SAICM/OEWG.3/3

Distr.: General
1 April 2019

Original: English

Strategic Approach to International Chemicals Management

Open-ended Working Group of the International Conference on Chemicals Management
Third meeting
Montevideo, 2–4 April 2019
Item 3 (a) of the provisional agenda*

The Strategic Approach and the sound management of chemicals and waste beyond 2020: Independent evaluation of the Strategic Approach for the period 2006 - 2015

Executive Summary (Advance Version) - Independent Evaluation of the Strategic Approach to International Chemicals Management from 2006 - 2015

Note by the secretariat

1. The Strategic Approach secretariat has contracted an independent evaluator to conduct an independent evaluation of the Strategic Approach from 2006 – 2015, in line with the annex to resolution IV/4 of the International Conference.

2. The secretariat has the honour to provide, in the annex to the present note, an advance version of the executive summary of the independent evaluation of the Strategic Approach from 2006 – 2015. It is presented as received from the independent evaluator, on 1 April 2019, without formal editing.

* SAICM/OEWG.3/1.

Annex

Executive Summary
(Advance Version)

Independent Evaluation of the Strategic Approach to International Chemicals Management from 2006 - 2015

PREPARED BY INDEPENDENT EVALUATOR: DR ROBERT NURICK

1 April 2019

COVER MESSAGE FROM THE INDEPENDENT EVALUATOR

Dear SAICM stakeholders.

It is with great pleasure that I submit the attached Advanced Version of my Executive Summary of the Strategic Approach to International Chemicals Management (SAICM) Independent Evaluation from 2006 - 2015 to you. I wish to thank all of you for providing input to the Evaluation.

Kindly receive my apologies for the late submission of my work. I am well aware that the secretariat was to make this Executive Summary of the Evaluation available to you two months in advance of this meeting. I also have not yet submitted the full and final Independent Evaluation to the secretariat. I take full ownership of not meeting the timeline assigned by the International Conference.

The Evaluation has taken me longer to complete for several reasons, including some health issues over the second half of 2018.

As you are aware, the draft of the independent evaluation report (SAICM/IP.2/4) was presented to participants at the inter-sessional meeting held in Stockholm in March 2018. Following this meeting SAICM stakeholders were invited to comment and provide feedback on the draft report. A total of 245 comments / inputs were received over the course of the following three months. The comments came from across the range of SAICM stakeholder groups.

I will finalize the full Independent Evaluation Report, and refine this advance version executive summary as appropriate, and make it available to the secretariat by the end of April 2019. I wish to thank you for your patience and understanding on this matter.

Kind regards,

Robert Nurick

INTRODUCTION: BACKGROUND AND CONTEXT

1. The Strategic Approach to International Chemicals Management (SAICM) is a policy framework, hosted by the United Nations (UN) Environment Programme, aimed at promoting the sound management of chemicals throughout their lifecycle, to achieve the 2002 Johannesburg goal agreed at the World Summit on Sustainable Development, that "by 2020, chemicals are produced and used in ways that minimize significant adverse impacts on human health and the environment".

2. SAICM, although not legally binding, aims to build international cooperation and influence national policy through deliberation and consensus, between governments, industry, non-governmental organisations and civil society.

3. SAICM was launched in 2006 in Dubai, at its first international conference attended by representatives from 154 Governments, 20 intergovernmental organisations and 45 non-governmental organisations (NGOs). Two outputs were agreed: (1) the Dubai Declaration – affirming delegates' commitment to the Johannesburg goal; (2) the Overarching Policy Strategy (OPS) – outlining the five objectives that would be the focus of action for meeting the Johannesburg goal addressing risk reduction, knowledge and information, governance, capacity-building and technical cooperation, and illegal international traffic.

4. A further output of the conference was the Global Plan of Action (GPA) that listed 273 specific activities, together with associated targets and indicators of progress, designed to support governments in the pursuit of the five OPS objectives.

5. The international community's efforts to address the sound management of chemicals and waste, have been reflected in numerous UN initiatives. These included: International Labour Organisation (ILO) conventions on White Lead (Painting) (came into force in 1923); benzene (in 1973); occupational cancer (in 1976); air pollution, noise and vibration in the working environment (in 1979); use of asbestos (in 1989); chemicals at work (in 1993).

6. Other international conventions related to the sound management of chemicals include: the Basel Convention on Transboundary Movement of Hazardous Wastes and their Disposal (in 1989); Bamako Convention on the ban on the import of all hazardous and radioactive wastes into Africa (in 1998); Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in 1998); Stockholm Convention on Persistent Organic Pollutants (in 2001); WHO International Health Regulations (in 2007); Minamata Convention on Mercury (in 2017).

7. In addition to the international conventions and regulations there have been a number of international initiatives that promote the sound management of chemicals and waste. These included: the first World Health Assembly (1948) which included work on, air pollution, water quality, food standards, pesticide safety, and occupational health; the International Programme for Chemical Safety (IPCS) (1980); Agenda 21 Chapter 19 – laid out the plan of action to ensure the environmentally sound management of toxic chemicals, agreed at the Earth Summit; the Intergovernmental Forum on Chemical Safety (IFCS) established in 1994; the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) established in 1995; the World Summit on Sustainable Development (2002) that provided the goal that serves as SAICM's mission; the 2012 Rio+20 Summit on Sustainable Development which addressed the sound management of chemicals and waste; the Sustainable Development Goals agreed in 2015 that has chemicals and waste embedded, or mainstreamed, throughout many of the goals, and specifically refers to the 2020 Johannesburg goal under SDG target 12.4: 'By 2020, achieve the environmentally sound management of chemicals and all wastes throughout their life cycle, in accordance with agreed international frameworks, and significantly reduce their release to air, water and soil in order to minimize their adverse impacts on human health and the environment'.

OBJECTIVE AND METHODOLOGY OF THE INDEPENDENT EVALUATION

8. The objective of the evaluation is to provide an analysis of SAICM activities from 2006-2015 that will support SAICM stakeholders to take an informed decision on future arrangements for the Strategic Approach and the sound management of chemicals and waste beyond 2020.

9. The evaluation draws on lessons learned with respect to the implementation of the Strategic Approach, including in relation to the:

a. Impact of the Strategic Approach;

b. Strengths, weaknesses and gaps in implementing the Strategic Approach;

c. Progress towards targets;

d. Efficacy of the institutional arrangements within the voluntary multi-sectoral and multi-stakeholder approach of the Strategic Approach.

10. The methodology comprised a review of literature, online surveys, focus group discussions and one-to-one interviews. The literature review involved reviewing SAICM documents published over the period 2006 to 2015, documents published by SAICM stakeholders and documents and academic literature relating to the sound management of chemicals and waste. About 100 such documents were reviewed to develop the report.

11. An online survey sent to the database of SAICM stakeholders held by the SAICM Secretariat generated a total of 212 responses. Of those that indicated their affiliation (195), 64% were Government representatives from across the UN regions.

12. The online survey was followed up with 13 focus group discussions with SAICM stakeholders at the inter-sessional meeting held in Brasilia in February 2017 and in Geneva in April 2017. A total of 167 participated in these focus groups.

13. The results of these focus groups were shared with the focus group participants and they were invited to provide further details, amendments and comments.

14. The draft of the independent evaluation report (SAICM/IP.2/4) was presented to participants at the inter-sessional meeting held in Stockholm in March 2018. Following this meeting SAICM stakeholders were invited to comment and provide feedback on the draft report. A total of 245 comments/ inputs were received over the course of the following three months. The comments came from across the range of SAICM stakeholder groups.

15. A further round of engagement with Government National Focal Points (NFP) took place over the period May-July 2018. NFPs were emailed a summary document outlining NFP inputs received and were asked to reflect on this, and to provide further information. NFPs were invited to make written submissions or, if they preferred, to provide these submissions verbally through a telephone interview. These interviews were conducted in English, Spanish or French, at the request of the NFP interviewee. In all, 53 NFPs responded.

16. The analysis of findings from the literature review and interviews resulted in a review of the institutional and management arrangements of SAICM. Following on from the institutional review, an impact analysis was conducted.

17. The impact analysis was framed in terms of a Theory of Change. A Theory of Change maps the pathways by which SAICM seeks to deliver on the overall objective ‘to achieve the sound management of chemicals throughout their life-cycle so that, by 2020, chemicals are used and produced in ways that lead to the minimization of significant adverse effects on human health and the environment’. The Theory of Change provides a framework to assess the degree of success that SAICM has had in achieving the overall objective. No Theory of Change was constructed at the outset of SAICM in 2006. The Theory of Change presented in this report has been developed by the evaluator using the original SAICM texts and resolutions as a basis.

INSTITUTIONAL SET-UP OF SAICM

18. The institutional structure of SAICM was outlined in the original SAICM texts that were produced following the first International Conference on Chemicals Management (ICCM) in 2006. Figure 1 below presents that institutional structure.

