

Informative Document submitted to the Annual Sub-committee of the Committee of Representatives to the United Nations Environment Programme (7-11 October 2019)

Implementation of UNEA-4 Resolutions: Follow-up to UNEP/EA.4/Res.14

Roadmap for Action on Sustainable Nitrogen Management 2020-2022

Concept Note

Summary

This note summarizes current progress in implementing the Resolution on Sustainable Nitrogen Management (UNEP/EA.4/Res.14), including outcomes from the high-level segment of the fourth session of the International Nitrogen Management System (INMS-4, 29-30 April 2019). It outlines a roadmap for implementing the resolution, focused on the period 2020-2022.

Proposed actions to implement the provisions of the resolution include: a) *to promote coordination* of nitrogen policies by establishing an Inter-Convention Nitrogen Coordination Mechanism to mobilize, i) intergovernmental coordination on nitrogen between countries, conventions and other multi-lateral environmental agreements, ii) national coordination within countries, iii) provision of science and technical information to support national and international policy processes, b) *to support exploration of options* for better nitrogen management sharing experiences of measures through INMS, the Global Partnership on Nutrient Management and the Global Waste Water Initiative, c) *to coordinate platforms for assessment* of scientific evidence on threats, synergies and solutions as a foundation to inform smart nitrogen policies, including ongoing work on the first International Nitrogen Assessment, d) *to facilitate training, capacity-building and awareness raising* to mobilize the opportunities for action, including development and launching of a global nitrogen campaign; e) *to support member states* in decision-making for sustainable nitrogen management, through the proposed coordination mechanism; f) *to prepare the way to UNEA-6*, including development of a financing plan to enable implementation of the roadmap.

Context and Outline

1. The Resolution on Sustainable Nitrogen Management (UNEP/EA.4/Res.14) called on the Executive Director to mobilize a coherent, multi-sector, multi-impact approach to nitrogen, including consideration of the case to establish an inter-convention nitrogen coordination mechanism, options for policy development, evidence gathering to assess impacts and solutions, and support for capacity building. UN Environment has followed up the resolution speedily through its hosting of the Fourth Session of the International Nitrogen Management System (INMS-4) at its Nairobi headquarters. This included a High-Level Segment (29-30 April 2019) with permanent representatives and other government officials, representatives of inter-governmental conventions and programmes, and a wide range of experts from science, business and civil society. The High-Level Segment enabled reflection on the UNEA-4 nitrogen resolution, in order to inform development of a roadmap.
2. The present document firstly summarises the key emerging messages from INMS-4. It then considers major elements needed to implement the resolution. Finally, it summarizes the roadmap as a calendar of actions over the period up to 2022. **Feedback from the Committee of Permanent Representatives is now invited** in order to steer refinement of the roadmap.

Information-sharing and consultation through INMS-4

3. The High-Level Segment focused on sharing between countries, inter-governmental conventions and programmes about their activities in relation to the developing vision for sustainable nitrogen management. It included presentation of the work programme under the “Towards INMS” GEF/UNEP project, as well as of expert views from science, business and others. Discussion under the lead of representatives from governments, inter-governmental conventions and programmes allowed the next steps to be identified. The High-Level Segment was followed on 30 April to 2 May 2019 by sessions addressing technical aspects of the INMS work programme, to which high-level delegates actively contributed.¹
4. The High-Level Segment discussed the four options for improved coherency across the nitrogen policy arena, as outlined in the Concept Note² to the Draft Nitrogen Resolution:
 - Option 1:** status quo, fragmentation among policy processes across the nitrogen cycle,
 - Option 2:** one existing inter-governmental policy process takes the lead on behalf of others (e.g. water, air, climate, biodiversity or stratospheric ozone),
 - Option 3:** establishment of a new intergovernmental convention on nitrogen,
 - Option 4:** establishment of an Inter-convention Nitrogen Coordination Mechanism to promote coherency and synergy across existing inter-governmental frameworks.
5. The meeting agreed that Option 4 represented the favoured approach. It also agreed that there was potential to consider Option 3 further in future if there was willingness.
6. The meeting agreed that coordination is needed to address sustainable nitrogen management at three levels including the interactions between these levels:
 - (1) Intergovernmental co-ordination, especially between countries, conventions, other Multi-lateral Environmental Agreements MEA’s and stakeholders
 - (2) National co-ordination within countries, between different ministries, agencies and other stakeholders
 - (3) Provision of science and technical information in support of national and international policy processes, under the guidance of governments.
7. The meeting also recommended that the function of INMS be established within the coordination mechanism rather than separate from it. This would promote efficiency and resilience, while ensuring a tight interface between science support and policy coordination, enabling the coordination mechanism to guide on future priorities under INMS.
8. The meeting identified the need to establish a network of **National Focal Points** to the Inter-convention Nitrogen Coordination Mechanism. These National Focal Points would help mobilize

