



# Economic and Social Council

Distr.: General  
3 October 2016

Original: English

---

## Economic Commission for Europe

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

### Working Group on Strategies and Review

#### Fifty-fourth session

Geneva, 13 and 14 December 2016

Item 3 of the provisional agenda

**Progress in the implementation of the 2016–2017 workplan**

## Report of the Task Force on Reactive Nitrogen

### *Summary*

At its twenty-fifth session (Geneva, 10–13 December 2007), the Executive Body for the Convention on Long-range Transboundary Air Pollution established the Task Force on Reactive Nitrogen. The Task Force was mandated to carry out the tasks specified for it in the Convention's annual workplan and to report thereon to the Working Group on Strategies and Review (ECE/EB.AIR/91/Add.1, decision 2007/1, para. 2).

The present report by the Task Force co-Chairs presents the outcomes of the Task Force's eleventh meeting, held in Paris on 11 May 2016, back to back with a workshop organized in cooperation with the Organization for Economic Cooperation and Development on 9 and 10 May. It also summarizes the work undertaken by the Task Force in accordance with the 2016–2017 workplan for the implementation of the Convention.

GE.16-17013(E)



\* 1 6 1 7 0 1 3 \*

Please recycle



## Contents

	<i>Page</i>
I. Introduction .....	3
II. Eleventh Task Force meeting and joint workshop with the Organization for Economic Cooperation and Development .....	3
A. Background and organization of work.....	3
B. Summary of the main discussion points .....	4
C. Conclusions of the joint workshop .....	7
III. Progress in the implementation of the 2016–2017 workplan for the Convention .....	8

## **I. Introduction**

1. The present report, prepared in cooperation with the secretariat to the United Nations Economic Commission for Europe (ECE) Convention on Long-range Transboundary Air Pollution (Air Convention), presents the work of the Task Force on Reactive Nitrogen in 2016, in particular the outcomes of its eleventh meeting, held in Paris on 11 May 2016, and a joint workshop with the Organization for Economic Cooperation and Development (OECD), held in Paris on 9 and 10 May. The report also summarizes the progress achieved by the Task Force with regard to the tasks assigned to it in the 2016–2017 workplan for the implementation of the Convention (ECE/EB.AIR.133/Add.1).

2. During the reporting period, among others, the Task Force continued to build its collaborative links with the United Nations Environment Programme (UNEP), the Global Environment Facility (GEF) and the ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes (Water Convention), together with the regional marine conventions. Cooperation was also developed with the following partners: the Agriculture Initiative of the Climate and Clean Air Coalition; the Baltic Marine Environment Protection Commission; the Convention on the Protection of the Black Sea against Pollution; the Convention for the Protection of the Marine Environment of the North-East Atlantic; the Convention on Biological Diversity; the European Union; the Food and Agriculture Organization of the United Nations (FAO); the Global Atmospheric Pollution Forum; the Global Partnership on Nutrient Management and the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (both hosted by UNEP); the International Nitrogen Initiative; OECD; and the World Health Organization (WHO). Moreover, during the fifty-third session of the Working Group on Strategies and Review (Geneva, 15–17 December 2015), the Task Force on Reactive Nitrogen and the Task Force on Techno-economic Issues started to analyse the possibilities for future collaboration between the two bodies. In addition, a joint workshop with the World Meteorological Organization (York, United Kingdom of Great Britain and Northern Ireland, 13–14 April 2016) examined potential links with the Global Atmosphere Watch programme.

3. In the case of OECD, links were further strengthened by the organization of the joint workshop “The Nitrogen Cascade and Policy — Towards Integrated Solutions” back to back with both the eleventh Task Force meeting and the meeting of the OECD Working Party on Water, Biodiversity and Ecosystems. This widened the participation of the Task Force meeting to representatives from outside the ECE region and provided engagement with a wider range of stakeholders, enabling the sharing of experience and best practice, and encouraged the further collaboration between the Task Force and OECD communities.