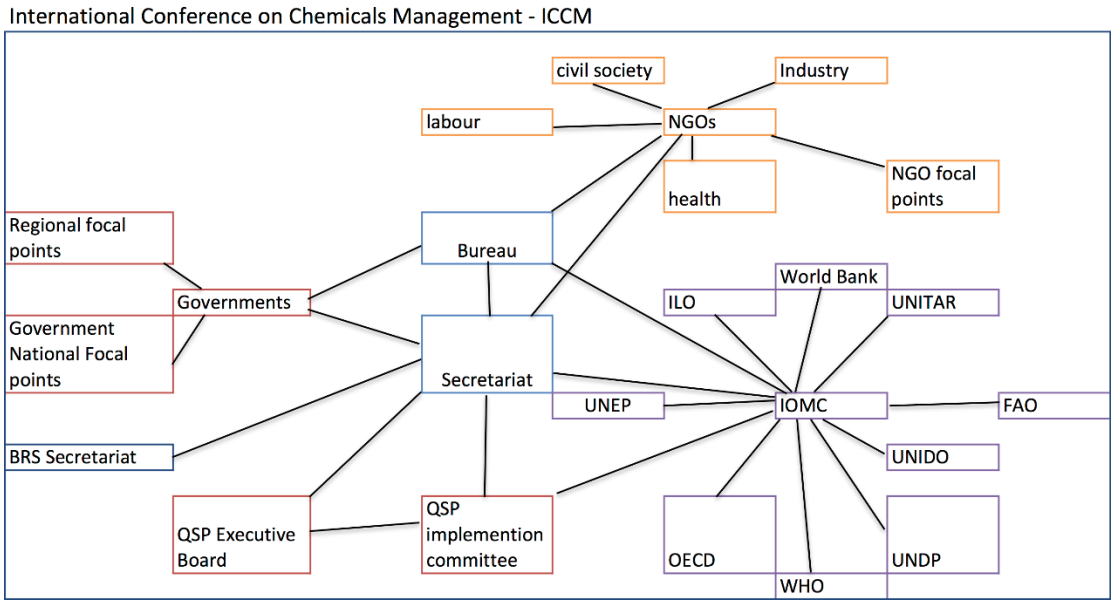
19. Reflecting the multi-stakeholder nature of SAICM, the institutional structure comprised: Government representatives – National and Regional Focal Points; members of the IOMC; NGO representatives from the health and labour sectors, industry, and civil society.

20. The SAICM Secretariat, located within the Chemicals and Health Branch (formerly the Chemicals and Waste Branch) of UN Environment, was mandated to serve the Bureau, the Quick Start Programme (QSP) Implementation Committee (IC) and the QSP Executive Board. The Secretariat functions also included the facilitation of meetings and supporting SAICM stakeholders, enabling them to participate effectively in SAICM. The Bureau was mandated to advise the President (of the Bureau) and the secretariat on the conduct of the business of the Conference and its subsidiary bodies.

21. The QSP IC was mandated to review applications for funding through the QSP and to monitor the delivery of the QSP project outputs. The QSP provided funding for projects that "support activities to enable initial capacity building and implementation in developing countries, least developed countries, and small island developing States and countries with economies in transition". The QSP Executive Board provided oversight and accountability for the QSP trust fund.

22. The joint Basel, Rotterdam and Stockholm (BRS) secretariat was established to support the conferences of the parties to the BRS conventions and their subsidiary bodies to enhance cooperation and coordination together. The goals of the three conventions are broadly aligned with the SAICM goal, namely, to protect human health and the environment from chemicals and waste.

Figure 1: SAICM Institutional Structure and Set-up

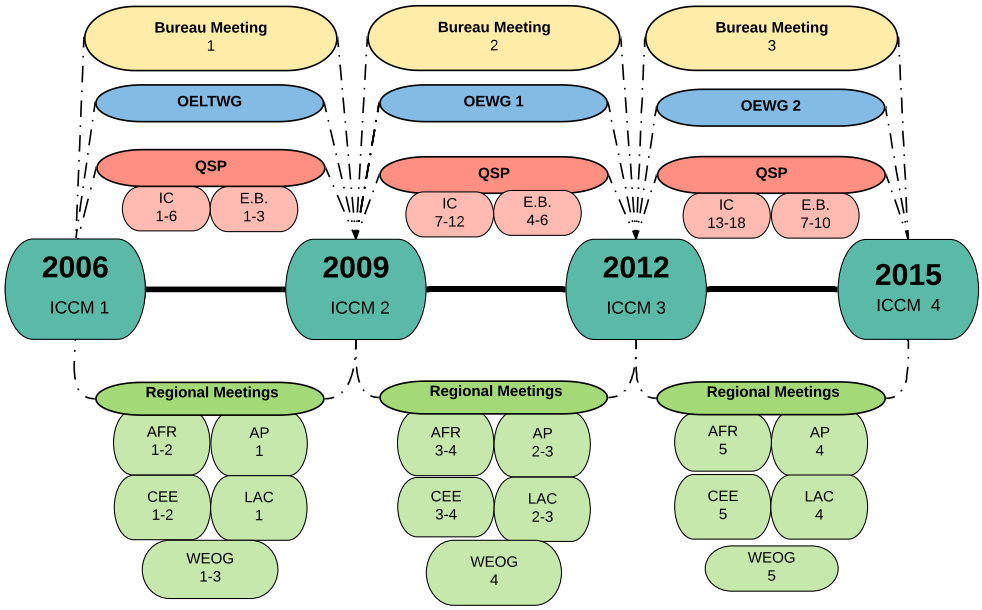


23. The timeline for the SAICM process over the period 2006-2015 is shown in Figure 2 below. The management and delivery of the process were primarily the responsibility of the SAICM secretariat. The three-yearly conferences (ICCM1-ICCM4) were interspersed with inter-sessional meetings – the Open-Ended Working Group and regional meetings. In total there were three OEWG meetings and four or five regional meetings per region.

24. The inter-sessional meetings were designed as a forum for SAICM stakeholders to deliberate and discuss strategies and issues pertinent to the sound management of chemicals: preparing proposals, reviewing outcomes of regional meetings, identifying priorities and drafting resolutions for consideration at the International Conference on Chemicals Management.

25. The Quick Start Programme Implementation Committee convened six monthly meetings to review applications, monitor progress of funded projects and report to the Quick Start Programme Executive Board. The Executive Board met annually over the period 2006-2015.

Figure 2: Timeline of SAICM process (2006-2015)



THEORY OF CHANGE

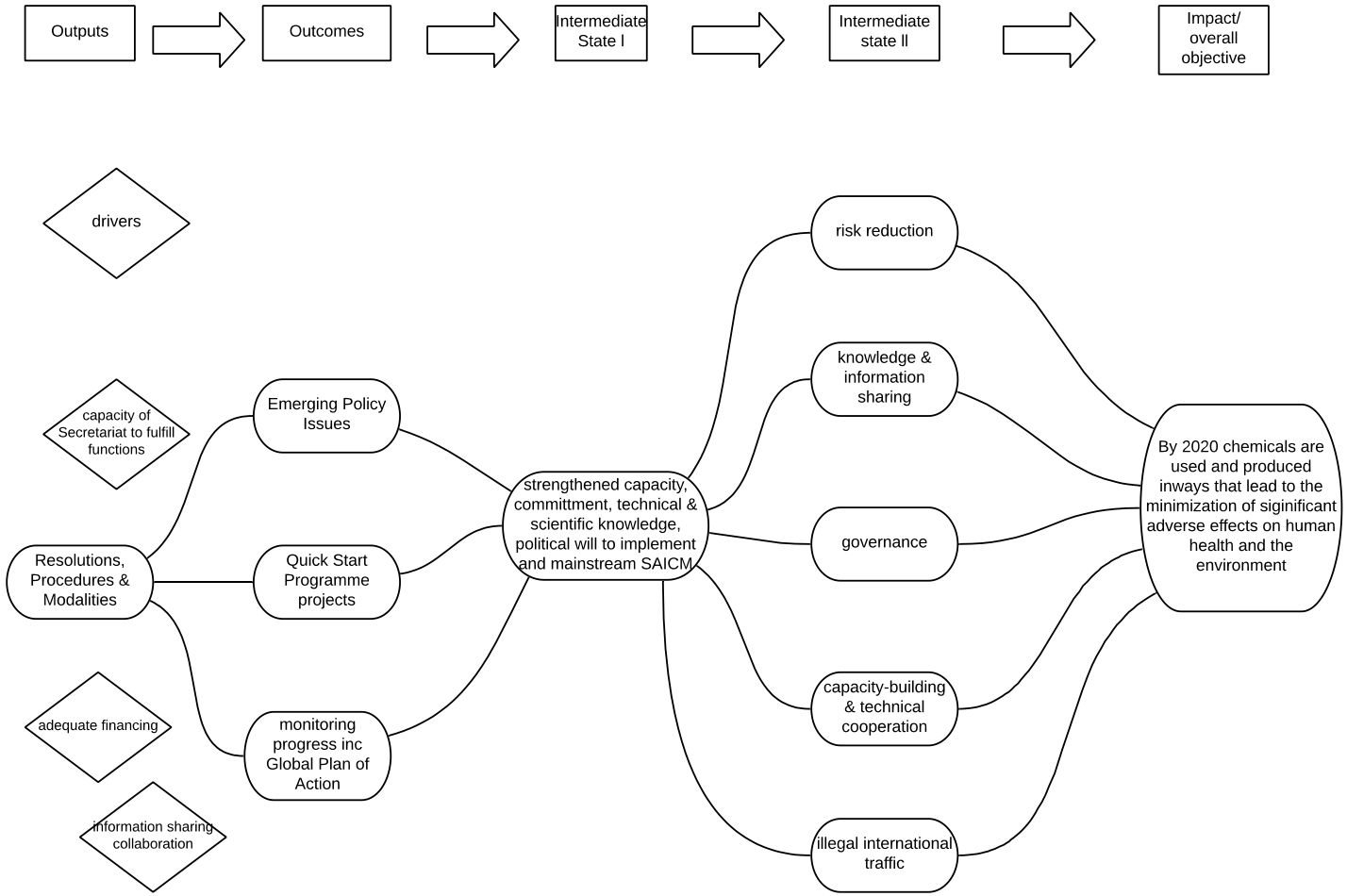
26. The key meetings undertaken under SAICM are depicted in the figure above – the Conferences, associated Bureau meetings, and inter-sessional meetings. The outputs from the SAICM process were the resolutions, procedures and modalities agreed upon at conferences – ICCM1, ICCM2, ICCM3 and ICCM4.