¹ The full report of the INMS-4 High-Level Segment, including summaries of the statements to plenary can be found at: <http://www.inms.international/sites/inms.international/files/Provisional%20INMS-4%20full%20report%20of%20high-level%20segment%20%2830%20July%202019%29.pdf>.

A summary of the High-Level Segment focused on the conclusions of the Multi-actor discussion is provided at: <http://www.inms.international/sites/inms.international/files/INMS-4%20Summary%20Report%20of%20high-level%20segment%20%2830%20July%202019%29.pdf>

² To allow wider dissemination, the Concept Note is re-issued as an appendix to the full report of INMS-4.

coordination within countries and allow improved coordination at the international level.

9. In addition, the meeting agreed several requests to the Executive Director of UNEP³:
- a) For the UNEP Executive Director to contact countries formally under the mandate of the nitrogen resolution, **requesting that countries establish and identify National Focal Points** to the Inter-convention Nitrogen Coordination Mechanism. The National Focal Points should be requested by the Executive Director to provide a **review of existing environmental and other policies in their country relevant to nitrogen and to provide a reflection on the plans of the country to develop more co-ordinated nitrogen policies and opportunities in future**. The meeting agreed that, whilst such a request is necessarily on a voluntary basis, the seriousness of the task should be reflected by setting clear deadlines for submission.
 - b) For the UNEP Executive Director to reach out formally to the **relevant conventions, MEA's and others to invite these processes to provide a summary of their existing activities in relation to nitrogen**. The bodies approached should also be invited to **identify the opportunities for working towards improved co-ordination** in addressing the opportunities and threats associated with human disturbance of the nitrogen cycle.
 - c) For the UNEP Executive Director to work with countries and partners to develop **communication pathways** at multiple levels to reach a wide range of audiences, for example members of the public, business, farmers, local government, education, science community etc.
 - d) For the UNEP Executive Director to consider further the effective options for developing the **long-term institutional arrangements** of the proposed inter-convention nitrogen co-ordination mechanism, including the establishment of a **secretariat** to the co-ordination mechanism.
 - e) For the UNEP Executive Director to work with countries and key engagement partners, in preparation for the next annual subcommittee meeting of the Committee of Permanent Representatives, to develop an **outline of a proposed architecture for the Inter-convention Nitrogen Coordination Mechanism**, including the possible roles of the Committee of Permanent Representatives, Bureau of the Coordination Mechanism, National Focal Points, INMS, representatives of nitrogen-relevant conventions, MEAs and other inter-governmental bodies, other experts and stakeholders, including the International Nitrogen Initiative.
 - f) For the UNEP Executive Director, Permanent Representatives and others to engage with their governments to **explore further options for high-level engagement**, for example towards hosting of a possible future Nitrogen Summit, as well as possible establishment of a 'UN Nitrogen Forum' to explore the opportunity for aspirational goals. The UNEP Executive Director is invited to report progress to the 8th International Nitrogen Initiative conference in May 2020.
10. The work to implement UNEA/EA.4/Res.14 can be seen as contributing to identification of linkages to accelerate action on Pollution and Circular Economy (PACE). It forms a contribution to the delivery of the Pollution Implementation Plan⁴, especially in addressing synergies

³ Paragraph 48 of the Full Report and Paragraph 15 of the Summary Report of the INMS-4 High-Level Segment.

