

SUMMARY OF THE SIXTH SESSION OF THE INTERGOVERNMENTAL FORUM ON CHEMICAL SAFETY: 15-19 SEPTEMBER 2008

The sixth session of the Intergovernmental Forum on Chemical Safety (IFCS VI) took place from 15-19 September 2008 in Dakar, Senegal. Over 200 participants attended the meeting, representing 70 governments, 12 intergovernmental organizations and 39 non-governmental organizations.

The main agenda item for the meeting was the future of the IFCS. Discussions were based on three options identified by the Working Group on the Future of the IFCS, created by IFCS V in light of agreement on the Strategic Approach to International Chemicals Management (SAICM) in 2006. After debating the three options and whether to maintain the institutional independence of the IFCS, delegates agreed to invite the International Conference on Chemicals Management (ICCM) to integrate the Forum into the ICCM as an advisory body. They also reached consensus on the three functions and key elements for operation of the Forum, and decided that its role is to provide an open, transparent and inclusive forum for considering new and emerging issues related to sound chemicals management.

Another key agenda item was nanotechnology and manufactured nanomaterials. After debating, *inter alia*, the IFCS's mandate to consider nanotechnology, delegates agreed on a statement limited to manufactured nanomaterials. IFCS VI also considered international transport of lead and cadmium via trade but was unable to reach consensus on this issue.

Delegates left the meeting with a sense of relief that the Forum had reached agreement on a decision on the future of the IFCS, even though the issue is now in the hands of the ICCM. While many voiced disappointment over the lack of agreement on lead and cadmium, there was satisfaction that, with the decision on nanotechnology and manufactured nanomaterials, the IFCS had taken up yet another important emerging issue on the international chemicals management agenda.

A BRIEF HISTORY OF THE IFCS

The idea of an intergovernmental forum to address chemical safety originated during preparations for the 1992 United Nations Conference on Environment and Development (UNCED) held in Rio de Janeiro, Brazil, when the UNCED

Preparatory Committee (PrepCom) identified the collaborative efforts of the United Nations Environment Programme (UNEP), the International Labor Organization (ILO) and the World Health Organization (WHO), within the framework of the International Programme on Chemical Safety (IPCS), as the nucleus for international cooperation on the environmentally sound management of toxic chemicals. The PrepCom invited the IPCS to identify possible intergovernmental mechanisms for risk assessment and chemicals management. In response, UNEP, ILO and WHO convened an expert meeting in London, UK, in December 1991, to consider priority areas for an international strategy and proposals for an intergovernmental mechanism for the environmentally sound management of chemicals. The meeting resulted in a recommendation to establish an intergovernmental forum on chemical risk assessment and management that was forwarded to UNCED.

At UNCED, delegates adopted Agenda 21, a programme of action for sustainable development. Chapter 19 of Agenda 21 addresses the "Environmentally Sound Management of Toxic Chemicals Including Prevention of Illegal International Traffic in Toxic and Dangerous Products," and contains an international

IN THIS ISSUE

A Brief History of the IFCS	1
Report of the Meeting	2
Future of the IFCS	3
Nanotechnology and Nanomaterials	4
Substitution and Alternatives	6
International Transport of Lead and Cadmium via Trade	7
Integrated Pest Management and Integrated Vector Management	9
Closing Plenary	9
A Brief Analysis of IFCS VI	10
Upcoming Meetings	12
Glossary	12

This issue of the *Earth Negotiations Bulletin* © <enb@iisd.org> is written and edited by Kati Kulovesi, Leila Mead, Anne Roemer-Mahler, Jessica Templeton, and Kunbao Xia. The Digital Editor is Francis Dejon. The Editor is Pamela S. Chasek, Ph.D. <pam@iisd.org> and the Director of IISD Reporting Services is Langston James "Kimo" Goree VI <kimo@iisd.org>. The Sustaining Donors of the *Bulletin* are the United Kingdom (through the Department for International Development – DFID), the Government of the United States of America (through the Department of State Bureau of Oceans and International Environmental and Scientific Affairs), the Government of Canada (through CIDA), the Danish Ministry of Foreign Affairs, the German Federal Ministry for Economic Cooperation and Development (BMZ), the Netherlands Ministry of Foreign Affairs, the European Commission (DG-ENV) and the Italian Ministry for the Environment, Land and Sea. General Support for the *Bulletin* during 2008 is provided by the Norwegian Ministry of Foreign Affairs, the Government of Australia, the Austrian Federal Ministry of Agriculture, Forestry, Environment and Water Management, the Ministry of Environment of Sweden, the New Zealand Ministry of Foreign Affairs and Trade, SWAN International, Swiss Federal Office for the Environment (FOEN), the Finnish Ministry for Foreign Affairs, the Japanese Ministry of Environment (through the Institute for Global Environmental Strategies - IGES), the Japanese Ministry of Economy, Trade and Industry (through the Global Industrial and Social Progress Research Institute - GISPRI) and the United Nations Environment Programme (UNEP). Funding for translation of the *Bulletin* into French has been provided by the International Organization of the Francophonie (IOF). Funding for the translation of the *Bulletin* into Spanish has been provided by the Ministry of Environment of Spain. The opinions expressed in the *Bulletin* are those of the authors and do not necessarily reflect the views of IISD or other donors. Excerpts from the *Bulletin* may be used in non-commercial publications with appropriate academic citation. For information on the *Bulletin*, including requests to provide reporting services, contact the Director of IISD Reporting Services at <kimo@iisd.org>, +1-646-536-7556 or 300 East 56th St., 11A, New York, NY 10022, USA.

strategy for action on chemical safety with six priority programme areas: expanding and accelerating international assessment of chemical risks; harmonization of classification and labeling of chemicals; information exchange on toxic chemicals and chemical risks; establishment of risk reduction programmes; strengthening of national capabilities and capacities for management of chemicals; and prevention of illegal international traffic in toxic and dangerous products. Chapter 19 also calls for the establishment of an intergovernmental forum on chemical safety.

IFCS I: In April 1994, UNEP, ILO and WHO convened the International Conference on Chemical Safety in Stockholm, Sweden. The Conference established the Intergovernmental Forum on Chemical Safety (IFCS) and constituted the first meeting of the Forum (Forum I). The Conference adopted a resolution with detailed recommendations on Priorities for Action in implementing Agenda 21, and the Terms of Reference for the IFCS, establishing it as a mechanism for cooperation among governments, intergovernmental organizations (IGOs) and non-governmental organizations (NGOs) to promote chemical risk assessment and the environmentally sound management of chemicals.

IFCS II: IFCS II, held in February 1997 in Ottawa, Canada, made recommendations on the programme areas identified in Chapter 19 of Agenda 21, and on emerging issues such as endocrine-disrupting chemicals and pollutant release and transfer registers (PRTRs). Delegates reached agreement on a number of actions regarding the structure and function of the IFCS. The Forum Standing Committee was established as a mechanism for responding to new developments and advising on preparations for future meetings.

