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**Implementation of the Strategic Approach to International
Chemicals Management: Evaluation of and guidance on
implementation and review and update of the Strategic Approach**

Cooperation with intergovernmental organizations

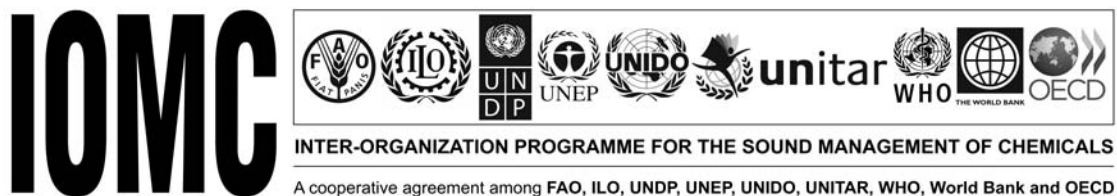
**Activities of the Inter-Organization Programme for the Sound
Management of Chemicals to support SAICM Implementation**

Note by the secretariat

1. The secretariat has the honour to circulate in the annex to the present note information on activities of the Inter-Organization Programme for the Sound Management of Chemicals (IOMC) to support SAICM implementation. The annex describes IOMC and its role in implementation of SAICM, collective IOMC activities in support of SAICM, including a matrix of IOMC activities in countries, analysis of how IOMC activities contribute to the achievement of development goals, an analysis of implementation of the Global Plan of Action, IOMC documents and tools, SAICM emerging issues and Quick Start Programme and SAICM governance. The annex also describes the activities of the IOMC participating and observer organizations, in support of the SAICM objectives.
2. The information is presented for the information of participants as submitted and has not formally been edited.

* SAICM/ICCM.3/1.

Annex



Activities of the Inter-Organization Programme for the Sound Management of Chemicals to support SAICM Implementation

17 August 2012

Prepared for the 3rd International Conference on Chemicals Management

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I. IOMC and its role in implementation of SAICM

1. The Inter-Organization Programme for the Sound Management of Chemicals (IOMC) comprises nine Participating Organizations: the Food and Agriculture Organization (FAO), the International Labour Organization (ILO), the United Nations Development Programme (UNDP), the United Nations Environment Programme (UNEP), the United Nations Industrial Development Organization (UNIDO), the United Nations Institute for Training and Research (UNITAR), the World Health Organization (WHO) the World Bank, and the Organisation for Economic Cooperation and Development (OECD).
2. The objective of the IOMC is to strengthen international cooperation in the field of chemicals and to increase the effectiveness of the organizations' international chemicals

programmes. The IOMC promotes coordination of policies and activities, pursued jointly or separately by its Participating Organizations, to achieve the sound management of chemicals in relation to human health and the environment.

3. During the first International Conference on Chemicals Management, the IOMC organizations issued a Joint Statement about their participation in the implementation of SAICM and affirmed the commitment of the organizations to:

- Work together to strengthen the sound management of chemicals;
- Contribute to the achievement of SAICM within the mandates and in accordance with decisions of the governing bodies of the organizations;
- Promote coordination of policies and activities, pursued jointly or separately, in order to achieve the sound management of chemicals;
- Cooperate to ensure the most effective use of the organizations human, technical and financial resources;
- Exploit the synergies between IOMC organizations and other organizations;
- Strengthen the capacity of countries, in particular developing countries and countries with economies in transition, to participate fully in SAICM;
- Undertake and support, together with other multilateral, regional and bilateral agencies, and within the resources at their disposal, technical assistance and investment activities to assist countries in the establishment and implementation of appropriate programmes for the sound management of chemicals; and
- Support country efforts at national, regional and international levels as appropriate.

4. Following the adoption of SAICM, each of the IOMC organizations endorsed or otherwise formally acknowledged support for SAICM.

II. Collective IOMC Activities in support of SAICM

5. Activities of the IOMC organizations support the objectives of SAICM as specified in the Overarching Policy Strategy as well as implementation of the Global Plan of Action. Eighty percent of activities listed in the Global Plan of Action identify one or more IOMC organization/s as an actor. These activities are formally coordinated by IOMC, including through its bi-annual meetings.

Matrix of IOMC activities in countries and analysis of how IOMC activities contribute to the achievement of development goals

6. In 2012, the IOMC organizations developed a matrix of IOMC activities in countries. The matrix provides a country-by-country overview of where individual IOMC organizations are working on chemicals issues. It is available at <http://www.who.int/iomc/activity/poactivities/en/index.html>.

7. Also in 2012, the IOMC organizations carried out a survey of IOMC activities in nine countries from different UN regions, and analyzed how the activities contribute to the countries' development goals. The project focuses on national development plans and IOMC organization activities in Ecuador, Georgia, Indonesia, OECD

8. Kazakhstan, Morocco, Peru, Philippines, Vietnam, and Zambia. The survey and analysis reports are available on the IOMC web site, at www.iomc.info.

8. Further information about IOMC organization activities in support of SAICM can be found on each organization's web sites, linked to the IOMC web site.

Analysis of implementation of the Global Plan of Action

9. In preparation for the 3rd International Conference, the IOMC organizations undertook an analysis of the Global Plan of Action in relation to activities where one or more IOMC organizations is an actor. An annotated version of the Global Plan of Action, containing a high level indication of progress is provided on the IOMC web site.

IOMC documents and tools, including the IOMC Toolbox

10. The IOMC organizations have collectively developed a number of SAICM-related documents, including:

- *National Implementation of SAICM: A guide to resource, guidance and training materials of the IOMC Participating Organizations*, updated in August 2012, and available as SAICM/ICCM.3/INF/31 with other languages to be available from the IOMC website later in 2012.
- *Guidance for Developing SAICM Implementation Plans*, 2009 edition, developed by UNITAR and the SAICM Secretariat in collaboration with IOMC.
- *IOMC Strategy for Strengthening National Chemicals Management Capacities*, updated in 2011. The core objective of this strategy is to assist countries in strengthening their national chemicals management capacities throughout the life-cycle in order to implement SAICM and achieve the 2020 goal for sound chemicals management.

11. The IOMC organizations are currently developing a toolbox for making policy choices in chemicals management, and a proof-on-concept version ready for hands-on testing will be launched at ICCM3. The IOMC Toolbox will be a decision support tool that will enable countries to identify appropriate and efficient ways to address national problems related to chemicals management. The toolbox will take into account as far as possible all material developed by the IOMC Participating Organizations, and it will focus on simple, effective solutions. The toolbox will have a web-based framework and will include three detailed examples (road-maps or decision trees) of how specific national chemicals management issues can be addressed. The three examples will involve pesticides, occupational health and safety, and chemical accidents.

SAICM emerging issues

12. During the second International Conference on Chemicals Management, held in May 2009, the IOMC committed to assisting in the implementation of the Conference Resolutions on the emerging policy issues, including by leading or co-leading each of the four issues, plus the activity on perfluorinated chemicals, listed below. Detailed reports on each are available as separate Documents for the 3rd International Conference.

- Chemicals in products: UNEP
- Hazardous substances within the life cycle of electrical and electronic products: UNIDO assisted the Basel Convention Secretariat
- Lead in paint: UNEP and WHO
- Nanotechnology: OECD and UNITAR
- Perfluorinated chemicals: OECD and UNEP

Quick Start Programme and SAICM governance

13. In accordance with Resolution I/4 adopted by the ICCM, the IOMC organizations have formed a Trust Fund Implementation Committee for projects financed by the SAICM Quick Start Programme Trust Fund administered by UNEP. The IOMC organizations also provide assistance to countries, on their request, to implement QSP projects.

14. The IOMC organizations participate in SAICM regional meetings, co-organize back-to-back workshops, and participate in the Core Group/Coordinating Committees of the regions for Africa, Central and Eastern Europe, Latin America and the Caribbean, and Asia-Pacific. The Chair of the IOMC participates as an observer in the Bureau of the International Conference.

III. Activities of the IOMC participating and observer organizations, in support of the SAICM Objectives

15. The following section provides information on activities, organized by SAICM objectives, received from FAO, ILO, UNDP, UNEP, UNIDO, UNITAR, WHO, World Bank and OECD.

Food and Agriculture Organization of the United Nations (FAO)

The key area of FAO activity relating to chemicals management is in the area of pesticides use in crop production and animal husbandry, food safety and the impact of chemicals in the environment on resources such as fish stocks, forests and irrigation water. In the context of SAICM, FAO works to provide guidance and technical assistance to countries in complying with international legislative obligations such as those defined in the Basel, Rotterdam and Stockholm Conventions, and with best international practice in the regulation, management and use of chemicals in agriculture.

FAO's strategic plan integrates sustainable agricultural production with sustainable diets, conservation of natural resources, improvement of rural livelihoods and access to national and international markets. Chemicals management in this context focuses on risk reduction through reduced reliance on and sound use of chemicals in agriculture. With a substantial portfolio of projects that are funded by a diverse range of donors and financing institutions, FAO helps countries to develop capacity for risk reduction and chemicals management. FAO's technical divisions and the extensive network of FAO Regional, Sub-Regional and country offices also provide institutional and technical support.

FAO's work on chemicals management and risk reduction is backed by an extensive programme of standard setting, preparation of technical guidance and development of tools to assist countries. FAO and WHO together recommend Maximum Residue Limits (MRLs) for pesticide residues in food, determine technical specifications for pesticide formulations to ensure product quality, and produce guidelines, training materials and tools to assist countries. The entire programme is framed by the International Code of Conduct on the Distribution and Use of Pesticides; a voluntary agreement that outlines effective life cycle management of pesticides.

SAICM objective: Risk Reduction
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A priority area of activity is reduction of risks from Highly Hazardous Pesticides as defined

by the FAO/WHO Panel of Experts on Pesticides Management in 2008 (<http://www.fao.org/agriculture/crops/core-themes/theme/pests/pm/code/hhp/en/>) . Pesticide regulators are guided in identifying HHPs under their conditions of use and finding alternative pest management strategies that can replace the use of or reduce the risks from use of HHPs.

Integrated Pest Management (IPM) is a key risk reduction strategy and is at the core of FAO's crop production and protection approach as defined in the recently published document *Save and Grow* (<http://www.fao.org/ag/save-and-grow/>). In IPM, farmers are informed about ecological approaches to crop production and protection such that their reliance upon chemical pesticides is minimized and the selection of pest management tools is compatible with the ecosystem in which they are operating.

SAICM objective: Knowledge and Information

Currently more than 50 technical guidelines in support of the International Code of Conduct on the Distribution and Use of Pesticides are published and available on-line. Many are translated into UN languages. All technical standards for pesticide specifications and Maximum Residue Limits are published on-line as they are produced. Project summaries and lessons learned are also published on-line.

SAICM objective: Governance

The International Code of Conduct on the Distribution and Use of Pesticides provides a framework for effective life cycle management of pesticides. Legislation and regulation is the foundation of sound chemical management and this applies to pesticides too. Noting that pesticides are largely governed by Ministries of Agriculture or Health, it is vital to support inter-sectorial approaches to sound chemicals management. FAO also hosts half the Secretariat of the Rotterdam Convention which helps governments to control trade in particularly hazardous chemicals, many of which are pesticides.