⁴ <http://web.unep.org/environmentassembly/node/41635>

between air, land, water and climate pollution, while furthering consideration of sustainable finance in relation to the nitrogen circular economy.⁵

11. The work is led through the UN Environment Programme's Ecosystems Division, within the framework of the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), and as a contribution to UNEP's Subprogrammes on SP5: Chemicals, Waste and Air Quality, as well as SP3: Healthy and Productive Ecosystems. More specifically, this work supports the following Expected Accomplishments under UNEP's approved Programme of Work, 2020-2021.
- Expected Accomplishment SP5(b): Policies and legal and institutional and fiscal strategies and mechanisms for waste prevention and sound management developed or implemented in countries within the framework of relevant multilateral environmental agreements.
 - Expected Accomplishment: SP5(a): Policies and legal, institutional and fiscal strategies and mechanisms for sound chemicals management developed or implemented in countries within the framework of relevant multilateral environmental agreements and the Strategic Approach to International Chemicals Management (SAICM).
 - Expected Accomplishment: SP3(a): The health and productivity of marine, freshwater and terrestrial ecosystems are institutionalized in education, monitoring and cross-sector
12. The following sections describe progress in addressing each of the requests from the High-Level Segment of INMS-4, which are set in the context of implementing operative paragraphs (a) to (f) of UNEP/EA.4/Res.14. Brief consideration of resource mobilization is given under each heading, with an overview of resourcing provided under operative paragraph (f).

UNEP/EA.4/Res.14 (a) Coordination of nitrogen policies and evidence

13. The resolution calls on the Executive Director to:

(a) *Consider the options for facilitating improved coordination of policies across the global nitrogen cycle at the national, regional and global levels, including consideration of the case for establishing an intergovernmental mechanism for coordination of nitrogen policies, based primarily on existing networks and platforms, and consideration of the case for developing an integrated nitrogen policy, which could enhance recognition of the need for common action across multiple policy domains;*

14. The proposed plan recognizes the agreement from the High-Level Segment of INMS-4:
- a. that establishing an Inter-convention Nitrogen Coordination Mechanism is the favoured option (Option 4), as compared with Option 1 (the Status Quo), Option 2 (a single inter-governmental process leading on behalf of others), or Option 3 (establishment of a new intergovernmental convention).
 - b. that the Coordination Mechanism should address needs at three levels, including the interactions between these levels: 1) intergovernmental coordination between countries, conventions and other multi-lateral environmental agreements, 2) national coordination within countries, 3) provision of science and technical information to support national and international policy processes.

⁵ The Nitrogen Fix: From Nitrogen Cycle Pollution to Nitrogen Circular Economy. UN Environment *Frontiers 2018/2019*. <https://www.unenvironment.org/resources/frontiers-201819-emerging-issues-environmental-concern>

