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Implementation towards the achievement of the 2020 goal of sound chemicals management: emerging policy issues and other issues of concern

Emerging policy issues and other issues of concern

Report by the secretariat

I. Introduction

1. The secretariat has the honour to circulate a description of the activities called for by the International Conference on Chemicals Management at its previous sessions, together with summaries on progress achieved in relation to the existing emerging policy issues and other issues of concern as developed by and received from the respective lead organizations (see annex). The emerging policy issues identified by the Conference to date are lead in paint, chemicals in products, hazardous substances within the life cycle of electrical and electronic products, nanotechnologies and manufactured nanomaterials and endocrine-disrupting chemicals. In addition, managing perfluorinated chemicals and the transition to safer alternatives has been identified as another issue of concern.

2. One of the functions of the Conference, as set out in paragraph 24 (j) of the Overarching Policy Strategy of the Strategic Approach to International Chemicals Management, is to focus attention and call for appropriate action on emerging policy issues as they arise and to forge consensus on priorities for cooperative action.

3. The Strategic Approach provides a unique global framework for identifying, promoting and advancing chemical safety objectives. The objectives of the Strategic Approach with regard to risk reduction and knowledge and information, as set out in paragraphs 14 (g) and 15 (g) of the Overarching Policy Strategy, respectively, are to ensure that existing, new and emerging issues of global concern are sufficiently addressed by means of appropriate mechanisms, and to accelerate the pace of scientific research on identifying and assessing the effects of chemicals on human beings and the environment, including emerging issues, and to ensure that research and development are undertaken in relation to chemical control technologies and non-chemical alternatives and technologies.

4. Priority actions on emerging policy issues and other issues of concern have been called for in resolutions II/4, II/5, III/2 and III/3 as well as in the overall orientation and guidance for achieving the 2020 goal of sound management of chemicals.

* SAICM/ICCM.4/1.

5. Attention is drawn to the following related meeting documents:

(a) Note by the secretariat on the Chemicals in Products Programme proposal (SAICM/ICCM.4/10);

(b) Note by the secretariat on guidance to stakeholders on exchanging information on chemicals in products (SAICM/ICCM.4/11);

(c) Note by the secretariat on elements for a draft resolution on nanotechnologies and manufactured nanomaterials (SAICM/ICCM.4/12).

6. Attention is also drawn to the following documents prepared by the relevant participating organizations of the Inter-Organization Programme for the Sound Management of Chemicals, which provide additional information on progress achieved in relation to these issues and proposed workplans towards the achievement of the 2020 goal:

(a) Emerging policy issue update: lead in paint (see SAICM/ICCM.4/INF/14);

(b) Emerging policy issue update: chemicals in products (see SAICM/ICCM.4/INF/16) and making the business case for knowing chemicals in products and supply chains (see SAICM/ICCM.4/INF/17);

(c) Emerging policy issue update: hazardous substances within the life cycle of electrical and electronic products (see SAICM/ICCM.4/INF/18);

(d) Emerging policy issue update: nanotechnology and manufactured nanomaterials (see SAICM/ICCM.4/INF/19);

(e) Emerging policy issue update: endocrine-disrupting chemicals (see SAICM/ICCM.4/INF/20);

(f) Update on the management of perfluorinated chemicals and the transition to safer alternatives (see SAICM/ICCM.4/INF/21).

II. Proposed action

7. The Conference may wish to review progress made in relation to resolutions II/4 and II/5, as well as in relation to resolutions III/2 and III/3, as appropriate, including considering whether the actions called for in respect of each issue have been adequately implemented.

8. The Conference may also wish to take note with appreciation of the activities undertaken and the progress made by the lead organizations on existing emerging policy issues and on managing perfluorinated chemicals and the transition to safer alternatives.

9. The Conference may also wish to adopt decisions on the following:

(a) Chemicals in Products Programme proposal (see SAICM/ICCM.4/10);

(b) Guidance to stakeholders on exchanging information on chemicals in products (see SAICM/ICCM.4/11);

(c) Elements for a draft resolution on nanotechnologies and manufactured nanomaterials (see SAICM/ICCM.4/12).

