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Long-term strategy for the Convention

Draft long-term strategy for the Convention on Long-range Transboundary Air Pollution

Note by the Chair of the Executive Body

I. Introduction

1. The Convention on Long-range Transboundary Air Pollution is one of the most successful regional air pollution agreements ever established. It has delivered demonstrable improvements in reducing acidification of the environment, in reducing the highest peak levels of ozone and photochemical smog and has begun to make improvements in atmospheric levels and deposition of nitrogen — one of the most important global environmental problems in addition to climate change. The Convention has also shown itself to be flexible and dynamic in responding to new challenges and problems in the area of transboundary air pollution. Almost uniquely for an international environmental instrument, the Convention has given a prominent role to science not just in providing underpinning information, but also in sustaining the policy process itself.

2. While the Convention's results are impressive, air pollution in the region still causes important environmental and health problems and new problems are emerging. The Convention must respond to these challenges, build on its strengths, and demonstrate that it can continue to be successful in solving the air pollution problems of the twenty-first century.

3. The Convention thus now stands at a crucial period in its history, and rather than respond in a piecemeal way to the emerging pressures and developments worldwide, it is an appropriate time to think strategically. The long-term strategy contained in this document sets out a vision for the Convention over the next 10 years. In doing so, it also takes into account possible developments over a longer time frame, up to 2050.

4. There have been important scientific and policy developments regionally and globally over the past 10 years relating to air pollution issues of interest to the Convention and the major issue of climate change and biodiversity have also grown immensely in importance. The Convention needs to assess how it positions itself in relation to these wider developments — to examine critically its work, to formulate priorities and to confront potentially difficult decisions on its future work programme and organizational structure.

5. Moreover, the Convention has now developed several protocols with specific obligations designed to reduce emissions of key air pollutants. This imposes a cumulative demand for resources in the Parties and in the secretariat and calls for a critical appraisal of the workload of the Convention. It is therefore an opportune time to examine the existing protocols in the light of strategic priorities for the Convention, and to identify ways to free up resources to address the remaining issues and to pursue important new areas of activity.

6. The Convention needs to plan strategically to adapt to the changing world, while building its future on its established strengths. The strategy will therefore:

(a) Set a vision for the next 10 years and beyond to address the remaining issues from existing activities and to meet emerging challenges with the aim of delivering a sustainable optimal long-term balance between the effects of air pollution, climate change and biodiversity ;

(b) Base the vision on the unique strengths and successes of the Convention — the close links between science and policy, the ability to deal with multiple effects and pollutants and to respond swiftly to emerging challenges; and

(c) Set clear priorities for the Convention on the strategic and operational level to ensure the best use is made of scarce resources in the Parties and in the secretariat.

II. Strengths and successes of the Convention

7. The Convention has achieved considerable success in solving environmental and health problems. In particular, it has led the way in delivering a single international agreement dealing with multiple pollutants with multiple effects in the 1999 Gothenburg Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol). The Convention has also been one of the most successful environmental instruments in bringing scientists and policymakers together, creating a powerful collective driving force to improve the environment and human health.

8. One of the great strengths of the Convention is its science base and the unique way in which science informs policy development. In line with article 2 of the Convention, a goal-oriented structure of the Convention was established, including a strong scientific and monitoring part, to ensure that Parties are able to produce sufficient insight into the facts and problems which guide their policy action. The Working Group on Effects and the Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP) have been extremely effective in this task. It is worth noting, too, that the scientific tools, including integrated assessment modelling, were also used by the European Union (EU) for the development of their Thematic Strategy on Air Pollution and for the National Emission Ceilings (NEC) Directive. As the Convention moves forward to build on past successes and to address the emerging problems related to air pollution, climate change and biodiversity, the close links between science and policy will continue to be crucial.

9. Another major strength of the Convention is its geographical coverage. In the atmospheric pollution area, the Convention is unique in that it covers most of the Northern Hemisphere from the West Coast of North America to the Pacific Coast of the Russian

Federation — from Vancouver to Vladivostok. This broad cooperation is an important feature of the Convention and needs to be strengthened. One way of achieving this is to extend the ratification and implementation of the Convention and its Protocols, and participation in its scientific activities over the whole region.

10. Breaking new ground, the Convention has shown leadership over the past decade by establishing Protocols on Persistent Organic Pollutants (POPs) and on Heavy Metals. In doing so, it has led the way for a wider global approach to these problems.

