

STRATEGIC APPROACH TO INTERNATIONAL CHEMICALS MANAGEMENT (SAICM)

FURTHER INPUT ON HEALTH ASPECTS OF CHEMICAL SAFETY

WORLD HEALTH ORGANIZATION INFORMATION DOCUMENT FOR SAICM PREPCOM2

1. This SAICM PrepCom2 Information Document is intended to facilitate Health Sector agreement to updated Health Sector input to SAICM, and to support the Progress Report on SAICM to the World Health Assembly (WHA) which was called for in WHA Resolution 56.22 on SAICM: participation of global health partners.
2. The text in the following section titled "SAICM PrepCom2: Health Sector Input" amalgamates the outcome of two Health Sector contributions to the SAICM process:
 - Agreements reached at Health Sector meetings convened in the context of SAICM PrepCom1 and included in Document SAICM/PREPCOM.1/INF/8/Rev.1 and in the PrepCom1 Meeting Report SAICM/PREPCOM.1/7 Annex V.
 - Further input from a World Health Organization (WHO) questionnaire administered in 2004 to elucidate issues that PrepCom1 did not have sufficient time to discuss in detail, or where there had been little Health Sector input to date. Responses are summarized in Annex 1 and provided in tabular form in Annex 3.
3. Also included is some Health Sector-relevant material from regional work that has taken place since SAICM PrepCom1, and a starting point for possible mechanisms for ongoing Health Sector engagement in SAICM implementation is provided at paragraph 10 (for further development at PrepCom2 by the Health Sector meetings).
4. Suggested text beyond the PrepCom1 agreement has been indicated with underlining.
5. This Information Document also contains an Annex (Annex 2) providing additional background, which summarizes recent regional work, puts chemical safety into the context of sustainable development, and describes related WHO efforts.

SAICM PrepCom2: Proposed Health Sector Input

6. This summary provides input from the Health Sector to SAICM. It is based on input from a total of 63 countries (56 countries provided input to SAICM PrepCom1 and of the 22 additional country submissions received prior to PrepCom2, seven were from countries that had not previously provided input).
7. Countries called strongly for a multi-sectoral, multi-stakeholder process for SAICM, to reflect the principle that human beings lie at the centre of concerns for sustainable development. The need for integration of chemicals into mainstream health policies was agreed, as was the contribution that the sound management of chemicals can make to achievement of the WSSD Plan of Implementation and the Millennium Development Goals.
8. The importance of establishment and strengthening of inter-sectoral processes and approaches at regional and country level was emphasized. Use of advocacy, community empowerment and ownership was highlighted. Coordination at all levels should be improved, including: nationally between sectors; regionally through regional networks; and internationally through international organizations and between countries.
9. Countries indicated a preference for a SAICM that includes a global programme of action (including priorities) with concrete targets and a timetable. Countries requested that the foreshadowed SAICM discussion on needs should centre on competence and other resources necessary for implementation, including capacity-building and technical assistance.
10. SAICM implementation should involve periodic follow-up and assessment of progress, and include the use of health indicators. Mechanisms for ongoing Health (and other) Sector engagement in the process of implementation need to be clarified and described in the SAICM. A mandate for this ongoing engagement should be sought from the World Health Assembly when it considers the final SAICM. Possible mechanisms include: [to be developed as the final form of SAICM evolves].
11. Currently, the following main areas of health input for SAICM are foreseen.
 - **Filling of gaps in abilities to access, interpret and apply knowledge** (e.g. improved availability of information on the hazards, risks and safe use of chemicals (including those in manufactured products), in forms relevant to end users, and improved use of existing risk assessments).
 - **Development and use of new and harmonized methods for risk assessment**, e.g. methods for assessment of dose-response relationships and risks to vulnerable groups, in particular children, pregnant and fertile women, the elderly and the poor; new tools for risk assessment, making best use of (molecular) epidemiology, clinical and exposure data, and scientific advances in toxicogenomics; harmonized methods for risk assessment of carcinogens, mutagens, reproductive toxins, genotoxins and immunotoxins; and new risk assessment methods relevant to real-life exposures, e.g. aggregate/cumulative exposures, use of simple analytical methods for in-field exposure assessment.

- **Development of better methods and criteria to determine the impact of chemicals on health (and thereby on economy) to set priorities for action, for the detection of chemicals, and to monitor progress of SAICM.** This will also assist with implementation of Millennium Development Goals and place chemicals and health on development assistance agenda. These methods should be able to be used at country level. Means of determining health impacts of policy decisions are required.
- **Building capacities of countries to deal with poisonings and chemical incidents.** An integrated approach to establishment and strengthening of poisons centres and surveillance, alert and response mechanisms for chemical incidents is proposed. This would include technical cooperation on a regional basis.
- **Filling of gaps in science** (e.g. gaps in understanding of endocrine disruptors).
- In addition to risk assessment methods, broad **strategies specifically directed to the health of children and young families** are needed. These would include recommendations arising from Forum IV.
- Inclusion of specific **actions for worker health protection**, including farmers and children, and linking of these to broader health policy and actions, in consultation with the labour sector.
- Inclusion of a **range of preventive strategies**, education and awareness raising, and capacity building in risk communication.
- **Further work to promote alternatives to highly-toxic, persistent and bioaccumulating chemicals, taking into account the whole life-cycle of chemicals including waste. This would include using tools such as cleaner production and integrated pest and vector management.**

Annex 1: Background to Health Sector input to date and summary of responses to the 2004 WHO Questionnaire