- c. that following Option 4 still allows potential to consider Option 3 in future if there is willingness.
15. The agreement from INMS-4 is fully consistent with the mandate of the resolution to draw on the work of existing bodies. Development of Option 4 would also allow countries to further consider “*the case for developing an integrated nitrogen policy*”, based on evidence and experiences shared as part of the Inter-convention Nitrogen Coordination Mechanism.
16. INMS-4 High-Level Segment also noted that there is an opportunity to develop innovative ways of working with the Committee of Permanent Representatives in fostering flexible integration across multiple policy domains.⁶
17. Considering this feedback, UN Environment proposes the following actions as part of establishing a Roadmap for Sustainable Nitrogen Management:
- a. To invite the Committee of Permanent Representatives to establish a Working Group to review the terms of references, architecture, approach and name of the Inter-convention Coordination Mechanism (CPR Annual Sub-committee, October 2019),
 - b. To provide support to the proposed Working Group on possible institutional arrangements for the coordination mechanism (October 2019 to March 2020),
 - c. To contribute technical advice and experience to the Working Group, including from the International Nitrogen Management System (October 2019 to March 2020),
 - d. To invite the Working Group to report its recommendations to the Committee of Permanent Representatives (e.g., Spring 2020, subject to CPR guidance on timing),
 - e. To consider the options for developing the long-term institutional arrangements of the proposed inter-convention nitrogen co-ordination mechanism, including establishment of a secretariat to the co-ordination mechanism (April 2020),
 - f. To report on financing options, in relation to the wider emerging implementation plan for UNEA-4 (April 2020),
 - g. To foster consensus among countries on the terms of references, architecture, approach and name of the Inter-convention Coordination Mechanism (Summer 2020),
 - h. To support efforts in preparation for UNEA-5 related to implementation of UNEP/EA.4/Res.14, in accordance with the guidance of countries.
18. While the Terms of Reference of the Inter-convention Coordination Mechanism have yet to be established, in order to ensure momentum and wide engagement, **countries are already here invited:**
- a. To establish and identify **National Focal Points** for coordination on nitrogen policies, who may ultimately become contributors to the Nitrogen Coordination Mechanism,
 - b. To **review existing environmental and other policies in their country relevant to nitrogen** and to provide a reflection on the plans of the country to develop more co-ordinated nitrogen policies and opportunities in future (a simple template will be provided),
 - c. To **provide contact details** for the National Focal Points to UNEP SGB unep-sgb@un.org by 31 December 2019 and to provide a short review on National Nitrogen Policies by March 2020.
19. In parallel, UN Environment will request relevant **inter-governmental conventions and other programmes** to provide: a) an overview of their existing activities in relation to nitrogen, and b) an identification of opportunities for working towards improved coordination in relation to

⁶ Paragraph 42 of the Full Report and Paragraph 9 of the Summary Report of the INMS-4 High-Level Segment.

human disturbance of the nitrogen cycle. This will allow the compiled results to be shared with the Committee of Permanent Representative and its Working Group on nitrogen (June 2020).

20. **Resource Implications** Outline costings for implementing resolution UNEA/EA.4/Res.14 are estimated at 1.15M USD in additional cash contributions up to 2020. These additional cash resources are estimated to support cost-benefits assessments from regional to national levels, develop resource materials and execute for technical and policy level capacity building based on tools developed under INMS, raise awareness through broad campaigns and expand the convening of technical and policy dialogues around regional to global policy coherence. Support to the process is being provided through the Global Environment Facility, under the 'Towards INMS' project (6M USD, 2016-2022), which includes travel support for mobilization activities. Additional underpinning is provided by the GCRF South Asian Nitrogen Hub focused on wider scientific, technical and policy development (24M USD, 2019-2024). Consideration of resources to establish a Secretariat to the Inter-convention Nitrogen Coordination Mechanism will be provided by date (Sept 2020).

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UNEP/EA.4/Res.14 (b) Options for better nitrogen management

21. The resolution calls on the Executive Director to:

(b) *Support*, in close collaboration with relevant United Nations bodies, including the Food and Agriculture Organization of the United Nations and, as appropriate, multilateral environmental agreements, exploration of the options for better management of the global nitrogen cycle and how they could help to achieve the Sustainable Development Goals, including the sharing of assessment methodologies, best practice, guidance documents and emerging technologies for recovery and recycling of nitrogen and similar nutrients;