## **II. Eleventh Task Force meeting and joint workshop with the Organization for Economic Cooperation and Development**

### **A. Background and organization of work**

4. The eleventh Task Force meeting and the joint workshop were attended by 95 participants from 26 countries represented the following governmental institutions of ECE member States: the Austrian Environment Agency; the Belgian Federal Public Service — Health, Food Chain Safety and Environment; the Department for Nature Management of the Ministry of Climate and Environment of Norway; the Department of

Agriculture, Food and the Marine of Ireland; the Economic Analysis Directorate of Environment Canada; the Federal Environment Agency of Germany; the Federal Ministry for the Environment, Nature Conservation, Building and Nuclear Safety of Germany; the Federal Office for the Environment of Switzerland; the Ministry of Agriculture, Food and Environment of Spain; the Ministry of Agriculture of the Czech Republic; the Ministry of Ecology, Sustainable Development and Energy of France; the Ministry of the Environment and Spatial Planning of the Republic of Slovenia; the Ministry of the Environment of Lithuania; the National Agency for New Technologies, Energy and Sustainable Economic Development of Italy; the National Institute for Public Health and the Environment of the Netherlands; the Norwegian Agriculture Agency; the Office of Water, Soil and Circular Economy of the Ministry of Agriculture, Agrifood and Forestry of France; the Permanent Delegation of Estonia to OECD; and the Swedish Environmental Protection Agency. Meeting participants included representatives from four United Nations bodies or processes — the Convention on Biological Diversity, FAO, GEF and UNEP — as well as the Task Force on Techno-economic Issues under the ECE Air Convention. Moreover, the meeting included participants from a variety of universities and research institutions, as well as representatives from industry and the Centre for Ecology and Hydrology of the Natural Environment Research Council of the United Kingdom. Representatives of OECD also attended the meeting.

5. The joint workshop and Task Force meeting was co-chaired by Tommy Dalgaard (University of Aarhus, Denmark), Claudia Marques dos Santos Cordovil (School of Agronomy, University of Lisbon, Portugal) and Mark Sutton (Centre for Ecology and Hydrology, United Kingdom), together with Simon Upton (OECD), and with assistance from among others the TFRN expert panel chairs. Further financial support in addition to the OECD was provided by the Governments of Denmark and Germany and through the Centre for Ecology and Hydrology, with accompanying support provided by the European Commission through ongoing research projects. Support from Germany included funds for the provision of simultaneous interpretation facilities, a joint meeting dinner and the participation of five experts from Eastern Europe, the Caucasus and Central Asia as well as the Russian Federation. This included the two co-Chairs of the Expert Panel on Nitrogen in countries of Eastern Europe, the Caucasus and Central Asia. Thanks to the financial support provided by Germany, delegates from Eastern Europe, the Caucasus and Central Asia contributed to the main Task Force meeting, as well as the associated meetings of the Expert Panel on Mitigation of Agricultural Nitrogen, the Expert Panel on Nitrogen Budgets and the Expert Panel on Nitrogen and Food, operating under the Task Force.

## **B. Summary of the main discussion points**

6. The eleventh meeting of the Task Force and the joint nitrogen cascade policy workshop were opened by Simon Buckle, Head of the OECD Climate Change, Biodiversity and Water Division and the Task Force co-Chairs. Keynote speakers addressed the following questions:

- (a) Are current nitrogen management policies adequate to the task of managing the spatial and temporal characteristics of nitrogen impacts on the different environmental media?;
- (b) Do the uncertainties associated with the nitrogen cycle suggest that countries should adopt nitrogen use efficiency policies across the economy?;
- (c) Is across-the-board efficiency enough, or could a better understanding of nitrogen pathways guide future policy intervention and improve cost-effectiveness?.