Background

12. The Information Document SAICM/PREPCOM.1/INF/8/Rev.1 and this Information Document respond to the World Health Assembly Resolution on the participation of global health partners in SAICM (Resolution WHA65.22). The Assembly also called for a progress report on SAICM (before the estimated date of its completion) and for the completed SAICM to be submitted to the Health Assembly for consideration. It is planned to provide the Assembly with a progress report in May 2005. In making this Resolution, the WHA was mindful of WHO's contribution to the international management of chemicals through the International Programme on Chemical Safety (IPCS), a cooperative activity of WHO, International Labour Organization (ILO) and UNEP.
13. SAICM/PREPCOM.1/INF/8/Rev.1 described contributions from the Health Sector based on a WHO questionnaire and meetings during PrepCom1, comprising written responses from 41 countries and subsequent input at Health Sector meetings from 15 countries.
14. Further input has thereafter become available through a second WHO questionnaire administered in 2004. Responses from 22 countries were received in time for the preparation of this Document. Of these, seven had not previously provided input. A summary of the responses is provided in the following section. A tabular compilation of the responses to the 2004 questionnaire is included at Annex 3. The original responses are available in full at <http://www.who.int/ipcs/en/>.
15. Some additional input was drawn from Health Sector-relevant material in submissions made to UNEP in 2004 concerning background documents for PrepCom2 (see website below). Such input is reflected in the following section.
http://www.chem.unep.ch/saicm/meeting/prepcom2/saicm2_2comments/default.htm.

Summary of WHO Member State views on issues in chemical safety

16. In the following paragraphs, the questions asked are reproduced in **bold**, followed by a summary of the responses.
17. **Statement of political strategic vision. Should this be included? If so, what should it contain?** Almost all survey responders supported the inclusion of a political strategic vision. Various suggestions were made as to its contents, including
 - global references about main issues and goals
 - goals relating to good health and vulnerable groups, objectives, principles and approaches, specific topics and problems
 - chemical safety at the national level and national commitments towards international and regional conventions
 - need for coordination
 - strategic medical-hygiene tasks
 - principles: precaution, risk assessment, burden of injury, ill-health and disease.

Two countries suggested the vision should be contained in a preamble. One country referred to the Thought Starter from IFCS on visions and goals.

18. Statement of needs. Should this be included and if so, what should it contain? Almost all survey responders supported the inclusion of a statement of needs. The comments referred almost exclusively to needs for human, financial and technical resources to implement actions including those that have already been agreed internationally. One comment referred to chemical safety as part of a preventive health-care policy. Another addressed the need to monitor health effects in those at risk: workers, women and children. A third proposed additional special concerns and a framework for a comprehensive international regime, and a fourth suggested a need for a strongly-coordinated follow-up mechanism.

19. How can coordination be improved at: i) national level; ii) regional level; iii) international level.

i) **National coordination.** Many comments were made, mainly about various inter-institutional committees, sometimes stressing dialogue with non-governmental organisations. Resources needs were stressed. One country proposed "sensitizing" ministers to the impact of chemicals on sectors such as health, environment and agriculture, and advocated model legislation. Communication needs were mentioned in several submissions, including creation of networks, using e-mail and the web, and providing documentation. One country proposed binding steps to promote cooperation, and two others suggested that SAICM should be associated with a follow-up structure that included the international, regional and national levels.

ii) **Regional cooperation.** Many comments were made about forming regional or sub-regional networks or committees, or using existing ones, of which many examples were given; one country advocated a more active role for the WHO Regional Office for Europe. One country mentioned developing regional environmental and health agreements, and another advocated binding steps. Resources were again emphasised, including using national focal points, toolkits of training materials, and documentation. Two countries suggested that SAICM should be associated with a follow-up structure that included application at international, regional and national levels.

iii) **International cooperation.** Many comments were made with a range of suggestions. Several proposed better coordination between international organizations, in particular those having secretariats of conventions, and national coordination in dealing with international organisations, while one country advocated that no new bodies should be created. Resource issues were mentioned, including better dissemination of materials from international organisations, and the use of national focal points. One country advocated binding steps for coordination, and three others that SAICM should be used as a tool. A third one proposed an information bulletin, and periodic organisation of meetings with reviews of the developments in all countries. One country in a submission to UNEP proposed establishment of a broad group of experts to improve environmental monitoring.

20. Please provide suggestions for implementation and how to take stock of progress.

Approximately half of the survey respondents stressed the need for periodic follow-up and assessment of progress, sometimes pointing out the need for national follow-up. A requirement for indicators was explicitly mentioned in two responses, of which one advocated methodology already established for structured assessment (Marco Logico). One country addressed the need for personal communications in implementation at all levels (national, regional, international), and another one the utility of regular follow-up meetings. One country called for a strongly-organized formal follow-up program extending to the national level. Two countries pointed to the need for resources for implementation. One country pointed to the need for advocacy in all international fora including, for example, the World Trade Organisation. Two countries discussed instruments, of which one advocated some kind of non-binding instrument and the other discussed legal agreements. One country in a submission to UNEP addressed the benefits of compiling and building on elements of existing programmes at all levels, another the advantage of relating relevant implementation to the different conventions. A submission to UNEP from a WHO Regional Office underlined the importance of risk communication and the precedents from other WHO programmes as well as from OPCW.