IFCS III: IFCS III was held in October 2000, in Salvador da Bahia, Brazil, under the theme “In Partnership for Global Chemical Safety.” Delegates reviewed the IFCS, assessed progress made on implementing Chapter 19 of Agenda 21, reached agreement on the Priorities for Action Beyond 2000, and issued the Bahia Declaration on Chemical Safety. The Bahia Declaration lists six priorities for review at future Forums, as well as key goals with target dates for their achievement. The Priorities for Action Beyond 2000 include recommendations linked to these goals and organized according to the six Programme Areas set forth in Agenda 21. Forum III also considered: the prevention of illegal international traffic in toxic and dangerous products; barriers to information exchange; information exchange for chemical production decisionmaking; PRTRs and emissions inventories; a capacity-building network for the sound management of chemicals; awareness raising and prioritization of chemicals management capacity-building issues at the political level; and the Globally Harmonized System for the Classification and Labeling of Chemicals (GHS).

WORLD SUMMIT ON SUSTAINABLE

DEVELOPMENT: The WSSD convened from 26 August to 4 September 2002 in Johannesburg, South Africa, and adopted, among other outcomes, the Johannesburg Plan of Implementation (JPOI), a framework for action to implement the UNCED commitments that includes a number of new commitments. The issue of chemicals management is addressed primarily in Chapter III on Changing Unsustainable Patterns of Production and Consumption, which reflects a renewed commitment to

the sound management of chemicals. Chemicals-related targets contained in the JPOI include: the aim to achieve, by 2020, the use and production of chemicals in ways that lead to the minimization of significant adverse effects on human health and the environment; the development of a Strategic Approach to International Chemicals Management (SAICM) based on the IFCS Bahia Declaration and Priorities for Action Beyond 2000; and the national implementation of the new GHS, with a view to having the system fully operational by 2008.

IFCS IV: IFCS IV convened in November 2003, in Bangkok, Thailand, under the theme “Chemical Safety in a Vulnerable World.” Forum IV took stock of progress achieved on commitments and recommendations made at Forum III, focusing on topics relating to: children and chemical safety; occupational health and safety; hazard data generation and availability; acutely toxic pesticides; and capacity building. Delegates also considered and took decisions on the GHS and illegal traffic of chemicals.

In response to United Nations Environment Programme (UNEP) Governing Council decisions UNEP/GCSS.VII/3 and UNEP/GC.22/4 IV, Forum IV discussed the development of SAICM, and forwarded a non-negotiated compilation report on its work to SAICM PrepCom-1 addressing, *inter alia*: life-cycle management of chemicals since Agenda 21; new and ongoing challenges; gaps in life-cycle chemicals management; and resources for capacity building and implementation.

SAICM: SAICM was developed over the course of three meetings of the Preparatory Committee: PrepCom-1 (9-13 November 2003, Bangkok, Thailand); PrepCom-2 (4-8 October 2004, Nairobi, Kenya) and PrepCom-3 (19-24 September 2005, Vienna, Austria). It was adopted at the International Conference on Chemicals Management (ICCM) (4-6 February 2006, Dubai, United Arab Emirates) and includes a High-level Declaration, an Overarching Policy Strategy and a Global Plan of Action.

IFCS V: IFCS V was held in Budapest, Hungary, from 25-29 September 2006, and was preceded by an event convened by Switzerland entitled, “Health and environmental concerns associated with heavy metals: global need for further action?”

IFCS V agreed to establish a working group to draft a decision on the future of the IFCS to be presented at IFCS VI, identified a series of potential next steps to assist developing countries and countries with economies in transition with tools and approaches for applying precaution in domestic decision-making processes, and adopted the Budapest Statement on Mercury, Lead and Cadmium.

REPORT OF THE MEETING

IFCS VI opened on Monday morning, 15 September 2008. IFCS President Zoltan Szabó (Hungary), highlighted the importance of Forum VI and stressed the relevance of its agenda for African countries.

Djibo Leyti Ka, Minister of State in charge of the Environment, the Protection of Nature, Retention Basins and Artificial Lakes, Senegal, underlined the Forum’s importance for human health and the environment. He stressed the need to consider the impacts of nanotechnology and nanomaterials, called for an efficient strategy on substitution, highlighted lead and cadmium as major concerns, and underscored the importance of discussing the future of the IFCS. He stated that high priority must be given to implementing the Forum’s recommendations.

IFCS AWARDS: IFCS President Szabó then presented the IFCS Awards of Merit to Barbara Dinham, and jointly to Georg Karlaganis and Franz Perrez.

Barbara Dinham, Pesticide Action Network (PAN) (retired)/Bhopal Medical Appeal, UK, reminded delegates that many pesticide users in developing countries lack the necessary equipment and access to information to protect themselves. She called for enhanced collaboration among key stakeholders to achieve more rapid substitution or elimination of toxic chemicals.

Georg Karlaganis, Switzerland, stressed that the nonbureaucratic working structure of the IFCS and its multistakeholder and multidisciplinary approach make it the ideal forum to address emerging issues and contribute to the sound management of chemicals at the global level. Franz Perrez, Switzerland, emphasized the IFCS's role as a link between fostering understanding and formulating solutions. He emphasized that the Forum's flexible and inclusive working structures enabled the IFCS to fulfill this role.

IFCS President Szabó then announced the IFCS Special Recognition Awards to Ravi Agarwal, Lilian Corra and Abiola Olanipekun.

Ravi Agarwal, Toxics Links, India, praised the IFCS for providing civil society with the opportunity to participate in international chemicals management on an equal footing with governments. Noting that the production of chemicals was shifting to emerging markets and developing countries, he stressed that the poorest are least able to protect themselves against negative impacts from this production.

Lilian Corra, International Society of Doctors for the Environment (ISDE), Argentina, stressed the importance of working for the sound management of chemicals and reducing their harmful effects on human health and the environment.

Noting that she considered her award as an award for Africa, Abiola Olanipekun, Nigeria, emphasized the importance of: access to resources; capacity building; implementation of policies and regulations; information sharing; and technology transfer for sound chemicals management in Africa.

ORGANIZATIONAL MATTERS: Delegates designated Imogen Ingram, Cook Islands, as the rapporteur and adopted the agenda (IFCS/Forum-VI/01w.Rev1) and time schedule (IFCS/Forum-VI/03w).

PRESIDENT'S REPORT: IFCS President Szabó reported on preparations for Forum VI and the IFCS regional Vice-Presidents reported on their groups' activities.

ADMINISTRATIVE ITEMS: IFCS Executive Secretary Judy Stober introduced the IFCS financial statement (IFCS/FORUM-VI/04w). Regarding the IFCS trust fund overview, she noted the negative predicted balance, and said the maximum amount indicated was seldom spent. Regarding the expenditures report, she said the approved 2008 budget allowed for flexibility to take into account Forum VI preparations, exchange rate fluctuations, and a decline in the value of the US dollar. She noted support for NGO participation in the meeting, thanking Thailand in particular.