7. The co-Chair of the Task Force from the United Kingdom presented an outline of 10 suggested key actions to be discussed, and taken in order to improve nutrient management:

- (a) **In agriculture:**
  - (i) Improving nitrogen use efficiency in crop production;
  - (ii) Improving nitrogen use efficiency in animal production;
  - (iii) Increasing the fertilizer nitrogen equivalence value of animal manure;
- (b) **In transport and industry:**
  - (iv) Low-emission combustion and energy-efficient systems;
  - (v) Nitrogen oxides (NO<sub>x</sub>) capture and utilization technology;
- (c) **In waste and recycling:**
  - (vi) Improving food supply efficiency and reducing food waste;
  - (vii) Recycling nitrogen (and phosphorus) from wastewater systems;
- (d) **In societal consumption patterns:**
  - (viii) Energy and transport saving;
  - (ix) Lowering the human consumption of animal protein;
- (e) **In integration:**
  - (x) Spatial optimization and integration.<sup>1</sup>

8. Subsequently, speakers provided examples of national efforts, including those of Germany, Ireland and Switzerland, to improve the coherence of nitrogen policies as well as steps taken to develop “joined up” or integrated approaches, to serve as background for the discussions at the Task Force meeting on the following day.

9. Parallel sessions for each of the expert panels established under the Task Force on Reactive Nitrogen were organized on 11 May. The results from the two groups were reported in the final plenary session. Reports were presented by the co-Chairs of the following expert panels:

- (a) Expert Panel on Nitrogen and Food (Adrian Leip, European Commission Joint Research Centre);
- (b) Expert Panel on Nitrogen in countries of Eastern Europe, the Caucasus and Central Asia (Natalia Kozlova, Russian Federation);
- (c) Expert Panel on Mitigation of Agricultural Nitrogen (Shabtai Bittman, Canada);
- (d) Expert Panel on Nitrogen Budgets (Wilfried Winiwarter, International Institute for Applied Systems Analysis, Austria).

<sup>1</sup> Examples of integration and spatial integration include: (a) optimizing the placement of landscape elements to catch and possibly harvest leached nitrogen in buffer zones along streams and lakes, to filter ammonia from the air in shelterbelts and forest vegetation, or to denitrify reactive nitrogen in constructed wetlands; or (b) optimizing nitrogen use by means of, for example, crop rotation, the use of catch crops and a better regional integration of livestock and crop farming.

10. The reports were then discussed in relation to the implementation of the current workplan for the Air Convention and potential updates (see chap. III).

11. Furthermore, a wider discussion of resources to accomplish the work of the Task Force on Reactive Nitrogen was held. That included discussion of items that would require further resources to implement them and the ongoing issue of a lack of funds to support a secretariat. The Task Force co-Chairs, with the support of the ECE secretariat, had presented a proposal to the Working Group on Strategies and Review at its fifty-third session (Geneva, 15–17 December 2015), requesting that a trust fund be established for the Task Force; however, the proposal was not taken up. It was highlighted that the secretariat for the Task Force on Reactive Nitrogen at the Centre for Ecology and Hydrology was currently in a critical position, running on a minimum basis, and would cease to operate from March 2017 unless new resources could be found.

12. The co-Chairs recalled the mandate of the Task Force, highlighting the key activities, such as:

- (a) Mitigation of agricultural nitrogen;
- (b) Development of regional nitrogen budgets;
- (c) Assessment of links between nitrogen and food choices;
- (d) Awareness-raising and knowledge building on nitrogen in countries of Eastern Europe, the Caucasus and Central Asia;
- (e) Catalytic activity on nitrogen for use by other bodies outside the Convention;
- (f) Inputs to processes such as the European Nitrogen Assessment, the report *Our Nutrient World*,<sup>2</sup> and the GEF project “Targeted Research for improving understanding of the Global Nitrogen Cycle towards the establishment of an International Nitrogen Management System” (Towards INMS project).

13. It was also noted that nitrogen could have both a cooling and warming effect on climate, while a focus on improving nitrogen use efficiency could maximize the benefits of nitrogen while reducing the adverse effects.