10. The Conference may also wish, through the resolution expected to be developed under agenda item 5 (a), to encourage continued and enhanced risk reduction and information-sharing efforts in order to draw heightened political attention to emerging policy issues and other issues of concern, share information on best practices and foster enhanced coordination, collaboration and cooperation among relevant stakeholders on emerging policy issues and other issues of concern.

Annex

I. Background

1. In its resolution III/2, the International Conference on Chemicals Management requested the secretariat to report to the Conference at its fourth session on progress made in the work on the existing emerging policy issues.

2. The following intergovernmental organizations lead the work on the above-mentioned emerging policy issues as follows:

(a) Lead in paint: United Nations Environment Programme (UNEP) and the World Health Organization (WHO) through the established Global Alliance to Eliminate Lead Paint;

(b) Chemicals in products: UNEP;

(c) Hazardous substances within the life cycle of electrical and electronic products: United Nations Industrial Development Organization (UNIDO);

(d) Nanotechnologies and manufactured nanomaterials: Organization for Economic Cooperation and Development (OECD) and the United Nations Institute for Training and Research (UNITAR);

(e) Endocrine-disrupting chemicals: OECD, UNEP and WHO.

3. In addition, OECD and UNEP lead the work on managing perfluorinated chemicals and the transition to safer alternatives through the Global PFC Group called for under resolution III/3.

4. Work on emerging policy issues and other issues of concern has been under way throughout the intersessional period since the third session of the Conference, and regular updates have been provided at Strategic Approach regional meetings and at the second meeting of the Open-ended Working Group.

II. Action called for by the Conference at its third session and summary of the progress achieved

5. In its resolution III/2, the International Conference on Chemicals Management called for specific actions to be implemented under each of the emerging issues identified in the resolution. Progress in relation to the emerging policy issues identified in the resolution and in the management of perfluorinated chemicals and the transition to safer alternatives as called for in resolution III/3 are summarized in this section.

A. Lead in paint

6. With regard to lead in paint, in its resolution III/2 the Conference:

(a) Encouraged all stakeholders to contribute to the work of the Global Alliance to Eliminate Lead Paint and to provide technical and financial assistance wherever possible, including in the following areas:

(i) Raising awareness of toxicity to human health and the environment and alternatives;

(ii) Guidance and assistance to identify potential lead exposure;

(iii) Promotion of international third-party certification of new paint products;

(iv) Prevention programmes to reduce exposure;

(v) Promotion of national regulatory frameworks;

(vi) Encouraging companies to substitute lead compounds added to paint with safer alternatives;

(b) Expressed its support for the Global Alliance’s proposal to establish an international lead poisoning prevention day of action;

(c) Invited the secretariat of the Global Alliance to report to the Conference at its fourth session on progress in the implementation of the business plan of the Global Alliance, developed in accordance with resolution II/4.

7. The work of the Global Alliance seeks to implement the business plan, which lays out high-level actions to 2020, and a detailed action plan for the period 2015–2016. Further information is included in the emerging policy issue update on lead in paint (SAICM/ICCM.4/INF/14).

8. As at 26 June 2015, some 57 Governments had informed the secretariat that they had put legally binding restrictions in place regarding lead paint, while 14 said that they were in the process of putting such measures in place. These figures relate to the targets established in the business plan of the Alliance for the number of countries that have adopted legally binding laws, regulations, standards and/or procedures to control the production, import, sale and use of lead paints, with special attention to the elimination of lead decorative paints and lead paints for other applications most likely to contribute to childhood lead exposure, i.e., 30 countries by 2013; 70 or more countries by 2015; and all countries by 2020.

9. As at 12 June 2015, a total of 9 Governments, 3 intergovernmental organizations and 26 non-governmental organizations and others, totalling 38 partners, had joined the Alliance as compared with business plan targets of 30 partners by 2013; 50 partners by 2015; and 70 partners by 2020.

10. In 2013, UNEP supported the International POPs Elimination Network (IPEN) work related to sampling and testing of the lead content of decorative paints on the market in nine developing countries and countries with economies in transition, namely Argentina, Azerbaijan, Chile, Côte d'Ivoire, Ethiopia, Ghana, Kyrgyzstan, Tunisia and Uruguay.[1] Most of the paints tested in those countries did not meet the regulatory standards established in the majority of industrialized countries. Paints tested contained very high levels of lead, although paint with no added lead was available. This work related to business plan priority actions of the Global Alliance to fill information gaps on the availability of lead paint on the consumer market.