27. It is these outputs that were assumed to give rise to the outcomes – the delivery of the portfolio of QSP projects, delivery of the initiatives agreed upon for each emerging policy issue and an effective monitoring system for tracking progress in achieving the 2020 goal. These pathways are presented in the Theory of Change developed for the impact evaluation, shown in Figure 3 below.

28. The realisation of the SAICM outcomes depended on a number of drivers – that is factors that would influence the success in achieving the outcomes that were under the sphere of influence of the SAICM stakeholders. These were: the capacity of the secretariat to deliver on its functions; adequate financing available to deliver the outcomes; the degree of collaboration and sharing between stakeholders.

29. Successful realisation of the outcomes would lead to the achievement of Intermediate State l: strengthened capacity, commitment, technical and scientific knowledge, political will to implement and mainstream the sound management of chemicals and waste.

Figure 3: Evaluator's Reconstructed Theory of Change



30. The pathways to impact lead to Intermediate State ll – the OPS five objectives of risk reduction, knowledge and information sharing, governance, capacity-building, illegal international traffic. It is through the realization of these objectives that it is assumed the overall impact, i.e. the 2020 goal, would be realised.

OUTPUTS: RESOLUTIONS, PROCEDURES AND MODALITIES

31. The resolutions agreed at each International Conference represented significant outputs of the SAICM process. This section provides an overview of the high number of outputs delivered in the period 2006-2015. The resolutions at ICCM1 focused on the implementation arrangements and the establishment of the QSP.

32. At ICCM2, Resolution ll/4 identified four issues as emerging policy issues - lead in paint; chemicals in products; hazardous substances within the life cycle of electrical and electronic products; nanotechnologies and manufactured nanomaterials. The resolution also set out modalities for considering emerging policy issues at future Conferences.

33. The 'lead in paint' issue focused on advocating for a global partnership to promote phasing out the use of lead in paints that would adopt terms of reference based on those presented at ICCM2. The resolution requested that UNEP and WHO serve as the secretariat for the global partnership, and that the partnership developed a business plan articulating clear milestones for progress in achieving a global phase-out of lead in paint.

34. The 'chemicals in products' issue primarily focused on establishing a project to collect and review existing data on information systems pertaining to chemicals in products (including regulations, standards and industry practices), assessing that information, identifying gaps and developing specific recommendations to address those information gaps.

35. The 'hazardous substances within the life cycle of electrical and electronic products' focused on convening a workshop to consider issues that would develop a series of options and recommendations for future work.

36. The 'nanotechnologies and manufactured nanomaterials' focused on engaging in dialogue with stakeholders with a view to gaining further understanding of the issue.

37. Resolution ll/5 called for the establishment of a stewardship programme aimed at reducing emissions of perfluorinated chemicals of concern in products and to work toward global elimination. The resolution focused on promoting surveys on product content and environmental release of perfluorinated chemicals, together with promoting the exchange of information on current alternatives, potentially safer alternative substances and technologies.

38. At ICCM2, the 20 indicators of progress and the modalities for reporting these indicators were presented. Data for these indicators were to be collected nationally and monitored at the regional and global levels. The indicators were aligned to each SAICM objective.

39. Resolution lll/1 presented a proposal for secure and sustainable financing – mainstreaming, industry involvement and external financing. Mainstreaming called on Governments to integrate SAICM objectives into their national development plans and priorities.

40. Industry involvement was envisaged as meaning that industry internalizes the costs of complying with chemicals and waste regulations, with economic instruments (e.g. taxes and subsidies) used to shift the external costs of production, use and disposal of chemicals away from the public sector to the private sector. Industry involvement was also conceived to involve industry transferring cleaner technology and taking innovative steps to 'green' products throughout their life.

41. External financing was envisaged to involve two components. Firstly, the establishment of national chemicals and waste units in all recipient countries, and secondly the creation of an integrated chemicals and waste focal area under the Global Environment Facility (GEF).

42. Resolution lll/2 – Emerging policy issues – built upon resolution ll/4. In regard to 'lead in paint' the resolution called for Governments to: raise awareness of lead toxicity to human health, ensuring effective assessment of the presence of lead in the consumer paint market and establishing lead exposure pathways for children under six years old, paint users and workers in paint production facilities; provide guidance to identify potential lead exposure, build capacity to conduct blood lead testing and surveillance programmes; promote

international certification of new paint products; introduce prevention programmes to reduce exposure, particularly in housing, childcare facilities and schools; promote national regulatory frameworks; encourage companies to substitute lead compounds added to paint with safer alternatives. The resolution supported the Global Alliance on Eliminating Lead in Paint's proposal to establish an international lead poisoning prevention week of action.

43. The resolution called for a 'chemicals in products' (CiP) proposal to be developed for a voluntary international programme for information on chemicals in products along the supply chain and throughout their life cycle. The resolution further called for a workshop to discuss the completed proposal.

44. The resolution called for all stakeholders to consider the recommendations made at the international workshop on hazardous substances in the life cycle of electrical and electronic products held in Vienna in March 2011. The resolution also resolved to work to create a set of best practice resources.

45. For the issue of nanotechnologies and manufactured nanomaterials, Resolution lll/2 encouraged all stakeholders to facilitate the exchange of information on nanotechnologies and nanomaterials, and recommended the development of international technical and regulatory guidance and training materials. The resolution called for industry to enhance their stewardship role and responsibility as manufacturers of nanotechnologies and nanomaterials and to participate in information exchange. The resolution invited the UN committee of experts on the Globally Harmonized System of Classification and Labeling of Chemicals GHS to review the applicability of the GHS criteria to manufactured nanomaterials and, if necessary to prepare a workplan for adapting those criteria.

46. ICCM3 agreed that international cooperation to build awareness and understanding and promote actions on endocrine-disrupting chemicals was an emerging policy issue. Work should build on stakeholders' existing activities to: provide information and expert advice; raise awareness and facilitate scientific information-exchange; provide international support for capacity-building; facilitate mutual research, development of case studies and guidance on translating research into action.

47. Resolution lll/3 called for the Global Perfluorinated Chemicals (PFC) Group to broaden its participation beyond the member countries of OECD as a means to further progress work in this area. The resolution also invited the Global PFC Group to collaborate closely with the secretariat of the Stockholm Convention.

48. At ICCM4, Resolution lV/1 endorsed the Overall Orientation and Guidance (OOG) for achieving the 2020 goal as a voluntary tool that will assist in prioritizing efforts for the sound management of chemicals. The 11 basic elements that comprised the OOG, were deemed critical at the national and regional levels to attainment of the 2020 goal.

49. The 11 basic elements were envisaged as a monitoring tool to assess progress towards measurable steps at the national level as well as a guide to set national priorities and to align activities to the Sustainable Development Goals (SDGs).

50. Resolution lV/2 encouraged stakeholders to implement the activities added to the GPA at ICCM3 in regard to the emerging policy issue 'hazardous substances in electrical and electronic products'. The resolution further invited UNIDO to develop and finalise the workplan 2016-2020 set out in the secretariat's report 'Emerging policy issue update on hazardous substances within the life cycle of electrical and electronic products'. The resolution also called for stakeholders to implement the workplan, in a particular the ILO in addressing worker safety. The resolution further encouraged stakeholders to promote advocacy, awareness, information, education and communication about hazardous chemicals in electronic and electrical products for vulnerable groups. It also called for original equipment manufacturers to implement product-take-back programmes as well as to collect and provide health and safety information to workers on chemicals they are handling or exposed to in electronic and electrical products manufacturing.

51. For the emerging policy issues of endocrine disrupting chemicals, the resolution invited UNEP and WHO to address needs identified by developing countries as part of the workplan set out in the progress report submitted to ICCM4. Specifically, to: provide up-to-date information; raise awareness; provide international support for activities to build capacity, in particular developing countries and countries with economies in transition.