21. Please indicate any preference with respect to the character of the final SAICM, e.g. one or more of the examples i)-vii) below or other options

- i) high-level declaration**
- ii) overarching policy strategy**
- iii) global programme of action with concrete targets and a timetable**
- iv) convention**
- v) international voluntary agreements and partnerships**
- vi) periodic review of progress**
- vii) coordinated with sustainable development**

All of the seven characters given as examples in the survey question had their proponents. Of the 21 responses, 18 mentioned a global programme of action with concrete targets and a time-table. About half of the respondents mentioned a high-level declaration and an overarching policy strategy, and slightly fewer a periodic review of progress. A convention was mentioned by seven respondents, and international voluntary agreements and partnerships by three respondents. In comments to the responses, one country suggested work towards a convention on subjects likely to find agreement, as a supplement to a high-level declaration. Another proposed a high-level declaration with generalities, summary analysis, national policies and implementation procedures. One country mentioned mechanisms to learn from experience in a systematic way. Several of the submissions to UNEP supported the three-tier approach of a global programme of action, an overarching chemicals policy strategy, and a high-level declaration, in one case seen as adopting the two other tiers.

22. The summary of Health Sector input ... is relevant to the development of objectives, concrete measures and scientific activities for SAICM. Is any major area of Health Sector interest missing (if so, please describe). A handful of suggestions were given about areas not mentioned above that should be given further attention:

- Occupational health, including that for research workers
- Illegal importation of toxic chemicals

- Development of criteria for health impacts that would enable priority setting (two countries); issues of economic valuation should be quantified to enhance the priority of chemical safety of the entire health system
- Linking chemical safety and waste management.

Also mentioned in submissions to UNEP were the importance of including chemicals used for fuels and for a SAICM that takes account of gender equality.

Annex 2: Additional Background

Recent regional work on chemical safety and health

23. This section provides views on chemical safety and health priorities expressed at various regional meetings from 2002 onwards. A review of earlier work is given in Information Document SAICM/PREPCOM.1/INF/8/Rev.1.

Africa

24. A conference held in Cape Town in July 2001 discussed preparation of the health sector for the challenges of the 21st Century. A follow-up plan was discussed in Dakar, July 2002.

25. In direct preparation for SAICM PrepCom2, an African Regional Meeting held in Abuja in May, 2004, agreed a plan of action¹ based on the Dakar plan. The Abuja Statement on SAICM welcomed the phasing out of leaded gasoline and the launching of the African Stockpiles program, noted the need for IFCS to play an active coordinating role, and recommended that SAICM should prevent the exposure of the most vulnerable groups and help overcome a general lack of well-functioning poison control and treatment facilities. The African Ministerial Conference on the Environment in Sirte, Libya, June 2004, noted the link between poverty and vulnerability to toxic chemicals, and emphasized the priority of sound management of chemicals. It urged regional organizations to participate in SAICM work, and the Governing Council of the United Nations Environment Programme to adopt a decision on undertaking the tasks assigned to it in ensuring the prevention of illegal international traffic in toxic and dangerous products. In the associated Sirte Declaration, Ministers committed themselves further to prioritizing and drawing synergies from the issues of chemical management, the SAICM process, environmental impact assessment, the phasing out of leaded gasoline, sustainable human settlements, post-conflict environment assessment, health and environment and disaster risk management.

The Americas

26. A Meeting of the Health and Environment Ministers of the Americas took place in 2002². The meeting identified the priority environmental health issues in the Region: first, water pollution, water and sanitation, and hygiene; second, indoor and outdoor air pollution; and, third, the chronic and acute effects of exposure to chemical substances, and pesticides in particular.

27. Canada, the United States of America, and Mexico have formed the independent North American Commission for Environmental Cooperation³. The Commission has a programme on pollutants and health that includes projects on air quality, sound management of chemicals, North American Pollutant Release and Transfer Register, capacity building for pollution prevention, and children's health and the environment. The chemicals programme aims to reduce chemical pollution, with particular focus on chemical substances that are persistent and toxic and which bioaccumulate in living organisms.

¹ <http://www.chem.unep.ch/saicm/meeting/afreg/Default.htm>

² <http://www.paho.org/english/gov/csp/csp26-27-e.pdf>

³ http://www.cec.org/who_we_are/index.cfm?varlan=english

Eastern Mediterranean

28. The WHO Eastern Mediterranean Regional Office, EMRO, has a Regional Centre for Environmental Health Activities⁴ whose mandate is to promote environmental health through technical support for national capabilities and programmes in the Member States of the region. A Regional Workshop on Chemical Safety and Risk Analysis in the Eastern Mediterranean Region was held in Cairo, Egypt, in October 2003, where SAICM was one of the agenda items for discussion. The meeting made a number of new recommendations for action at country, regional and global level. A regional consultation specifically focused on poisons centres was also held in Cairo in October 2003. In 2004, work is ongoing on a pilot application of the Global Initiative on Children Environmental Health Indicators and on exposure of children to lead.

Europe

29. The Fourth Ministerial Conference on Environment and Health in Budapest, June 2004, had the theme “The future for our children”. The Children's environment and health action plan for Europe endorsed the need for countries to address chemicals and their impacts on children's health. Chemical safety was included as one of four Regional Priority Goals that countries should address in their national plans of action and upon which they are expected to report by 2007. The declaration from the meeting stressed the need to generate hazard information and, to this end, recognized the role of the REACH programme (see next paragraph). It underlined the need for more attention to the chemical composition in children's products and toys, and tools to estimate the economic impact of environmental degradation. The conference also stressed the need to specifically address the impacts of chemicals on children with regard to dose-response relationships and the study of impacts of phthalates on children's health.

30. The European Union (EU) published in June 2003 a European Environment and Health Strategy with a focus on children⁵. Its implementation includes a European Integrated Environment and Health Monitoring and Response System. The EU also has a European Community Strategy on Health and Safety at work⁶, that calls for extending the scope of the “carcinogenic agents” directive, and linkage with the Community rules on the manufacture and marketing of work equipment and chemical products. A programme for assessment of hazards and risks from chemicals (REACH), prepared by the European Commission, is currently under discussion by EU Member States.