FUTURE OF THE IFCS

Delegates held an initial exchange of views on the future of the IFCS (IFCS/FORUM-VI/05w) in plenary on Monday afternoon and further discussed the issue in a working group,

co-chaired by IFCS President Szabó and IFCS Vice-President Jamidu Katima (Tanzania) from Tuesday through Thursday. Delegates also met in regional groups and bilaterally throughout the week. Late on Thursday evening, delegates reached consensus on a resolution, which was adopted by plenary on Friday morning.

On Monday afternoon, IFCS Vice-President Katima introduced to plenary three options formulated by the Working Group on the Future of the IFCS, namely:

- to retain the IFCS as a distinct/independent institutional arrangement that avoids duplication, enhances synergies and saves costs (option one);
- to integrate the IFCS into the International Conference on Chemicals Management (ICCM) by designating part of each ICCM meeting as a Forum session (option two); and
- to integrate the IFCS into the ICCM by making it a subsidiary body (option three).

During the debate, opinions diverged on whether to maintain the IFCS as a distinct, independent body or to integrate it into the ICCM as a subsidiary body. Germany, Austria, Switzerland and others supported the third option, with the Czech Republic stating that limited financial and human resources must be taken into account when considering the IFCS's future. Switzerland called attention to the IFCS's financial difficulties, noted that SAICM has many benefits but is also struggling, and said the third option would benefit both SAICM and the IFCS. France underscored the Forum's uniqueness in allowing all stakeholders to participate on an equal footing, and supported the third option as a basis for further discussion. Some delegates stressed the need for a short, convincing and attractive resolution that the ICCM would agree to, particularly given the absence of many countries at Forum VI that will be present at ICCM2.

Nigeria, for the African Region, Pesticide Action Network Asia and the Pacific (PAN AP), Sustainable Development Policy Institute and ISDE supported the first option. Thailand stressed the importance of the IFCS for developing countries and countries with economies in transition, and, with Haiti, underscored the need to maintain the IFCS's distinct and independent identity. Chile supported maintaining the IFCS's functions. Argentina said that IFCS, SAICM and the three chemicals conventions are part of a package to address international chemicals management and all need new and additional financial resources. He stressed that the IFCS is the "mother of SAICM" and that "killing the mother to feed the baby" is not a good idea.

Slovenia, for Central and Eastern Europe (CEE), said the first option was unrealistic, while Suriname, for the Latin American and Caribbean Group, expressed openness to discussing all three options. The UK said the Forum's integrity should not be lost, and proposed identifying the IFCS's future functions and role before discussing the institutional structure.

The Center for International Environmental Law (CIEL) urged delegates to agree on one option regarding the future of the IFCS and how it can be implemented. The International Council of Chemical Associations said maintaining the IFCS as an independent institution was unnecessary since SAICM's launch, while the International Trade Union Confederation (ITUC) said it was not economically sustainable.

A working group was then established to negotiate a draft resolution on the future of the IFCS. Delegates were able to agree relatively quickly on the role and three proposed functions of the Forum. The debate revolved around the question of whether to maintain the IFCS as a distinct, independent body or to integrate it into the ICCM as a subsidiary body. Based on these discussions, regional groups agreed on Wednesday to use the third option of integrating the IFCS into ICCM as a subsidiary body as a basis for negotiation on the condition that elements safeguarding the integrity of the Forum were incorporated. The group agreed to define the elements for the Forum's operation before negotiating the draft resolution on its future. Both the elements and the draft resolution were agreed to in the working group on Thursday evening and forwarded to the plenary, which adopted the texts on Friday morning.

In Friday's plenary, Germany said his country may reconsider its position in light of ICCM2's outcomes and efforts to integrate the IFCS into the ICCM, and announced Germany would contribute financially in 2009. Noting her country's strong commitment to the IFCS, Switzerland expressed intention to work under the current terms of reference and financially support the Forum until ICCM2, and do everything possible to ensure the ICCM accepts the Forum's invitation.

Iran said he hoped the resolution would provide solid ground for the ICCM to integrate the IFCS, while upholding the Forum's status, role and functions. Chile stressed the importance of the new IFCS negotiating its own terms of reference. Madagascar urged all countries to contribute financially and CIEL called for all stakeholders to provide financial support as best they could. CIEL also said the resolution: is fair and balanced; positions the Forum well for a favorable decision by the ICCM to integrate it; and provides an opportunity to strengthen SAICM. Slovenia announced her country would provide financial support to the Forum and the WHO reiterated its support to continue hosting the IFCS Secretariat.

Final Outcome: In its resolution (IFCS/FORUM-VI/07w), the IFCS, *inter alia*, outlines the Forum's functions, which are to:

- provide all stakeholders, particularly developing countries and countries with economies in transition, with an opportunity to share and acquire information through open discussion and debate;
- provide an independent and objective source of synthesized information about chemicals management issues, including potential health, environmental and socioeconomic impacts and possible response actions; and
- prepare and disseminate reports that reflect a state-of-the-art understanding of key subjects, are based on solid scientific evidence, ensure a balance of views, and package information in a manner that educates and may stimulate action, particularly for the ICCM.

The IFCS also:

- invites ICCM2 to decide to integrate the Forum into ICCM by establishing it as an ICCM advisory body;
- proposes the new name of the Forum will be the "International Forum on Chemical Safety";
- invites ICCM2 to include the elements contained in the resolution's annex in the new terms of reference and rules of procedure for the Forum;

- invites the ICCM to specify tasks for the Forum, such as preparing reports on new and emerging issues, while being mindful of the need for adequate resources;
- recognizes that successfully integrating the Forum into the ICCM will require sufficient human, financial and in-kind resources, and urges all stakeholders to provide such resources on a voluntary basis;
- decides that until the ICCM integrates the Forum, it will continue to operate under its current terms of reference; and
- invites all governments, IGOs and NGOs, including the private sector, to provide voluntary and in-kind resources to support the IFCS Secretariat in fulfilling its functions.

The resolution also contains an annex with key elements for the Forum's operation, including: full participation of government, IGOs, NGOs and other civil society groups; raising new and emerging issues for discussion to, *inter alia*, stimulate action by the ICCM; following the lead country/sponsor/organization approach; meeting during the ICCM intersessional period in time to contribute to the ICCM processes; and a bureau/standing committee comprised of representatives from all stakeholder groups.

NANOTECHNOLOGY AND NANOMATERIALS

The agenda item on nanotechnology and manufactured nanomaterials (IFCS/FORUM-VI/01.TS; IFCS/FORUM-VI/4 INF; IFCS/FORUM-VI/5 INF; IFCS/FORUM-VI/6 INF) was considered in plenary on Tuesday morning and afternoon, and in a working group chaired by Georg Karlaganis (Switzerland) from Tuesday to Friday. The IFCS closing plenary adopted the Dakar Statement on Manufactured Nanomaterials (IFCS/FORUM-VI/07w) on Friday afternoon.

On Tuesday, Karlaganis facilitated the IFCS plenary session, during which delegates heard presentations on nanotechnology and manufactured nanomaterials. For a detailed report on these discussions, see: <http://www.iisd.ca/vol15/enb15157e.html>.

OPPORTUNITIES AND CHALLENGES: In discussing opportunities and challenges, Germ Visser, Royal DSM Innovation Center, explained that the market for nanotechnology is growing rapidly and that nanotechnology may help in responding to major societal challenges, including energy, water and food.