11. These efforts complemented existing paint testing data in 35 countries as well as additional projects being implemented by the Global Alliance partners through the SWITCH-Asia Programme to test paints in Bangladesh, India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand. The results of activities under the SWITCH-Asia Programme show that most of the paints analysed contained high levels of lead, brightly coloured paints contained much higher levels of lead than white paints, some market-leading brands have removed lead from their paint production and equivalent lead-free paints are available.

12. Two international awareness campaigns on lead poisoning prevention, with a primary focus on eliminating lead paint, were conducted in 2013 and 2014. In that regard, the Global Alliance provided a range of multilingual, customizable outreach materials to assist country-specific efforts, which were made available on the Alliance's website.[2] At least 50 countries organized activities during the two campaigns. The 2015 campaign will take place from 25 to 31 October.

13. The Alliance developed and promoted a brochure entitled *Elements of a national legal and regulatory framework for the elimination of the use of lead in new decorative paint* .[3] It provides guidance to Governments on a national framework for implementing and enforcing legal requirements for the control of lead in decorative paint used in homes, schools and other locations.

14. The Global Alliance continues to work on building capacity in relation to lead paint through the development of a legal and regulatory toolkit. The toolkit is intended to assist countries in developing strategies for awareness-raising on the issues associated with lead paint while identifying the market and suggesting strategies for taking action at the national level through regional workshops, the first of which will take place in Africa in the last trimester of 2015.

15. The third meeting of the Global Alliance[4] was held on 24 September 2014 back to back with a workshop on establishing legal limits on lead in paint held on 22 and 23 September 2014. Both events were hosted in New Delhi by the WHO Regional Office for South-East Asia.

16. Two projects relating to lead in paint have been funded in Cameroon and Nepal, respectively, through the Quick Start Programme.

[1] www.unep.org/chemicalsandwaste/LeadCadmium/LeadPaintAlliance/Publications/tabid/29591/Default.aspx.

[2] www.who.int/ipcs/lead_campaign/en.

[3] www.unep.org/chemicalsandwaste/Portals/9/Lead_Cadmium/docs/GAELP/GAELP%20Documents/NRFflyer-.pdf.

[4] www.unep.org/chemicalsandwaste/LeadCadmium/GAELP/MeetingsandEvents/3rdGAELPMeeting/tabid/1036780/Default.aspx.

17. A three-year project, approved by the secretariat of the Global Environment Facility (GEF) in December 2013, will be implemented in Cameroon, Côte d'Ivoire, Ethiopia and the United Republic of Tanzania.

18. The United Nations Industrial Development Organization (UNIDO), which officially joined the Global Alliance in July 2014, has committed to developing projects that support small and medium-size companies to eliminate the use of added lead compounds in paint manufacturing and to promote the establishment of appropriate national regulatory frameworks.

19. UNIDO elaborated two projects, one for the Andean region and one for China, on the elimination of lead in paint to be funded by GEF. The Andean regional project has a strong focus on industry and assisting companies to switch production to lead-free paint and will be implemented in close cooperation with the national cleaner production centres of Bolivia, Colombia, Ecuador and Peru. The project for China, likewise, aims at stimulating lead-free paint production and strengthening of national capacities for the phase-out of the production and use of lead-based paint in the country.

20. Thanks to the Government of China, through the framework agreement on strategic cooperation between its Ministry of Environmental Protection and UNEP, the implementation of a project promoting the elimination of the used of lead paint in China and Africa will begin in 2015. The project is conceived as a key element of South-South cooperation.