22. UN Environment proposes to explore the options for better nitrogen management, in partnership with other bodies, as a contribution to the Sustainable Development Goals by:
- a. Establishing the proposed Inter-convention Nitrogen Coordination Mechanism, as outlined above, which would include knowledge-sharing on assessment methodologies, best practice, guidance and emerging technologies across existing Multilateral Environmental Agreements (MEAs) relevant to nitrogen,
 - b. Mobilization of support for better nutrient management, including nitrogen, phosphorus and other nutrients, through the Global Partnership on Nutrient Management (GPNM) and the Global Waste Water Initiative (GWWI), as contributions to the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities (GPA), including utilization of a tool box of options developed under the GEF/UNEP Global Nutrient Cycles (GNC) project.⁷ The GPNM and GWWI include partners from countries, inter-governmental organisations (UNEP, FAO, IAEA), business, academia and civil society, with a core focus on experience sharing.
 - c. Gathering of scientific/technical information on measures for better nitrogen management under INMS, considering the links between freshwater and marine water, air quality, greenhouse gases, ozone depleting substances, ecosystems and soil, including denitrification to N₂, as part of the INMS database and guidance documentation.
23. Key anticipated milestones (beyond those already noted) include:
- a. Regional Workshop towards Integrated Nitrogen Management, focused on preparation of a new **UNECE Guidance Document on Integrated Nitrogen Management** under the Task Force on Reactive Nitrogen of the Convention on Long-range Transboundary Air Pollution (October 2019, Brussels),
 - b. Demonstration of INMS **Nitrogen Measures Database** (October 2019, Colombo),
 - c. INMS **Workshop on Nitrogen Performance Indicators** and their regional applicability (November 2019, Madrid),
 - d. Joint workshop of GPNM and GWWI on co-benefits between agricultural and wastewater options for improved nutrient management (Autumn 2020, tbc).
 - e. Draft Chapters on Nitrogen Measures and Nitrogen Performance Indicators submitted to the International Nitrogen Assessment (Autumn 2020).
24. **Resource Implications.** Funds are available through 'Towards INMS' and 'GCRF Nitrogen Hub' for the work on Nitrogen Measures, for hosting the Brussels and Madrid Workshops, and for presentation of the INMS Measures activity in Colombo. The European Commission is contributing c. 100k Euro to the Brussels Workshop on Integrated Nitrogen Management. Additional resources would be needed to enable the joint GPNM and GWWI Workshop.

⁷ <http://www.nutrientchallenge.org/>

UNEP/EA.4/Res.14 (c) Coordination of assessment for nitrogen

25. The resolution calls on the Executive Director to:

(c) *Coordinate* existing platforms for assessment of the multiple environmental, food and health benefits of possible goals for improved nitrogen management, while ensuring coordinated management of relevant data to allow development of an integrated and sustainable nitrogen management approach and identify current information gaps, including in quantifying the net economic benefits for food and energy production; freshwater, coastal and marine environmental quality; air quality; greenhouse gas mitigation; and stratospheric ozone depletion mitigation, all underpinned by the development of reference values;

26. UN Environment proposes to coordinate existing platforms for nitrogen assessment, including consideration of possible goals through the following activities, as implemented through the existing programme of the 'Towards INMS' project:
- a. To **review the outcomes of recent assessment platforms** in relation impacts of nitrogen and the benefits of improved nitrogen management. The review will include examining relevant linkages between products from the Inter-governmental Panel on Climate Change, the UN Convention on Biological Diversity, including the Biodiversity Indicators Partnership, the Intergovernmental Platform on Biodiversity and Ecosystem Services, the Global Programme of Action for the Protection of the Marine Environment from Land-based Activities, Convention on Long-range Transboundary Air Pollution, the Vienna Convention on Stratospheric Ozone, the UN Food and Agriculture Organisation, the World Health Organisation, the World Meteorological Organisation, the Organisation for Economic Development and Cooperation and others as appropriate.
 - b. To bring together previous work and ongoing efforts through INMS into a first **International Nitrogen Assessment**, including drafting of chapters (up to Autumn 2020); peer review of chapters (up to December 2020), preparation of Summary Documents (Spring 2021) and Publication (by end Spring 2022).
 - c. The International Nitrogen Assessment is planned to include particular focus on scientific evidence of threats, benefits and synergies across the nitrogen cycle as a foundation to inform smart nitrogen policies. The application of models will consider both present conditions and future scenarios, as well as consideration of possible goals, such as **what it would mean to achieve a goal to Halve Nitrogen Waste**, and what could be the pathways toward this goal.
 - d. The International Nitrogen Assessment approach was reviewed as part of INMS-4. A multi-actor discussion highlighted the need to develop several products for different audiences, including (in addition to Technical Summary and Summary for Policy Makers): Summary for Business, Resource Pack for Teachers & Schools and multi-media products. The Summary for Policy Makers would be provided to the Committee of Permanent Representatives for advisory review (e.g. by the preparatory Working Group) in Summer 2021.
27. **Resource Implications:** Resources are already available through the GEF/UNEP 'Towards INMS' project to deliver the International Nitrogen Assessment. Additional resources would be needed to go further in developing a wider set of communication products derived from the assessment. Reference values of nitrogen use efficiency and best practices are being developed under INMS. Further resources would be needed to provide full assessment of air, water and ecosystem reference values.