South-East Asia

31. The WHO Regional Office for South-East Asia (SEARO) convened an Informal Consultation on Health and Chemical Safety at the end of October 2003 to discuss chemical management issues and health and safety priorities in the region. Specific areas of concern included: pesticides in agriculture and public health; prevention and management of poisoning; prevention of and response to chemical incidents; and disposal of hospital waste. A range of other areas needing attention were identified, including indoor air pollution. Countries discussed ways of working better together to address these problems, including through participation in the development and implementation of SAICM.

⁴ http://www.emro.who.int/ceha/about_ceha.asp

⁵ http://www.centraweden.se/Bevakningsomr%C3%A5den/Milj%C3%B6/Bev_ME_D_MiljoHalsa_030630.pdf

⁶ http://europa.eu.int/comm/employment_social/news/2002/mar/new_strategy_en.pdf

Links between the Millennium Development Goals and Chemical Safety

32. The Millennium Development Goals (MDGs) were adopted at the Millennium Summit in September 2000. Taken as a whole, the MDGs focus on human development and poverty reduction, and they are now commonly accepted as the framework for measuring development progress.
33. While chemical safety is not explicitly mentioned in the MDGs, exposure to hazardous chemicals may have a bearing on the ability of some countries to achieve certain MDG targets, as indicated by the selection presented in Information Document INF/8 of PrepCom1. Target 8 of the MDGs covers malaria "and other major diseases". This is widely interpreted to mean non-communicable as well communicable diseases (although there is no specific MDG indicator for non-communicable diseases). Chemical safety is relevant to this target, as chemicals contribute to non-communicable disease. The use of DDT in malaria eradication is an important example of the need to balance large risks posed by malaria against risks of DDT use, and the costs of alternative interventions.
34. The World Summit on Sustainable Development (WSSD, Johannesburg, 2002) sought to overcome obstacles to achieving sustainable development and resulted in a global commitment to full implementation of Agenda 21 and the Millennium Development Goals. The WSSD Plan of Implementation sets out many health-related environment actions and called for SAICM to be based on the Bahia Declaration and Priorities Beyond 2000.

Improving understanding of links between chemicals and other risk factors

35. The need to integrate and understand chemical-specific assessments in the context of chemicals use was emphasized by many Member States and regional groups in their responses to the first call by WHO for input to SAICM. Technical methodologies and guidance need developing in order to make such assessments. A necessary part of this is improving the greater availability of robust epidemiological data between chemicals exposure and health consequences and also the need to reduce a number of uncertainties that still remain in assessment methods. For example, the IPCS Global Assessment of the State-of-the-Science on Endocrine Disruptors in 2002 highlighted the fact that fundamental concerns remain because traditional toxicological approaches do not always provide the necessary answers.
36. The World Summit on Sustainable Development in 2002 recognised several of the links between chemicals exposure and ill health, for instance calling for reduction in health impacts resulting from air pollution, with particular attention to women and children, and phase out of lead in gasoline, in lead-based paints and in other sources of human exposure.
37. The World Health Assembly has also expressed concern about possible release or deliberate use of biological, chemical or radionuclear agents, and urged Member States, with the support of WHO, to strengthen systems for surveillance, emergency preparedness and response. IPCS is now building upon previous activities for providing guidance for preparedness and response to chemical accidents and emergencies.

Contribution of chemicals to the burden of injury, ill-health and disease

38. The burden of disease in some low-income regions acts as a barrier to economic growth. The links between social, economic and environment pillars are most evident among the poor who frequently live in unsafe and crowded settlements and who are therefore more likely to be exposed to air pollutants and other health risks at home and at work, who consume insufficient and poor quality food, and who are exposed to other health risks. There is some way to go before the link between chemical safety and sustainability and the Millennium Development Goals is generally appreciated.
39. Quantification of the environmental burden of disease has many uses including improving understanding of the burden of disease and helping to prioritize preventive measures, as well as providing a world-wide picture of ill-health and disease burden at a global level, and therefore highlighting countries in greatest need of support on selected issues. However, the few data that are available are not robust. Harmonized methodologies for assessing the environmental burden of disease would facilitate the comparison of estimates made by different countries. WHO is further developing its approach to the environmental burden of disease.
40. Quantitative estimates of the Global Burden of Disease have been made in the World Health Report 2002 for 26 selected risk factors ranging from iron deficiency to unsafe sex. The report includes ten environmental and occupational risks, some of which have direct links to exposure to hazardous chemicals. Such calculations involving chemical hazards are in an early stage of development. Depending on the strength of the association with chemicals they can estimate the size of the global burden of disease measured as loss of healthy life (using Disability Adjusted Life Years, DALYs).
41. For example, if the following risk factors are assumed to be attributed to chemical risks then a figure of 5% of the global burden of diseases can result: indoor smoke from solid fuels; lead exposure, urban air pollution, occupational air particulates, and occupational carcinogens. For reference, some other selected risk factors were: *unsafe water, sanitation and hygiene, alcohol and tobacco* (4% each), *unsafe sex* (mainly HIV/AIDS, 6%).

Key Contributions of WHO to International Chemicals Management

42. The following summarizes key contributions of WHO to international chemicals management, including those made through:
- International Programme on Chemical Safety (IPCS)
 - JMPR and JECFA
 - Food Safety Programme
 - WHO Pesticide Evaluation Scheme
 - WHO Air and Drinking-water Quality Guidelines
 - International Agency for Research on Cancer
 - Occupational and Environmental Health Programme.