52. Resolution lV/2 introduced a new emerging policy issue: environmentally persistent pharmaceutical pollutants. The resolution invited the IOMC to lead and facilitate cooperation action and to develop a plan of work, and invited Governments and other stakeholders to generate and share information to fill identified knowledge gaps. It requested these stakeholders to provide support – expertise and financial – on a voluntary basis.

53. Resolution lV/3 on highly hazardous pesticides (HHP) – welcomed the FAO, UNEP and WHO strategy to address HHPs. This strategy drew on the experience of FAO, UNEP and WHO over 2009-2012 – developing HHPs Guidelines, work on identifying and phasing out HHPs in Botswana and Mozambique, developing a regional strategy of phasing out HHPs in the countries of the Southern African Development Community (SADC) and the East African Community (EAC) and Pacific. The resolution encouraged stakeholders to implement the strategy with an emphasis on promoting agroecological-based alternatives and strengthening national regulatory capacity to conduct risk assessment and risk management.

OUTCOMES

Emerging Policy Issues (EPI) and Other Issues of Concern

Lead in Paint

54. In the six years since ICCM2 (2009-2015) that lead in paint had been an emerging policy issue under SAICM, the Global Alliance on the Elimination of Lead Paint grew to a partnership of 38 – nine governments, three intergovernmental organizations and 26 non-governmental organizations. By June 2015, 57 Governments had put in place legally binding regulations relating to lead in paint, with another 14 declaring that they were in the process of putting such measures in place. These figures fell short of the target (70 or more by 2015) set in the business plan.

55. During the early years of the Alliance's work, activities centred on information gathering and identifying gaps in knowledge. The Alliance's partners undertook paint sampling and testing in a number of countries including: Kazakhstan, Nigeria, Lebanon, Peru and the Russian Federation. IPEN – a partner of the Global Alliance – received funding from the European Union SWITCH-Asia Programme to conduct paint sampling in seven Asian countries – Bangladesh, India, Indonesia, Nepal, Philippines, Sri Lanka and Thailand.

56. Partners of the Global Alliance – UNEP and IPEN – undertook sampling and testing of lead content in decorative paints in the market in nine developing countries and countries with economies in transition – Argentina, Azerbaijan, Chile, Cote D'Ivoire, Ethiopia, Ghana, Kyrgyzstan, Tunisia and Uruguay. Results from both these surveys indicated that paints tested contained high levels of lead, although lead free paint was available in these countries.

57. The Global Alliance launched international awareness campaigns in 2013, 2014 and 2015 providing multilingual materials in support of those campaigns, accessible from the Alliance's website.

58. The Alliance was successful in securing funding from the governments of the United States, Germany, Norway and Sweden that were used to convene meetings and the operational costs of the Alliance's start-up phase.

59. The on-line survey of SAICM stakeholders, for this evaluation, revealed that over half of the respondents considered that they had had success in addressing this emerging policy issue in their activities.

Chemicals in products

60. Four product sectors were selected in the design of the Chemicals in Products efforts, including children's toys, electronics, textiles and construction materials. The case study reports produced highlighted the interruption of information exchange in the production chain between chemical manufacturers providing information further down the production chain on the one hand, and the producers/ brand owners who attempt to pull down information on chemical content in materials and components from higher up the chain, on the other.

61. Key outcomes of the work on this issue highlighted the gaps, obstacles and commonalities identified in the four sectors. They were: the need for information on the part of (1) product designers in making decisions, (2) actors within the production chain concerning the chemicals they use, (3) Governments and distributors in overseeing the safe composition/content of products, (4) consumers in making informed purchases, (5) recyclers in

properly directing materials back into production processes and (6) waste-handlers in following proper disposal practices.

62. The proposal for a voluntary international programme for information on chemicals in products along their supply chain, called for in Resolution lll/2, was developed and presented at ICCM4. ICCM4 welcomed the chemicals in products programme document as a voluntary framework for all Strategic Approach stakeholders. In this evaluation however, civil society stakeholders noted concerns for the emphasis on voluntary sharing of information with Governments. They wanted to see more responsibility placed on industry along the value chain to provide governments with full access to information on chemicals in products.

63. The on-line survey with SAICM stakeholders revealed that half of respondents considered that they had had at least some success in addressing this emerging policy issue in their activities. Developing country stakeholders highlighted the lack of capacity and resources to address this issue, observing that most products are imported and authorities are not able to monitor for chemical composition.

Hazardous Substances within the Life Cycle of Electrical and Electronic Products

64. The workshop on this issue called for in Resolution ll/4 had originally been scheduled for May 2010, but due to the lack of financial support it had to be postponed until March 2011. Funding from the ministries of environment of Japan, Sweden and the United States Environmental Protection Agency together with UNIDO enabled the workshop to take place. The workshop resulted in three sets of recommendations – upstream, midstream and downstream recommendations.

65. During the period 2012 to 2015, progress on this emerging policy issue centred on downstream activities providing support to developing countries for the design of sustainable e-waste management schemes; development of public-private partnerships; establishment of an informal network for work on e-waste, including a pilot study looking at heavy metals in children living and studying near an e-waste site in Thailand; development and endorsement by 200 public interest NGOs of "A challenge to the global electronics industry to adopt safer and more sustainable products and practices, and eliminate hazardous chemicals, exposures and discharges".

66. At ICCM4, a representative speaking on behalf of African Group called for action to minimise the use of hazardous materials in the production processes, i.e. calling for a shift in focus from downstream to upstream processes. This was of critical importance to Africa, due to the large inflow of e-waste to the continent and the crude recycling methods employed, which posed risks to human health and the environment.

67. The on-line survey with SAICM stakeholders revealed that less than a third of respondents considered that they had had at least some success in addressing this emerging policy issue in their activities.

Nanotechnologies and Manufactured Nanomaterials

68. Over the course of 2009-2012, three activities in the area of nanotechnologies and manufactured nanomaterials were conducted: UNITAR held a series of awareness-raising workshops; pilot activities with support from the Government of Switzerland, were undertaken in Uruguay, Nigeria and Thailand to explore the development of national nanotechnology-related policies; a report on nanotechnologies and manufactured nanomaterials was coordinated by the secretariat.

69. At ICCM3 several representatives expressed concern over the lack of available information on the benefits and risks posed by manufactured nanomaterials and the ethical and social issues they raised.

70. In the report on progress made at ICCM4, achievements included: a second phase of pilot projects at the national level, in Armenia, Jordan and Viet Nam, building on the first pilot projects; production of a guidance document and e-learning course 'An introduction to nanomaterial safety' delivered twice in 2014 and once in 2015; regional meetings on capacity-building on nanosafety in the Latin America and the Caribbean, Africa and Asia and the Pacific regions. OECD continued to develop freely available on-line tools for assessing nanotechnologies and nanomaterials for regulatory purposes; WHO convened an expert meeting in 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.

71. Following on from the pilot project in Thailand, the Thai Government approved a National Nanotechnology Policy Framework and a five-year "National Nanosafety and Nanoethics Strategic Plan".

72. The 2015 regional workshops on nanosafety highlighted significant gaps in addressing this emerging policy issue. The workshops identified the need for: improvements in human resources and expertise, in policy and legal frameworks, and in nano-focused infrastructure; creating national requirements for a registry of nanomaterials; implementing product identification, regulation and standards' setting; establishing and promoting an accreditation scheme for relevant centres and agencies; enhancing communications and sharing expertise.

73. Other gaps in delivering on this emerging policy issue presented at ICCM4 included the need for a central hub to share and disseminate information. The lack of a SAICM information clearing house was recognised. The need to increase work and engagement with industry in order to enhance industry's stewardship role and the provision of information on nano was also recognised.

74. The on-line survey with SAICM stakeholders revealed that about a third of respondents considered that they had had at least some success in addressing this emerging policy issue in their activities.

Endocrine-Disrupting Chemicals (EDC)

75. The main progress made under this emerging policy issue from ICCM3 to ICCM4 was the publication of the UNEP/WHO report *State of the Science of Endocrine Disrupting Chemicals – 2012*. This report was not without controversy; there is an on-going debate between stakeholders as to the testing regime that is most appropriate for EDCs. Those that advocate a (linear) dose-response function approach for each chemical in isolation, are at odds with those that advocate a non-linear approach to risk assessment that also addresses timing of exposure and the issue of synergistic effects of combinations of more than one EDC. Furthermore, these advocates also argue for risk assessment that distinguishes between the different effects for different ages – from fetuses, to children, to reproductive adults, to older people.

76. At the regional workshops held between ICCM3 and ICCM4, it became clear that most developing countries and countries with economies in transition have limited or no control over substances with endocrine-disrupting potential.

77. OECD has developed and updated existing Test Guidelines for both hazards to the aquatic environment and to human health. WHO has established a global network of chemical risk assessment institutions (Chemical Risk Assessment Network) in order to provide a forum for scientific exchange and collaborative actions, including on endocrine-disrupting chemicals.