SAICM objective: Capacity Building and Technical Cooperation

With a programme on pesticide management running since the 1960s, offices, projects support staff in every geographical region, FAO has accumulated a unique body of expertise and knowledge on pesticides management that is applicable to chemicals management in other sectors, as well as to other input management in agriculture and health. Operational projects in November 2011 span 60 countries, and more are in development as others conclude their activities continuously.

Training is offered on an ongoing basis on every aspect of FAO's work on pesticides management and standard setting and collaboration with other agencies through IOMC expands opportunities for capacity development. FAO is also supporting a post-graduate programme on pesticides management at the University of Cape Town.

SAICM objective: Illegal International Traffic

FAO works with countries to build capacity in every stage of the pesticide life cycle. This includes effective import controls which is the most effective point to prevent illegal imports and trade in chemicals. Similarly, FAO, together with WHO, determine pesticide specifications which allow countries to test the quality of pesticides that are imported and traded in their territory. Effective quality control measures identify counterfeit and substandard pesticides and allow countries to remove them from the market and prosecute offenders. The Rotterdam Convention whose secretariat is partly hosted by FAO aims to control trade in particularly hazardous chemicals, including pesticides. This also requires

effective import controls.

International Labour Organization (ILO)

The ILO Governing Body endorsed the SAICM at its 297th Session (November 2006) and approved the follow-up activities proposed by the Office to implement SAICM objectives. This included active involvement by the ILO in the operations of the SAICM Quick Start Programme Trust Fund Implementation Committee, as well as supporting ILO-related activities in the SAICM's Global Plan of Action.

Through the ILO's Programme for Safety and Health at Work and the Environment (SafeWork), focus is placed on assisting member States to implement firstly, the main ILO chemicals-related Conventions, namely the Chemicals Convention, 1990 (No. 170) and the Prevention of Major Industrial Accidents Convention, 1993 (No. 174). These two Conventions provide the basis for the sound management of chemicals at the workplace, as recognised by ICCM 1&2 and SAICM.

Furthermore, implementation by member States of the Globally Harmonised System for the Classification and Labelling of Chemicals (GHS) remains a priority, as well as an important SAICM objective. The ILO, in collaboration with UNITAR, will continue to work through the UNITAR/ILO Global GHS Capacity Building Programme, to assist developing countries and countries with economies in transition to implement the GHS.

SAICM objective: Risk Reduction

Under the auspices of IOMC, the ILO is assisting in developing an internet-based problem-solving tool (toolbox) that will enable countries to identify the most relevant and efficient tools to address specific national problems in chemicals management. Of the 3 current toolkits being developed, the ILO is assisting the IOMC in the development of the toolkits on occupational safety and health management systems for chemicals and prevention of major hazards.

In addition, the ILO is developing and piloting two distinct risk assessment tools. One for large and medium sized and another to small enterprises. Whilst both look at occupational safety and health, they both carry modules that deal with the risk posed by chemicals in the workplace and how they should be assessed.

The ILO, in collaboration with the WHO and European Commission, also develops the International Chemical Safety Cards (ICSC) which are intended to provide essential safety and health information on chemicals in a clear and concise way. To date, 1700 cards are available in English, French, Spanish, Dutch, Finnish, German, Hungarian, Japanese, Polish, Italian, Hindi, Korean, Russian, Swahili, Thai and Urdu.

SAICM objective: Knowledge and Information

The ILO-SafeWork website includes a specific section on chemicals and the environment at www.ilo.org/safework, which provides information on SAICM.

To support national SAICM implementation, the ILO has translated key guidance material prepared by UNITAR such as Guidance for Developing SAICM Implementation Plans, and has provided input into UNITAR's document, *National Implementation of SAICM: A Guide to Resource, Guidance and Training Materials of IOMC Participating Organizations*.

The UNITAR/ILO Global GHS Capacity Building Programme provides guidance documents,

<p>and educational, awareness-raising, resource, and training materials regarding the GHS (http://www.unitar.org/cwm/ghs).</p> <p>The ILO, in collaboration with the WHO and European Commission, also develops the International Chemical Safety Cards (ICSC) which are intended to provide essential safety and health information on chemicals in a clear and concise way. To date, 1700 cards are available in English, French, Spanish, Dutch, Finnish, German, Hungarian, Japanese, Polish, Italian, Hindi, Korean, Russian, Swahili, Thai and Urdu.</p>
<p>SAICM objective: Governance</p>
<p>As indication of support for the outcomes of ICCM, the Governing Body of the ILO endorsed the SAICM at its 297th Session (November 2006) and approved the follow-up activities proposed by the Office to implement SAICM objectives 2006.</p> <p>The ILO has been supporting SAICM development process through participation and contributions to preparatory meetings as well as the ICCM. The ILO, together with IOMC is a member of the SAICM Quick Start Programme Implementation Committee and the Executive Board.</p> <p>The ILO also supports member States implement ILO Conventions 170 (Chemicals) and 174 (Major Industrial Accidents) which have been recognised by SAICM to be the main international agreements for the sound management of chemicals at the workplace.</p>
<p>SAICM objective: Capacity Building and Technical Cooperation</p>
<p>The ILO (SafeWork) has commissioned two studies to raise awareness in countries about the OSH implications of electronic waste and so-called “green jobs”. These studies will be made available to ICCM3 as they focus on one of the emerging issues identified under SAICM as well as one of the main topics that will be discussed at Rio+20. The Theme of the World Day for Safety and Health at Work on 28 April 2012 is “Promoting Safety and Health in a Green Economy”. With this in mind, a report has been prepared and is available on the SafeWork website. This reports forms part of a much more in depth study on hazards associated with green technologies.</p> <p>A study on electronic waste has also been prepared by SafeWork and the ILO SECTORAL activities department. Titled <i>The Global Impact of E-Waste: Addressing the Challenge</i>, it explores the volumes, sources and flows of e-waste, the risks it poses to e-waste workers and the environment, occupational safety and health (OSH) issues, labour issues and regulatory frameworks, and links this growing global problem with the International Labour Organisation (ILO)’s current and future work. In addition, the ILO (SafeWork) is currently undertaking a fact-finding study on electronic waste in the Peoples Republic of China.</p>

United Nations Development Programme (UNDP)

Within the framework of SAICM, UNDP advocates for the integration of sound chemicals management priorities into national environmental and poverty reduction planning frameworks. UNDP supports international chemicals conventions objectives and assists Parties to comply with agreed measures. In addition, UNDP helps countries to identify and access technical and financial resources to improve their chemicals and waste regimes.

As one of the implementing agencies of the Global Environment Facility (GEF) and its Chemicals Focal Area that funds national priority initiatives related to the Stockholm Convention on

Persistent Organic Pollutants (POPs). Mercury, SAICM as well as ODS is CEIT countries. UNDP has supported 36 countries in developing their national implementation plans under the Stockholm Convention and now is implementing three global programmes and supporting 22 countries in implementing national implementation plans with a combined portfolio of projects amounting to US \$84 million of grants through the GEF and co-financing of US \$152 million. UNDP supported activities resulted so far in 91,600 people trained in POPs management/alternatives and 1,500 metric tons of POPs disposed or safeguarded.

UNDP also helps countries to meet their commitments under the Montreal Protocol on Substances that Deplete the Ozone Layer, phase-out HCFCs and introduce Ozone and Climate friendly alternatives with the financial support of the Multilateral Fund for the Implementation of the Montreal Protocol (MLF), the Global Environment Facility (GEF) and bi-lateral donors. Since 1992, UNDP has implemented 2,085 projects in 110 countries. UNDP's portfolio of ozone-related projects has a cumulative total value exceeding US\$ 574 million in grant funding and to date has prevented the release of over 65,000 tonnes of ozone depleting substances into the atmosphere.

SAICM objective: Risk Reduction

UNDP activities on chemicals, such as Persistent Organic Pollutants, Ozone Depleting Substances, and heavy metals help reducing risks to environment and health.

UNDP supports the reduction and elimination of all types of POPs contaminants included under the Stockholm Convention through

- Sound management and disposal of POPs pesticides, including the promotion and introduction of POPs-free alternatives;
- Sound management of PCB stockpiles, including inventories, sound disposal, strengthening of legal frameworks and enforcement capacity;
- Reducing releases of unintentional POPs (UPOPs) and brominated flame-retardants resulting from unsound waste management processes/practices as well as recycling operations (e.g. e-waste, health-care and municipal waste etc.);
- Gradual implementation of best available techniques (BAT) and best environmental practices (BEP) for existing as well as new POPs sources; and
- Minimization of exposure levels of communities living close to contaminated areas.

In the framework of the Montreal Protocol, UNDP helps countries to undertake investment activities in refrigeration, air conditioning, foams and solvents sectors to phase out the production and consumption of ozone-depleting substances thus reducing risks to human health and environment. Such supporting activities also include the validation and demonstration of low carbon alternative technologies with zero ozone-depleting potential.

To protect public health and the global environment from the impacts of heavy metals, such as mercury and lead, UNDP is supporting countries through i) introduction of management schemes that support the waste aspects of obsolete equipment (including mercury waste stream), which arise when more environmentally friendly and energy efficient appliances are being introduced (e.g. as a result of refrigerator replacement programmes); and ii) introduction of Best Environmental Practices (BEP) and Best Available Technologies (BAT) to e-waste processing to avoid harmful releases of heavy metals and other hazardous substances.

SAICM objective: Knowledge and Information

UNDP maintains websites at <http://www.undp.org/chemicals/> and

<http://www.undp.org/ozone/> where it provides information on its activities on chemicals management as well as information about linkages between chemicals development and development.

In 2011 UNDP prepared a publication entitled *Chemicals and Gender* which describes the important linkages between socio-economic development, gender, and chemicals management. A number of factors justify the importance of adopting a gender-differentiated approach to the management of chemicals. The major factors include: differences in physiological susceptibility and the resulting health effects as well as the source of exposure to toxic chemicals (workplace vs. household).

The UNDP *Guide for Integrating the Sound Management of Chemicals into MDG-Based Development Planning (2012)* provides a systematic approach to countries to help assess their capacity for sound management of chemicals, identify needs, and ultimately integrate identified priorities into national MDG-based development policies and plans. The UNDP Guide is based on applied, practical experience accumulated in a number of pilot countries under the UNDP-UNEP Partnership Initiative.

SAICM objective: Governance

UNDP has been supporting SAICM development process through participation and contributions to preparatory meetings as well as the ICCM. UNDP together with IOMC is a member of the SAICM Quick Start Programme Implementation Committee and the Executive Board. Furthermore, with SAICM adoption, UNDP realigned its chemicals’ programming to enhance its support to countries with SAICM implementation in order to adequately reflect SAICM priorities in its technical assistance strategy.