11. The work of the Convention has traditionally been carried out in a flexible, consensual process. The procedures and activities are less rigid than in many multilateral environmental agreements, particularly in the way the science and policy work interact, and the way in which decisions are taken. While there is some value in flexibility and informality, these can at times hinder the Convention's transparency, fairness, and effectiveness. It is important to ensure that the way the work of the Convention is carried out retains some flexibility and relative informality while also strengthening the Convention's transparency, fairness, and effectiveness.

12. One further strength resulting from this flexibility in processes and structures is the ability of the Convention to respond quickly to new developments and problems, as illustrated by the swift response to scientific developments in hemispheric air pollution and reactive nitrogen in the environment. [This ability to respond promptly will need to be maintained and encouraged, while keeping in mind the need to avoid unsustainable additional burdens on the resources of either the Parties or the secretariat].

III. Environmental and health effects: remaining challenges

13. While the Convention has achieved significant success in reducing the impacts of air pollution on health and the environment, significant problems remain. These can potentially be addressed in the context of the multi-pollutant/multi-effects approach of the Gothenburg Protocol, according to which the environmental and health effects of acidifying and eutrophying air pollutants, as well as of ground-level ozone and particulate matter, have to be assessed, including their potential interaction with climate change and biodiversity. On the basis of the current effects assessments, problems still exist in all of the areas mentioned, with the least additional action needed in the case of acidification. Among the challenges facing the region are:

(a) High particulate matter concentrations, including the contributions from long-range transport of air pollutants, which have significant health effects in terms of morbidity and mortality. Health-related air quality standards for particulate matter are substantially exceeded in many areas of the United Nations Economic Commission for Europe (UNECE) region. In particular, the reduction of black carbon, as part of particulate matter, is important owing to its toxicological effects and its contribution to climate change;

(b) Continuing exceedances in acidifying pollutants. Reductions in emissions of acidifying pollutants in the past, particularly of sulphur, have significantly reduced the threat of acidification for sensitive terrestrial and aquatic ecosystems. However, biological recovery can show a substantial delay compared with recovery of critical chemical parameters. Even with full implementation of the Gothenburg Protocol, exceedances of critical loads will remain in some areas of the UNECE region, and nitrogen compounds contribute substantially to the problem;

(c) The threat of eutrophication of sensitive ecosystems continues in large areas of the UNECE in spite of the reductions in emissions of nitrogen-containing air pollutants. The current and future exceedances of critical loads of nitrogen over large areas are

dominated by ammonia emissions from agriculture. These predictions are supported by current observations of nutrient imbalances and a high degree of nitrogen saturation in terrestrial and aquatic ecosystems. Eutrophication, including the acidifying effects of nitrogen deposition, and changes in biodiversity in sensitive ecosystems are interlinked. Common interests with the Convention on Biological Diversity are evident, as well as the link with climate change due to the coupled carbon and nitrogen cycles;

(d) Although peak ozone concentrations have been reduced, a large-scale problem with elevated ozone concentrations will remain even with full implementation of the Gothenburg Protocol. There is evidence of widespread ozone pollution damage in the UNECE region, and new effects-related exposure indices based on ozone flux predict damage risks reaching further into Northern latitudes than with the concentration-based assessment used in the past. Ozone fluxes will have to be reduced substantially across large areas of Europe to avoid significant damage. Non-exceedance of the health-related ozone indicator will not be sufficient to protect vegetation in all of Europe. Since tropospheric ozone is a greenhouse gas, the reduction of elevated concentrations also contributes to the mitigation of climate change;

(e) Corrosion and soiling of materials and cultural monuments above tolerable levels are linked with elevated concentrations of all of the above-mentioned pollutants. The achievement of tolerable levels to preserve these will require even more reductions of sulphur emissions than needed for the protection of ecosystems and health.