B. Chemicals in products

21. With regard to chemicals in products, in its resolution III/2 the Conference:

(a) Decided that a proposal would be developed for a voluntary international programme for information on chemicals in products along the supply chain and throughout their life cycles for submission to the International Conference on Chemicals Management at its fourth session for consideration. The Conference agreed that in the development of the proposal, the following tasks would be undertaken:

(i) Identification of the roles and suggestions for responsibilities of the major stakeholder groups;

(ii) Development of guidance on what information could be transferred and how information access and exchange could take place to meets the needs of various stakeholders groups;

(iii) Implementation of pilot projects to demonstrate the applicability of the guidance in one or more priority sectors (e.g., building materials, electronics, textiles and toys);

(iv) Implementation of activities aimed at raising consumer awareness and gaining broader support from business, industry and other stakeholders.

(b) Invited UNEP to prepare relevant documents and to facilitate a multi-stakeholder workshop to consider the outcomes of the tasks set out in paragraph 21 (a) (i)–(iv).

22. Progress on chemicals in products has been made in three key areas: engagement of product sectors in the Strategic Approach discussions on the chemicals in products policy issue, formulation of a chemicals in products programme and piloting of the programme in the textiles sector.

23. The engagement of product sectors in the chemicals in products discussions has been significantly strengthened by the participation of expert representatives from specific sectors in the steering group for the chemicals in products programme. Inclusion of these members from the textile, automotive and electronics sectors has brought to the discussions the benefits of experience derived from addressing both previous and continuing challenges relevant to these products. In addition to engagement with these sectors, UNEP has maintained its outreach to other product sectors and stakeholder groups, including through presentations at meetings and events, webinars and teleconferences. Targeted and sustained engagement with implicated product sectors has been, and will continue to be, a key element contributing to the success of the chemicals in products programme.

24. Piloting of the programme in the textile sector in China is advancing through a GEF-funded project. Implementation of the project has begun and will continue into early 2017.

25. The formulation of the chemicals in products programme commenced immediately after the third session of the Conference. At its fourth session, two documents developed by UNEP will be before the Conference for its consideration and possible adoption, namely the chemicals in products programme proposal, including a proposed resolution (see SAICM/ICCM.4/10) and the guidance to stakeholders in exchanging chemicals in products information (see SAICM/ICCM.4/11). Together,

these documents make up the chemicals in products programme proposal as requested by the Conference at its third session.

26. The development of the programme proposal progressed during the intersessional period through stakeholder consultation coordinated by the chemicals in products programme steering group. Face-to-face meetings dedicated to gathering stakeholder input and to furthering the development of the programme proposal were held in December 2013 and July 2015.

C. Hazardous substances within the life cycle of electrical and electronic products

27. With regard to hazardous substances within the life cycle of electrical and electronic products, in its resolution III/2 the Conference decided to continue to work to identify, compile and create an international set of best practice resources, drawing on existing initiatives and opportunities for collaboration, which might include, inter alia:

(a) Tools that lead to progress in the development of designs that reduce and eliminate the use of hazardous chemicals in the production of electrical and electronic products;

(b) Business standards and practices for tracking and disclosing the presence of hazardous chemicals in the manufacturing, use and end-of-life stages of electrical and electronic products;

(c) Tools and information on potential safer substitutes for chemicals of concern in electrical and electronic product applications;

(d) Green purchasing strategies of businesses and Governments;

(e) Extended producer responsibility policies of businesses and Governments;

(f) Provisional strategies and actions in design and manufacturing that should be implemented until elimination is possible or safer substitutes are available.

28. Also at its third session, the Conference agreed to endorse the addition to the Global Plan of Action of the Strategic Approach of 13 new activities in respect of hazardous substances within the life cycle of electrical and electronic products.

29. Relevant activities have been focused on the downstream level. A number of United Nations entities and international organizations have been providing support to developing countries and countries with economies in transition for the development of sustainable e-waste management schemes taking into account the whole reverse supply chain of electrical and electronic products. The development of specific electrical and electronic waste (e-waste) policies and international standards, the establishment of a collection scheme, the transfer of technologies, the building of capacities and the establishment of dismantling or recycling facilities are an integral part of the e-waste management schemes. In this regard, UNIDO has projects ongoing in East Africa (Ethiopia, Uganda and the United Republic of Tanzania) and has prepared a proposal for a regional e-waste management project for submission to GEF.