UNDP supports countries implementing such international agreements and conventions on chemicals as the Stockholm Convention on Persistent Organic Pollutants, Montreal Protocol on Substances that Deplete the Ozone Layer, and the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and Their Disposal.

SAICM objective: Capacity Building and Technical Cooperation

The capacity building and mainstreaming approach follows guidance provided by *UNDP Guide for Integrating the Sound Management of Chemicals into MDG-Based Development Planning* which provides an explanation of the synergies that exist between SMC and development goals and suggests steps in determining national SMC capacity building needs/priorities and “points of entry” to facilitate the integration of SMC into national development plans and sector-based strategies.

First pilot countries including Cambodia, Macedonia, Uganda and Zambia as well as Belize have already undertaken the a SMC “mainstreaming” process resulting in encouraging results in form of engaging development planning officials in understanding the need to take chemicals and waste management as well as showing the economic benefits in investing in chemicals management.

The program has entered a full implementation phase with several more countries, including Burkina Faso Ecuador, Honduras, Kazakhstan, Kyrgyzstan, Liberia, Mauretania, Mauritius, Moldova, Nigeria, Suriname and Vietnam, embarking on further integrating chemicals and waste management in the national and sector development plans as per the guidance developed.

Within its programmes under the implementation of the Stockholm Convention and the Montreal Protocol, UNDP endeavors to incorporate issues related to POPs and ODS management into national development planning processes, and its projects aim to improve

<p>policy and regulatory frameworks through targeted institutional capacity development.</p> <p>Wherever possible and appropriate, UNDP POPs activities are undertaken within and strengthening a country's framework for sound management of chemicals, to ensure national coordination among chemicals-related activities in support of regional or global conventions and agreements on chemicals.</p> <p>Some other specific examples include support in developing 29 national implementation plans (NIP) under the Stockholm Convention and national ODS phase-out strategies and plans under the Montreal Protocol.</p> <p>Within the framework of Montreal Protocol and funded by the MLF, UNDP supports 21 countries with institutional strengthening projects, with focus on national ozone units.</p>
<p>SAICM objective: Illegal International Traffic</p>
<p>Within the framework of institutional strengthening projects funded by MLF, UNDP assists national ozone units to establish licensing systems for import and export of ozone-depleting substances (ODS) and undertake trainings for customs officials to prevent illegal trade in ODS.</p> <p>In addition to GEF projects on e-waste management that also address illegal international traffic, UNDP works on illegal movement of e-waste at country level through the framework provided by the Partnership for Action on Computing Equipment (PACE) Working group under the Basel Convention</p>

United Nations Environment Programme (UNEP)

UNEP works to protect humans and the environment from adverse effects caused by chemicals throughout their lifecycle, and hazardous waste. The Programme reflects global priorities identified by governments. In response to mandates from UNEP's Governing Council, it facilitates global action, including the development of international policy frameworks, guidelines and programs, to reduce and/or eliminate risks from chemicals. UNEP's activities on chemicals are in its work programme covered in the subprogramme on Harmful Substances and Hazardous Waste, one of the six UNEP work programmes.

UNEP has facilitated the negotiations of a number of international treaties on chemicals and waste, and hosts the secretariats of the:

- Basel Convention
- Montreal Protocol on Substances that Deplete the Ozone Layer.
- Vienna Convention for the Protection of the Ozone Layer
- Rotterdam Convention
- Stockholm Convention
- Global Programme of Action for the Protection of the Marine Environment from Land-based Activities
- Strategic Approach to International Chemicals Management

The table below provides information on some but not all of the UNEP-led activities on chemicals.

<p>SAICM objective: Risk Reduction</p>
<p>UNEP assists countries and regions in managing, within a life-cycle approach,</p>

chemical substances and waste that have potential to cause adverse impact on the environment and human health.

These include:

- mercury, lead and cadmium
- persistent, bioaccumulative and toxic substances (PBTs);
- chemicals that are carcinogens or mutagens or that adversely affect the reproductive, endocrine, immune, or nervous systems;
- chemicals that have immediate hazards (acutely toxic, explosives, corrosives);
- chemicals of global concern such as persistent organic pollutants (POPs), greenhouse gases and ozone-depleting substances (ODS)
- healthcare wastes
- hazardous substances within the life cycle of electrical and electronic products.

UNEP has been working to address mercury issues since 2003. Currently, the UNEP mercury programme has two main facets:

- development of a legally binding instrument on mercury. See section on governance
- UNEP Global Mercury Partnership consists of activities to reduce, and where feasible, eliminate anthropogenic releases of mercury to air, water and land. The Partnership, made up of eight priorities areas, undertakes activities in all regions.

The priority areas are:

- reducing Mercury in Artisanal and Small-Scale Gold Mining
- mercury Control from Coal Combustion
- mercury Reduction in Processes
- mercury Reduction in Products
- mercury Air Transport and Fate Research
- mercury Waste Management
- mercury Supply and Storage
- mercury control in the cement industry

UNEP-led work on lead and cadmium, in coordination with other IOMC members, will:

- continue to promote and facilitate the work in relation to the Partnership for Clean Fuels and Vehicles (PCFV) and the Global Alliance to Eliminate Lead Paint (GAELP);

UNEP continues to assist the implementation and monitoring of the Stockholm Convention on POPs. In doing so, UNEP:

- trained laboratories in 20 countries to analyze POPs in core matrices for the Global Monitoring Plan and established a network of passive air samplers in 32 countries. The results will provide source-related information on present releases of POPs;
- undertook the First Worldwide UNEP Intercalibration Study on Persistent Organic Pollutants, which was the largest inter-laboratory comparison study on POPs so far with 85 laboratories participating and analyzing a variety of biotic and abiotic test samples;
- developed reporting formats for the Global Monitoring Plan on POPs for harmonized reporting of analytical results and established criteria for accurate data generation;
- generated emission factors for unintentional POPs through targeted research

projects and thus, contributes to the further updating and reviewing of the Dioxin/furan Toolkit for release inventory development (mandated through COP decisions and in collaboration with Stockholm Convention Secretariat);

- participates in the expert groups on best available techniques and best environmental practices for POPs and the development of factsheets on POPs waste destruction technologies;
- undertakes an assessment for inclusion of additional dioxin-like chemicals into the scheme of toxicity equivalency factors jointly with the World Health Organisation.

UNEP also plays a leading role in the GEF implementation in some key areas of human and environmental protection. UNEP has, among others, initiated the process to design Pollutant Release and Transfer Registers (PRTRs) in 7 countries in three continents, with the aim of facilitating reporting, disseminating information to the public, and monitoring releases of POPs and other chemicals. UNEP has also initiated a project to assess and to eliminate PCBs in the mining sector in Chile and Peru. Most GEF interventions focus on the electrical sector and do not address the PCB problem in other sectors. This project is being implemented with the active participation of the mining sector and the national governments, and will provide a detailed action plan on PCB management in the mining sector and in the participating mining facilities. PCB destruction is also envisaged but will be assumed by the participating mining companies. It will address important issues as PCB in products, mine workers safety, national regulation, guides and norms development, etc.

Further, following decisions from the Fifth Conference of the Parties to the Stockholm Convention on POPs, Chemicals Branch of UNEP's Division of Technology, Industry and Economics has taken over the leadership of the **Global Alliance on DDT uses and alternatives**. UNEP will coordinate the phase out of DDT with the development in accordance with the provisions of the Stockholm Convention, introduction of viable alternative chemicals and non-chemical measures with the goal of reducing incidences of malaria; ensure that the remaining uses of DDT are in compliance with the Stockholm Convention. The basis for this Project Output is decision SC-5/6 on DDT (5th Conference of the Parties to the Stockholm Convention, 25-29 April 2011) to facilitate a transition of the leadership of the Global Alliance, in a sustainable manner, from the Secretariat [of the Stockholm Convention] to one or more United Nations agencies whose mandate is better suited to the implementation of a major project such as the Global Alliance and to cooperate with WHO in its implementation. The Global Alliance works through thematic groups¹ that are advised by a steering committee.

Chemicals Branch also provides the management of the **PCB Elimination Network (PEN)**: The PEN has been established by the Conference of the Parties to the Stockholm Convention at its fourth meeting (May 2009) to coordinate efforts for the phase out and environmentally sound disposal of PCB at global level. In accordance with the Stockholm Convention decision SC-5/7 (25-29 April 2011). The mandate is laid down in the report of the Conference of the Parties to the Stockholm Convention "... the Executive Director had expressed a willingness to consider undertaking work in such areas that were within the mandate of UNEP, if it would facilitate the work of the Convention" (paragraph 63) and subsequent correspondence between the Executive Secretary of the Basel-Rotterdam-Stockholm Conventions Secretariat and the Head of Chemicals Branch. The PEN consists of several working groups and a

¹ 1. Cost-effective alternatives to DDT, 2. Strengthening of in-country decision making on IVM, 3. Malaria vector resistance patterns and mechanisms, 4. Reduce barriers to bring new chemicals/products on market, and 5. Reduce barriers to bring new non-chemicals products on market

steering committee to approve workplans and budgets. Chemicals Branch will provide the secretariat and overall coordination of the PEN to enhance implementation activities and assisting Parties. Chemicals Branch will be assisted by IOMC institutions, Basel and Stockholm Convention Regional Centers, and members of the PEN. The PEN has a long-term objective according to the Convention's provisions and timelines.

With respect to mercury, UNEP with GEF funding is assisting two countries, China and Kirgizstan to implement obligations under the future Minamata Convention on Mercury.

The UNEP, DSSA Programme ('Demonstrating and Scaling up of Sustainable Alternatives to DDT in Vector Management') formally started in 2009 through signing of an agreement between WHO, UNEP and GEF - the Global Environment Facility. The Programme consists of some 10 sub-regional projects in various eco-epidemiological settings aiming at demonstrating and scale enlargement of various alternative approaches to vector management. The Programme, implemented by UNEP and executed by national partners and WHO, mainstreams specific environmental issues in the national programs focusing on a phasing out of DDT in malaria vector control and introducing/demonstrating alternative substitutes as well as alternative approaches like Integrated Vector Management (IVM). These alternative approaches need as well an adaptation in institutional settings which is also supported by the programme in order to sustain the achieved changes.

Some 40 countries are participating in the DSSA Programme, the GEF co-funded budget is about 50 million US \$.

UNEP assists developing countries and countries with economies in transition (CEITs) to enable them to achieve and sustain compliance with the Montreal Protocol. With our programme's assistance, countries are able to make informed decisions about alternative technologies and ozone-friendly policies.

For ozone depleting substances, UNEP has the distinction of implementing more than 1,000 projects and services that benefit of more than 100 developing countries and 17 CEITs that assist another 40 developing countries.

UNEP has three areas of work:

- assisting developing countries in UNEP's capacity as an Implementing Agency of the Multilateral Fund for the Implementation of the Montreal Protocol, through a Compliance Assistance Programme (CAP).
- assisting CEITs in UNEP's capacity as an Implementing Agency of the Global Environment Facility.
- specific partnerships with bilateral agencies and Governments. The Governments of the Czech Republic, Finland, Italy, the Netherlands, Norway and Sweden have also provided bilateral support to UNEP over and above their contribution to the Multilateral Fund to undertake specific projects.