78. The on-line survey with SAICM stakeholders revealed that just under half of respondents considered that they had had at least some success in addressing this emerging policy issue in their activities.

Perfluorinated Chemicals (PFC)

79. During the period 2009-2012 activities to address this issue of concern included: establishment of a web-based portal on perfluorinated chemicals; workshop on perfluorinated chemicals held on 5 September 2011; establishment of a global perfluorinated chemicals group that developed a draft programme of work.

80. Resolution lll/3 at ICCM3 noted that a significant need remained for additional work to support the implementation of resolution ll/5, and invited the Global PFC Group to broaden participation in the work on perfluorinated chemicals beyond the member countries of the Organization for Economic Cooperation and Development (OECD). Consequently, the 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. Efforts were made to engage a wider group of stakeholders to participate in the work of the Global PFC over the period 2012-2015.

81. The on-line survey with SAICM stakeholders revealed that just under two fifths of respondents considered that they were very successful or had had some success in addressing this issue. Much of this success was attributed to the regulatory regimes in WEOG countries. Within developing countries, stakeholders were of the view that they lacked the resources and capacity to monitor this group of chemicals. OECD and UNEP considered

that they had made progress in raising awareness of these compounds but the actual transition to safer alternatives is very slow. Respondents concluded that transitioning to safer alternatives will not take place in the short term.

Quick Start Programme

82. A total of 70 projects had been completed by June 2015. A further 45 projects had completed their activities and were in the process of submitting and revising their final reports at that time. Most of the 115 projects had completed all their activities. A comprehensive Impact Evaluation of the QSP outcomes was conducted in 2015 (SAICM/ICCM.4/INF/5). This evaluation reached a number of conclusions:

- A key success of the QSP was the creation of enabling environments for the sound management of chemicals at the national level;
- In many cases the QSP projects succeeded in 'mainstreaming chemicals management' into national legislation, policies and institutions. However, not all countries were able to succeed in this due to a range of factors including the lack of priority of chemical management in national agendas, a lack of technical capacity as well as the lack of capacity for inter-departmental collaboration and coordination required for effective chemicals management;
- A large number of publications were produced through the QSP projects. However, these documents and data were not readily available in part because, at the SAICM secretariat level, there was no centralised system of content management and retrieval, which would have allowed for outputs to be made accessible to a wide audience;
- Major gains were documented in political and technical service-level awareness and understanding of the risks of chemicals, the importance of sounds management of chemicals, and the tools available to manage risks; and in stakeholder coordination with enhanced coordination and active participation by diverse stakeholders. However, quantitative data on the health and environmental impacts of chemicals remained scarce and systems for regularly collecting and updating such information were largely absent;
- Apart from in a minority of, mainly non-governmental organization projects, gender was not adequately addressed;
- Relatively few civil society projects were funded but their impact was high. Partnerships between NGOs and government were found to be very effective in ensuring good outcomes as well as the sustainability of projects;
- Many projects developed externally-funded projects which effectively continued QSP projects (e.g. with funds from GEF, UN agencies, NGOs and donors); however few countries were able to follow up with resources allocated from national budgets; and even fewer were able to give examples of economic instruments to promote industry participation in financing for chemical management;
- For many governments, chemicals were still not a priority issue, and there was a lack of evidence of internalisation and delivery of chemicals management into national plans and budgets. Chemical management initiatives relied on external sources of funding; and on individual commitment. Even where chemical management was reflected in Government mandates and policies, an 'implementation gap' still existed.

Monitoring progress including Global Plan of Action, Indicators of Progress and the Overall Orientation and Guidance (OOG)

83. IPEN has been the most prominent stakeholder in reporting regularly on the progress of its members in contributing to the delivery of GPA activities, providing regular monitoring reports at ICCM2, ICCM3 and ICCM4.

84. An assessment of progress made by IOMC organizations in contributing to the delivery of the activities within the GPA was produced by IOMC in June 2014, providing reflections on progress made for each activity over the period 2006-2014.

85. In regard to Governments reporting on progress made in delivering on the GPAs there was no systematic reporting to ICCM. However, governments were invited to participate in the systematic collection of data relating to the 20 indicators of progress.

86. A baseline report covering the period 2006-2008, and two progress reports (2009-2010; 2011-2013) have been produced, reviewing countries' performance in making progress towards the five overarching policy objectives, as reflected by the 20 indicators. However, the baseline data collection exercise did not allow for the development of a comprehensive baseline for all 20 indicators. In the end, baseline estimates were only possible for seven of the indicators.

87. The common approach to data collection across the two reporting periods had the potential to allow for a comparative analysis to be conducted. However, a number of weaknesses in the data collection limited that potential. Firstly, the relatively low response. Secondly, and more significantly, the regional variations in response rates, particularly for the second reporting period (2011-2013). Thirdly, the lack of consistency in country submissions between the two reporting periods – those countries reporting in period 2 were not necessarily the same countries that had reported in reporting period 1. These limitations call into question the effectiveness of the reporting mechanisms.

88. The 20 indicators are outputs based and, whilst being a necessary condition for meeting the 2020 goal, may not be sufficient. There is a need for outcome and impact focused indicators to complement the existing indicators of progress, i.e. results-based indicators that measure tangible reductions in health and environmental impacts of chemicals use.

89. Notwithstanding the limitations of the indicators of progress as an effective monitoring system to track performance of SAICM over time, 59% of respondents (of the online survey) considered that the indicators of progress had been very effective (8%) or had had some effect (51%) in assessing progress towards the sound management of chemicals and waste.

Drivers

Capacity of Secretariat to fulfill functions

90. Over the ten year period 2006-2015, the secretariat was hampered by capacity constraints to deliver on its mandated functions. Indicative budgets approved at each conference never materialised. The annual shortfall ranged from a 4% shortfall in 2013 to a 56% shortfall in 2009. The annual shortfall was at least 43% for six of the ten years (2006-2015).

91. The secretariat experienced a chronic shortfall in professional staff capacity throughout the period 2006-2015; The project addressed this shortfall to some extent through the contracting of short-term consultants.

92. Shortfalls in staff and resources affected the secretariat's ability to deliver on a number of functions. The most significant of these were the facilitation of the operation of the QSP function and the information clearing house function.

93. The secretariat was unable to realise its full potential for sharing the knowledge generated from the QSP project portfolio between developing countries because of the under-funding of the Secretariat in general, and the inability to establish an effective forum for such knowledge exchange i.e. the information clearinghouse, in particular.

94. Despite the challenges that faced the secretariat, the evaluation of its performance (2018) concluded that the secretariat was effective in providing support to the ICCM and its subsidiary bodies. The role of the secretariat in organising these meetings, preparing documents, being responsible for the logistics and sharing outputs with participants post-conference, was central to their success.

Information sharing and collaboration

95. There has been much collaboration between SAICM stakeholders. The IOMC organisations have led on the emerging policy issues: UNEP/WHO for lead in paint; UNEP for chemicals in products; UNIDO for hazardous

substances in the lifecycle of electronics; UNITAR/OECD for nanotechnologies; OECD/UNEP/WHO for EDCs; OECD/UNEP for PFOS. IOMC organisations were also executing agencies for 75 of the QSP project with the BRS secretariat or regional centers executing agency for six QSP projects. Further examples of information sharing and collaboration include the IOMC assistance for countries implementing the GHS; an online toolbox for decision making in chemicals management; the WHO Chemicals Road Map.

96. Limitations in information sharing and collaboration included: the withdrawal of the WHO sponsored secretariat post; the absence of a fully functioning SAICM information clearing house; limited collaboration between SAICM and BRS secretariats; concerns over limited disclosure of information by industry; withdrawal of the Intergovernmental Forum on Chemical Safety (IFCS) from the SAICM process; the absence of a scientific body integrated into SAICM; lack of commitment to SAICM agenda at the senior level by all IOMC organisations.

Secure, sustainable and adequate financing

97. The success of the SAICM mission depended on secure and sustainable financing. With the notable exception of the QSP trust fund, the SAICM process has been hampered by both uncertainty and inadequate financing.

98. At ICCM1 no agreement was reached about how to make provision for adequate and sustainable funding. At ICCM2 there were calls for a proposal to be presented at ICCM3. The proposal presented at ICCM3 was a contentious issue, with representatives in disagreement over the mainstreaming and industry involvement components of the integrated approach. There was a common concern raised on the challenges in raising funds for a voluntary approach as compared with legally binding instruments. At ICCM4, there was acknowledgement that the scale of resources available was insufficient to achieve the 2020 goal.

INTERMEDIATE STATE 1: STRENGTHENED CAPACITY, COMMITMENT, TECHNICAL KNOWLEDGE, POLITICAL WILL TO IMPLEMENT AND MAINSTREAM SAICM

Regional Experience

99. In the Africa Region there were several examples of national coordination committees established for chemicals management. These committees have brought together agencies, hitherto fragmented, sometimes working at cross-purposes and to their own agendas, into a common platform for cooperation and collaboration.