30. For the establishment of a collection scheme, the International Environmental Technology Centre developed *Volume III: WEEE/E-waste Take-back System* in 2012 and the Solving the E-waste Problem (StEP) Initiative hosted by the United Nations University published a paper entitled “E-waste Prevention, Take-back System Design and Policy Approaches” in 2015. The United Nations University also quantified the e-waste challenge in its publication entitled *The Global E-waste Monitor 2014: Quantities, flows and resources*. Green purchasing guidelines as well as extended producer responsibilities are highlighted as important elements of those reported policies for e-waste prevention.

31. Private-public partnerships have been developed and joint efforts have been undertaken to support Governments. Partnerships within the Solving the E-waste Problem Initiative and the Partnership for Action on Computing Equipment (PACE) continue to evolve on a regular basis.

32. In consideration of the health impacts of e-waste for vulnerable populations, WHO, in collaboration with UNEP, PACE, the United Nations University, WHO collaborating centres and other stakeholders, started an informal network for work on e-waste. A pilot study was developed to look at heavy metals levels in children living and studying near e-waste sites in Thailand.

33. Several side events have been organized by United Nations entities and their partners to highlight the importance of tackling hazardous substances within the life cycle of electrical and electronic products at the upstream, midstream and downstream levels during important high-level meetings and of raising awareness about recent developments in the field.

34. In response to the action requested as set out in subparagraph 27 (a) of the present report, the Strategic Approach secretariat undertook a survey on hazardous substances within the life cycle of electrical and electronic products in order to support stakeholders to map existing tools for chemicals used in the production of electrical and electronic products. The results of the mapping exercise suggested the need for more work on the upstream and midstream level of the life cycle, such as in design and manufacturing.

35. At its twelfth meeting, the Conference of the Parties to the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal adopted, on an interim basis, the technical guidelines on transboundary movements of electrical and electronic waste and used electrical and electronic equipment, in particular regarding the distinction between waste and non-waste under the Basel Convention,[5] and agreed to include the further elaboration of work on those issues in the work programme of its Open-ended Working Group for 2016–2017.

36. More than 200 public interest non-governmental organization stakeholders in 40 countries have developed and endorsed "A challenge to the global electronics industry to adopt safer and more sustainable products and practices, and eliminate hazardous chemicals, exposures and discharges" – an initiative seeking industry cooperation and action in the following six areas: transparency on chemicals used and associated hazards, use of safer alternatives, worker protection, guaranteed participation of workers and community members in sound management of chemicals, protection of communities and the environment, and compensation and remediation for harm to people and the environment.

37. Further efforts during the period 2015–2020 will be focused on promoting green purchasing, design for environment and the tracking of substances within the production process within their life cycle.

D. Nanotechnologies and manufactured nanomaterials

38. With regard to nanotechnology and manufactured nanomaterials, in its resolution III/2 the Conference:

(a) Encouraged all Strategic Approach stakeholders to facilitate the exchange of information in order to improve global transparency and allow better decision-making processes;

(b) Recommended the development of international technical and regulatory guidance and training materials for the sound management of manufactured nanomaterials;

(c) Requested all Strategic Approach stakeholders to continue to support public dialogue on all aspects of nanotechnologies and manufactured nanomaterials, including on the benefits and risks of manufactured nanomaterials throughout their life cycles;

(d) Invited relevant international organizations to continue to support efforts to facilitate capacity-building information exchange, develop guidance and training materials and support public dialogue regarding nanotechnologies and manufactured nanomaterials;

(e) Called for members of industry to continue and enhance their stewardship role and responsibilities as manufacturers and suppliers of nanotechnologies and manufactured nanomaterials and to participate and support awareness-raising, information exchange, training activities, public dialogue and risk research;

(f) Invited the United Nations committees of experts on the transport of dangerous goods and on the Globally Harmonized System of Classification and Labelling of Chemicals to take into account the progress on international scientific work to review the applicability of the Globally Harmonized System criteria to manufactured nanomaterials and, if necessary, to prepare a workplan for adapting those criteria;

(g) Invited all stakeholders to generate information on manufactured nanomaterials to facilitate their safe handling and use throughout their life cycles and to make that information available.

(h) Recommended that further pilot projects be developed at the national level to enhance stakeholder capacity for the sound management of nanotechnologies and manufactured nanomaterials.