14. It was reported that the full *Nitrogen on the Table* report<sup>3</sup> had been launched at the European Parliament in January 2016, completing phase I of the work of the Expert Panel on Nitrogen and Food. With phase I complete, the Task Force agreed to follow-up with the integration of WHO into the Expert Panel.

15. During the process of revision of the European Union National Emission Ceilings Directive,<sup>4</sup> members of the European Parliament had asked for clarification regarding the relationship between the mitigation of methane and ammonia emissions. A policy brief on the topic had been prepared by the Task Force in response, under the lead of the Danish

---

<sup>2</sup> M. A. Sutton and others, eds., *Our Nutrient World: The challenge to produce more food and energy with less pollution*, Global Overview of Nutrient Management (Edinburgh, United Kingdom, Centre for Ecology and Hydrology, 2013). Available from <http://nutrientchallenge.org/document/our-nutrient-world>.

<sup>3</sup> Henk Westhoek and others, *Nitrogen on the Table: The influence of food choices on nitrogen emissions and the European environment*, Special Report of the European Nitrogen Assessment (Edinburgh, United Kingdom, Centre for Ecology and Hydrology, 2015). Available from [www.pbl.nl/sites/default/files/cms/publicaties/Nitrogen\\_on\\_the\\_Table\\_Report\\_WEB.pdf](http://www.pbl.nl/sites/default/files/cms/publicaties/Nitrogen_on_the_Table_Report_WEB.pdf).

<sup>4</sup> Directive 2001/81/EC of the European Parliament and of the Council of 23 October 2001 on national emission ceilings for certain atmospheric pollutants.

co-Chair.<sup>5</sup> The policy brief concluded that, while some measures offered synergistic benefits, there was an ongoing need to optimize practices in order to minimize trade-offs between the two gases. The Task Force welcomed the publication of the policy brief.

16. It was noted that making the linkages between nitrogen pollution and food consumption provided good opportunities for public awareness-raising and public engagement. It was also considered important to raise the profile of the nitrogen issue on the political agenda by emphasizing the importance of nitrogen with high-level decision makers (government ministers), for example, by highlighting the links between improving nitrogen management, circular economy and green economy — offering win-wins for jobs, the economy and the environment.

### C. Conclusions of the workshop

17. Following the discussion to address the three major questions before the workshop participants (see para. 6 above), it was concluded that:

(a) Current nitrogen management policies are not adequate to the task of managing the spatial and temporal characteristics of nitrogen impacts on different environmental media. In particular, there is currently a high degree of fragmentation between policies across the nitrogen cycle. This leads to risks for trade-offs, missed synergies and a lack of overall critical mass in both the political will and the existing policies to address the nitrogen challenge that can help overcome the barriers to change. There is a need to further develop the nitrogen policy arena connecting the different international conventions and programmes addressing the threats and benefits of nitrogen. Through the Task Force on Reactive Nitrogen, the ECE Air Convention is taking a leading role in the process of developing the INMS project, which provides a platform to discuss how to develop a more joined-up policy approach for the future;

(b) Owing to uncertainties associated with the nitrogen cycle, countries would benefit by adopting policies linked to improving nitrogen use efficiency across the economy. In particular, nitrogen is not just a contributor to pollution, but a valuable resource in its own right. For example, the 20 per cent improvement in nitrogen use efficiency reported in *Our Nutrient World* was estimated to be worth a savings of US\$ 170 billion per year, while global NO<sub>x</sub> emissions have a nitrogen fertilizer value of US\$ 40 billion per year that emerging technologies could seek to harvest. Even considering the fertilizer value alone, the European Union loses around 14 million tonnes of nitrogen per year, equivalent to around 25 per cent of the value of its Common Agricultural Policy budget as nitrogen losses to air and water. The approach of increasing nitrogen use efficiency across the economy allows flexibility for governments to choose where to put their focus, since gains can be found in agriculture, food supply, by optimizing food choices, as well as in transport and industry;