100. Countries that had established national coordination committees included: Burkina Faso, Egypt, Gambia, Cote D'Ivoire, Lesotho, Niger, Nigeria, Sierra Leone, South Africa and Tanzania. Two thirds of respondents (of 18) indicated that development of a strategic plan for chemicals management was well underway or completed. A third reported that the development was either yet to start or in the early stages of development.

101. The role of the Economic Community of West African States (ECOWAS) in facilitating regional cooperation on chemicals and waste management was highlighted. This regional body has been proactive, hosting a technical meeting of experts to validate the regional strategy and action plan for integrating chemicals and hazardous waste management.

102. NFPs from the Africa Region reported that SAICM regional meetings provided good opportunities for countries to share experiences and learn from each other. These meetings also enabled participants to develop common positions on chemicals and waste issues within the region, and address these issues in a more coordinated and coherent manner. The regional centers for the Basel and Stockholm conventions also facilitated the implementation of SAICM and provide a platform for sharing experiences. The QSP funded several regional projects over the 10-year period building capacity and facilitating regional networking.

103. In the Asia-Pacific Region, the Islamic Republic of Iran, Iraq, Maldives and India all reported having established national coordination committees for chemicals management. Three of the six NFPs that responded stated that the development of a strategic plan for chemicals management was well underway with one stating that they were in the implementation phase. Three reported that the process was yet to start.

104. NFPs from the Asia-Pacific Region highlighted the SAICM regional meetings and the regional meetings of the BRS conventions as promoting knowledge exchange between countries that helped to guide formulation of national legislation. They reflected that strengthening regional cooperation in this region will enhance the management of chemicals and waste. The QSP funded several regional projects that supported regional cooperation.

105. In the Central and Eastern Europe (CEE) Region, both Republic of Belarus and Serbia reported establishing such national coordination committees. Four of the six NFPs who responded, considered that the development of the strategic plan was well underway with broad engagement of stakeholders. Two responded that the process of developing a strategic plan was in the early stages of development.

106. Regional activities for some NFPs from the CEE Region included projects aimed at developing national systems of chemicals management in order to facilitate economic integration with the EU. The region also benefited from regionally focused QSP projects.

107. In the Latin America and the Caribbean (LAC) Region many examples of such coordination committees were provided; Costa Rica, Guyana, Mexico, Peru, Trinidad and Tobago and Uruguay. In this region, four out of 12 NFP respondents indicated that the development of a strategic plan for chemicals management had been completed with six stating that development of the plan was either yet to start or in the early stages.

108. In the LAC Region, the establishment of the regional chemicals and waste network of the intergovernmental forum of ministers of environment has strengthened the exchange of information and cooperation between countries. Support from the Basel Convention Regional Centers has enabled countries in the region to: advance activities for the early implementation of the Minamata Convention; to implement projects for the best practices for the management of PCBs in the mining sector; build capacity for managing POPs. The regional institution – Mercado Común del Sur (MERCOSUR) – composed of Argentina, Brazil, Paraguay and Uruguay, has developed an action plan aligned to the GPA that included the following priority areas: mercury, GHS, pesticides and contaminated sites. The region also benefited from QSP regionally focused projects.

109. For the EU countries of the Western Europe and Others Group (WEOG), the REACH Regulation of 2006, states that: 'This Regulation should contribute to fulfillment of the Strategic Approach to International Chemical Management (SAICM) adopted on 6 February 2006 in Dubai'. The EU and its Member States were reported to have a number of legal instruments in place that enhanced the responsibility and involvement of stakeholders. It was reported that the EU and its Member States fully implement the MEAs through respective EU legislation and have a number of legal instruments in place that aim at ensuring the sound management of chemicals and waste across sectors. The 7th Environmental Action Programme for the European Union (2013) included a number of actions on chemicals, including the development of a non-toxic environment strategy by 2018 (postponed until 2019).

110. It was reported that in Canada, SAICM and the 2020 goal has provided additional political impetus to Canada's domestic chemicals management programme as well as funding renewal requests over the 10-year period.

Role of National Focal Points

111. NFPs from Africa, Asia-Pacific, Central and Eastern Europe and Latin America and Caribbean regions identified their role as one of raising awareness and promoting the introduction of ideas generated at the international SAICM forum into national policies, legislation and regulations. They saw their role as one of coordinating and promoting the integration of chemicals and waste management among ministries and building capacity, sharing information and being champions for change.

112. In order to fulfill this role national focal points were required to play the role of facilitators, enablers, motivators and advocates, bringing together all stakeholders.

113. NFPs were expected to support the preparation of national strategic plans for taking forward SAICM in their countries, through extensive networking with stakeholders at the national and local levels. NFPs had a role in promoting synergies between the BRS and Minamata Conventions and SAICM and working with other national focal points from the region to develop regional agendas for chemicals and waste management.

114. NFPs' role was to mediate between the different national sector actors and SAICM for the exchange of information, and between the different NFPs of the region to coordinate projects and joint initiatives to be implemented by the competent national authorities.

115. A significant factor that influenced the ability of NFPs to fulfill their role was the institutional arrangements in which they worked. Most NFPs were located within the Ministry of Environment and found it a challenge to generate the synergies and collaboration between the ministries needed for SAICM. Many NFPs highlighted the inadequate institutional coordination and inter-agency cooperation as a major factor influencing their ability to deliver on their role.

116. For many, SAICM objectives were not high on national political agendas. This low priority was reflected within the NFP agencies – some NFPs had relatively junior positions, had multiple responsibilities, and consequently had insufficient time to devote to the SAICM agenda. For some, their role as NFP for SAICM was 'invisible' within their agency. The low political priority accorded to SAICM objectives was further reflected in the low budget, or no budget, allocated to SAICM related activities.

117. Capacity constraints included the lack of experienced personnel to conduct surveys (e.g. of contaminated sites), to assess health impacts as a result of exposure, monitoring and testing, as well as a lack of, and poor coordination between, accredited laboratories. Insufficient administrative capacity and numbers of qualified staff compounded by high staff turnover added to the challenges faced by NFPs in fulfilling their role.

118. Capacity constraints, limited resources and political context has led to agencies structured to address short-term problems, critical incidents and emergencies. Several NFPs reported that this short-term nature of chemicals management affected their ability to perform their role. This resulted in limited scope for planning and development for the long-term that would ensure safe and rational use of the entire spectrum of chemicals throughout their lifecycle.

119. Reflecting the sectoral structure, existing national chemical regulations were reported dispersed among numerous agencies – hard therefore to build an integrated regulatory framework. Weak legislation, the lack of technology and the technical capacity to maintain control on existing regulations, resulted in low levels of enforcement, thereby undermining NFPs' role.

120. NFPs reported that the influence of the industrial lobby ran the risk of undermining efforts to establish SAICM priorities for chemicals management. The relationship between the private sector and the regulatory authorities that govern chemicals and waste have a significant influence on NFPs fulfilling their role. The type of regulation, the level of enforcement and the nature of sanctions for the breach of regulations all have a bearing on the ability of NFPs to deliver on their mandate.

121. NFPs reported a lack of engagement with the private sector, a reluctance to share information and data, including health related data on exposure of employees to chemicals. The lack of cooperation reflected the perceived underlying competing interests between SAICM and the industrial agriculture and mining sectors.

122. The low level of awareness within Government and among end-users of chemicals posed serious risks to public health and the environment. The degree of commitment and political will to protect vulnerable groups, particularly women and children, from the health impacts of chemicals and waste impacted on NFPs' ability to deliver on their mandate. Concern was raised as to the extent of these health impacts and the lack of engagement with vulnerable groups. This limited engagement created uncertainty on the magnitude of impacts and therefore the appropriate actions required.

123. The degree of coordination and collaboration with SAICM stakeholders influenced the success of the NFP role. Turnover of NFPs highlighted the need for effective orientation programmes for newly appointed NFPs. Greater support and communication between NFPs, SAICM regional focal points, BRS focal points, IOMC organisations and the SAICM Secretariat, were seen as ways to enhance the NFP role.

INTERMEDIATE STATE II: OVERARCHING POLICY STRATEGY OBJECTIVES

Risk reduction

124. The organizations participating in the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) have developed chemicals management tools and guidance to support the implementation of risk reduction measures at national and regional levels. The International Council of Chemical Associations (ICCA) launched the Responsible Care Global Charter and the Global Product Strategy in 2006. CropLife International reported its training of field officers on good agricultural practices, and its two year partnership (2013-2015) with the World Cocoa Foundation to train professional Spray Service Providers in four countries of the Africa region.

125. Despite these efforts, significant gaps remain in addressing the objective of risk reduction. The Africa region at its fifth regional meeting, identified the lack of guidelines and methodologies to undertake risk assessment as a gap limiting the sustainable management of chemicals in the region. Similarly, the LAC Regional Coordinating Committee reported limited progress in risk assessment and management at the LAC region's fifth regional meeting in 2013, citing a lack of understanding of risk assessment methodologies, applications and evaluations.

126. IOMC reported that a high proportion of pesticides in use have high acute toxicity, have known chronic toxic effects even at very low exposure levels, or are very persistent in the environment or in organisms. Furthermore, there are pesticides that can cause severe or irreversible harm because of the conditions in which they are used because risk reduction measures - such as the use of personal protective equipment or maintenance and calibration of pesticide application equipment - are not easily implemented or are not effective.