Vyvyan Howard, University of Ulster, discussed the health effects of exposure to nanoparticles, stating that their effects on the central nervous system are of particular concern as these particles may increase the incidence of protein misfolding diseases. He raised concerns about containment, highlighting that very small particles act like gases and are difficult to control.

Peter Gehr, University of Bern, presented on the interaction of manufactured nanomaterials with human organisms, saying that nanoparticles may transmit to other organs, are dangerous to cells, and may cause cancer and damage DNA.

Pieter van Broekhuizen, University of Amsterdam, highlighted, *inter alia*, the need for: workers' involvement in risk assessment, monitoring and risk management; nanoadapted occupational health surveillance; data and knowledge transparency; and compliance with legislation.

Pat Mooney, Action Group on Erosion, Technology and Concentration, emphasized that the way in which a technology is introduced is critical for its socioeconomic impact, and that the impact of nanotechnology is likely to be vast, both in terms

of monetary value and range of economic sectors affected. He highlighted the lack of risk awareness among scientists and expressed concern about governments' ability to develop appropriate regulation in a timely manner.

Claudia Neubauer, Citizen Sciences Foundation, lamented the small budgets for research on social implications of nanotechnology and for products beneficial to marginalized people. She emphasized that technological innovation cannot resolve all problems facing the world today since many of them are rooted in social and environmental injustices.

Andreas Bachmann, Switzerland, discussed the possibility that advances in nanotechnology could exacerbate a divide between countries without access to such technology and those countries that are able to invest in research and development. He highlighted questions of distributive justice, and suggested that if advances in nanotechnology could help people meet their basic needs, developed countries would have a moral obligation to provide this technology to others.

RELEVANT ACTIVITIES IN INTERNATIONAL ORGANIZATIONS: On relevant activities in international organizations, Robert Visser, Organization for Economic Cooperation and Development (OECD), outlined OECD's activities on nanotechnology, focusing on the Working Party on Nanotechnology and Manufactured Nanomaterials. He explained that some non-OECD members participate in the work together with other stakeholders and outlined experiences from eight projects, including a project on testing nanomaterials.

Francoise Roure, OECD Working Group on Nanotechnology, highlighted that nanotechnology is an area reaching beyond chemicals management, noted its potential contribution to the Millennium Development Goals and stressed the need to balance risk and opportunities. Roure suggested strengthening intergovernmental dialogue on nanotechnology and creating a system for formal coordination among UN agencies.

SCIENCE AND POLICY CHALLENGES IN DEVELOPED AND DEVELOPING COUNTRIES: In the session on science and policy challenges in developed and developing countries, Jane Stratford, UK, explained her country's approach to governing the development and application of nanotechnologies. She emphasized that because nanomaterials have different characteristics and therefore pose different risks, they should be evaluated on a case-by-case basis.

Lerson Tanasugarn, Chulalongkorn University, discussed developments in nanotechnology in Thailand. He indicated that growth of the nanotechnology industry could be hampered by the public's concerns about risks, and called for governments to educate people about the safety of nanotechnology products.

Adeniyi Fasasi, National Agency for Science and Engineering Infrastructure of Nigeria, stressed the need for capacity building, awareness raising and funding for nanoresearch in Africa. He cited potential dangers of nanotechnology such as cheap manufacture and duplication of designs leading to economic upheaval, overuse of inexpensive products causing widespread environmental damage, and smuggling of nanoreactors.

Kyung-Hee Choi, Republic of Korea, emphasized that research on the safety of manufactured nanomaterials has the highest priority. She discussed international cooperation

on nanosafety and her country's involvement in the OECD's working groups, and said future plans include cooperation and coordination with relevant stakeholders.

Thomas Epprecht, Swiss Reinsurance Company, explained how the insurance industry manages risk from nanotechnology. He stressed the need for a precautionary approach and said information is always a prerequisite for risk analysis, and that regulatory, social and economic adjustments should be considered in predicting risk.

Noppawan Tanpipat, National Nanotechnology Center of Thailand, explained that the center has been building capacity, strengthening human resources and infrastructure, and undertaking research in areas relevant and important for Thailand, and that its goals include conducting risk assessment and developing a nanosafety framework for industrial applications.

Babajide Alo, University of Lagos, lamented the limited participation of developing countries, especially those at the bottom of the Human Development Index, in developing nanotechnology. Warning that this could increase the technological divide between North and South, he called for establishing a global fund to help developing countries cope with the challenges.

NEGOTIATIONS ON NANOTECHNOLOGY AND NANOMATERIALS: Negotiations by the working group established under this agenda item focused on the scope of the draft statement, and the need for recommendations on global codes of conduct and product labeling. Delegates also discussed workers' protection from exposure to nanoparticles and whether people affected by nanotechnologies had been consulted.

Some delegates from European countries emphasized the need to distinguish between nanotechnologies and manufactured nanomaterials and said the statement should only address manufactured nanomaterials. They indicated that the IFCS's mandate was limited to chemical safety and did not include social and ethical implications of new technologies. Some developing country delegates and NGOs emphasized that the IFCS VI agenda item included both manufactured nanomaterials and nanotechnology, and this should be reflected in the outcome. In the final text, delegates agreed to a preambular paragraph acknowledging the need "to address the safety aspect of nanotechnologies" but establishing the focus of the statement on "safety aspects of nanomaterials only."

Discussions on recommendations for product labeling and global codes of conduct also revealed a divide between some developed countries, and some developing countries and NGOs. Developing country delegates and NGOs favored a recommendation for global codes of conduct, arguing that many developing countries did not have the capacity to develop national standards. The UK and some other European countries said it was premature to develop global codes of conduct, and expressed concern that this would divert attention from improving understanding on health and environmental risks.

Some developing country and NGO delegates also favored strongly recommending product labeling as the preferred option. They emphasized the importance of labels in informed consumer decisions, and stressed that labeling was particularly critical for developing countries as importers. The UK, some other European countries and some industry groups favored product labeling,

noting that labeling alone does not necessarily improve consumer information and might divert attention from other sources of information.

The recommendations on product labeling and global codes of conduct remained in brackets in the draft resolution presented to plenary on Friday morning, where Chair Karlaganis proposed to remove the brackets. Colombia, Nigeria, ISDE, and Peru Consumers International emphasized the need for product labeling. The Russian Federation, Mexico, Argentina, ITUC and the Environmental Health Fund also supported recommendations for product labeling, and in addition, noted the need for a global code of conduct. The UK opposed the recommendations on these issues, and the text was sent back to the working group, where delegates agreed to text on: evaluating “the feasibility of developing global codes of conduct in a timely manner,” and providing information “through product labeling and, as appropriate, websites and databases.”