39. In addition, at its third session the Conference agreed to endorse the addition to the Global Plan of Action of 13 new activities in respect of nanotechnology and manufactured nanomaterials.

[5] UNEP/CHW.12/5/Add.1/Rev.1.

40. UNITAR has undertaken a combination of regional and national activities, with core funding provided by the Government of Switzerland and supported by a network of experts from around the world. The UNITAR website provides information on nanomaterials, particularly in relation to its own activities.

41. In late 2013, UNITAR embarked on a second phase of pilot projects at the national level, in Armenia, Jordan and Viet Nam, building on the first pilot projects. Project work areas include: awareness-raising; establishment of multi-stakeholder coordination committees; establishment of national databases; legal preparations for safe use of nanotechnologies and nanomaterials; updating of national profiles to include nanotechnologies and nanomaterials; and setting priority action areas. In order to support national processes, UNITAR has published a guidance document entitled *Guidance for Developing a National Nanotechnology Policy and Programme*, in English, Russian and Spanish.

42. UNITAR has organized e-learning courses on nanotechnologies and nanomaterials as a tool to increase outreach and scale up accessibility to information on relevant issues, entitled "Introduction to nanomaterial safety". In 2014, two sessions of the course were undertaken and UNITAR plans to repeat the course, with relevant updates, in the second half of 2015.

43. UNITAR and OECD follow the work of the United Nations Economic Commission for Europe subcommittee of experts on the Globally Harmonized System of Classification and Labelling of Chemicals. The subcommittee has begun a review of the applicability of GHS to nanomaterials, with an informal correspondence group collecting data from nanomaterials and performing a classification exercise.

44. In 2015, UNITAR and OECD organized regional meetings focusing on capacity-building on nanosafety, identification of regional priorities and deliberations on the proposed resolution on nanotechnology to be considered at the fourth session of the Conference.[6] The meetings were scheduled to be held in Lusaka in April (for Africa); in Bogota, , in June (for Latin America and the Caribbean); and in Bangkok in the third quarter of 2015 (for the Asia-Pacific region). At the regional meeting for Africa,[7] participants adopted a list of identified needs for the region and established a nanotechnologies and nanomaterials network and coordination group, with plans to secure funding both to meet as a group in 2016 and to develop a larger nanotechnologies and nanomaterials project in the region.

45. OECD continues to facilitate information exchange in order to improve transparency and decision-making processes through its programme of work and coordination with entities such as UNITAR, WHO, FAO and the Economic Commission for Europe.

46. In view of the increasing trend over recent years to use existing regulatory systems, such as those for industrial chemicals, to manage the risks of manufactured nanomaterials, an OECD Council recommendation was adopted in 2013 and is open for adherence by non-OECD countries with a view to enhancing international cooperation. Much of the data collected as part of the safety assessment of nanomaterials will fall within the scope of the OECD system for the Mutual Acceptance of Data in the Assessment of Chemicals. Key to this system are the OECD test guidelines for the testing of chemicals. While many of these guidelines are considered as suitable for nanomaterials, some are not and are being adapted by OECD to the specific nature of nanotechnologies and nanomaterials.

47. The OECD focus remains on the development of tools, publicly and freely available, for the assessment of nanotechnologies and nanomaterials for regulatory purposes that can assist in the implementation of safety policies.

48. WHO is developing guidelines to facilitate improvements in the occupational health and safety of workers potentially exposed to nanomaterials in a broad range of manufacturing and social environments. These will incorporate elements of risk assessment and management, and contextual issues, in order to support policymakers.

49. WHO convened an expert meeting in April 2015 to begin the preparation of a new WHO International Programme on Chemical Safety environmental health criteria document on principles and methods for assessing the risk of immunotoxicity associated with exposure to nanomaterials.

[6] See SAICM/ICCM.4/12.

[7] The workshops scheduled to be held in the Asia-Pacific, and the Latin America and the Caribbean regions had not been held in 2015 by the time the present report was finalized. Outcomes of workshops will be available from: http://www.unitar.org/cwm/portfolio-projects/nanotechnology.