UNEP/EA.4/Res.14 (d) Training, capacity building and awareness raising

28. The resolution calls on the Executive Director to:

(d) *Facilitate*, with relevant United Nations bodies, including the Food and Agriculture Organization of the United Nations and, as appropriate, multilateral environmental agreements, the provision of appropriate training and capacity for policymakers and practitioners to develop widespread understanding and awareness of nitrogen cycling and opportunities for action;

29. UN Environment proposes to catalyse training, capacity building and awareness raising about the global nitrogen challenge as follows:

- a. **By providing training for policymakers**, incorporated into activities associated with the proposed Inter-convention Coordination Mechanism. It is proposed to give particular attention to establishing linkages between individual threat/benefit based portfolios (e.g. water, air, climate, biodiversity, soil, food, energy) through the development of multi-actor discussion and sharing of national case studies. This approach proved successful as part of the High-Level Segment of INMS-4 and is proposed to be further developed for INMS-5 (Berlin, May 2020) and INMS-6 (Nairobi, Spring 2021).
- b. **By involving policymakers in key nitrogen-science events**, including the 8th International Nitrogen Conference (Berlin, May 2020, immediately after INMS-5) and key regional activities, such as the INMS Regional Demonstration activities (2019-2022), meetings of the GCRF South Asian Nitrogen Hub (2019-2024) and the EU RISE Marie Curie programme INSA (Integrated Nitrogen Studies in Africa).
- c. **By catalysing training for practitioners**, through amplifying leverage mobilized through the Global Partnership on Nutrient Management and the Global Waste Water Initiative. This includes links to regional programmes, including with the UN Food and Agriculture Organization and the GCRF Nitrogen Hub, which is mobilizing the development of nitrogen management tools for farmers and nitrogen recycling industry, and developing connections with the GCRF Water Hub. Two Massive On-Line Open Courses (MOOCs) have already been developed by partners⁸, while under INMS it is planned to produce Resource Pack for Teachers & Schools framed around outcomes of the International Nitrogen Assessment.
- d. **By developing a Nitrogen Campaign** to raise public and policy awareness of the global nitrogen challenge, provisionally framed around the idea of 'Nitrogen for Life'. The campaign will develop the communication pathways at multiple levels to reach a wide range of audiences.
- e. **By working with Champion Countries**, exploring options for high-level engagement, for example hosting of a possible Nitrogen Summit and possible establishment of a 'UN Nitrogen Forum' to explore the potential of high-level aspirational goals.

30. **Resource Implications:** Resources are already available through 'Towards INMS' (total 6M USD), GCRF South Asian Nitrogen Hub (total 25M USD) and INSA (total 1M USD), parts of which can be used to mobilize training for policy makers and practitioners and for awareness raising. The UN nitrogen campaign is currently being developed in partnership between UN Environment and INMS with catalytic support from the Government of Sri Lanka. Current resources will allow development of campaign strategy, branding and campaign launch under H.E. the President of

⁸ "Nitrogen – A global challenge" (<https://www.edx.org/course/nitrogen-a-global-challenge-2>) and "From Source to Sea to Sustainability" (<http://www.nutrientchallenge.org/source-sea-sustainability>).