Final Outcome: In the Dakar Statement on Manufactured Nanomaterials, (IFCS/FORUM-VI/07w), the IFCS, *inter alia*, recommends:

- applying the precautionary principle as one of the general principles of risk management;
 - making information on use and risks associated with the lifecycle of manufactured nanomaterials readily accessible;
 - strengthening capacity of civil society to effectively participate in decisionmaking related to manufactured nanomaterials;
 - taking measures to prevent or minimize exposure of workers to nanomaterials and their releases into the environment; and
 - informing users throughout the supply chain about health and safety risks and novel characteristics of manufactured nanomaterials via Material Safety Data Sheets or other means.
- The Statement further recommends that:
- governments cooperate with all stakeholders in preparing national codes of conduct and evaluate the feasibility of developing global codes of conduct in a timely manner;
 - producers provide appropriate information about the content of manufactured nanomaterials in order to inform consumers about potential risks through product labeling and, as appropriate, websites and databases; and
 - ICCM2 consider these recommendations for further actions.

SUBSTITUTION AND ALTERNATIVES

The agenda item on substitution and alternatives (IFCS/FORUM-VI/02.TS, IFCS/FORUM-VI/8.INF) was considered by the IFCS plenary on Wednesday morning and in a small drafting group chaired by Michael Wittmann (Austria) on Wednesday evening. The IFCS plenary adopted recommendations on Friday.

Wittmann facilitated the IFCS plenary session, during which delegates heard presentations on various topics related to substitution and alternatives, including: assessment; case studies; challenges in developing countries and countries with economies in transition; substitution strategies; lessons learned to phase out DDT; and establishing tools and criteria for facilitating application of substitutes. For a detailed report on these discussions, see: <http://www.iisd.ca/vol15/enb15158e.html>

Ken Geiser, University of Massachusetts Lowell, proposed six steps for good substitution strategies, namely: improved methods and procedures; better scientific information; creation

of a substitute database; integration of substitution processes into comprehensive chemicals management; involvement of all stakeholders; and capacity building.

Lothar Lißner, Cooperation Centre Hamburg, highlighted the principle of substitution under European law. He stated, however, that most companies are not following the rules, and identified uncertainty as one of the main barriers to substitution often due to incomplete information on substitutes.

Richard Kiaka, iLima, discussed challenges facing developing countries in implementing substitution strategies, highlighting: weak capacity in research and development; limited public awareness and financial capacity; and economic investment that favors established industries.

Jorge Pérez, National Cleaner Production Center of Mexico, explained how the chemical leasing business model can increase substitution of hazardous chemicals and reduce consumption of raw materials, emphasizing that it aligns producer and user interests by compelling them to share responsibility for use of chemicals to improve both profits and environmental sustainability.

Dolores Romano, Instituto Sindical de Trabajo, Ambiente y Salud, said companies and workers are often unaware of the chemical ingredients in the products they use, and that her institute has, *inter alia*, organized training courses and created a database on health and environmental risks of chemicals and on substitution.

Michael Streek, Schülke & Mayr GmbH, a manufacturer of disinfectants, stressed the importance of application and customer support. He outlined a two-year project in which his company is taking responsibility for hygiene conditions in a German hospital.

Jorge Méndez-Galvan, Mexico, discussed phasing out DDT through his country’s malaria control programme. He recommended eliminating conditions and sites that breed mosquitoes through, *inter alia*, improving hygiene, sweeping patios, cutting vegetation and using bed nets. He stressed community participation, ecological management and improving living standards in fighting malaria without insecticides.

Tanzania called upon the WHO to disseminate information on malaria vector control without DDT, while the ISDE stated that Mexico’s experience was not fully understood or ready for dissemination.

Joel Tickner, University of Massachusetts Lowell, discussed the challenges of substitution and the tools needed to support implementation and innovation, including identifying substances of greatest concern and utilizing alternatives. He emphasized the need for a comprehensive information framework to make decisions that improve safety.

Nigeria, supported by Toxics Link, urged delegates to consider the issue of eliminating lead in paints, noting that alternatives are available. Toxics Link also highlighted the need to consider the cost of inaction.

NEGOTIATIONS ON SUBSTITUTION AND ALTERNATIVES: Chaired by Wittmann, the drafting group on substitution and alternatives met on Wednesday evening to discuss the draft Dakar recommendations on substitution and alternatives. The discussions were not controversial, and delegates supported adopting recommendations on this agenda item.

Chair Wittmann introduced the draft recommendations to the IFCS plenary on Friday morning. France proposed including a reference in the preamble to the relevant paragraphs of the Overarching Policy Strategy of the SAICM. The draft text was adopted with this amendment.

Ravi Agarwal, Toxics Link, then presented a draft resolution for eliminating lead in paints. The International Lead Association, joined by Germany and Sweden, supported eliminating household paints containing lead, but opposed including other consumer products in the resolution. Delegates agreed to delete the reference to other consumer products. Slovenia, for the CEE, Nigeria and ISDE expressed support for the resolution, which was adopted.

Noting that lead in paints is harmful and that those affected most are in developing countries and countries with economies in transition, Zambia appealed to UNEP and other IGOs to support phasing out lead in Africa.

Final Outcome: In its recommendations on substitution and alternatives (IFCS/FORUM-VI/07w), the IFCS recommends, *inter alia*, that governments support international regulatory frameworks on substitution and research and development on safe and effective alternatives.

The IFCS also recommends that governments and international organizations:

- identify the substances and uses of highest concern;
- develop an international portal to raise awareness and encourage adoption of tested, proven and documented alternatives;
- implement a transparent alternatives assessment process;
- promote publicly accessible systems for collecting information on chemical uses through supply chains; and
- establish an international technical support network to facilitate application of safer materials, processes and products in industrial and agricultural settings.

The IFCS also recommends that governments and industry ensure that potentially affected parties, particularly workers, are involved in substitution decision making.

In its resolution for eliminating lead in paints (IFCS/FORUM-VI/07w), the IFCS:

- decides that a global partnership is essential to promote implementation of measures contained in the JPOI, especially for developing countries and countries with economies in transition;
- decides that the initial priority of such a partnership should be to support the phase-out of lead in lead-based paints;
- requests the Forum Standing Committee to establish an *ad hoc* working group, following the lead sponsor approach, to prepare draft terms of reference for the global partnership for consideration at ICCM2;
- invites the governing bodies of relevant IGOs, including UNEP and WHO, to support and participate in such an initiative; and
- invites the UNEP Governing Council to consider providing support for concerted action.

INTERNATIONAL TRANSPORT OF LEAD AND CADMIUM VIA TRADE

The agenda item on international transport of lead and cadmium via trade (IFCS/FORUM-VI/03.TS, IFCS/FORUM-VI/07 INF, IFCS/FORUM-VI/12 INF) was considered by the IFCS plenary on Wednesday afternoon and in a working group chaired by Reiner Arndt (Germany) from Wednesday to Friday. By Friday, the group had not reached consensus on the content of a proposed statement. Chair Arndt therefore presented, and delegates accepted, a Chair's Summary of the group's discussions, findings, and points of disagreement.

On Wednesday, Arndt facilitated the IFCS plenary session, during which delegates heard presentations on international transport of lead and cadmium via trade. For a detailed report on these discussions, see: <http://www.iisd.ca/vol15/enb15158e.html>.