IV. The changing world

14. Since the last protocol to the Convention was agreed in 1999 in Gothenburg, many significant policy developments have occurred at regional and global levels of which the Convention needs to take account. The more important developments and issues include:

(a) The enlargement of the EU, which has had the result that 27 of the 51 Parties to the Convention are now also member States of the EU. This has several implications for the work of the Convention and its future, due, inter alia, to the fact that the EU produces legislation on similar subjects as the Convention by using the instruments developed under the Convention (e.g., emission inventories, effects assessment, critical loads, dispersion modelling and integrated assessment modelling). Parties to the Convention need to strengthen relations and cooperation with the EU, but ultimately the Convention needs a clear view of the value it adds to the work of the EU. The active participation of the countries of Eastern Europe, the Caucasus and Central Asia and those of South-Eastern Europe and North America is essential in order to ensure a healthy future for the Convention given the shift to an expanded EU;

(b) Climate change is now seen politically as one of the most important environmental problems. This could pose challenges to the Convention, given that in most countries climate change issues now attract more political attention and resources. Moreover, the important links of climate change and air pollution have received little attention in international climate negotiations. However, as the links between pollutants, sources and effects of air pollution and climate change are more and more clearly demonstrated, opportunities will open up for the Convention to play a significant role in addressing the most important environmental problem facing society today. There is growing interest in the so-called short-lived climate forcers (SLCFs) as a potential means of mitigating short-term climate change before the effects of the longer-lived greenhouse gases are seen. Most of the SLCFs are also harmful air pollutants such as black carbon and ozone. International governance of these substances is lacking and there is a potential opportunity for the Convention to show leadership by addressing these pollutants;

(c) There is now a growing recognition of the importance of the transport of air pollutants over much longer distances than hitherto had been recognized. Hemispheric and intercontinental transport of air pollutants, especially ozone and particulate matter (PM), has been established as an important factor in air quality management. The emergence of this issue further strengthens the links between the management of air pollution problems and those of climate change. The Convention has again shown leadership in addressing this issue and incorporating the scientific findings in policy represents an important challenge and opportunity for the Convention. This process will potentially involve further outreach activities and cooperation with other organizations around the world;

(d) Other organizations and conventions, such as the World Health Organization, the World Meteorological Organization, the United Nations Environment Programme (UNEP), the United Nations Framework Convention on Climate Change (UNFCCC), the Stockholm Convention on Persistent Organic Pollutants (Stockholm Convention) and the Convention on Biological Diversity, are now addressing air pollution issues directly or are addressing issues of importance for air quality, many of which are of direct relevance to the Convention. It will be important for the Convention to formulate ways of working with these bodies in the next few years;

(e) Since the signing of the Gothenburg Protocol, it has become clear that cooperation on air pollution problems can extend even beyond the UNECE region. The Convention has a worldwide reputation as one of the most successful environmental instruments and is seen as an exemplar across the world. Building on this reputation, the Convention has extended its outreach activities across the world, building on and cooperating in the work of UNEP and the Global Atmospheric Pollution Forum, among other activities. While such cooperation has been very effective in the scientific field, it should gain momentum in moving into the policy arena in the future. These outreach activities are likely to assume even greater importance for the Convention in the coming years. The Convention will appropriate ways and means to best build on this work and to develop it, and to continue to build on the reputation of the Convention as a global leader in regional air pollution management;

(f) Global action has begun to address POPs and heavy metals. The Stockholm Convention — largely inspired by the work at the regional level under the 1998 Aarhus Protocol on Persistent Organic Pollutants — has now established itself as a global instrument dealing with POPs. Moreover, within UNEP negotiations have begun to deal with mercury. There is a need therefore for the Convention to reassess, after the current amendments to the two Protocols, what added value the Convention can provide on these issues compared with the global instruments.

V. Strategic priorities for the Convention

15. It will be through building on its strengths and critically evaluating its future role in addressing environmental problems in a changing world that the Convention will ensure its long-term future. The wider strategic goals for the Convention and the strategic priorities for its action are set out below. They are presented in order to guide the direction of future work and to provide a means of prioritizing this work and the effective use of resources in managing the workload of the Parties and the secretariat. No attempt is made to describe the processes by which these will be carried out and delivered. The delivery of this strategy will follow from actions and decisions by the Executive Body in the future.

16. In line with article 2 of the Convention, the strategic priorities and goals for the Convention are:

(a) Increased ratification of the Protocol on Heavy Metals, the Protocol on Persistent Organic Pollutants and the Gothenburg Protocol is a high priority. A viable future for the Convention depends upon positive and vigorous participation by the Parties in all parts of the region and on ensuring its extensive geographical coverage. Increased ratification is particularly important for countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe, and this priority will be emphasized in the revision of, or amendments to, the three Protocols referred to above. This priority will also be taken into account in the annual work programmes of the subsidiary bodies. A specific section to address this challenge will be included in the annual work plan adopted by the Executive Body. Measures and action to facilitate wider ratification and implementation in countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe, including financial support, will be pursued vigorously;