Activities of IPCS (WHO/ILO/UNEP)

The current work of IPCS includes the following products and services:

43. *Chemical risk assessments for national authorities* (including Environmental Health Criteria monographs, Concise International Chemical Assessment Documents, International Chemical Safety Cards, WHO Classification of Pesticides by Hazard, and Joint IPCS/OECD in-depth assessments (as needed)).
44. *Chemical risk assessments for WHO activities and in support of international instruments* (including chemicals in drinking water and disinfectants, air pollutants - indoor and ambient, chemical exposures in the workplace, chemical risks due to climate change, Persistent Organic Pollutants, assessment of pesticides for public health and chemical issues in healthy environments for children, assessments used by countries in support of the Rotterdam and Stockholm Conventions).
45. *Methodologies for chemical risk assessments* (including harmonization of approaches and methods, emerging chemical health risks, e.g. state-of-the-science review of endocrine disruptors, integrated risk assessment, and biological, physical and scientific principles of risk assessment).
46. *Research studies on improved use of human data* (including development of methodology, validation of available data, and contribution to burden of disease estimates for death, illness and dysfunction attributable to chemical and pesticide exposures).
47. *Dissemination of chemical safety information* (including IPCS INCHEM database, development and maintenance of the IPCS web site, and prevention and treatment interventions for pesticides).
48. *Poisons Centre Network Management* (including establishing and strengthening national poisons centres, and IPCS INTOX Programme implementation).
49. *Emergency response mechanisms for chemical incidents* (including a preparedness and response network for chemicals integrated with the network for communicable diseases under the WHO Global Outbreak and Alert Response Network, cooperation with drinking water and food safety programmes on deliberate contamination threats, support to national emergency preparedness initiatives, and international coordination mechanisms).
50. *Policy coordination in chemicals management* (including chemicals issues in environmental health, IPCS programme planning, WHO linkages to Stockholm and Rotterdam Conventions, Intergovernmental Forum on Chemical Safety, and secretariat functions for IOCC/IOMC).

JMPR and JECFA

51. With FAO, WHO conducts chemical risk assessments for Codex Alimentarius and Member States (notably by the *Joint FAO/WHO Expert Committee on Food Additives* (JECFA) which evaluates the safety of food additives and contaminants, naturally-occurring toxicants and residues of veterinary drugs in food, and the *Joint FAO/WHO Meeting on Pesticide Residues* (JMPR), and revision of the Methodology for Evaluation

of Chemicals in Food). These assessments also support the work of the World Trade Organization (WTO), as needed.

WHO Food Safety Programme

52. This programme is largely responsible for the exposure assessment of chemicals in food, including development of methodologies for predicting dietary intake of chemicals. Hence its work also contributes to Codex work (refer to paragraph above). Other contributions to international chemicals management include provision of advice in food safety emergencies.

WHO Pesticide Evaluation Scheme

53. The WHO Pesticide Evaluation Scheme (WHOPES) is the only international programme which promotes and coordinates the testing and evaluation of pesticides proposed for public health use. The main objectives of WHOPES are: to facilitate the search for alternative pesticides and application methodologies that are safe and cost-effective; and to develop and promote strategies and guidelines for the use of pesticides in public health, and to assist and monitor their implementation by Member States.

WHO Air and Drinking-water Quality Guidelines

54. WHO establishes guidelines for chemicals found in air and drinking-water sources in the form of its *Guidelines for Air Quality* and *Guidelines for Drinking-water Quality (GDWQ)*. The GDWQ are a significant contribution to chemicals management. Guidelines are maintained for over 100 chemicals/groups of chemicals found in drinking-water and they are recognized as the UN system's position on drinking-water quality.

International Agency for Research on Cancer

55. The International Agency for Research on Cancer (IARC), is a Specialized Agency of WHO devoted to a range of major activities on cancer, including assessment of the carcinogenic potential of chemical substances.

Occupational and Environmental Health Programme

56. This programme operates through its Global Strategy on Occupational Health for All, and includes a range of activities on chemicals, particularly facilitation of country-based actions through a network of WHO Collaborating Centres. Also a number of activities, for example work on silicosis and Control Banding, are conducted in cooperation with ILO. Control Banding enables workplaces to select appropriate control measures for chemicals based on Risk Phrases on product labels. Hence it will use the outcomes of the Globally Harmonized System for Classification and Labelling to improve chemical safety.

Annex 3: Compilation of country health representatives' further responses to WHO questionnaire on SAICM

The table below provides a list of those countries for which responses to the WHO questionnaire were received before PrepCom2, organized by WHO region. The WHO regions are:

AFRO: Regional Office for Africa
 AMRO: Regional Office for the Americas
 EMRO: Regional Office for the Eastern Mediterranean
 EURO: Regional Office for Europe
 SEARO: Regional Office for South-East Asia
 WPRO: Regional Office for the Western Pacific

Note 1: Member States with names in *italics* have also submitted responses to UNEP in response to its call for submission of comments on documents SAICM/PREPCOM.2/2 and SAICM/PREPCOM.2/2/Add.1.

Note 2. The original language of the response is given in the third column: English (E), French (F), or Spanish (Sp).

Region (No. of responses)	Member State	Original language	Comment
AFRO (9)	Algeria	F	
	Republic of Benin	F	
	Central African Republic	F	
	Congo	F	
	Mauretania	F	
	Mauritius	F	
	Nigeria	E	
	Senegal	F	
	South Africa	E	
AMRO (3)	Costa Rica	Sp	
	Jamaica	E	
	Panama	E	

EMRO (2)	Jordan	E	Gives no detailed response to questions but refers to response to first questionnaire; adds some priorities that have been entered below together with extracts from first response Gives no detailed response to questions but provides several opinions; those pertaining to the question have been entered below. Reservation: working with other involved agencies but their views are not yet received.
	Saudi Arabia	E	
EURO (5)	Armenia	E	
	<i>Estonia</i>	E	
	Finland	E	
	Poland	E	
	<i>Switzerland</i>	E	
SEARO (1)	Thailand	E	
WPRO (2)	Philippines	E	
	Vanuatu	E	

The structure of the below table follows the questions in the questionnaire using their numbering.