TRADE RELATED DISPERSAL OF LEAD AND CADMIUM: Erika Rosenthal, CIEL, discussed the "thought starter" (IFCS/FORUM-VI/03.TS), explaining that it identifies risks to human health and the environment that may be directly traced to international trade in lead and cadmium commodities, compounds, products and wastes, and suggested discussing whether such risks constitute an "international concern" warranting a coordinated international approach.

Brian Wilson, International Lead Management Centre, discussed lessons learned from lead risk management, highlighting the need for, *inter alia*: project partnerships with governmental, non-governmental and private-sector organizations; a multistakeholder approach to implementation; and realistic objectives.

Patrick de Metz, International Cadmium Association, said 70% of cadmium produced is used for rechargeable consumer batteries. He discussed cadmium releases into the environment and said that scientific data do not support the argument that trade in products containing lead and cadmium poses an unacceptable risk to human health and the environment.

Ravi Agarwal, Toxics Link, discussed global transport of lead and cadmium through trade in e-waste such as secondhand computers and mobile phones. He said products are manufactured, assembled and marketed globally, but are often disposed of in developing countries, which are most affected by exposure because much recycling of products containing these chemicals is done by hand by the urban poor.

Kaj Madsen, UNEP, and Anne Nkwimba Magashi, African Roundtable on Sustainable Consumption and Production, presented a study on the effects of trade of lead, cadmium and mercury on human health and the environment in Africa. They said Africa is becoming a dumping ground and noted several studies that found high levels of these chemicals in children.

EXPERIENCES AND CASE STUDIES: Joel Tickner, University of Massachusetts Lowell, discussed concerns about toxic substances in consumer goods, including toys. He said national and international policies are disjointed and uncoordinated, stated that the US regulatory framework is burdensome and does not result in a high standard of protection, and called for improved national and global measures.

Michael Musenga, Zambia, outlined efforts to reduce heavy metal exposure in Zambia, highlighting the development of national standards and work toward harmonization and

implementation. He also identified challenges, including lack of coordinated enforcement, capacity, and adequate testing facilities.

Perry Gottesfeld, OK International, emphasized the need to complement national collection systems for lead batteries with certification schemes to address problems of lead poisoning in developing countries. Warning that growing international trade in lead batteries may limit the possibility of introducing producer responsibility initiatives, he suggested that any solution will require greater international cooperation.

Ibrahim Shafii, Basel Convention Secretariat, explained how the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal engages with lead and cadmium, including through: guidelines on environmentally sound management of batteries; technical and emergency assistance; capacity building; and development of initiatives on e-waste.

Jaime Delgado Zegarra, Peruvian Association of Consumers Unions, highlighted concerns over the presence of lead in toys and pencils, discussed health problems associated with production and export of lead, and identified illegal recycling of batteries as a significant problem in Latin America.

After the discussion, Reiner Arndt identified the need to consider whether trade in lead and cadmium poses unacceptable risks to human health and the environment and, if so, the need to discuss questions of responsibility and remedy.

NEGOTIATIONS ON LEAD AND CADMIUM:

Discussions on the proposed Dakar recommendations on lead and cadmium focused on the link between international trade and risks posed by exposure to these chemicals, particularly during processes of waste disposal in developing countries.

The main controversy centered on availability of scientific evidence of risk due to international trade in lead and cadmium. Most participants agreed some risk is due to trade, while China and some industrial representatives identified the need for a more solid scientific basis for review and risk assessment before taking any other international action. The International Lead Management Center said trade in new products represents a risk if materials are sourced from informal recycling activities in developing countries, and other industry representatives argued that not enough scientific evidence exists to warrant international action. Some NGOs, however, stressed that trade in hazardous waste poses unacceptable risks to human health and the environment and, noting the issue should not be limited to batteries, called for improved standards and product labeling.

On Friday morning, Chair Arndt reported to the plenary that, after extensive discussions and exchanges of information, the group was unable to reach consensus on whether trade in these chemicals posed unacceptable risks to human health and the environment. Instead of the proposed statement, Chair Arndt produced a Chair's Summary of the group's discussions, including points of agreement and contention.

In the closing plenary on Friday, some delegations lamented they were unable to participate in the working group due to lack of human capacity. Nigeria, supported by ITSU, the International POPs Elimination Network, ISDE, France, Uganda, Germany, Czech Republic, the CEE and others, highlighted that developing countries face "grave risks" caused by international trade of lead and cadmium and called for the issue to be

addressed at the next IFCS or ICCM2. Toxics Link lamented that it was unfortunate that "all points of action were blocked" by one country. The Environmental Health Fund expressed disappointment that a "very tiny minority of delegations" prevented progress. The Cook Islands noted it does not produce lead or cadmium but is rapidly accumulating e-waste containing these chemicals. The Czech Republic emphasized that upon assumption of the EU Presidency next year, it will "put forth every effort" to bring the issue of lead and cadmium to the UNEP Governing Council and ICCM2.

Chair's Summary: The Chair's Summary (IFCS/FORUM-VI/07w), *inter alia*, explains that the working group held a series of intensive deliberations on international transport of lead and cadmium via trade, concentrating on the question of whether sufficient data currently exist for political decision making, and that the group also discussed the inability of developing countries and countries with economies in transition to effectively address problems related to international transport of lead and cadmium via trade through unilateral action.

The Chair's Summary identifies elements upon which the group agreed, including:

- the desirability of addressing risks presented by lead and cadmium throughout their lifecycles;
- the need for governments and other stakeholders to reduce the risks posed by these chemicals to human health and the environment;
- the request to governments, IGOs, and private sector organizations to provide financial support to developing countries and countries with economies in transition;
- the encouragement to governments and private entities to promote environmentally sound management of products and waste containing lead and cadmium; and
- the call to governments to strengthen consumer protection, via measures such as awareness raising and enhanced standard setting.

The Chair's Summary also identifies points on which the group did not reach consensus but for which there was significant support, including:

- producers should phase out production and use of products containing lead or cadmium, including paints, toys, jewelry, and pipes for the delivery of drinking water;
- consideration by governments and producers of other risk-reduction measures such as establishment of extended producer responsibility initiatives and lead battery recycling certification schemes;
- encouragement of exporting countries and private entities to provide information on the lead and cadmium content of materials and risks to importing parties and stakeholders via safety data sheets, certification programmes, databases and labeling schemes;
- the need for governments and the private sector to consider national, regional and global measures to promote substitution of and alternatives to products containing lead and cadmium; and
- the 25th UNEP Governing Council and ICCM2 should reflect upon these needs and action items as a basis for considering further responses.

INTEGRATED PEST MANAGEMENT AND INTEGRATED VECTOR MANAGEMENT

The agenda item on integrated pest management (IPM) and integrated vector management (IVM) (IFCS/FORUM-VI/04.TS) was considered by the IFCS plenary on Thursday afternoon. A small drafting group chaired by Saro Rengam, PAN AP, and Nassereddin Heidari, Iran, met on Thursday evening to draft the IFCS recommendations, which the plenary adopted on Friday.