E. Endocrine-disrupting chemicals

50. With regard to endocrine-disrupting chemicals, in its resolution III/2, the Conference:

(a) Decided to implement cooperative actions with the overall objective of increasing awareness and understanding among policymakers and other stakeholders;

(b) Invited the participating organizations of the Inter-Organization Programme for the Sound Management of Chemicals to lead and facilitate cooperative actions by building on existing activities that would:

(i) Provide up-to-date information and scientific expert advice to relevant stakeholders for the purpose of identifying or recommending potential measures that could contribute to reductions in exposures to or the effects of endocrine-disrupting chemicals, in particular among vulnerable populations;

(ii) Raise awareness and facilitate science-based information exchange, dissemination and networking through, inter alia, activities at all levels and the use of the Strategic Approach clearing house;

(iii) Provide international support for activities to build capacities in countries for generating information and for assessing issues related to endocrine-disrupting chemicals in order to support decision-making;

(iv) Facilitate mutual support in research, the development of case studies and advice on translation of research results into control actions;

(c) Also invited the participating organizations of the Inter-Organization Programme for the Sound Management of Chemicals to develop a plan of work for the cooperative actions.

51. Since the third session of the Conference, UNEP and WHO have published a report entitled *State of the Science of Endocrine Disrupting Chemicals – 2012* together with a summary for decision makers. The summary was circulated to all Strategic Approach focal points in April 2013.

52. In accordance with resolution III/2 F, UNEP, WHO and OECD developed a workplan to support the implementation of the resolution.

53. In line with the workplan, UNEP convened awareness-raising workshops on endocrine-disrupting chemicals back to back with the Strategic Approach regional meetings in the Latin America and the Caribbean, Central and Eastern European, African and Asia-Pacific regions. At the workshops, as highlighted in the adoption of resolutions in the African, Latin American and the Caribbean and Asia-Pacific regions, the need for increased awareness and research on the issue was widely recognized, including the need to gather information on levels of endocrine-disrupting chemicals in the environment. OECD representatives participated in all the regional workshops organized by UNEP and gave presentations on the achievements, tools and methodologies developed by the Organization and available to regulatory authorities in any country.

54. UNEP established an advisory group that provides strategic and policy advice aimed at increasing and improving intergovernmental and intersectoral coordination as well as raising awareness about endocrine-disrupting chemicals in developing countries and countries with economies in transition.

55. WHO convened an expert meeting in Bonn, Germany, on 7 and 8 July 2014,[8] at which participants discussed experiences in exposure assessment, health surveillance and epidemiological study design and performance, as well as capacity-building at the national and international levels and means to support countries in the implementation of resolution III/2 F.

56. OECD continues to develop new and update existing test guidelines with endocrine-specific endpoints, in terms of hazard to aquatic environment and to human health. The test guidelines are developed on the basis of countries' regulatory needs for in vitro and in vivo tests and are used by countries and industry to screen and prioritize chemicals for further testing and to test chemicals for the purpose of characterizing the hazard. A meeting of the advisory group on endocrine disrupters testing and assessment was held on 16 and 17 October 2014.

[8] The report of the meeting is available at www.euro.who.int/en/health-topics/environment-and-health/health-impact-assessment/publications.

57. Building upon the progress achieved to date and focusing on the near to medium term in line with the detailed work planning horizons of UNEP, WHO and OECD, planned future activities are aligned with resolution III/2.

58. WHO follow-up on its expert meeting in 2014 includes the preparation by groups of experts of two scientific articles on exposure to and the effects of endocrine-disrupting chemicals. In addition, WHO has embarked on a new project on early life-stage avoidable environmental exposures, which will include endocrine-disrupting chemicals, among other things, and is a contribution to global work on the developmental origins of health and disease. An expert meeting is planned for 2016 in that regard.

59. OECD seeks to encourage the development of test guidelines, in particular in areas not well covered for efficient screening, for example, in vitro methods for thyroid disruption. In addition, the adverse outcome pathway concept is being applied to improve mechanistic understanding and relationships between biomarker responses measured and adverse effects observed. In addition, test guidelines including biotransformation assays (for example, prediction of metabolism) are being standardized and validated to place in vitro results in context.