Responses are then ordered by WHO Region, and then by country, in alphabetical order.

Note 3. Where a country did not answer a question, no country entry is listed. The comments have been slightly edited and in a few cases abbreviated.

3a)⁷ Statement of political strategic vision. Should this be included? If so, what should it contain?

Region	Member State	Comment
AFRO	Algeria	Yes, chemical safety at the national level (poison centres, occupational health...)
	Central African Republic	Yes, adequate management of chemicals, classification of chemicals according to toxicity-sensitisation-management
	Congo	Yes, to provide uniformity, present the different steps of the strategy, their timing and aims
	Mauretania	Yes, in a preamble
	Mauritius	Yes, in a preamble
	Nigeria	Yes. Achievement of safe production, use and disposal of chemicals such that adverse effects on human health and the environment are minimal
	Senegal	Yes, overview, evaluation of risks from chemicals, enhanced cooperation between countries
	South Africa	Yes- to be in line with the thinking and deliberations of WSSD.
	AMRO	Costa Rica
Jamaica		Minimize adverse effect of chemicals on human health especially the poor and children
Panama		Yes, include global references about main issues
EURO	Armenia	Yes, strategic medical-hygienic tasks
	<i>Estonia</i>	Yes. It should contain: main goals, objectives, principles/approaches and bringing out specific topics and problems.
	Finland	Yes, it should be included. A vision should be discussed in PrepCom II.
	Poland	Yes, It should contain the final goal and the instruments to achieve it
	Switzerland	High health (and environmental) quality, in particular with regard to vulnerable groups (e.g. children
SEARO	Thailand	Agrees with IFCS Thought Starter (<i>Note</i> This document discusses options, see SAICM/PREPCOM.2/INF/10))
WPRO	Philippines	Yes, principles: precaution, risk assessment, burden of injury, ill-health and disease
	Vanuatu	Yes. And it should contain Policy vision of each country to control the management of chemicals safety in the country. It should also support country's commitments toward international and regional conventions, which signed and ratified (or yet to be ratified) by the country, example: the Waigani Convention, the Basel convention, the Rotterdam convention and the Stockholm Convention and others. The need for a strong and well-established mechanism in the three levels is vital to avoid duplication of efforts and resources.

⁷ Questions 1 and 2 related to Member State and Contact Information

3 b) Statement of needs. Should this be included and if so, what should it contain?

AFRO	Algeria	Yes. Above all dossiers and medical treatment and antidotes
	Central African Republic	Yes. Need for financial, material and human resources. Time.
	Congo	Yes. E.g. expertise, training, capacity enhancement or funding
	Mauretania	Yes. Human resources, legislation etc
	Mauritius	Yes. Legislation and human resources
	Nigeria	Yes. Chemical safety management should be made an important part of preventive-healthcare policy because of wide-spread exposure of consumers, workers, etc. to chemical hazards;
	Senegal	Yes. Creation of a structure capable of managing, following and providing solutions in the case of accidents
	South Africa	Yes. It should include implementation of internationally-binding instruments; development of chemicals management instruments (national profile, national implementation plans, national emergency preparedness and response plans)
AMRO	Costa Rica	Yes. The priority needs are 1. Technical capacity 2. Economic adequacy 3. Political decision
	Jamaica	Support for continued monitoring of health effects on those at risk. Occupational, women and children.
	Panama	Yes. Special needs by region
EMRO	Jordan	<i>Response to first questionnaire</i> has strong emphasis on capacity building
EURO	Armenia	Yes. Development of legislation, modern laboratory equipment and safety standards
	<i>Estonia</i>	Yes. It should contain: special concerns (current gaps, specific vulnerable groups, bridging between developed and developing countries etc), a framework for comprehensive international regime, adequate capacity and commitment to implement them.
	Finland	Yes. It should be included. To introduce more coherence between chemicals management and capacity building, globalisation, priority setting, stepwise approach
	Poland	Yes. It should contain a list of priority needs as they are understood now
	Switzerland	Life cycle of chemicals, risk assessment with special focus on vulnerable groups, harmonized methods (risk assessment, GHS)
WPRO	Philippines	Yes. Capacity building for the health sector especially in developing countries; development of harmonised approaches to risk assessment
	Vanuatu	The first level of needs is to establish the Programme and financial mechanism globally and in consultation with executing countries, the second level of need would include the establishment of programme/project base (Coordination Mechanism) in the different levels; national, regional and global and these would also need lots of awareness raising activities to ensure a well establish project/programme base in place before implementation. This is to ensure countries have sound knowledge on the project/programme to ensure their full participation and commitment especially the governments of the countries. The third level of needs would include the technical expertise and assistant, resources and transfer of know how on Best Available Technique (BAT) and Best Environmental Practice (BEP). There will be capacity building need for different stakeholders and institution to assist the strengthening of the capabilities in managing chemical safety in countries. Other option to needs is to establish a Integrated National Chemical Programmes; Countries should increase their efforts to systematically develop an integrated and coordinated approach to manage chemicals safely. Countries should therefore prepare and regularly update national profiles, identify capacity building priorities, and develop sound national action plans for them.

3 c) How can coordination be improved?