Heidari, Rengam and Romy Quijano, PAN AP, facilitated the IFCS plenary session, during which delegates heard presentations on IPM and IVM. For more details of these discussions, see: <http://www.iisd.ca/vol15/enb15159e.html>.

Robert Bos, WHO, discussed IVM characteristics including: cost-effectiveness, intersectoral action and community involvement, sustainability, evidence-based decision making, ecosystem analysis, health-based targets, and hierarchical programming.

William Settle, Food and Agriculture Organization (FAO), questioned the assumption that current levels of pesticides are necessary for food security, and emphasized the availability of sustainable alternatives, including the IPM.

STATUS OF IMPLEMENTATION OF IPM AND FURTHER POTENTIAL: Harry van der Wulp, FAO, said IPM: reduces pesticide use and should be part of risk reduction strategies; is being mainstreamed by FAO, the World Bank, the EU and others; and is being implemented globally by producers ranging from small farmers to multinational corporations.

Mohamed Hama Garba, FAO, discussed experiences with regional IPM projects in western Africa. He identified lack of information and training on pest and pesticides management as a serious problem for farmers and discussed “farmer field schools,” which train farmers to make informed decisions.

Hasan Bolkan, Campbell’s Agricultural Research Center, discussed IPM in the food industry, noted its role in his company’s corporate social responsibility programme, and highlighted the need to address public concerns over pesticide residues in food, pesticides in the environment, and workers’ safety.

STATE OF IMPLEMENTATION OF IVM AND FURTHER POTENTIAL: Robert Bos, WHO, identified malaria as the most important vector-borne disease. He outlined factors affecting global vector distribution and noted climate change as an important consideration for future vector-control programmes.

Henk van den Berg, Wageningen University and Research Centre, proposed a framework for decentralized decision making on IVM, and stressed the need for addressing determinants of diseases, including vector behavior and longevity, human behavior, and land use patterns.

V.P. Sharma, Indian Institute of Technology, explained how IVM and IPM have been used to combat malaria in urban settings and called for: expanded IVM programmes; regular vector surveillance; ongoing health impact assessments; improved sanitation in settlements; and implementation of community awareness campaigns.

CROSS-CUTTING ISSUES: R.R. Abeyasinghe, National Malaria Control Programme of Sri Lanka, noted that after using IVM for ten years in his country, spending on insecticides has decreased by 50%, pesticide use has decreased and agricultural

productivity has increased. He said that limiting pesticide availability has contributed to a significant decline in self-poisonings and suicides by farmers.

NEGOTIATIONS ON IPM AND IVM: On Thursday evening a small drafting group on IVM and IPM convened, chaired by Quijano and Heidari. The group worked through the draft recommendations on ecologically-based IPM and IVM, proposing key elements of pesticides risk reduction strategies. No major controversies emerged and the working group reached consensus on the draft text, which was introduced to the plenary on Friday morning and adopted with minor amendments.

Final Outcome: In its recommendations (IFCS/FORUM-VI/07w), the IFCS, *inter alia*, encourages governments and other stakeholders to: adopt a pesticide-use reduction strategy as the first step in risk reduction; and consider IPM and IVM as preferred methods in responding to challenges posed by potential increases in crop pests and vector borne disease transmission due to climate change.

It also calls on governments, IGOs, NGOs and other stakeholders to:

- ensure the sustainability of IPM and IVM achievements by implementing participatory approaches aiming at community empowerment;
- mainstream IPM and IVM in relevant programmes; and
- promote capacity building, training, technology transfer and sharing of information.

The IFCS also:

- encourages intersectoral and cross-border collaboration on IPM and IVM, and development of the necessary regulatory and institutional framework;
- calls on governments to develop mechanisms for supporting and encouraging technical and financial assistance and public and private investments in pest management, to develop national strategies, and to strengthen their planning and development with an IVM component;
- encourages donor countries and institutions to support capacity building and consider supporting research and development programmes;
- calls on the WHO and FAO to strengthen their policy basis for IPM and IVM;
- encourages governments, IGOs, NGOs and other stakeholders to adopt a proactive approach to involve agricultural and health sector in SAICM implementation and other strategies or programmes aimed at chemicals risk reduction; and
- invites the ICCM and other relevant organizations to consider these recommendations for further action.

CLOSING PLENARY

On Friday morning and afternoon, the IFCS closing plenary convened. Delegates adopted recommendations on substitution and alternatives, and on IPM and IVM. They adopted resolutions on the future of the IFCS and on eliminating lead in paints. They also adopted a statement on manufactured nanomaterials, and agreed to reflect the discussions on lead and cadmium in the Chair’s Summary (IFCS/FORUM-VI/07w).

ELECTIONS: The plenary elected Senegal as the new IFCS President and Mauritius, Iran, Poland, Suriname and Switzerland as the five regional Vice-Presidents.

The following countries were elected for the IFCS Forum Standing Committee: Thailand, China, Republic of Korea, Lithuania, the Russian Federation, Chile, Brazil, Austria, France and Germany.

The following organizations will continue as NGO and industry representatives: ISDE, ITUC, PAN, CIEL and the Inter-Organization Programme for the Sound Management of Chemicals, with some nominations pending confirmation from the constituencies.

Senegal thanked delegates for being elected as the new IFCS President and expressed commitment towards achieving the 2020 goals in an atmosphere of transparency and openness.

BUDGET: Delegates adopted the budget as proposed (IFCS/FORUM-VI/11 INF).

MEETING'S REPORT: Several delegates proposed corrections to the meeting's report (IFCS/FORUM-VI/07w), with Argentina suggesting a paragraph on new and additional financial resources and Nigeria highlighting the importance of reflecting the Forum's discussions on lead and cadmium, and lead in paint. Delegates then adopted the meeting's report, which contains all the resolutions, recommendations and the statement as an annex.

CLOSING CEREMONY: Several delegates and IFCS regional Vice-Presidents thanked the host country, IFCS President Szabó, Executive Secretary Stober and the Secretariat for their constructive cooperation, and wished success for the new IFCS President and Forum Standing Committee members.

IFCS President Szabó thanked everyone for their hard work. He lamented the lack of conclusions on lead and cadmium, but expressed hope that a solution would be found at the next meeting, stating he was optimistic about the Forum's future.

Sidy Gueye, Cabinet Director in charge of the Environment, the Protection of Nature, Retention Basins and Artificial Lakes, Senegal, thanked the participants and expressed hope that the Forum's recommendations would be implemented. He especially thanked the WHO for recalling "the very painful" events in Senegal related to lead poisoning of children and stressed the need for better international cooperation on chemicals management. He declared the meeting closed at 4:35 pm.

A BRIEF ANALYSIS OF IFCS VI

SUNSET IN THE WEST?

The most pressing concern of delegates gathered in Dakar for IFCS VI was whether the Intergovernmental Forum for Chemical Safety would live on or disappear into the sunset. While there was general agreement that the IFCS, since its inception in 1994, has played a unique and valuable role in international chemicals management, there was no clear consensus on its fate. While many eyes were focused on the future of the IFCS, two other issues on the agenda, namely nanotechnology and manufactured nanomaterials and the international transport of lead and cadmium via trade, also triggered difficult negotiations. This analysis focuses on these three items that dominated the agenda in Dakar, considers how the debate on the future of the IFCS affected its substantive work, and examines the future prospects and challenges for the IFCS.