(b) Full compliance by all Parties with their obligations under the Protocols is a very high priority. The work of the Implementation Committee will be given a very high priority and the compliance mechanism will be improved;

(c) The Convention and its subsidiary bodies will further give priority to the core strengths and expertise of the Convention, namely, dealing with the atmospheric pollutants affecting human health, acidification, eutrophication, cultural heritage and other environmental effects which lead to adverse impacts on environmental services. It will concentrate on pollutants best controlled at a regional level and address the remaining and emerging air pollution issues. This means in particular a focus on PM, tropospheric ozone, eutrophying pollution and, where still needed, on acidifying pollution. The list might need to be extended and the Convention will incorporate other pollutants if the scientific evidence is sufficiently strong and Parties agree they are appropriate to address;

(d) In addressing issues related to its core air quality expertise, the Convention recognizes that the priorities for work and action will need to be regularly reviewed in the light of new priorities and progress already achieved and in the light of wider policy developments on the regional and global scale. This will require a change in the balance of the activities of the Convention; it may be necessary to scale down or even stop work where it can no longer add value, while opening up opportunities for other newly relevant issues;

(e) Building further on its core expertise, the Convention will regularly reassess the Gothenburg Protocol in terms of its correspondence with the updated scientific effects assessment and the degree to which it has achieved its long-term effects-oriented goals. Stepwise improvements and revisions of the multi-pollutant/multi-effects Protocol will reduce the gap between the impacts on the environment and on human health and critical loads, critical levels and health-oriented air quality targets. In developing the Gothenburg Protocol full account will be taken of the recent emergence of hemispheric and intercontinental transport of pollution as an important issue for the Convention;

(f) While the Convention has successfully established international action on POPs, and shown leadership resulting in creating a global instrument, now the main focus of global action on this issue will be taken through the Stockholm Convention in UNEP. The balance of work within the Convention will therefore change in the future. Options to better complement the measures and actions taken at global level and to secure the added value of the Protocol on POPs will be explored. Policy work directed at a new or revised Protocol will therefore scale down by shifting its focus to unintentionally released POPs and to areas and substances where the implementation of stricter measures in the UNECE region is still recommended. The Convention will give high priority to increasing the number of countries ratifying and implementing the existing Protocol. This means that the scientific and technical work will continue, as will the work on implementation. If new substances arise where action is needed, the first priority for Parties should be to nominate them in the Stockholm Convention, but incorporation into the Protocol on POPs would be

an option should the former route fail. It will also be necessary to strengthen the links with the Stockholm Convention;

(g) The Convention has also successfully established international action on heavy metals. Currently, preparations for a global instrument on mercury are under way within UNEP. However, while action on mercury can be most appropriately taken at the global level, it will be some years before a global instrument is agreed and enters into force. In the meantime, therefore, the current revision of the Protocol on Heavy Metals will proceed, but thereafter the Convention will review this position. It is possible that in due course a position will be reached similar to that which currently prevails for POPs, where the science and implementation work continue, but the policy work is scaled down or changed towards the development of stricter measures in UNECE region. It is noted that it is likely that emission reductions and abatement techniques developed to control PM will deliver acceptable reductions in emissions of metals other than mercury. Accordingly, after the current revision of the Protocol, the key priority will be to increase the number of countries ratifying and implementing the revised Protocol;

(h) Science-based decision making and the effects-oriented approach will remain an essential component and strength of the Convention. The close links between science and policy development are important. These links will be retained and, where possible, strengthened. There is also a role for science and monitoring to play in the evaluation and assessment the effectiveness of policies and Protocols. User-friendly effect indicators and cost-benefit assessments (in quality and in monetary terms) are important to policy, politicians and the general public, and will be further developed in the coming years. The content and balance of the scientific programme of the Convention will need to reflect the overall priorities of the Convention, so that, as policy priorities change, the scientific activities of the Convention will be adjusted. However, new scientific developments may also affect the policy priorities. The relation between science and policy is a two-way street. The strategy documents of EMEP and the Working Group on Effects set out the science programme for the Convention. These scientific activities, chiefly within EMEP, will need to involve the countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe more strongly than hitherto, inter alia, with a view to obtaining reliable emission data and to developing monitoring and modelling networks throughout the region. Scientific cooperation beyond the UNECE region was begun in the work of the Task Force on Hemispheric Air Pollution and this wider geographical scientific cooperation will be strongly encouraged in future;