In 2007, UNEP launched an initiative to promote chemical accident prevention worldwide. The initiative is based on the 'Flexible Framework for Chemical Accident Prevention' that offers guidance for national governments wanting to develop, improve, strengthen or review their industrial chemical accidents prevention and preparedness policies and programmes.

The Flexible Framework brings together in one document both in-depth information on critical elements of a the development or review of an industrial chemical accident prevention and preparedness programme based on international references and

practical information addressed to national governments on how to develop such a programme.

More specifically, it provides comprehensive information for establishing a chemical accident prevention programme by:

- describing the steps that are needed before developing and implementing laws, regulations, policies, guidance or other instruments which would make up an effective chemical accidents programme (e.g. for establishing priorities, determining the appropriate administrative arrangements, etc.);
- setting out the possible elements of such instruments; and
- providing resource materials related to how these elements may be implemented, based on international initiatives and the experience of countries that have had chemical accident programmes in place for a number of years.

It has been designed to be flexible to ensure that:

- the guidance can be applied in different national contexts worldwide;
- countries can focus on elements relevant to their particular context and adapt them as required; and
- countries can decide how to define actions, depending on priorities, resources and experience.

The Flexible Framework focuses on prevention and preparedness for industrial accidents at "hazardous installations", which include places where hazardous substances are produced, processed, used, handled or stored in such quantities and under such conditions that a chemical accident could occur. The types of accidents addressed by the Guidance would include any loss of containment, explosion, or fire involving chemicals which pose a risk to human health or the environment.

UNEP is developing a number of expert guidance documents to assist countries in identifying and incorporating determinants related to local environmental conditions, socio-economic aspects, ecosystems sensitivities and their services in management decisions regarding pesticides use and other chemical release issues.

Together with WHO, UNEP has developed training tools for trainers on sound management of pesticides. These tools, including one for teaching schoolchildren about potential risks from pesticides and other chemicals found in the households are undergoing testing in countries.

As requested through a resolution by ICCM2 on the emerging policy issue "Chemicals in Products", UNEP is leading a project to improve the availability and access to information on chemicals in products in the supply chain and throughout their life cycle.

UNEP, working with WHO and a panel of internationally recognized experts, has developed an update to the 2002 IPCS "Global Assessment of the State of Science of Endocrine Disruptors". The update is planned to be completed prior to ICCM3 for which UNEP has nominated endocrine disrupting chemicals as a new emerging policy issue.

The UNEP-led Global Programme of Action for the Protection of the Marine Environment from Land-Based Sources of Pollution addresses the management of nutrients, marine litters and other forms of harmful substances and hazardous waste that have negative impacts on marine environments. A Global Partnership on Nutrient Management has been formed as a platform for dialogue, policy making and actions at national, regional and global levels. The partnership will promote the use of

ecosystem-based management practices in an enabling policy framework such that land-based sources of pollution reaching coastal waters and open seas and leading to eutrophication and the creation of dead zones, are effectively monitored, assessed and ultimately reduced.

UNEP is furthermore developing The Global Platform for Waste Management (GPWM), an open-ended partnership for international agencies, governments, businesses, academia, local authorities and NGOs. GPWM supports the development of work plans to facilitate the implementation of integrated solid waste management at national and local level to overcome environmental, public health, social and economic issues inflicted by waste and its impact.

SAICM objective: Knowledge and Information

UNEP has developed a Global Chemicals Outlook founded on previous OECD industry analysis. The Outlook addresses the consequences of the continuing shift in chemicals production and use of chemicals from developed to developing countries, highlighting potential negative impacts on human health and the environment in developing countries. The Outlook will consist of an analysis of the changes in production and use of chemicals from developed to developing countries for the next decade, the economic and financial implications of these changes if sound management of chemicals is not being improved, and an assessment of the potential policy responses. The Global Chemicals is expected to be published in time for ICCM3. The 5th Global Environment Outlook (GEO5) released June 2012 aims to analyze the way ecosystems and the atmosphere are responding to patterns of unprecedented consumption and production. It contains a chapter on chemicals and waste covering a number of issues such as progress towards the internationally agreed goals relevant for chemicals and waste, the status and trends, life cycle thinking as well as emerging issues.

As a response to a call at ICCM2 for additional research on the economic and social cost of unsound chemicals management, UNEP has initiated a study of the cost of inaction on sound management of chemicals with input from the World Health Organization, the Organization for Economic Cooperation and Development and others. The first phase of the study has been to assess the existing knowledge on the economic cost of the lack of sound management of chemicals. A Baseline Assessment Report on the Cost of Inaction will be prepared in time for ICCM3.

UNEP worked with WHO on a project on Children's Environmental Health. Results of an intensive review of CEH studies done in developing countries affirmed the crucial role of the environment sector in the prevention of chemical releases to reduce children's exposure risks and that improving environmental conditions upstream is likely to be a cost-effective strategy to prevent environment related children's health outcomes. The need for global harmonization of exposure and outcome measures to promote CEH is recognized.

SAICM objective: Governance

UNEP hosts with WHO the SAICM Secretariat and is the trustee for the SAICM Quick Start Programme.

Agreement to negotiate a legally binding instrument on mercury was reached by the twenty-fifth session of the UNEP Governing Council. To date, four sessions of the intergovernmental negotiating committee have been held (June 2010 in Stockholm; January 2011 in Chiba, Japan; October 2011 in Nairobi, Kenya; and June 2012 in

Punta del Este, Uruguay). Regional consultations have been held between each session of the INC to assist regions in preparing for the negotiations.

UNEP and WHO lead the Health and Environment Strategic Alliance. Under this Alliance an African Framework to reduce chemicals risks to human health and the environment has been drafted and is currently undergoing a review process for its finalization. The Framework will be submitted for consideration by ministers of environment at a next AMCEN meeting as well as to the WHO Regional Committee for Africa. The purpose of the African programme for reducing chemicals risks to human health and the environment will be to build the technical and institutional capacities of African countries in support of concrete actions to reduce chemicals risks to health and the environment from the unsound management of chemicals.

UNEP has carried out a number of analyses on the integration of sound management of chemical into poverty reduction strategies and the use of economic instruments. This analysis shows that only to a very limited extent is the sound management of chemicals incorporated in the national strategies and that only limited use is made of economic instrument in developing countries.

A consultative process on financing options for chemicals and wastes was launched by the UNEP Executive Director in recognition of the need for adequate resources in the field of chemicals and wastes management. The fifth meeting of the consultative process was held in Bangkok, Thailand from 6 to 7 October 2011 and delivered recommendations on an integrated approach to financing to the UNEP Executive Director as input to his final report for consideration at the twelfth special session of the Governing Council/Global Ministerial Environment Forum, in February 2012. The GC/GMEF has forwarded the ED's report to the third session of the International Conference on Chemicals Management, in 2012, and will consider further developments at the twenty-seventh session of the Governing Council/Global Ministerial Environment Forum, in 2013. A consultative meeting will take place in **Mexico City from 5 to 6 September 2012** on the draft proposal of the Executive Director on an integrated approach to financing sound management chemicals and wastes. The purpose of the meeting in September, which will be chaired by the secretariat, is to seek advice from those governments and other stakeholders who previously have been invited to the meetings of the consultative process on financing options for chemicals and wastes, on the draft proposal. The outcome of the Mexico City meeting will be presented to the third session of the International Conference on Chemicals Management (ICCM3) in September 2012 for consideration.

SAICM objective: Capacity Building and Technical Cooperation

UNEP partners UNDP to promote the Integration of sound management of chemicals into development strategies and policies. Training programmes and guidance materials on how to perform economic assessment of the lack of sound management of chemicals have been prepared for UNDP to deploy in its country programmes.

UNEP has also developed guidance on the development of legal and institutional infrastructures for sound management of chemicals and on measures for recovering costs of national administrations which are being used in QSP projects in Belize and Cambodia and will be used in additional countries, such as Uruguay and Nigeria based on funding from the SIDA under the Swedish Government.

UNEP has assisted Moldova and Armenia in their assessment of legal needs for sound management of chemicals.

UNEP has furthermore supported a number of country projects on POPs:

28 countries with Global POPs monitoring and POPs laboratory capacity building projects financed through GEF and co-finance from SSC and others. These countries are:

Asia-Pacific: Fiji, Kiribati, Marshall Islands, Niue, Palau, Samoa, Solomon Islands, Tuvalu

- Africa: Democratic Rep of Congo, Egypt, Ethiopia, Ghana, Kenya, Mali, Mauritius, Nigeria, Senegal, Togo, Uganda, Zambia

-GRULAC: Antigua and Barbuda, Brazil, Chile, Ecuador, Jamaica, Mexico, Peru, Uruguay

- 4 Countries with Global POPs monitoring and POPs laboratory capacity building projects with finance from SAICM QSP: Bahamas, Barbados, Cuba, Haiti

- 5 countries for mercury waste project: Burkina Faso, Cambodia, Chile, Pakistan, Philippines

- Dioxin/furan open burn projects with China and Mexico; China also for project on laboratory intercalibration study and environmental indicators

- Expert institutions were contracted from: Australia, Czech Republic, Germany, Japan, Mexico, Netherlands, Spain, Sweden, Switzerland, USA

- Collaboration in IUPAC project: China, Italy, Sweden

UNEP is responsible for the Chemical Information Exchange Network (CIEN) which creates an opportunity to build national capacity, encourage cooperation and reduce duplication of effort related the implementation of various chemical of global concern. Under CIEN a number of activities have been carried out:

- The CIEN project was implemented in 6 countries respectively in Latin America (Peru, Bolivia and Uruguay), Africa (Cote d'Ivoire and Burundi) and in Asia (Vietnam and The Philippines).
- Assistance was provided to Mexico to strengthen their network (<http://www.semarnat.gob.mx/gestionambiental/riiq/Pages/riiq.aspx>)
- 180 senior officers and decision maker were involved in designing the national information system for the SMC
- 120 were trained on how to access technical and scientific information for the SMC, including ways of disseminating national information for the sound management of chemicals.
- 73 webmasters were trained on the use of the UNEP Environmentally Sound Technology Information System (ESTIS) to build national network
- Discussion is engage with Peru, the Philippines and Cote d'Ivoire to act as a focal point for the establishment of a regional network as requested by ICCM2.
- Monthly global electronic forums were organized in various topics including ICCM2, discussion on Mercury and emerging issues, management of plastic wastes (www.reic-cien.com/dokeos).