(c) Across-the-board improvements in nitrogen use efficiency can make a central contribution to stimulating both circular economy and green economy thinking and strengthening progress in reducing nitrogen air pollution and other nitrogen pollution impacts. However, this is not sufficient on its own; there is simultaneously a need for a better understanding of nitrogen pathways to guide future policy effectiveness and improve cost-effectiveness. Specifically, a multisectoral, multi-media (air, soil, water)

---

<sup>5</sup> “Methane and Ammonia Air Pollution”, May 2015. Available from [www.clrtap-tfrn.org/content/methane-and-ammonia-air-pollution](http://www.clrtap-tfrn.org/content/methane-and-ammonia-air-pollution).

approach for nitrogen that considers the nitrogen cascade offers the possibility of cost savings by considering the multiple benefits of mitigation and management actions. In addition, both nitrogen use efficiency and regional nitrogen balances need to be considered, in order to make the link directly to the reduction of emissions, the reduction of the adverse effects of nitrogen losses and the maximization of the production benefits of keeping nitrogen where it is needed (e.g., for food and feed production).

18. It was also noted that the further development of the International Nitrogen Management System holds the prospect of further strengthening and exploiting the relevant nitrogen links between the transboundary Air and Water Conventions of ECE.

### **III. Progress in the implementation of the 2016–2017 workplan for the Convention<sup>6</sup>**

#### **Item 2.3.1: Further disseminate the guidance document on preventing and abating ammonia emissions from agricultural sources**

19. During the Expert Panel on Mitigation of Agricultural Nitrogen session participants highlighted that new technical developments continued in the field of ammonia abatement and the need to explore options for disseminating that updated information in an efficient manner. The expertise existed to develop supporting documents, updates and, where useful, images on the subject, which could be made available on a web space, such as the Task Force website. However, that was not possible without further resources (see para. 11 above). It was also noted that the Task Force on Techno-economic Issues was developing a clearing house for relevant techniques as they emerged,<sup>7</sup> and that that might be a suitable model for the Expert Panel on Mitigation of Agricultural Nitrogen to follow, regarding technical options for ammonia abatement. The Expert Panel was also keen to further develop the links between the Guidance Document on Preventing and Abating Ammonia Emissions from Agricultural Sources (ECE/EB.AIR/120) and emission factors.

#### **Item 2.3.3: Further disseminate the ECE Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions and support its implementation**

20. The Framework Code for Good Agricultural Practice for Reducing Ammonia Emissions (Ammonia Framework Code) (ECE/EB.AIR/129) is based on the most up-to-date, proven technologies for ammonia mitigation; however, as time progresses, techniques and equipment are improved and updated. The Expert Panel on Mitigation of Agricultural Nitrogen has long recognized the need for a mechanism to more regularly update the contents, to allow for a “living” Ammonia Framework Code, in a web setting. At the Task Force meeting, in parallel with the discussions on the guidance document, it was noted that the expertise existed to create such a living document and that the Expert Panel’s website could be used as a platform to host it. However, as with the guidance document on ammonia emissions, it would not be possible if adequate resources were not made available (see para. 11 above).

---

<sup>6</sup> In several cases the titles in this section abbreviate or summarize much longer workplan items. For the full text of each item, see ECE/EB.AIR/133/Add.1.

<sup>7</sup> Clearing house of control technology information for primary emissions of nitrogen oxides, sulphur dioxide, volatile organic compounds and particulate matter, including short-lived climate pollutants, heavy metals and persistent organic pollutants. See <http://tftci.citepa.org/en/clearing-house-home>.

21. The Task Force identified that a key challenge at present was to support countries in applying the Ammonia Framework Code when developing their own national ammonia codes, as required by annex IX to the Protocol to Abate Acidification, Eutrophication and Ground-level Ozone (Gothenburg Protocol). Many Parties that had ratified the original Protocol still needed to establish their own national codes.