Sri Lanka (23-24 October 2019, Colombo), including launch of a nitrogen-song and a first Nitro-Innovation Exhibition. Further championship and resources are needed to develop additional communication products, e.g. Portable Multi-media Exhibition Feature, awareness raising events, innovation-partnerships. Resources from the GCRF Nitrogen Hub are being used to translate the Nitrogen MOOC into the main South Asian languages. There are opportunities for translation into other languages, as well as extension designed for school teachers.

UNEP/EA.4/Res.14 (e) Support on nitrogen decision making

31. The resolution calls on the Executive Director to:

(e) Support Member States by, where appropriate, sharing existing information and knowledge in the development of an evidence-based and intersectorally coherent approach to domestic decision-making to promote sustainable nitrogen management, where appropriate;

32. UN Environment proposes to support Member States in the development of an evidenced based and intersectorally coherent approach to decision making on nitrogen through a combination of each of the actions outlined in previous sections of this document. These include efforts related to the further development of:

- a. The inter-convention nitrogen coordination mechanism, focused on sharing existing and emerging knowledge between threat/benefit sectors and of experiences in intersectoral nitrogen policy development,
- b. The International Nitrogen Management System (INMS) in providing evidence-based support to underpin an intersectorally coherent approach, including development of models and testing under a range of scenarios, as well as on improved understanding of successes and barriers to change,
- c. The Global Partnership on Nutrient Management (GPNM) and the Global Waste Water Initiative (GWWI), focused on sharing of experiences with practitioners and of mobilizing innovation in solutions.
- d. Activities that bring together engagement with a wide range of partner projects, such as the GCRF South Asian Nitrogen Hub and the Integrated Nitrogen Studies in Africa (INSA), which fresh evidence and depth of understanding to be developed.

33. **Resource Implications:** Resources are available for mobilization activities through INMS (2016-2021), the GCRF Nitrogen Hub (2019-2024) and INSA (2020-2023). Future mobilization activities under INMS will require further GEF/UNEP investment (2022-2027). Internal UNEP resources need to be allocated facilitate establishment the Secretariat to the Coordination Mechanism.

UNEP/EA.4/Res.14 (f) Preparing the way to UNEA-6

34. The resolution calls on the Executive Director to:

(f) Report to the United Nations Environment Assembly at its sixth session on the progress achieved in the implementation of the present resolution.

35. The focus of the resolution on reporting back to UNEA-6 (anticipated in 2022) rather than UNEA-5 ensures a long-term approach is developed to address the global nitrogen challenge.

36. Member States may wish to reflect progress over the period 2019-2020 by proposing a follow-up resolution on nitrogen to UNEA-5 (February 2021). For example, Member States may wish to be more specific about the next steps for Sustainable Nitrogen Management in the light of a

possible Colombo Declaration, linked to agreements made during the launch event of the planned UN nitrogen campaign. Being informed by the conclusions of the proposed Working Group under the Committee of Permanent Representatives, Member States may also wish to outline the key Terms of Reference of the proposed Inter-convention Nitrogen Coordination Mechanism in the form of a UNEA-5 resolution.

37. Depending on the date for UNEA-6, it may be possible to highlight key outcomes of the International Nitrogen Assessment, to be launched during Summer 2022 (provisionally June).
38. **Resource Implications:** Operative paragraph (f) does not entail direct additional costs, which may be considered as included under the other headings.
39. **Overall Perspective on Resources:** The additional cash contribution for the implementation of the Nitrogen resolution up to 2020 is estimated at 1.15M USD. These additional cash resources are estimated to support cost-benefits assessments from regional to national levels, develop resource materials and execute for technical and policy level capacity building based on tools developed under INMS, raise awareness through broad campaigns and expand the convening of technical and policy dialogues around regional to global policy coherence. These resources will be mobilized based on resources allocated within UNEP's approved Programme of Work for 2020-21, as well as additional resource mobilization efforts with bilateral and multilateral donors and partners.
40. The proposed **Roadmap for Action on Sustainable Nitrogen Management 2020-2022** has been prepared based on these elements.