than 2005 for setting ERCs
- Further financial, technical, political support / mechanisms needed
- (Complement with) voluntary action: considered useful by some

# What not present yet in technical annexes?

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- Non-technical measures → new guidance document under development
  - Energy efficiency requirements (e.g., for domestic stoves)
  - Environmental performance levels (associated with BAT)
  - Methane and black carbon requirements
  - Potentially relevant categories not covered yet:  
shipping - national navigation (NO<sub>x</sub>); waste sector and gas distribution (CH<sub>4</sub>);  
cattle farms (NH<sub>3</sub>, CH<sub>4</sub>), agricultural residue burning (PM), non-exhaust  
emissions (PM), ...
  - Mandatory requirements for domestic wood combustion (key category PM)
- Extend and/or change role of TA and GD?

# Elements to consider when updating technical annexes?

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## Future role of TA: mandatory TA versus non-mandatory GD (no TA)

### Cons of mandatory technical annexes (mandatory LVs)

- May continue to act as barrier if remaining too prescriptive, complicated
- Extending present TA with new requirements (CH<sub>4</sub>, BC, ...) may add barriers
- TA are rigid and likely out-of-date before legally applicable, considering slow speed of ratifications and entry into force of Convention's protocols
- Compliance checking is lacking (difficult / time consuming): no enforcement
- Less flexibility in achieving set targets (ERCs, objectives): in case no binding LVs, also option to bank for example on NTM to achieve ERCs

# Elements to consider when updating technical annexes?

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## Future role of TA: mandatory TA versus non-mandatory GD (no TA)

### Pros of mandatory technical annexes (mandatory LVs)

- Serve multiple purposes, including achieving ERCs and objectives and ensuring a basic level playing field
- Provide higher confidence / certainty in achieving set targets (ERCs)
- Likely better at attracting political attention and generating pressure and political will
- Without mandatory TA, focus shifts solely to ERCs (annex II) as remaining basic obligations (while setting meaningful ERCs for non-Parties remains a challenge, requiring additional improvements to EI → tier 2)
- Added value of technical annexes outside UNECE (as reference/benchmark)

# Elements to consider when updating technical annexes?

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- Options described in POD and other documents
  - introduce new approaches, keep set of minimum requirements, ...
- Keep BAT as basis for ELVs (BATAELs → ELVs)
  - update GD (BAT) before revising TA (ELVs)
- Enhance action (in particular) on ammonia / black carbon;  
Introduce action on CH<sub>4</sub>
  - while avoiding adding new barriers to ratification

# Elements to consider when updating technical annexes?

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- **Prioritize carefully, considering i.a.**
  - **Effectiveness** (contribution to objectives / ERCs), focus on large reduction potentials, key categories, extending scope (e.g. NH<sub>3</sub>), more ratifications
  - **Future relevance** (addressing remaining/emerging challenges → sectors, pollutants): e.g. cattle farms (NH<sub>3</sub>), biomass combustion (PM, BC)
  - **Synergies** with other policy areas (energy, climate, biodiversity, N, ...)
  - **Consistency / coherence** with domestic legislations/policies and other policy areas (ambition, scope, ...) (→ reference domestic legislation)  
Specific issue: defining existing / new source
  - Avoiding / addressing current and potential new **barriers**; applicability, role of flexibilities
  - Avoiding requirements resulting in **excessive retrofit costs**
  - **2021 WHO AQ guidelines** (annex I to GP) → action in specific sectors
  - **Level playing field**