127. PAN Asia-Pacific identified 14 highly hazardous pesticides in use by farmers in the Asia-Pacific Region. The survey found that hazardous conditions of use of these pesticides in countries across the region were similar. For example, pesticide packets and containers were stored in the house; empty pesticide packets were found in cooking areas; women sprayed chemicals without protective personal equipment; herbicide containers were used for water collection; communities were exposed to aerial spraying; pesticides were purchased in unmarked plastic bags. These practices put children at particular risk.

128. Similar findings were revealed in the Africa Region – very few pesticide containers were actually returned to suppliers; most were either dumped on farms, throw on garbage sites, or re-used for domestic purposes.

129. According to the WHO, over the last decades there has been limited progress in establishing poisons centres, and as of September 2017, only 46% of Member States had a poisons centre, with the most notable gaps being in the African, Eastern Mediterranean and Western Pacific regions.

Knowledge and information

130. Progress has been made in the development and exchange of knowledge and information on the sound management of chemicals and waste, including through regional meetings and workshops, improving the sharing of information, encouraging cooperation, supporting the establishment of priorities and reinforcing regional delivery.

131. The Strategic Approach has fostered enhanced coordination and cooperation among intergovernmental organizations and has expanded stakeholder participation in the sharing of knowledge and information on the sound management of chemicals and waste. More than 108 projects under the Quick Start Programme Trust Fund have contributed to the development or updating of national chemical profiles and the identification of capacity needs for sound chemicals management.

132. Progress has also been made in implementing and promoting the Globally Harmonized System of Classification and Labeling of Chemicals, including relevant supporting tools and materials. The Quick Start Programme Trust Fund has directly supported 24 projects on the labeling of chemicals according to internationally

harmonized standards and on the assessment and strengthening of national and regional capacity for implementing the Globally Harmonized System.

133. Despite this progress significant gaps persist. In the Africa Region, some countries do not have national chemicals profiles, and for those that do, profiles are not updated to reflect the latest chemicals of concern. An adequate platform for information exchange is lacking. In regard to the GHS, the region experiences different levels of implementation capacity, with knowledge and understanding of GHS lacking in some countries.

134. In the CEE Region, countries have different levels of GHS implementation capacity. The region also suffers from a lack of trained people to conduct risk assessments, and for the data that does exist, this is fragmented and information is not shared.

135. For the LAC Region, gaps persist in regard to the lack of awareness of the GHS by key stakeholders. There was also a lack of knowledge concerning the internal gaps and issues existing within agencies and other stakeholders with responsibility for the various aspects of chemicals management due to limited information sharing and collaboration. An effective mechanism for information sharing was also found to be lacking.

Governance

136. The NFPs now include 175 Governments. In addition, there are 85 focal points from non-governmental organizations, including a broad range of representatives from industry and civil society. The Strategic Approach secretariat has facilitated connections, coordination and involvement on the part of all stakeholder groups across the chemicals and waste cluster. At its third session, the International Conference on Chemicals Management agreed on a strategy for strengthening the engagement of the health sector in the implementation of the Strategic Approach.

137. Foundational and institutional capacity has been strengthened at the national level in some countries. Over 151 projects under the Quick Start Programme Trust Fund have contributed to the development and strengthening of national chemicals management institutions, plans, programmes and activities to implement SAICM.

138. Much work remains to be done. The African Region lacks comprehensive coverage of effective legislation for chemicals management. The lack of political will limits mainstreaming. Where legislation exists this is often outdated or fragmented. There remains a lack of coordination and cooperation between institutions and agencies tasked with chemicals management. Poor enforcement of legislation and standards. Effective cost-recovery and accountability mechanisms are lacking, with limited assessment of the externalized costs of chemical production use and disposal. In some countries legislation does not allow for an effective role for civil society in SAICM.

139. In the CEE Region, there remain a few countries that are not party to the BRS conventions. For some countries, chemicals issues have not been priorities and included in National Development Plans.

140. In the LAC Region, limited progress has been made in integrating SAICM objectives into national and regional development policies with associated budgets. Creating and strengthening national inter-sectoral, multidisciplinary committees remains a challenge. There persists a limited use of economic instruments to internalize environmental and health costs of industries in the chemicals sector.

Capacity-building and technical cooperation

141. The QSP has served as a primary tool for enabling activities related to capacity-building and technical cooperation through the implementation of 184 projects approved for funding under the Programme's Trust Fund in 108 countries. Funding for 54 projects was awarded to least developed countries or small-island developing States, and 21 have been led by civil society. Many projects have enhanced knowledge of the chemicals and waste management situation of the countries concerned, by developing policy and legal frameworks, strengthening institutional capacity, mainstreaming and raising awareness.

142. Capacity, technical cooperation, information sharing and exchange on best practices have been facilitated through QSP regional projects. In addition, the IOMC participating organizations have supported the implementation of risk reduction measures and mainstreaming at the national and regional levels.

143. Despite the successes of the QSP, in the Africa region, it was reported that there was a lack of training programmes in most countries. Where such training programmes do exist, there effectiveness is limited because they were not available in local languages. In regard to national laboratory capacity for identification and monitoring, few countries had such accredited laboratories. There was a lack of priority within institutions for monitoring exposure of vulnerable groups. Research institutes were not seen to be responsive to the needs of society.

144. For the CEE region, a similar picture merged. There was a lack of training programmes in some countries; no training or model procedures for inspectors; limited national ownership and a lack of harmonized methodologies. There was also a lack of awareness and appropriate training materials for vulnerable groups.

145. For the LAC region, the lack of technical training as well as the absence of monitoring the impact of training undertaken was reported. International support and cooperation was seen to be limited and conditional. There was an absence of tools to support analysis of environmental and health data together with limited involvement of government agencies in the creation and dissemination of public education materials.

Illegal international traffic

146. Efforts have been undertaken at the global, regional and national levels to address illegal international traffic, in particular for wastes covered by the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal as well as for ozone depleting substances covered by the Montreal Protocol. However, a comprehensive global picture is not well documented. Measures taken to promote compliance with relevant multilateral environmental agreements are mostly aimed at the development of legal frameworks. It may be assumed that a significant volume of unrecorded trade in banned chemicals, counterfeit chemicals and hazardous waste is still occurring even in countries with strong legislation, owing to the difficulties in monitoring and enforcement.

147. This picture was confirmed by delegates from the Africa region. In this region there was a lack of verification of chemicals, products and waste imported and exported; a lack of enforcement of anti-corruption laws; a lack of ability to regulate illegal traffic.

OVERALL IMPACT: BY 2020 CHEMICALS ARE USED AND PRODUCED IN WAYS THAT LEAD TO THE MINIMIZATION OF SIGNIFICANT ADVERSE EFFECTS ON HUMAN HEALTH AND THE ENVIRONMENT

148. Resolution lV/1 raised several concerns about the progress made towards achieving the 2020 goal, given the limited time remaining, noting that in most countries more progress had to be made.

149. At ICCM4, the UN Special Rapporteur for Human Rights, stated that in all countries more work was needed to achieve the 2020 goal. He highlighted the rights being violated by toxic chemicals included the right to life, the right to the highest attainable standard of health, the right to nutritious food, the right to safe water, the right to information and the right to effective remedies. More strategic actions were needed to narrow critical gaps in the attainment of human rights, particularly among vulnerable groups, including workers, women, children and low-income, minority and marginalised communities and indigenous peoples. Resolving related injustices, he asserted, was integral to achieving the 2020 goal.

150. Over half of NFP respondents (30 of 53) from across all UN regions assessed progress in meeting the 2020 goal, as either ‘haven’t started the journey’ or ‘started the journey but still a long way to go’.

151. For NFPs from the Africa, Asia-Pacific, Central and Eastern Europe, and the Latin America and Caribbean regions, 86% (14 of 18) were of the view that there remained a long way to go to achieving the 2020 goal.

152. Several expressed the view that whilst a national SAICM strategy has been developed with its action plan, the lack of financial resources meant that it was yet to be implemented. For other respondents the lack of

appropriate and effective policies and legislation governing chemicals management accounted for the lack of progress made. This lack was attributed to low priority for chemicals management in national development plans.

153. For many the technical expertise and infrastructure for monitoring and enforcement was lacking. The absence of capacity to diagnose poisoning because of the lack of toxicology laboratories and specialized doctors was a concern. Limited staff capacity was a recurring theme in accounting for the limited progress in achieving the 2020 goal.

154. 43% of all NFPs (or 26 NFPs) considered that the journey was well underway to achieving the 2020 goal, or the journey was nearing completion. They cited strong and effective legislation governing the management of chemicals and hazardous wastes as a significant factor accounting for success. Extensive cooperation and coordination between government agencies and non-governmental stakeholders was another significant factor accounting for progress. Good networks between NFPs and coordination at the regional level has allowed for sharing of experiences, cooperation and collaboration on chemicals management between countries.