UNEP has been supporting capacity building on accident prevention projects supported by SAICM Quick Start Programme (QSP) as follows:

- Chemical Accident Prevention Programme for West Africa supports the development of a Chemical Accident Prevention and Preparedness Programme in Mali and Senegal using the Flexible Framework for Chemical Accident Prevention and Preparedness (an IOMC Document). Project activities carried out include:
- Establishment of a National Chemical Accident Prevention and Preparedness Taskforce and meetings of the task force

Capacity building workshops: One workshop per country as well as a Project Launching Workshop

- An Assessment of the Country Situation (Mali and Senegal individually)
- Chemical Accident Prevention and Preparedness Programme for Sri Lanka:
- Support to SAICM QSP proposal
- Chemical Accident Prevention and Preparedness Programme for Tanzania:
- Support to SAICM QSP Proposal
- Chemical Accident Prevention and Preparedness Programme for Chile:
- Support to SAICM QSP Propos

Capacity building projects supported by other sources:

- UNEP has supported Capacity building in Sri Lanka through and Awareness Raising Workshop on APELL and Industrial Chemical Accident Prevention and Preparedness
- UNEP has supported Capacity building in the Philippines in Chemical Accident Prevention and Preparedness

SAICM objective: Illegal International Traffic

The UNEP-led Green Customs Initiative is a partnership of international organizations cooperating to prevent the illegal trade in environmentally-sensitive commodities and facilitation of the legal trade in these. Its objective is to enhance the capacity of customs and other relevant enforcement personnel to monitor and facilitate the legal trade and to detect and prevent illegal trade in environmentally-sensitive commodities covered by the relevant conventions and multilateral environmental agreements (MEAs). These include ozone depleting substances (ODS), toxic chemical products, hazardous wastes, endangered species and living-modified organisms. This is achieved through awareness-raising on all the relevant international agreements as well as provision of assistance and tools to the enforcement community. Green Customs is designed to complement and enhance existing customs training efforts under the respective agreements

The partners of the Green Customs Initiative comprise the secretariats of the relevant multilateral environmental agreements (Basel, Cartagena, CITES, Montreal, Rotterdam Stockholm), Interpol, the Organisation for the Prohibition of Chemical Weapons, UNEP, the United Nations Office on Drugs and Crime (UNODC) and the World Customs Organization. The Green Customs Initiative also works closely with a number of other regional and international organizations.

UNEP's regional offices for Asia and West Asia are implementing the project "Combating environmental crime involving harmful substances and hazardous waste". The project is progressing well in both regions after a delayed start in West Asia. In Asia, the governments of Cambodia, Thailand, and Viet Nam have stepped up their fight against environmental crimes through the "Partnership Against Transnational-crime through Regional Organized Law-enforcement (PATROL)" with support from the United Nations Office on Drugs and Crime (UNODC), TRAFFIC, Freeland Foundation, and UNEP.

United Nations Industrial Development Organization (UNIDO)

UNIDO formally recognized SAICM at the 12th session of the General Conference (2007) by adopting Decision GC12/Dec. 17 – Item 15, upon the recommendation of the Industrial Development Board Decision (IDB.33/Dec. 7).

In the area of implementation of the sound management of chemicals UNIDO's efforts are carried out within the Green Industries Initiative, which focuses on promoting greater efficiency in the use of resources by industries to take advantage of cost reductions, better image and less technical barriers to trade.

UNIDO is implementing a number of programmes that promote clean technologies and/or the preventive approach: the National Cleaner Production Centres Programme, the Montreal Protocol Programme, the Transfer of Environmentally Sound Technologies (TEST) approach, Chemical Leasing, Corporate Social Responsibility (CSR) based on the implementation of a Triple-Bottom Line (TBL) approach, Environmental Management Systems (EMS), the elimination of Persistent organic Pollutants (POPs), sector-specific programmes for the reduction of process wastes and pollution from the leather and textile sectors as well as other sectors.

The UNIDO Cleaner Production (CP) Programme, through the application of the Cleaner Production methodology, contributes to building the capacity and implementing sound management practices at company level, offering a set of services which include: information dissemination, training, technical assistance at plant level, Environmentally Sound Technologies (EST) transfer and investment promotion and CP policy advice.

The same network of CP Centres is also supporting the national governmental institutions in implementing the SAICM Global Plan of Action, including through the development and joint implementation of Quick Start Programme projects.

The strong involvement of the Cleaner Production Programme in the area of chemicals management has been reflected in the strategy for the implementation of the Programme for the Resource Efficient and Cleaner Production (RECP) in developing and transition countries, jointly developed with UNEP.

SAICM objective: Risk Reduction

The Cleaner Production Programme strategy focuses on four thematic priorities, one of which is Cleaner Production and environmental sound management of hazardous substances and waste, including chemical leasing, e-waste, chemicals safety and risk assessment.

UNIDO has been strengthening its support to developing and transition countries in the formulation and implementation of projects submitted to the Trust Fund Implementation Committee of the SAICM Quick Start programme.

The projects target the implementation of life cycle analysis for priority chemical product and substances in El Salvador, the establishment of inter-institutional coordination mechanisms in the area of sound chemicals management in Peru, strengthening of national governance for SAICM implementation in Colombia, the safe handling of mercury products in Uruguay, the formulation of an integrated approach to national chemicals management in Sudan and reducing risk from mercury use in artisanal and small scale gold mining in Mali.

UNIDO is also providing a supporting role in two regional projects in the area of reducing mercury risks from artisanal gold mining, respectively in Cambodia and Philippines and Bolivia and Peru.

<p>SAICM objective: Knowledge and Information</p>
<p>UNIDO is supporting countries in the formulation and implementation of QSPTF projects and ensures that all the information developed during QSPTF projects is shared and disseminated at national and regional level.</p> <p>UNIDO has been providing an active contribution in the Global Mercury Partnership, where the organization takes a leading role in the area of artisanal gold mining through the introduction and dissemination of cleaner artisanal gold mining and extraction technologies, the implementation of training and awareness campaigns, the assistance to national and international mercury and artisanal gold mining policy improvement and the introduction or continuation of health and environmental monitoring.</p>
<p>SAICM objective: Governance</p>
<p>UNIDO is developing initiatives that promote the establishment of inter-institutional coordination mechanisms in the area of sound chemicals management. Ongoing activities aim to enable the countries to achieve a coordinated evaluation, control and follow-up in the management of all chemical substances and products, responsibilities which are usually diluted among different national institutions.</p> <p>UNIDO's involvement in the implementation of the Stockholm Convention covers the implementation of three main interventions: UNIDO has been assisting more than 40 countries in the preparation of their National Implementation Plans, meeting the requirements of the Convention. UNIDO is developing initiatives that promote capacity building for national stakeholders. An important element of UNIDO's work is to promote the uptake of best available techniques (BAT) and best environmental practices (BEP) in industry through, for example, demonstration projects to test the local feasibility on innovative technologies and methodologies.</p>
<p>SAICM objective: Capacity Building and Technical Cooperation</p>
<p>UNIDO supports countries in the formulation and implementation of QSPTF projects targeting country specific priorities; benefiting from the role of facilitators and technical assistance of the Cleaner Production Centres.</p> <p>Cleaner Production Centres in developing and transition countries promote capacity building and information dissemination.</p> <p>In terms of capacity building the CP Programme tackles the following areas:</p> <ol style="list-style-type: none"> 1. <i>Resource Productivity</i>: the efficient utilization of natural resources (materials, energy, water, etc.) for the production of goods and services that bring quality of life; 2. <i>Environmental Management</i>: minimizing the impact of business on the environment to protect the health of workers and community and the ecological integrity of the natural environment; 3. <i>Entrepreneurship</i>: skills, tools and systems of the owners/operators of businesses to run their businesses in a rational and planned way achieving a solid balance between short term profit and medium to long term viability; and 4. <i>Public Private Partnership</i>: recognition by government and business sector that collaboration on issues of national concern (including environmental management and productivity) is necessary. <p>National Cleaner Production Centres (NCPCs) deliver training on CP and CP-related topics to</p>

build local capacity in various target groups. Practical implementation is part of the training activities, in order to strengthen national capacities to plan and execute CP-related actions and solutions. Upon conclusion of their initial financial support from UNIDO and UNEP, NCPCs are expected to achieve their financial self-sustainability. Capacity building for resource mobilization to support the continuation of their operation is therefore another area of intervention of UNIDO and UNEP.

United Nations Institute for Training and Research (UNITAR)

UNITAR's Chemicals and Waste Management Programme supports capacity building in developing and transition countries in a wide range of SAICM-related areas to protect human health and the environment from toxic chemicals and wastes, often in collaboration with other IOMC POs. This includes: (i) infrastructure and capacity assessments: providing guidance, training, and technical support to assist countries in assessing their existing legal, institutional, administrative, and technical infrastructure for sound chemicals management including analysing existing capacities, gaps and needs, and initial priority setting (e.g. National Profiles, Globally Harmonized System of Classification and Labelling of Chemicals (GHS) situation analysis); (ii) integrated national programmes for chemicals and waste management: assisting countries to establish and strengthen a collaborative framework at the national level which can provide a foundation for effective and coordinated action to address both national chemicals management priorities as well as the implementation of international chemicals-related agreements and initiatives; and (iii) specialised training and capacity building addressing, for example, the GHS, pollutant release and transfer registers (PRTR), mercury inventory development and risk management decision-making, nanotechnology and manufactured nanomaterials, and chemicals and waste convention implementation (Basel, Rotterdam, and Stockholm Conventions).

SAICM objective: Risk Reduction

UNITAR supports projects in developing and transition countries to prepare mercury emissions inventories using UNEP's Toolkit for Identification and Quantification of Mercury Emissions. In addition, UNITAR has provided countries with guidance to assist them to prepare national plans to reduce risks related to mercury.

SAICM objective: Knowledge and Information

UNITAR's website includes a specific SAICM section at www.unitar.org/cwm/saicm, which provides information on various UNITAR-assisted SAICM enabling activities and related country outputs.

To support national SAICM implementation, UNITAR has developed/revised and pilot tested a number of key guidance materials, including: *Preparing a National Profile to Assess Infrastructure and Capacity Needs for Chemicals Management*; *Guidance for Developing SAICM Implementation Plans* (in collaboration with SAICM secretariat and IOMC); and *Guidance for Developing a National Nanotechnology Policy and Programme*. With the input of all other IOMC POs, UNITAR developed the document *National Implementation of SAICM: A Guide to Resource, Guidance and Training Materials of IOMC Participating Organizations*.

The National Profile Homepage, www.unitar.org/cwm/nphomepage, provides a global collection of National Profiles, including those prepared/updated within the SAICM framework.

The UNITAR/ILO Global GHS Capacity Building Programme provides guidance documents, and educational, awareness-raising, resource, and training materials regarding the GHS (<http://www.unitar.org/cwm/ghs>).

UNITAR provides support to countries to design PRTRs at the national and regional levels. PRTRs provide information on pollution to governments, communities, and the public, thereby supporting the “right to know” principle. UNITAR’s current PRTR activities provide technical assistance, guidance and reference materials, and support for country-based activities, including development of inventories of releases of POPs.