		At national level?	At regional level?	At international level?
AFRO	Algeria	Networks, documentation, training	Networks, documentation, training	Networks, documentation, training
	Central African Republic	National Committee for Chemicals Management	Regional Committee for Chemicals Management	International Committee
	Congo	Information exchange between relevant departments, improved capacity of persons at relevant institutions	Establishment of network of interested countries with circulation of information	Establishment of an information bulletin to put all countries on an equal footing. Periodic organisation of meetings with reviews of the development in all countries involved
	Mauretania	Financial, technical and human means		
	Mauritius	Financial, technical and human means	Financial, technical and human means	-
	Nigeria	National Steering Committes on Chemicals Safety Management should carry out the functions assigned to National SAICM.	(Regional Socio-Political Integration Organ) e.g. African Union; Sub-regional Political and Economic Integration Organ e.g. ECOWAS, etc.	SAICM
	Senegal	Appointing and supporting a National Focal Point	Appointing and supporting a National Focal Point	Appointing and supporting a National Focal Point
	South Africa	SAICM should be established at national, regional and international levels as a coordinating structure for the harmonization of legal instruments and bodies responsible for chemicals management.		
AMRO	Costa Rica	Interinstitutional Forum on Chemical Safety has been initiated	Use existing resources such as the Central American Development Commission and the Meeting of the Health Sector of Central America and the Dominical Republic to implement chemical safety actions in the Central American isthmus	Make direct contacts with related organisations (IFCS, UNITAR, UNEP-Chemicals, INECE, WHO:SAICM) to create institutional synergies
	Jamaica	Ministers sensitized to impact on sectors such as health, environment and agriculture. Inter-ministerial committee encouraged Model legislation developed for adoption to help coordination of crucial areas of chemical	Formation of regional networks eg The Caribbean has the Coordinating Group of Pesticides Control Boards	Focal points should not all be located in environment. They should call for health, agriculture involvement in all projects or chemical management activities
	Panama	Inter-institutional committee	Annual meetings	Meetings and Internet

EMRO	Jordan			<i>From first questionnaire:</i> Between conventions: Stockholm, Rotterdam, Basle
	Saudi Arabia	Greater cooperation of stakeholders regarding the assessment of hazard and its management; multi-sectoral approach		
EURO	<i>Estonia</i>	Detecting or creating national coordination body; developing coordinated national action plan and active inter-sectoral coordination and collaboration (creating special mail-lists and web-pages for better and quicker information flow);	Detecting or creating regional coordination bodies; regular intraregional workshops, trainings, developing integrated toolkits of training materials; developing regional environmental and health agreements	In principle the same as for regional level; more intensive information flow between international organisations/agreements to ensure that efforts are not duplicated and are made in synergy.
	Finland	Better coordination between responsible national authorities (for example establishment of common working groups or networks for this purpose)	Better coordination between member states in regional organisations (for example European Union)	Cooperation and coordination meetings between secretariats of international organisation (UNEP, WHO, ILO)
	Poland	It is time for more binding steps	It is time for more binding steps	It is time for more binding steps
	Switzerland	-	More active part of WHO Regional Office for Europe	Better coordination and communication between existing bodies; no additional new bodies
WPRO	Philippines	Strengthening of the Philippine InterAgency Committee on Environmental Health- chemical safety sector (Department of Labor, Environment Management Bureau, Department of Science and Technology, National Poisons Center, Department of Agriculture- Bureau of Fertilizer and Pesticides); inclusion of Non Government Organization /interest group	Include chemical safety issues in strategic Environmental Occupational Health WHO WPRO meetings/ Conduct of Asia Pacific IFCS	Wider dissemination of WHO's contribution to International chemical meetings, i.e. IPCS, Drinking Water Quality Guidelines, Codex Alimentarius , Pesticides Residues , etc.
	Vanuatu	The establishment of National Project Coordinator for projects/programmes under different international conventions or treaties which deals with the control and management of chemical safety with a well multi-stakeholder coordinating mechanism to include the	The coordinating agency or the executing agency of global programmes to establish a strong net-work of a coordination mechanism with clear executing roles and responsibilities to supervise, direct, facilitate and coordinate programmes/projects within	WHO, UNEP, GEF, ILO & IPCS to establish a well solid coordination mechanism in consultation with international Conventions which requires the strict control, and management of chemical safety.

	involvement of all relevant stakeholders: Government entities, line and horizontal departments, ministries; Industries; Trade Unions; Academic, scientific and R&D institutions; Local Governments ; Non-government Agencies; Community base Organization and the representative of the civil societies [The response also elaborates on objectives, working methods and issues for the coordination]	countries in the national level. To establish Regional Coordinators for each project/programmes to ensure project implementation on chemical management and safety for each country. There will be different programme Coordinators/Managers that need a strong and well coordination mechanism with sound networking and effective information system.	
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3 d) Please provide suggestions for implementation and how to take stock of progress

AFRO	Algeria	An adequate management would permit the health sector, primarily concerned with accidents, to intervene in a rational and efficient manner
	Central African Republic	Follow-up and assessment of accomplishments half-way, final and periodic
	Congo	Availability of material, financial and intellectual resources
	Mauretania	Follow-up and assessment
	Mauritius	Mechanisms of follow-up and assessment
	Nigeria	The SAICM shall be a non-political, technical, intersectoral assembly with strategy formulating, monitoring and evaluation and administrative responsibilities at the international, regional and sub-regional level; and a coordinating implementation steering organ at the national level. It shall have responsibility for chemical safety advocacy in all intergovernmental political, trade and economic fora such as the Commonwealth, EU, AU, World Trade Organization (WTO) NEPAD, etc At national level, its activities must be coordinated primarily by Health, Environment, Labour and Agriculture and in conjunction with other stakeholders in National Committee on Chemicals Safety Management
	South Africa	A strong strategic implementation plan is essential and must be accompanied with clear targets and timetables, that will serve to review SAICM regularly.
AMRO	Costa Rica	Assignment of national responsibility including of coordination for the implementation, with periodic information to the relevant national focal points
	Jamaica	Designing activities/projects/reporting procedures to involve all sector eg health, environment and agriculture. All activities should require involvement of all sectors and be multidisciplinary. Gaps should be identified and addressed to ensure compliance with all international agreements
	Panama	Work with specific projects with indicators and methodology for structured assessment (Marco Logico, Logframe)