60. UNEP will compile overview reports on endocrine-disrupting chemicals related substances (i.e.; known and potential endocrine-disrupting chemicals) in terms of existing scientific knowledge and the regulatory framework; facilitate international meetings for science and information exchange, develop and disseminate region-specific awareness-raising campaigns, as well as support selected developing countries and countries with economies in transition to draft GEF project proposals on appropriate case studies (assessment and management of endocrine-disrupting chemicals) in collaboration with the chemicals in products programme.

F. Managing perfluorinated chemicals and the transition to safer alternatives

61. With regard to managing perfluorinated chemicals and the transition to safer alternatives, in its resolution III/3, the Conference:

(a) Noted that a significant need remained for additional work to support the implementation of resolution II/5;

(b) Invited the Global PFC Group to broaden participation beyond the member countries of OECD as an important mechanism to achieving further progress;

(c) Also invited the Global PFC Group to collaborate closely with the secretariat of the Stockholm Convention on Persistent Organic Pollutants and UNIDO.

62. The work related to managing perfluorinated chemicals and the transition to safer alternatives is managed by the Global PFC Group. The Group's progress in implementing resolution II/5 is outlined in the paragraphs below.

63. In 2013, the Global PFC Group published a *Synthesis paper on per- and polyfluorinated chemicals (PFCs)*[9] which provides an overview of the following issues: major uses of PFCs, scientific evidence, regulatory approaches and alternatives. In 2013–2014, four public webinars were organized to present the information contained in the synthesis report.[10]

64. A web portal on perfluorinated chemicals was set up with the aim of sharing information on PFCs (http://www.oecd.org/ehs/pfc/). A revised structure has been developed and is being implemented for the portal to make it more manageable over the long term. Once restructured and streamlined, additional elements can be proposed and worked on to populate the different sections in the portal.

65. A report on risk reduction approaches for per- and polyfluoroalkyl substances (PFASs)[11] has been developed by the Group with the aim of analysing in-development and in-place risk reduction approaches for PFASs in a number of countries.

[9] www.oecd.org/chemicalsafety/risk-management/synthesis-paper-on-per-and-polyfluorinated-chemicals.htm.

[10] Information on these webinars can be found at www.oecd.org/ehs/pfc/pfceventsmeetingswebinars.htm.

[11] PFASs stand for per- and polyfluoroalkyl substances. In the past, PFASs were often referred to as "PFCs" (per- and polyfluorinated chemicals); however, "PFCs" can also be interpreted as perfluorocarbons that contain only carbon and fluorine atoms and have properties and functionalities that are fundamentally different from those of PFASs. For clarity, the terminology is thus now changing from using PFCs to PFASs to describe to category of substances addressed by the Global PFC Group.

66. The Global PFC Group agreed to postpone the development of a survey on PFCs production, use and release until enhanced participation by non-OECD countries was in place. In the meantime, a paper has been prepared by the Group to highlight the gaps and uncertainties in measuring PFAS emissions worldwide, with a focus on perfluoroalkyl carboxylic acids (PFCAs), a subset of PFASs.

67. Efforts have been made, and continue, to engage a wider range of stakeholders to participate in the work of the Global PFC Group, for it to be fully inclusive, including participants from developing countries and countries with economies in transition, and also from a wider range of OECD countries and industry stakeholders at different levels in the supply/value chain. For example, China has been engaged in the project on risk reduction approaches for PFASs by providing information on programmes and measures taking place at the national level. Efforts will continue to develop projects on PFASs that are relevant for developing countries and countries with economies in transition. Webinars will be organized with the aim of engaging with a broad range of stakeholders, including representatives from downstream industries.

III. Proposed workplans

68. The overall orientation and guidance for achieving the 2020 goal of sound chemicals management has identified increased risk reduction and information-sharing efforts on emerging policy issues as one of its six core activity areas, highlighting the need to draw heightened political attention to those issues and foster enhanced coordination, collaboration and cooperation among relevant stakeholders.

69. Taking into account relevant priority actions, the emerging policy issue lead organizations have developed workplans on the individual emerging policy issues within their respective information documents with the aim of enhancing cooperative action in these areas and achieving specific risk reduction measures by 2020, including possible targets and indicators.