UNITAR also executes a number of supporting services for capacity building, including the provision of “virtual libraries” on UNITAR’s website related to a variety of topics including the GHS and PRTRs. In addition, the recently launched PRTR:Learn (<http://prtr.unitar.org>) provides an interactive website that has the main objective of sharing insights, information, knowledge, and resources on PRTRs.

To support engagement of civil society in SAICM implementation, UNITAR has also supported the International POPs Elimination Network (IPEN) to develop and disseminate SAICM guidance materials for NGOs.

SAICM objective: Governance

Resolution 4 adopted at the ICCM concerning the QSP includes a number of strategic priorities to support enabling activities at the national level. They include, for example, development or updating of national chemicals management profiles and identification of capacity needs, as well as refer to the development and strengthening of institutions, plans, and programmes. Many of these priorities are specific areas of capacity building for which UNITAR has, over the past years, developed and tested guidance materials in collaboration with a diverse range of countries, IOMC POs, and other partners. UNITAR is in the process of strengthening its support, upon request from countries, and is further developing existing methodologies towards meeting the needs for national SAICM implementation. As a further indication of support for the outcomes of ICCM, UNITAR’s Board of Trustees formally endorsed SAICM in April 2006.

UNITAR, in coordination with the IOMC, participated in SAICM preparatory meetings and the ICCMs and is a member of the SAICM QSP Trust Fund Implementation Committee and QSP Executive Board. UNITAR also supports countries to implement international agreements and conventions through QSP projects as well as by serving as an international executing agency for GEF-funded projects on Stockholm Convention implementation.

SAICM objective: Capacity Building and Technical Cooperation

UNITAR established a SAICM implementation programme in 2006 which began with a 2006-09 pilot phase, followed by the current 2010-12 phase. Core support for the programme is provided by the Government of Switzerland. In the pilot phase, country projects took place in Belarus, Mongolia, Pakistan, Panama, and Tanzania over a period of three years. The 2010-12 phase focuses on strengthening capacities for sound chemicals management with an emphasis on assisting countries and regions with SAICM implementation, nanotechnology (see below), and addressing challenges related to mercury and other heavy metals.

UNITAR also supports QSP Trust Fund projects. To date, UNITAR has been serving as the international executing agency for 79 countries/organizations supported by the QSP Trust Fund (Rounds 1-12). Projects cover a range of topics including, *inter alia*: national SAICM priority setting, strengthening national governance, National Profiles, national SAICM capacity assessments, national chemicals management databases, national policies for SAICM

implementation, SAICM implementation plans, GHS, and PRTRs. Two of the QSP Trust Fund projects are addressing regional cooperation on the GHS in Central and Eastern Europe and the Caribbean.

UNITAR also embarked with partners such as OECD, and within the framework of the IOMC, to raise awareness in countries about nanotechnology/manufactured nanomaterials, including the implications for developing and transition countries as nano-based or nano-containing products are traded across borders. Activities commenced with a series of regional awareness-raising workshops for all UN developing and transition countries between 2009 and 2011. In addition, with the support of the Government of Switzerland, UNITAR is undertaking three pilot projects to assist developing and transition countries to develop programmatic capacities to address nano issues at the national level during 2011-2012. See also the UNITAR/OECD report on nanotechnology (available as document SAICM//ICCM.3/17).

In cooperation with UNIDO and the Secretariat of the Stockholm Convention, and with the support of the GEF, UNITAR has developed guidance documents and training material on updating National Implementation Plans (NIPs) under the Stockholm Convention taking into account the new POPs added to the Convention. The full set of guidance will assist countries to identify chemicals in products/articles, establish inventories, undertake national surveillance of imported products or products in the market to determine whether they contain chemicals listed under the Stockholm Convention in order to ensure implementation of Article 3 and control illegal trafficking, and to handle production and use, recycling and waste disposal of industrial chemicals including PFOS and BDEs. Such guidance will be useful for all countries globally, both Parties and non-Parties, for environmental sound life-cycle management as well as sound trade of chemicals.

SAICM objective: Illegal International Traffic

The project noted above regarding developing guidance documents and training material on updating NIPs under the Stockholm Convention taking into account the new POPs will also help countries address illegal traffic.

World Health Organization (WHO)

Mandate and commitment to SAICM

The World Health Organization (WHO) is the specialised UN entity responsible for directing and coordinating health with the objective of the attainment by all peoples of the highest possible level of health. Efforts to promote a healthier environment, intensify primary prevention, and influence public policies in all sectors so as to address the root causes of environmental threats to health are a key part of the WHO Programme of Work.

WHO comprises 147 country offices and six regional offices. WHO has its headquarters in Geneva. The World Health Assembly, the organization's governing body, has considered the Strategic Approach to International Chemicals Management in 2003 and 2006, during its development and following its adoption, and more recently in 2010 when it received a report on progress following the second session of the International Conference on Chemicals Management and the roles and responsibilities of the health sector in chemicals management.

Provision of the SAICM Secretariat

Since September 2007, WHO has contributed staff resources to the SAICM secretariat in accordance with the provisions of paragraph 29 of the SAICM Overarching Policy Strategy, and

resolution I/1 of the International Conference on Chemicals Management. This has recently been extended to September 2012 but at a reduced rate of 60% of time reflecting current financial restraints.

Health sector engagement in SAICM

World Health Assembly resolutions on the Strategic Approach have been disseminated widely including by regional offices to health-sector contacts in Member States, drawing attention to the need to ensure multisectoral participation, encourage engagement in processes for implementing SAICM, disseminate guidance and application materials for the SAICM Quick Start Programme, and to help identify initial capacity-building activities that reflect identified health-sector priorities.

WHO is also working with the health sector through non-governmental organizations to promote health sector involvement in the implementation of SAICM including those active in its global health-sector networks of poisons centres, emergency alert and response operations for incidents of public health concern, risk assessors, scientific bodies such the International Union of Toxicology (IUTOX), and other organizations which are in official relations with WHO.

In accordance with resolution II/8 of the second session of the International Conference on Chemicals Management, WHO has prepared a draft strategy for strengthening the engagement of the health sector in implementation of the Strategic Approach, in cooperation with the secretariat. This will be considered for adoption by the third session of the International Conference on Chemicals Management.

The following paragraphs summarise some of the relevant WHO activities according to different sections of the Overarching Policy Strategy on risk reduction, knowledge and information, governance, and capacity-building and technical cooperation.

SAICM objective: Risk Reduction
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<p>WHO is an established authority for providing evidence-based assessments, norms and standards for protecting human health from major environmental and occupational hazards and contributes an extensive number of guidance materials, technical monographs and other publications on specific chemicals and groups of chemicals, and risk assessment methodologies.</p>

<p>Since 2009 WHO has published risk assessment documents on chemicals in both concise and comprehensive formats. Concise International Chemical Assessment Documents (CICADs) have been published on Strontium and Strontium Compounds and on ethylene series glycol ethers (as a compendium). A re-evaluation of the health aspects of DDT in indoor residual spraying was published. A further CICAD on hexavalent chromium has also been progressed. The International Chemical Safety Cards (ICSCs) project has continued to provide concise information on chemicals relevant to occupational settings. There are approximately 1700 ICSCs available in up to 15 languages, with scope for the number of languages to expand through a new database format which greatly facilitates translation. An average of 30-40 ICSCs are created or updated each year.</p>

<p>Information on classifications according to the Globally Harmonized System for Classification and Labelling of Chemicals (GHS) are now presented in the WHO <i>Recommended Classification of Pesticides by Hazard</i>, and in ICSCs as they are updated. WHO staff also regularly participate in the work of the UN Sub-Committee of Experts on the GHS.</p>

<p>Work on Environmental Health Criteria (EHC) and other methodology documents included publication of a draft EHC on dermal exposure; EHC 240 Principles and Methods for the Risk Assessment of Chemicals in Food, and generic risk assessment models for insecticides used for public health purposes in various settings:- indoor and outdoor space spraying, larviciding,</p>

indoor residual spraying and disinsection of aircraft.

A re-evaluation of the health aspects of DDT in indoor residual spraying was published as Environmental Health Criteria 241. Work on DDT alternatives for malaria control in Mexico and Central America has been supported by the release of a publication, in English and Spanish in 2011, on the role of municipal governments and community participation in the integrated vector management as part of a broader DDT/UNEP/GEF/PAHO project.

Increased attention to chemicals of major public health concern was given by the launch in 2010 of an initiative to raise awareness, advocate for action and facilitate access to tools for action. Short documents for decision makers were published on eight of these chemicals in 2010: arsenic; benzene; cadmium; highly hazardous pesticides; inadequate or excess fluoride intake; lead; mercury; major air pollutants; polychlorinated dibenzodioxins and dioxin-like compounds. Documents on asbestos and mercury had been published earlier.

Work on the harmonization of global approaches to risk assessment continues to increase understanding and approaches on basic principles and to provide international guidance documents on specific issues. The focus of work is on the risk assessment of combined exposures to multiple chemicals; guidance for immunotoxicity risk assessment; mode of action; principles of characterizing and applying physiologically-based pharmacokinetic models in risk assessment; characterizing and communicating uncertainty in chemical risk assessment; and identifying early life stages for characterizing chemical exposures.

The WHO Human Health Risk Assessment Toolkit was further developed and finalised in 2010 to deliver practical tools for risk assessment in a user-friendly format, in particular for use in developing countries and countries with economies in transition. The toolkit was used in the context of a number of capacity-building activities in cooperation with Joint UNEP/FAO convention secretariats, with other intergovernmental organizations and to support relevant SAICM Quick Start Programme projects.

A study to estimate the global burden of disease attributable to chemicals was published in the journal *Environmental Health* (2011). This study estimates that 8.3 per cent of the total or 4.9 million deaths and 86 million disability-adjusted life years (5.7 per cent of the total) were attributable to environmental exposure and unsound management of selected chemicals in 2004. A preview of the findings was presented at the eighteenth session of the Commission on Sustainable Development Meeting and to the OECD Joint Meeting on Chemicals. WHO has contributed his information and other burden of disease expertise to the UNEP *Cost of Inaction* report. This burden of disease information has been made available to the Conference as document SAICM/ICCM.3/INF/13.

A method guide to the quantification of health effects of selected housing risks in the WHO European Region was published in 2011. This publication estimates the risks for children's health of lead, carbon monoxide, and formaldehyde in the context of housing. An additional publication in 2012 titled *Health Effects of Black Carbon* presents the results of a systematic review of evidence of the health effects of black carbon in ambient air. Black carbon is a good indicator of combustion-related air pollution.

WHO is committed to contribute to the development of the global legally-binding instrument to reduce mercury emissions, through the provision of independent authoritative information on the risks posed by mercury, on priority prevention measures and biomonitoring arrangements. WHO, with Health Care Without Harm, is implementing a global initiative to substitute mercury thermometers and sphygmomanometers in health care and in 2011 produced step-by-step technical guidance on the replacement of these mercury devices.