EMRO	Jordan	<i>From first questionnaire:</i> The development of SAICM cannot be successful without the appropriate involvement of all stakeholders in the process of chemicals management, including government agencies, industry, environmental and health NGOs in consistence with the domestic laws and regulations, and the developing countries should be encouraged to do so. The implementation of SAICM in a satisfactory manner cannot be reached without a strong commitment from the developed countries and international agencies concerned with chemicals management to support the developing countries in different aspects. <i>Response to second questionnaire:</i> Worth discussing how to implement all suggestions within the goals; establish long term/short term plans; make a timetable, suggest the mechanism for implementation
	Saudi Arabia	Multi-dimensional progress involving all relevant sectors in the government as well as NGOs working in the country
EURO	<i>Estonia</i>	Capacity building for implementation and working out financial mechanisms. Implementation should be monitored and for that integrated indicators should be worked out.
	Finland	Some kind of non-binding instrument
	Poland	Legal agreements starting from health impact assessment methodology
	Switzerland	Regular follow-up meetings
WPRO	Philippines	Regular national, regional, international meetings (i.e, video conference, face to face)
	Vanuatu	Project Coordinator/Managers to produce quarterly progress reports including financial report on the expenditures to the Regional executing agency Programme Coordinators on specific project/programmes, the regional Project coordinator/Programme Directors in the region then compiled all country information cater from the country progress report to the global coordination mechanism to be included in the global achievement of International chemical management and safety.

4. Please indicate any preference with respect to the character of the final SAICM, e.g. one or more of the examples i)-vii) below or other options

- i) high-level declaration**
- ii) overarching policy strategy**
- iii) global programme of action with concrete targets and a timetable**
- iv) convention**
- v) international voluntary agreements and partnerships**
- vi) periodic review of progress**
- vii) coordinated with sustainable development**

AFRO	Algeria	iii), vi), vii)
	Republic of Benin	iii), iv), vi)
	Central African Republic	i), iii), v)
	Congo	iii)

	Mauretania	ii), iii), iv)
	Mauritius	ii), iii), iv)
	Nigeria	ii); iii); vi); and vii)
	Senegal	ii), iii)
	South Africa	ii), iii), vi)
AMRO	Costa Rica	<p>i) with</p> <ul style="list-style-type: none"> • generalities; • summary analysis of the situation and national challenges in chemical safety; • national policies in chemical safety (development and consolidation of relevant institutions; equality, universality, access and quality of environmental health actions; participation of the civil sector in the accomplishments of chemical safety; environmental health and technological disasters or chemical emergencies); • procedures for assimilation of these policies.
	Jamaica	Order given: iii, vi, ii (supplemented with: to involve all sectors in activities and at a ration near 30:30:30 involving health, environment and labour)
	Panama	Order of priority: iii), v), vi), i), ii), iv), vii)
EMRO	Jordan	[Implicitly, the comments are in line with item iii)]
EURO	Armenia	iv), vi)
	<i>Estonia</i>	i), ii), iii), vi), vii)
	Finland	i), ii), iii)
	Poland	i) and work towards iv) on issues where agreement seems feasible
	Switzerland	i), ii), iii)
SEARO	Thailand	iii), v), vi) with indicators
WPRO	Philippines	Order given: i) and iv); iii)
	Vanuatu	i), ii), iii), iv), vi), vii). Also Lessons learnt & experiences, information sharing within countries, difficulties encountered and how to solve them and level of capacity to manage chemical in countries and training and equipment needs

5. Is there any major area of Health Sector interest missing from Attachment 3?

AFRO	Central African Republic	Hygiene and health – Occupational medicine-Emergency practice
	Nigeria	Protection of the health of Chemical Analysts/Scientists and Researchers working for many years at a stretch with toxic analytical reagents from the cumulative effects of chemicals [III and VII] Need to control illegal importation i.e. smuggling of toxic chemicals across land borders for sale to illiterate farmers and consumers
	South Africa	
	Switzerland	
	Vanuatu	
EURO	Finland	Development of better scientific methods and criteria to determine the impact of chemicals on health to set priorities for action. Comparison of (health) risks should be an important element in this work.
	Poland	Improving education of chemical safety professionals
SEARO	Thailand	Prioritization of the global program is needed.
WPRO	Philippines	The Health Sector should broaden its perspective to encompass the entire health system relative to chemical safety issues. Issues on economic valuation (direct and indirect costs) of chemical hazards (e.g. pesticides, heavy metals, etc.) on health should be quantified so as to have a stronger case of chemical safety issues high in the agenda not only of the health sector but the entire health system.
	Vanuatu	There were public health and environmental impacts of chemicals in human which needs to be analysed for each country and the socio economic impact of chemical in countries which also needs analysed to develop country baseline data for policy decisions. The public health implication of chemical safety is during handling, storage and disposal of unused chemical in un-sound manner. Handling of chemicals by workers in work places, industries and manufactories, etc without following occupational health and safety requirements and standards is also a common practice in developing countries due to the lack of knowledge on the effect of chemicals in their health, the toxicity level of chemical concentration, the chemical properties, and the effects of these properties in their bodies. There is a need to link chemical safety and waste management together as they both have effects on the health and environment of the population and they too have economic and social impact in the countries.