155. Development and implementation of the BRS conventions, together with ratification of the Minamata Convention accounted for the significant progress made in achieving the 2020 goal. The process of accession to the EU that required candidate countries to harmonize chemicals management legislation with that of the EU also accounted for progress made. The REACH regulation together with other EU legislation directives were attributed to the progress made in achieving the 2020 goal.

156. Capacity to identify, assess and categorise chemicals in use in a country was identified by respondents, as a factor contributing to progress made. For one, this amounted to 23,000 substances registered in commercial use. The presence of associated infrastructure to assess any new substances prior to introduction and the development of regulation to manage any potential risks to health and the environment, were factors accounting for progress. A dynamic and agile regulatory regime with the ability to respond to new information on chemicals and act accordingly, with regulations revised accordingly, was a further factor accounting for progress.

CONCLUSIONS

Strengths

157. SAICM is an ambitious initiative, is unique in its set-up as an inclusive multi-stakeholder, multi-sector voluntary global policy framework on sound management of chemicals and waste. It has provided a space and opportunity for government and non-government actors alike, to discuss and deliberate on the management of chemicals and chemicals in products throughout their life cycle and of waste within an atmosphere of relative trust and cooperation.

158. The multi-stakeholder approach character of SAICM has been maintained since the initial meeting in Dubai in 2006. A particular strength has been the participation of non-government actors in the SAICM process to the extent that they are represented in the decision-making bodies, allowing for their perspectives and priorities to be heard and considered as resolutions were framed and agreed. This participation has been made possible because of the voluntary nature of SAICM.

159. SAICM delivered its outputs – the conferences and intersessional meetings resulted in a set of agreed resolutions. These resolutions provided the organisational structure and management that enabled SAICM to function, the mandate for the secretariat to carry out its work, and also resulted in raising the international profile of emerging policy issues and other issues of concern.

160. SAICM had some success in delivering its outcomes. The Global Alliance for phasing out lead in paint grew to a partnership of 38, comprising, Government, intergovernmental and non-government organisations; by June 2015, 57 Governments had put in place legally binding regulations; international awareness days campaigns were launched in 2013, 2014 and 2015.

161. Progress was made in identifying gaps, obstacles and commonalities pertaining to chemicals in products in four sectors, culminating in a proposal submitted to ICCM4 for a voluntary international progamme for information on chemicals in products along their supply chain.

162. Outcomes on the nanotechnologies and manufactured nanomaterials issue centred on awareness-raising workshops, pilot activities and production of a report, e-learning course and production of on-line assessment tools.

163. The QSP outcome was a notable success of SAICM. This programme succeeded in creating an enabling environment for the sound management of chemicals at the national level in many developing countries. There were instances where the QSP project resulted in the mainstreaming of chemicals management into national legislation. Participation in QSP projects raised awareness about chemicals management.

164. SAICM has made some progress in developing monitoring and evaluation framework for assessing progress made towards the 2020 goal. This can be viewed as an evolving process, from the indicators defined within the GPA to the 20 indicators of progress presented at ICCM2, to the most recent OOG comprising the 11 basic elements presented at ICCM4.

165. There is some evidence that the SAICM process has contributed to strengthened capacity and political will to mainstream the SAICM agenda into national development plans (the first intermediate state defined in the Theory of Change). Several countries in each region had established national coordination committees for chemicals management and progress had been made in the development of a strategic plan for chemicals management (although few reported that the plan was completed and being implemented).

166. Regarding SAICM contribution to the achievement of the five OPS objectives, the evidence suggests that there is some attribution of the SAICM process to all objectives, apart from addressing international illegal traffic. However, across all objectives there remains much work to be done to achieve them.

Weakness and gaps

167. Despite the multi-stakeholder ambition of SAICM, several important groups of stakeholders are missing from the SAICM process and structure, in particular academia. Offers were made at ICCM2 to host a scientific meeting prior to ICCM3 but these were declined. No scientific body is integrated into SAICM to support its work.

168. Industry representation at SAICM is limited to the chemical producing industry. Many organizations with an interest in the SAICM agenda are absent. These include: downstream uses of chemicals, retailers, downstream users that have created labeling schemes often driven by consumer demand.

169. The work plans and outcomes of some of the emerging policy issues were limited in their ambition and scope. Several activities were delayed because of lack of funds and/ or capacity of the lead organisations to take the agendas forward.

170. The capacity of the SAICM secretariat to deliver on its mandated functions has been limited over the 10 year period. The full complement of staff envisaged was met for a limited time, and the indicative budget approved at conference was never fully provided.

171. Throughout the 10 year period (2006-2015) the issue of secure and sustainable financing has been discussed and not resolved at each conference. Little progress had been made on taking forward the mainstreaming and industry involvement components of funding identified in the financing proposal presented to ICCM3. The findings from this evaluation (and the QSP evaluation of 2015) reveal that many Governments are yet to fully mainstream SACIM into national plans and budgets.

172. The role of NFPs is central for the delivery of the SAICM agenda at the national level. However, over 80% of NFPs are located within the environment sector with few representing the agriculture, health or labour sectors. A general lack of cooperation and collaborations between ministries is limiting the multi-sector ambition of SAICM.

173. Little guidance was provided to NFPs in fulfilling their role. The Africa region presented a proposed set of guidelines (job description) at ICCM2. However, this was not formally approved and remained a proposal.

174. The evidence from this evaluation indicates that the gap between countries in realizing the 2020 goal is widening. In many developing countries SAICM objectives are not high on the political agenda, reflected in low or no budget allocated to SAICM related activities. The shortage of experienced personnel to conduct surveys, to assess health impacts of exposure, together with a lack of and poor coordination between laboratories limited the ability of the NFP to fulfill her role. These factors together with weak and fragmented legislation, and poor or ineffective enforcement of existing regulations, have limited countries' ability to deliver on the five OPS objectives.

175. The findings from this evaluation indicate that there is little evidence of protection of vulnerable groups within many countries from exposure to chemicals. One illustration of this is the widespread exposure of women and children to hazardous pesticides on the farm and in the home, together with a lack of poison centers, puts this group a particular risk.

Lessons Learnt

176. Ultimately, the success of SAICM rests on national governments having the political will to legislate for the sound management of chemicals and to ensure that such legislation is fully implemented. SAICM stakeholders play several roles in pushing chemicals management higher up the political agenda: governments signing up to international conventions and forums (i.e. SAICM) and developing regulatory frameworks that Government have the capacity to monitor and enforce; engaged and responsive UN agencies supporting national and regional implementation; a strong and independent civil society, enshrined in law, advocating for sound chemicals management.

177. Reducing inequality between countries, will require strengthened adaptive management regimes in developing countries. Such regimes depend on access to knowledge, science and technology. Continuing the progress made in building national technical capacity as well as supporting the provision of technical infrastructure (such as poisons centres) will support such regimes. Effective monitoring and evaluation systems, together with sound science, will provide the information and assessments needed to shape future management regimes.

178. Reducing inequality within countries in regard to chemicals management will require further efforts by SAICM stakeholders to reduce vulnerable and marginalised groups to chemicals exposure at work, in the home and in the environment. Improving nutrition with sustainable agricultural practices requires SAICM stakeholders to increase efforts to work in partnership to find innovative and alternative forms of agriculture that minimize the

adverse impacts on health and environment of chemical inputs whilst increasing production. Continued efforts are needed by SAICM stakeholders to reduce gender inequality and the high incidence of adverse health impacts experienced by women and girls from exposure to chemicals.

179. Effective monitoring of progress made in achieving SAICM objectives between and within countries, requires outcome and impact focused indicators to complement the existing indicators of progress, i.e. results-based indicators that measure tangible reductions in health and environmental impacts of chemicals use.

180. SAICM was conceived as a multi-sectoral and multi-stakeholder approach. Integration across sectors is a key factor to achieving the 2020 goal. Greater capacity and increased representation of the health, agriculture, finance and industrial sectors within government national and regional focal points will support efforts to mainstream the sound management of chemicals across government departments. Within non-government stakeholders, continued efforts to communicate with and reach out to downstream businesses and industries as well as civil society more broadly will further support the multi-sectoral and multi-stakeholder approach.

181. Realising the objectives and goal of SAICM depend on sufficient levels of financing and resources. Securing sufficient funds has been a constant challenge for SAICM over the 2006-2015 period. Further success of SAICM will require secure and sustainable funding through: Governments mainstreaming SAICM objectives and activities into national development plans with associated budgets; introduction of appropriate economic instruments based on principles of polluter pays; donors continue to deliver on external finance commitments.

182. The SAICM secretariat has been constrained in delivering on its functions over the period 2006-2015 because of a persistent shortfall in resources. Beyond 2020, a fully functioning secretariat at full capacity will be required to support any future mission of protecting human health and the environment from harmful effects of chemicals and waste.

183. SAICM is an ambitious initiative, is unique in its set-up as an inclusive multi-stakeholder, multi-sector voluntary global policy framework on sound management of chemicals and waste. A particular strength has been the participation of non-government actors in the SAICM process, allowing for their perspectives and priorities to be heard and considered as resolutions were framed and agreed. Retaining this strength and character beyond 2020 will support the future mission.