The fourth edition of the World Health Organization's *Guidelines for Drinking-Water Quality* was published in 2011 which builds on over 50 years of guidance by WHO on drinking-water quality, and forms an authoritative basis for the setting of national regulations and standards

for water safety in support of public health. The publication includes guidance on chemical aspects of drinking water quality and provides a significant number of guideline values for helping to control chemicals found in drinking water. A technical publication on pharmaceuticals in drinking-water was published in April 2011.

WHO is in the process of establishing formal WHO guidelines for the diagnosis and treatment of lead poisoning to assist the application of policies to prevent and reduce lead exposure particularly in children. These guidelines will also contribute to the priority actions being promoted by Global Alliance to Eliminate Lead Paint. Further information on work of the Global Alliance to Eliminate Lead Paint is contained in documents SAICM/ICCM.3/14 and SAICM/ICCM.3/INF/21. Two guidance documents on methods for analysing lead in blood and in paint are part of the contribution of WHO to the work of the Global Alliance and are available on the WHO website

(http://www.who.int/ipcs/assessment/public_health/lead/en/index.html). The aim to provide non-specialists with guidance on the available types of equipment for lead analysis. In Central America and Dominican Republic, a document to evaluate the situation of lead exposures with identification of priorities to be addressed has been prepared with support from the WHO Regional Office for the Americas/Pan American Health Organization.

SAICM objective: Knowledge and Information

WHO maintains an up-to-date website where copies of its risk assessments, risk assessment methodology and other technical documents are available (www.who.int/ipcs).

The Global Health Observatory (www.who.int/gho) is WHO's gateway to health-related statistics from around the world presenting interactive data repository, maps and customised data views on global health priorities such as the health-related Millennium Development Goals, women and health, mortality and burden of disease, disease outbreaks, health equity and health systems. Public Health and Environment topics include data on chemical-related burden of disease and children's environmental health.

WHO also provides its chemical assessment related documents through the IPCS INCHEM website which enables dissemination to a wider audience of professionals with particular interests in chemical safety and is linked to OECD e-chem portal. In 2010, there were more than 2 million visitors to the INCHEM website (www.inchem.org).

Maintenance and development of the WHO INTOX Data Management System continues to provide a means to improve the knowledge-base on the toxic effects of chemicals through facilitating the comparison and pooling of harmonized case data collected by different poisons centres (<http://www.who.int/ipcs/poisons/package/en/index.html>).

WHO's work relevant to communication to vulnerable groups, includes a significant body of work and publications on children's environmental health including information directed at health-providers and pediatricians (www.who.int/ceh). It also includes a Global Plan of Action on Children's Environmental Health that calls for a coordinated multi-sectoral work at local regional and global level to improve the health of future generations. Similarly the WHO Global Plan of Action on Workers' Health includes a number of high priority actions to protect vulnerable workers including those exposed to priority carcinogens including asbestos. The prevention of asbestos-related disease is a major concern in Asia and WHO is working together with the International Labour Organization on this priority.

The European Environment Health and Information System (ENHIS) has been established as a web-based information service and provides several products focusing on environment and health issues relating to the Children's Environment and Health Action Plan for Europe including 26 indicator-based assessments, country profiles and methods and tools, including a tool for health impact assessment of outdoor pollution in European cities. In addition ENHIS

indicators supporting the Parma Declaration on Environment and Health, have been developed that include those relating to the human biomonitoring of heavy metals and chemicals policy matters.

In the Americas, a virtual library of sustainable development and environmental health provides access to different toxicology information data bases in English, Spanish and Portuguese. Virtual communities on toxicology have been interacting on different themes including clinical toxicology, chemical accidents and emergencies, training opportunities and other related events, information and a focus for networking in the region and information in English, Spanish and Portuguese.

A global network of poisons centres known as INTOX links together more than 200 specialists in over 75 countries. Members work in poisons centres, clinical treatment units, analytical toxicology laboratories and chemical incident response services and use the network to share knowledge and experience on the diagnosis and management of poisoning, and on poisons centre operations.

WHO also maintains an informal network known as ChemiNet which was set up in response to the need for strengthening international cooperation in chemical incident reporting, verification, investigation and response. Members of ChemiNet include the INTOX network; WHO Collaborating Centres; departments at WHO HQ, in regions and countries; analytical laboratories and academic institutions, as well as individual consultants and experts.

SAICM objective: Governance

WHO plays an active role and is committed to strengthen the support awareness and need for engagement of the health sector in implementation of SAICM and provides an active contribution to the SAICM secretariat and to governance of the Strategic Approach's QSP Trust Fund Implementation Committee along with other participating organizations of the Inter-Organization Programme for the Sound Management of Chemicals. The WHO Regional Office for the Americas/Pan American Health Organization acts as a technical advisor to the regional coordinating committee for the SAICM Latin America and Caribbean region.

WHO is an Executing Agency for nine SAICM QSP projects in the following 15 countries: Bahamas, Bhutan, Cook Islands, Gabon, Indonesia, Kenya, Kiribati, Madagascar, Morocco, Samoa, Solomon Islands, Sri Lanka, Thailand, Tonga, and Zambia. Projects focus on assessment of priority needs for environment and health; management of industrial carcinogens, public health management of chemical incidents, poisons centres, recycling of insecticide-treated nets and the management of public health pesticides.

WHO is also actively working in collaboration with the Joint UNEP/FAO secretariat to the Rotterdam Convention to build awareness of chemical risk assessment and management and to improve notification of severely hazardous pesticides formulations, with the Stockholm Convention POPs Review Committee to promote common principles and approaches in global risk assessment. WHO joined efforts with UNITAR and ILO in the organization of work in South-East Asia in relation to GHS implementation.

WHO provides the secretariat to the International Health Regulations (2005) and is engaged in significant activities to build core capacities, including for chemical incidents, for implementation of the Regulations in all Member States. Activities have been initiated in collaboration with the secretariat of the Basel Convention for the Control of Transboundary Movements of Hazardous Wastes and their Disposal to identify mutually supportive actions in this regard.

WHO is jointly providing with UNEP the secretariat to the Global Alliance to Eliminate Lead Paint, considered an emerging issue by the second International Conference on Chemicals

Management.

WHO Regional Office for Europe provides the secretariat of the Joint WHO-Convention Task Force on Health for the UN Convention on Long Range Transboundary Air Pollution is actively engaged in the assessment of the health risks of particulate matter from various sources.

The Fifth Ministerial Conference on Environment and Health, organized by WHO/Europe was held in March 2010, Parma, Italy focused on protecting children's health in a changing environment. The Conference set Europe's agenda on emerging environmental health challenges for the years to come.

The Second Inter-Ministerial Conference on Health and Environment in Africa was jointly organized by WHO and UNEP and held in Luanda, Angola, 23-26 November 2010. The Conference was aimed at sustaining the political commitment made by Ministers at the Libreville Conference in 2008, on enhanced inter-sectoral actions and co-benefits for human health and the environment, as part of their engagement towards sustainable development in the African region. Chemicals were identified as one of the top ten priorities for regional action.

A Regional Forum on Environment and Health is also a key focus of activities in the WHO Western Pacific Region and also the WHO South-East Asian Region. WHO and UNEP jointly provide the secretariat to this Forum. Two of the priorities of the Regional Forum relate to Toxic chemicals and hazardous substances and Contingency planning, preparedness and response in environmental health emergencies (including chemical emergencies).

SAICM objective: Capacity Building and Technical Cooperation

In total it is estimated that over 80 countries have received capacity-building support on chemicals issues from WHO in 2010, through the work of headquarters and regional offices.

Poisons prevention, information and management is a significant focus of WHO activities relevant to capacity-building and technical cooperation and work continues to establish and strengthen the capacity of poisons centres worldwide providing updated tools and guidance to support their activities. In 2010, this work included work on four antidote monographs (Succimer, Unithiol, DTPA and Prussian Blue); maintenance and development of the INTOX Data Management System and a capacity-building workshop held in Africa. In January 2012 work started on a SAICM QSP project examining the feasibility of a sub-regional poisons centre in the East Africa Sub-Region. This project is being executed by WHO Headquarters and the Regional Office for Africa in partnership with the Zambia Environmental Management Agency.

In 2010-2011 a total of 255 chemical-related incidents and emergencies were evaluated for their public health significance and the need for technical support by WHO. Support was provided in 35 cases as follows: eight disease outbreaks of initially unknown cause; seven environmental and/or complex emergencies, where WHO developed guidelines for the assessment and management of chemical hazards; eight chemical spills; six poisoning outbreaks, where WHO sourced antidotes and/or facilitated access to clinical toxicology expertise; one presumed chemical release, for which WHO identified a source of analytical support; one hazardous product marketed internationally as a "cure-all" medicine, where WHO carried out a risk assessment and informed International Health Regulation National Focal Points; two events involving contaminated products where WHO contributed to the risk assessment; assessment of one product giving rise to severe illness as a result of a particular circumstance of use and communication of this risk to other Member States; and assistance to a Member State to manage a mass lead poisoning.

WHO has been engaged in significant support to the lead poisoning event mentioned above since June 2010 in collaboration with a number of national and international partners and has included a WHO mission, the provision of technical expertise from the WHO toxicology network and the supply of antidotes and analytical equipment.

Work is continuing on a WHO Manual for investigating disease outbreaks of possible chemical origin which is intended to support WHO investigative missions to countries and evaluation of events of the type identified above.

Awareness-raising about the important role of public health in the management of chemical incidents, especially in developing countries continues to be a significant focus of work and WHO has worked in collaboration with Joint UNEP and FAO Convention secretariats to the Rotterdam Convention, the Basel Convention and other international partners in this regard, including with partners in countries and regional offices implementing the International Health Regulations (2005) and partners involved in the Global Health Security Initiative and its relevant working groups.

Awareness raising and capacity building activities to strengthen the public health management of chemical incidents and chemical risk assessment were conducted at regional and national workshops and training events, including in Côte d'Ivoire (in 2010 and 2011), Thailand (in 2010 and 2011), Jamaica (2010), Armenia (2011), and Jordan (2011). In addition, contributions were made to training workshops in Ghana (2010) and Chile (2011).

Awareness raising and training events were used to introduce, promote and disseminate the following documents: (i) *WHO Manual for the Public Health Management of Chemical Incidents*; and (ii) *The WHO Human Health Toolkit: Chemical Hazards*.

The Inter-Agency Awareness-raising Workshop on the Sound Management of Industrial Chemicals for the Asia-Pacific Region, Bangkok, Thailand, 29 August - 3 September 2011, was held to identify joint priorities for chemicals in relation to the International Health Regulations and SAICM.

World Bank

The World Bank has a large project portfolio on pollution management and environmental health, as well as on environmental policy and institutions (\$4 billion and \$2 billion respectively as of September 2010) that cover a number of activities with linkages to the SAICM, and more specifically POPs, pesticides management, and hazardous waste. In addition, the World Bank Group has a strong portfolio of active projects with solid waste management components that is also of relevance.