22. The work of gathering information on national codes (as based on the Ammonia Framework Code) had begun, with a view to adding them to the Task Force website and for use by the Expert Panel in supporting the development of the national codes of good agricultural practice to Reduce Ammonia Emissions by the Parties to the Convention.

**Items 2.3.2 and 2.3.5: Prepare and disseminate publication on nitrogen budgets, organize an awareness-raising workshop, and provide technical information on making and using nitrogen budgets**

23. At its thirty-first session (Geneva, 11–13 December 2012), the Executive Body for the Convention adopted the Guidance Document on National Nitrogen Budgets (ECE/EB.AIR/119). That framework guidance, prepared by the Expert Panel on Nitrogen Budgets, foresaw the provision of specific guidance on each of the eight nitrogen pools of a national nitrogen budget, in the form of annexes to the parent document (*ibid.*, para. 27).

24. Detailed information to develop nitrogen budgets for six out of the eight nitrogen pools had now been drafted by the Expert Panel and the annexes had been posted online for public review. Comments arising from that process had been incorporated into each annex, which would be submitted to the Working Group on Strategies and Review as informal documents. It was intended that the documents would continue to be updated, as over time more user-related experiences could be built upon.

25. As noted in previous years, it would be worthwhile to hold a workshop to improve awareness and understanding in the use of the nitrogen budget guidance document. That would be especially timely, as six of the eight annexes were now ready. However, it would only be possible to run such a workshop if resources were available.

26. Potential storage options were discussed for data provided at the national level on nitrogen budgets. It was agreed that the Centre for Emissions Inventories and Projections under the Convention's Cooperative Programme for Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe had the capability and expertise to undertake that task; however, resources would be needed for that.

**Item 2.3.4: Develop a guidance document describing an integrated approach with regard to nitrogen management in agriculture and illustrating its co-benefits**

27. The formulation of a draft guidance document on nitrogen mitigation in agriculture, taking into account synergies between ammonia, nitrates, nitrous oxide and other nitrogen compounds, had been initiated.

28. A joint workshop, "Towards joined-up nitrogen guidance for air, water and climate co-benefits" was to be organized by the European Commission Directorate General for Environment and the Task Force on Reactive Nitrogen in Brussels on 11 and 12 October 2016. The European Commission would support the participation of representatives from Eastern Europe, the Caucasus and Central Asia. Background documents on four themes would be presented at the workshop, followed by discussion in breakout groups. The output of the meeting would be a report containing the background documents, details of the discussion at the workshop and a concept outline for a future integrated guidance document. Links to other guidance documents would also be referenced and collated during the process. The report from the meeting would be submitted as an informal document to the Working Group on Strategies and Review.

29. Current guidance documents were typically separated according to environmental issues and nitrogen form, being fragmented across the nitrogen cycle. Focusing on European agricultural practices as a starting point, participants at the Brussels workshop would work to design a future concept that brought together existing guidance to reduce the adverse effects of nitrogen use, while maximizing its benefits for food and energy supply. The workshop would allow for the presentation and discussion of background documents addressing different parts of the agricultural system, the preparation of working group reports on the opportunities for synergy and avoidance of trade-offs, as well as the preparation of an outline for the envisaged guidance document. The guidance, to be prepared under the auspices of ECE, in cooperation with the European Commission, would describe an integrated approach to nitrogen management in agriculture, addressing multiple compounds and their synergies, and illustrating the co-benefits of such an approach.

30. The following thematic documents would be drafted for discussion at the workshop:

- (a) Principles of overall nitrogen management (coordinated by Oene Oenema, Netherlands);
- (b) Housed livestock, manure storage, manure processing (coordinated by Barbara Amon, Germany);
- (c) Field application of organic and inorganic fertilizers (coordinated by Tom Misselbrook, United Kingdom);
- (d) Land use and landscape management (coordinated by Tommy Dalgaard, Denmark).