(i) The Convention recognizes the importance of identifying the co-benefits in combating air pollution and climate change. It will give high priority now and in the longer term to establishing work on the links between climate change and air quality. In the short term, attention will be focused on SLCFs where there is a strong argument that optimal control policies for these pollutants should be regional in nature. There is, however, no international governance of this issue and this represents an important opportunity and challenge for the Convention. The Convention will assess the feasibility of incorporating SLCFs into instruments such as a revised Gothenburg Protocol, for instance, with regard to black carbon, as part of PM, and to methane and carbon monoxide as precursors of ozone. Links between UNEP and the technical centres under the Convention were already established on scientific issues. Links with the UNFCCC and UNEP more broadly will be strengthened by the secretariats in order to establish longer-term cooperation on a more strategic level. The Convention could strengthen the links between policies in Parties to address both air pollution and climate change by adopting long-term goals for air pollutants and SLCFs commensurate with the outcomes of long-term policies to reduce emissions of greenhouse gases;

(j) The Convention also recognizes the importance of identifying the co-benefits in combating air pollution and other environmental issues like biodiversity loss and reactive nitrogen in the environment. Links with UNEP (Stockholm Convention, Convention on Biological Diversity and a future legally binding instrument on mercury) more broadly will be strengthened by the secretariats in order to establish longer-term cooperation on a more strategic level;

(k) The Convention, in collaboration with many national, international and non-governmental organizations, including the Global Atmospheric Pollution Forum, has undertaken a considerable amount of scientific and political outreach activities over the past few years. This activity will become increasingly important, particularly to foster cooperation between regional agreements around the world, and also as a bridge between regional and global action. Enlarged cooperation at strategic/policy level with other regions and the global community on intercontinental air pollution issues will be actively pursued. The bodies under the Convention also actively contribute to an extensive and user-friendly communication strategy and system that highlights the work and benefits of the Convention. In this context, the Convention will regularly issue a "State of transboundary air pollution" report. This communication strategy will in particular help to increase the visibility of the Convention and raise political awareness of pollution issues in countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe;

(l) The Convention will critically assess the current structure of its subsidiary bodies, groups and task forces, and the number and frequency of meetings, with a view to realigning the use of time and resources in the Parties and the secretariat consistent with the overall priorities of the Convention, ensuring its needs are met in the most efficient way. The Convention will seek possible ways and means to streamline and rationalize operations and to make them more transparent. The aim will be to prioritize the work by the bodies; to find ways for more effective use of resources by the Executive Body and the subsidiary bodies and technical bodies/expert groups; to reduce the bulk of official documents; and to increase the operational efficiency of main subsidiary body meetings. Temporary ad hoc technical or expert groups can be set up as necessary to deal with specific newly emerging problems;

(m) The Convention will actively seek a solution to the issue of multiple protocols which address the same pollutant(s) with different targets and different requirements — and which create a series of overburdensome obligations for Parties — remaining all simultaneously in force. To avoid this problem in the future, as well as the cumbersome process of renegotiating and ratifying whole protocols, and since the measures and obligations to abate air pollutants in the different protocols overlap, the Convention will explore the benefits of a multi-pollutant/multi-effect protocol with annexes to be updated at regular intervals;

(n) The Convention will strive to ensure more active involvement of a greater number of Parties in the work of the Executive Body and the subsidiary bodies, including in the work of their bureaux, as well as in the technical and scientific groups. Participation of delegations of countries of Eastern Europe, the Caucasus and Central Asia and South-Eastern Europe in the bureaux should be ensured, as well as related appropriate funding. The Convention will also explore the establishment of a robust mechanism for supporting core activities not covered by the EMEP budget;

(o) The Parties to the Convention recognize that successful implementation of its Protocols and sustainable development of its activities will require sufficient and stable funding and adequate secretariat resources.

VI. Conclusion

17. In conclusion, the strategy for the Convention will:

(a) Strengthen the relevance of the Convention as a leading regional agreement in addressing the remaining and emerging transboundary air pollution challenges in the twenty-first century. A key factor to this effect will be to achieve increased ratification, implementation and compliance of the three Protocols referred to in paragraph 16 (a);

(b) Take the initiative in addressing the synergies and trade-offs between policies to address air pollution, climate change and biodiversity;

(c) Maintain visibility on the international scene through unique and relevant work which can serve as an inspiring model for other regions in the world; and

(d) Continue to convince donors that the Parties to the Convention are determined to take action to protect public health and the environment against air pollution.