The recently adopted World Bank Environment Strategy for 2012-2022, *Toward a Green, Clean, and Resilient World for All*, with its emphasis on working with Bank client countries to face the challenges of increasing air, water, and soil pollution as well as the challenges of legacy pollution, is directly relevant to the Strategic Approach. The Strategy foresees a focus on addressing legacy pollution resulting from past industrial activities, and water basin cleanup including agricultural runoff, with global transboundary impacts of hazardous chemicals continuing to be a priority.

The World Bank provides assistance to developing country partners related to SAICM objectives through Bank lending programs, mobilization of GEF and other grant resources, analytical and advisory services, dedicated technical assistance and capacity building trust funds, and through application of its environmental safeguards policies, notably on environmental assessment and pest management.

Some specific World Bank activities related to the objectives of the Strategic Approach are highlighted in the table here below.

<p>SAICM objective: Risk Reduction</p>
<p>The World Bank Group has been active in public and private sector pollution management for several decades. Projects have improved the management of solid and hazardous waste and wastewater and helped control pollution related to transport, industry, energy, mining, and other sectors across many countries. Projects for example are tackling pollution from an aluminum smelter, minimizing the exposure of humans and livestock to radionuclides associated with abandoned uranium mine tailings, cleaning up mercury pollution, and remediating ground water pollution from historical industrial hazardous wastes.</p> <p>As an Implementing Agency of the Global Environment Facility, the Bank relies on its comparative advantage for investments to bring about on-the-ground risk reduction. The World Bank’s POPs portfolio addresses the closure of production of toxic chemicals, identification and promotion of alternative technologies and practices, investments in Best Available Techniques/Best Environmental Practices, and environmentally sound destruction of toxic stockpiles and wastes.</p> <p>Moreover, sound chemicals management can be achieved through World Bank projects as a byproduct of a project’s primary objectives. Though not quantified, these opportunities constitute strong potential for synergies and mainstreaming chemicals management in Bank operations that can be explored and expanded based on client country priorities.</p>
<p>SAICM objective: Knowledge and Information</p>
<p>The World Bank Group keeps a wealth of information available to the general public through its websites, including the Environmental Health and Safety Guidelines available on the website of the International Finance Corporation. (www.ifc.org/sustainability).</p> <p>Many of the products generated by the World Bank are available in hard and soft copies for all interested stakeholders. Most recently, the World Bank has published two reports directly relevant to the SAICM: <i>Reducing the Human and Environmental Risks of Obsolete Pesticides – a GIS-based tool for priority setting</i> and <i>The Ship Breaking and Recycling Industry in Bangladesh and Pakistan</i>.</p>
<p>SAICM objective: Governance</p>
<p>As Implementing Agency of the Global Environment Facility and of the Multilateral Fund for the Implementation of the Montreal Protocol, the World Bank works with developing countries and countries with economies in transition to carry out the investments and build capacities for meeting their obligations under international environmental treaties.</p> <p>Moreover the Bank’s policy on environmental assessment used to examine environmental risks and benefits associated with all Bank investments and enhance their environmental impact, requires that not only national legislation is taken into account but also a country’s obligations under relevant international environmental treaties and agreements, including for example the Basel, Rotterdam, and Stockholm Conventions and the Montreal Protocol.</p>
<p>SAICM objective: Capacity Building and Technical Cooperation</p>
<p>The World Bank Group views capacity building and technical assistance as an integral part of its work that is integrated into risk reduction investments highlighted above. Capacity building</p>

is in fact an indispensable element of project interventions in all international development fields. In the Chemicals-related field, all Bank-implemented projects seek to build capacity to ensure that regulation and enforcement capabilities are in place and to ensure long-term sustainability of efforts.

Of direct relevance to the SAICM, the Bank promotes approaches where client countries can build the foundations for long-term capacity for chemicals management while working to implement the Stockholm Convention on Persistent Organic Pollutants.

Finally, under the Canada POPs Trust Fund that closed June 2011, the World Bank has provided capacity building support to a large number of countries. Although the main focus of the Fund originally was to facilitate early implementation of the Stockholm Convention, a number of projects have linkages to overall sound chemicals management, such as a project to support the development of Pollutant Release and Transfer Register, or a regional project to assess the environmental and economic impacts of the ship breaking and recycling industry.

SAICM objective: Illegal International Traffic

The bulk of activities carried out by the Bank in this context relate to the control of illegal trade of Ozone Depleting Substances in the context of the Montreal Protocol. The Bank has also initiated work more recently on international trafficking of wildlife with the creation of the International Consortium to Combat Wildlife Crime in collaboration with CITES and others, and has a growing series of investments with client countries on customs modernisation and trade. The World Bank Group maintains an Environment and International Law Unit which provides advisory support and expertise on environmental compliance and enforcement issues.

Organization for Economic Cooperation and Development (OECD)

In order to facilitate its global reach, the OECD aligns its work closely with other international efforts especially the IOMC. A 2008 OECD Council Resolution on the Implementation of the SAICM calls for countries to work together in OECD to ensure that, as chemicals management programmes are established or upgraded, OECD products will be accessible, relevant and useful to non-members in order to assist them in developing their capacities for managing chemicals. As a result, the four-year work programme for the overall Chemicals Programme in OECD (2009-2012 as well as 2013-2016) was organised around the objectives of SAICM. Active efforts have been underway to make the instruments already developed in OECD as accessible and useful to non-members as possible through SAICM and the wider IOMC.

SAICM objective: Risk Reduction

An internet-based Platform for information exchange, review of recent documents and further elaboration of incentives to promote sustainable chemistry was made public in October 2009; in the context of work on the role of environmental legislation and innovation in promoting Sustainable Chemistry, a study on “Evidence on Innovation from Patent Data” was finalized in 2010, reviewing certain areas of Sustainable/Green Chemistry for indicative areas for further analysis of innovation in Sustainable Chemistry; see <http://www.oecd.org/env/sustainablechemistry>.

OECD work on PFCs is presented in a separate report.

SAICM objective: Knowledge and Information

OECD-agreed hazard assessments are available to the public and can be used for priority setting, classification and labelling, risk assessment and other activities within national or regional programmes. Of the 1483 chemicals currently sponsored in the Cooperative Chemicals Assessment Programme, conclusions have been published for 867 chemicals and conclusions with full assessments have been published for 1089 chemicals. The OECD Existing Chemicals Database tracks all chemicals throughout the process of investigation in the OECD programme: <http://www.oecd.org/env/hazard/data>.

Since ICCM2, more than 10 Emission Scenario Documents for assessment of chemicals have been published :(<http://www.oecd.org/env/exposure/esd>).

Pollutant Release and Transfer Registers (PRTRs) help governments respond to the public's right to know by providing data on release and transfer of pollutants to the environment. A number of projects were completed in 2010, which includes: exploration of a geographic information system application for PRTR.net; part 4 of a resource compendium on release estimation techniques for releases from products (<http://www.oecd.org/env/prtr>).

The OECD QSAR Toolbox is a free software application intended to be used by member countries, the chemical industry and other stakeholders in filling gaps in (eco)toxicity data needed for assessing the hazards of chemicals. One of the major outcomes in 2010 was the release of the (Q)SAR Application Toolbox Version 2.0, which contains many improved tools and databases, especially for the prediction of hazards to human health, and has a more user-friendly interface and more functionalities (www.oecd.org/env/hazard/qsar). Versions 2.1 and 2.2 were released in 2011 and version 2.3 was released in 2012. Technical manuals were also developed and published in 2010 and a new set of training material was released in 2011. A web-based public discussion forum for users of the Toolbox was also launched in May 2010: https://community.oecd.org/community/toolbox_forum.

An analysis of classification by member countries of selected chemicals listed in Annex III of the Rotterdam Convention, according to the UN Globally Harmonised System of classification and Labelling of Chemicals (GHS), was published in 2010 in the Series on Testing and Assessment (see below the link to the Series on Testing and Assessment).

The OECD work on the safety of manufactured nanomaterials aims to promote international co-operation in human health and environmental safety related issues around manufactured nanomaterials, within the context of the industrial chemicals sector, in order to assist countries in the development of rigorous safety evaluation of nanomaterials. The work is implemented through several projects to further develop appropriate methods and strategies to help ensure human health and environmental safety. More than 30 documents have been published in the Series on the Safety of Manufactured Nanomaterials (<http://www.oecd.org/env/nanosafety>). See also the OECD/UNITAR report on nanotechnology.

Work continued on the development of harmonised templates, or standard formats for reporting summaries of the results of tests on all types of chemicals (*e.g.* pesticides, biocides, and industrial chemicals). The templates are aimed at developers of database systems as they prescribe the formats by which such information can be entered into and maintained in databases: www.oecd.org/ehs/templates.

Several documents related to pesticides and biocides management have been published since ICCM2 (see <http://www.oecd.org/env/biocides> and <http://www.oecd.org/env/pesticides>).

SAICM objective: Governance

The system of Mutual Acceptance of Data (MAD) is based on OECD Test Guidelines and

OECD Principles of Good Laboratory Practice (<http://www.oecd.org/env/glp>) and allows participating countries to share the results of various non-clinical safety tests done on chemicals and chemical products. By avoiding duplication of testing, the MAD system saves a considerable number of test animals, and around 150 EUR million per year to governments and industry according to the report *Cutting Costs in Chemicals Management* published in 2010: <http://www.oecd.org/dataoecd/55/4/47813784.pdf>. South Africa, Singapore, India, Brazil and Argentina are full adherents to the MAD system; Malaysia and Thailand are provisional adherents.

Since ICCM2, 33 new or updated Guidelines for testing chemicals for health effects, environmental effects, and pesticide residue chemistry have been published (http://www.oecd-ilibrary.org/content/package/chem_guide_pkg-en), and more than 50 documents supporting Test Guidelines have been published in the Series on Testing and Assessment (www.oecd.org/ehs/testingandassessment). An important part of the work on Test Guidelines was dedicated to screening or testing of endocrine disrupting chemicals.

SAICM objective: Capacity Building and Technical Cooperation

The new version of the eChemPortal still allows eChemPortal users to base data searches on chemical identity, and now also provides for new searches based on certain properties or effects, such as physical chemical properties, environmental fate and behaviour, ecotoxicity and toxicity. It was publicly launched in December 2010 [<http://www.oecd.org/ehs/eChemPortal>]. In 2010 and 2011, ten new participating data sources were added to eChemPortal, including the result of the GHS Classification by the Japanese Government.

A draft OECD Environmental Risk Assessment Toolkit was released on the OECD public website in June 2010 [<http://www.oecd.org/env/riskassessment/toolkit>]. This Toolkit is a set of web pages that describe the work flow for environmental risk assessment and management of chemicals with links to available OECD tools and products relevant for the different steps in risk assessment and management. The Toolkit contributes to providing support for capacity building on sound chemicals management.

In 2010, IOMC launched a project to develop a Toolbox for Decision-Making in Chemicals Management. OECD took the lead in the development of a proof-of-concept version of this IOMC Toolbox. A proof-of-concept version of this Toolbox will be available for demonstration at ICCM3.