**Item 2.3.10: Provide technical information on the effects of human diets on nitrogen use and emissions and the associated synergies**

31. The *Nitrogen on the Table* report (see para. 14 above) detailed how behavioural change in relation to food choice could complement nitrogen mitigation actions based on technical measures in the food chain, including the potential impact of several scenarios of dietary change. A key finding was that a 50 per cent reduction of meat and dairy consumption in the European Union (i.e., the scenario of a fully “demitarian” Europe) would reduce ammonia and other nitrogen emissions by around 40 per cent, while releasing substantial agricultural land for other uses (e.g., cereal export or bioenergy production). It was emphasized that those substantial reductions could be achieved without any changes in agricultural management practices. A combination of both agricultural practice improvements and optimization of human diets would be able to reduce nitrogen pollution even further.

32. The launch of the report in January 2016 had concluded the first phase of activity for the Expert Panel on Nitrogen and Food. The Task Force thanked the outgoing co-Chairs of the Expert Panel, Henk Westhoek (Netherlands) and Christian Palliere (France), for their contribution. Adrian Leip (Joint Research Centre of the European Union) and Susanna Kugelberg (WHO) had since been appointed as the new co-Chairs of the Expert Panel as it started its next phase.

33. In the second phase of the Expert Panel’s work it would develop a document for submission to the Parties to the Convention that identified technical and other options for reducing emissions from the agro-food chain in the implementation of their obligations under the Gothenburg Protocol, while relating those to the wider co-benefits for society, including the broader issues of public health. A meeting was planned in October 2016 to further the document’s development. Following that meeting, a short informal document

on the work of the Expert Panel, including the planned report, would be submitted to Working Group on Strategies and Review. The Task Force co-Chairs encouraged and welcomed feedback from Parties in order to refine the work of the Expert Panel.

**Item 2.3.7: International framework for nitrogen management linking Convention activities with other conventions at the global scale**

34. A proposal for an international framework for nitrogen management made to GEF in partnership with UNEP and the International Nitrogen Initiative was currently approaching the end of its project preparation grant phase. The project documents had been submitted first to UNEP and then to GEF in spring 2016, following a number of UNEP and partner reviews. Further comments from GEF and the endorsement by its Chief Executive Officer were anticipated in September 2016, with the aim of a project start by the end of 2016. The INMS project will combine global analysis with regional demonstration activities, including financial support for regional demonstration actions in Eastern Europe, the Caucasus and Central Asia, which to significantly strengthen ratification of the amended Gothenburg Protocol and its implementation in those countries. Following the project preparation grant phase, it was anticipated that the project would run between 2016 and 2019.

35. A shortlist of demonstration regions was agreed, including one funded case in the ECE region, focusing on the Dniester and Prut Rivers and the adjacent part of the lower Danube, which would link very closely with the work of the Expert Panel on Nitrogen in countries of Eastern Europe, the Caucasus and Central Asia. A further demonstration area (unfunded) was planned to focus on the European Atlantic coastline, though progress on that demonstration would depend on the availability of additional funds.

36. Further funded demonstration areas had been agreed in the INMS project beyond the ECE region in:

- (a) South Asia (Bangladesh, India, Nepal and Sri Lanka);
- (b) East Asia (China, Japan, the Philippines and the Republic of Korea);
- (c) The Lake Victoria catchment (Kenya, Tanzania and Uganda);
- (d) The La Plata catchment of Latin America (Brazil, Paraguay and Uruguay).

37. A further unfunded demonstration area was also planned for the Seattle Bay Area (United States and Canada), subject to the availability of funds.

38. The next workshop held in the framework of the INMS project was planned for 3–4 December 2016, just prior to the Seventh International Nitrogen Initiative Conference (Melbourne, Australia, 4–8 December 2016). All interested Parties and stakeholders were invited to attend the workshop. A more detailed agenda would be developed when the start date of the project had been agreed.