IFCS'S ROLE IN INTERNATIONAL CHEMICALS MANAGEMENT: PAST AND FUTURE

The issue of the Forum's future first emerged with the adoption of the Strategic Approach to International Chemicals Management (SAICM) by the International Conference on Chemicals Management (ICCM) in February 2006. With SAICM prioritizing objectives and approaches for international chemicals management, the IFCS was no longer the only overarching coordinating mechanism for international cooperation on chemical safety.

The future of the IFCS in the changing international arena had been on delegates' minds since Forum IV in 2003, however, in Dakar, the issue reached a critical point. Many delegates felt that with several other existing chemicals conventions and fora, streamlining would avoid duplication, enhance synergies and improve cost effectiveness. In fact, some countries, including the US, Japan, Canada, Australia and some Nordic states did not attend the meeting, and some of the major donor countries present in Dakar stated that they did not consider the IFCS financially and politically sustainable in its current form.

There was no lack of praise in Dakar for the Forum's *mode de travail* as providing an open and informal platform, which includes all stakeholders on equal footing. One veteran delegate stated it would be a "real shame to in any way constrain" this fundamental characteristic. Despite these generally held sentiments, considerable divergence of views emerged about the future structure and institutional arrangements that would best enable the IFCS to continue to fulfill these functions. The crucial question was whether to maintain the IFCS as an independent body or integrate it into the ICCM as a subsidiary body.

Most developing countries and developing country NGOs favored maintaining the IFCS as an independent body, emphasizing that the Forum provides a unique forum for representing their interests. Many feared that their voices would hardly be heard on the international chemicals management stage if the IFCS merged with the ICCM. On the other hand, most developed countries present in Dakar, together with some NGOs, favored integrating the IFCS into the ICCM, arguing that the only way to safeguard the Forum's functions and maintain necessary political and financial support was through integration. One delegate said this provided a "unique window of opportunity" to incorporate some of the IFCS's functions into SAICM, thus ensuring they are "cemented" into the international chemicals regime.

The final decision inviting ICCM2 to integrate the Forum as an advisory body was reached after four days of intense negotiations. While sighs of relief were audible at week's end, many delegates also pointed out that the toughest challenges were still to come, the first being the task of gaining ICCM's acceptance of the IFCS recommendation and the second, the successful integration of the IFCS under the ICCM. Many did express optimism that the ICCM would accept the Forum's invitation, indicating that some of the countries absent in Dakar were not necessarily antagonistic to the IFCS, they merely had different funding priorities. Perhaps "a higher, although not insurmountable hurdle," as one seasoned negotiator put it, would be to successfully integrate the IFCS into ICCM while preserving its distinct character. Most, however, felt that acceptance and

integration would in fact be achievable, since the resolution on the future of the IFCS is flexible enough to make it attractive to the ICCM.

SMALL BUT POWERFUL: NANOTECHNOLOGY AND MANUFACTURED NANOMATERIALS

With the inclusion of nanotechnology and manufactured nanomaterials on its agenda, the IFCS had taken up not just one new and emerging issue, but had tackled “the big elephant in the room,” as one delegate said, referring to nanotechnology’s economic and scientific importance, but historical absence from the chemicals agenda. Some speculated that the choice and timing of this agenda item aimed to underscore the Forum’s value in the international chemicals management arena and its usefulness in addressing new and emerging issues.

Discussions on this topic reflected both the uncertainty of scientific evidence in this new field and scope of the IFCS’s mandate. Delegates from some EU countries lamented that the plenary presentations and discussions had focused too much on the social and ethical dimensions of new technologies, stressing that such issues, while important, were outside the IFCS’s mandate. In response to suggestions to limit the scope of the Dakar Statement to manufactured nanomaterials, some delegates from developing countries and NGOs argued that much of the risk to human health and the environment stemmed from the technologies and not merely the products. Disagreement also emerged over global codes of conduct and product labeling, with some developing country delegates pointing out that both issues were of great significance for those with limited capacity to establish national regulatory frameworks and access relevant information. Some European countries considered global codes of conduct premature and stressed the importance of information from sources other than labeling schemes.

Even though most delegates were relieved when agreement was reached on a Statement on Manufactured Nanomaterials during the final hours of the meeting, some questioned the Statement’s value in light of the IFCS’s uncertain future, while others hoped that the Dakar Statement would pave the way for SAICM to take up the issue. One developed country delegate warned that “the absence of some of the most economically powerful countries in the world does not bode well for future discussions and progress on this issue.” Others were more optimistic, saying that maybe even the absence of some of these countries had enabled delegates to agree on the Statement.

INTERNATIONAL TRANSPORT OF LEAD AND CADMIUM VIA TRADE

Heavy metals had been a major topic for discussion at the IFCS’s last meeting in 2006, resulting in the Budapest Statement on Mercury, Lead and Cadmium. Since then, UNEP established the *Ad Hoc* Open-Ended Working Group on Mercury to review and assess measures to address the global issue of mercury and a Working Group on Lead and Cadmium has carried out scientific reviews. Heavy metals are also addressed in the 1998 Protocol on Heavy Metals to the Convention on Long-range Transboundary Air Pollution and SAICM. However, unlike these initiatives, which focus on the mobility of toxic substances via their potential for long-range environmental transport, IFCS VI focused on the mobility of lead and cadmium through international trade. The sensitivity of the issue was such that

many predicted “even touching it would sound alarms” within industry and some countries which rely heavily on trade in these chemicals and related products. Others cited “very disturbing evidence” of the health impacts of lead, in particular.

Some countries, including Germany, Sweden and many African countries, had hoped to make significant progress on the Budapest Statement and agree on moving forward on this issue. Some delegates also speculated that a few countries wanted to use the discussions on lead and cadmium to influence ongoing debates on a possible mercury convention. While many believed that there was sufficient scientific evidence on health and environmental risks posed by the international transport of lead and cadmium via trade to warrant international action, one country and a few industrial groups argued that there was not a solid scientific basis for this conclusion. Many delegations were disappointed that no agreement was reached as a result of irreconcilable differences on the issue, with a minority refusing to negotiate at all.

To add to the difficulties, many delegates were under strict orders to attend the working group on the Forum’s future and did not have enough delegates to participate in the other working groups, including the one on lead and cadmium. The group, therefore, suffered from a serious lack of participants with only a handful of governments present. Some acknowledged the Forum had put the issue of international trade in these chemicals on the international political agenda, pointing out that it is already going to be taken up by the UNEP Governing Council, and will, hopefully, be picked up by ICCM2.

AN UNCERTAIN FUTURE

Upon leaving the meeting, great relief could be seen on the faces of those who had feared for the Forum’s survival in case no decision on its future could be reached. Those who had wished to maintain greater institutional independence were guardedly optimistic, hoping that the Forum’s functions could be maintained within the ICCM.

Many regretted the absence from Dakar of some important industrialized countries, believing this would compromise the integrity of the Forum’s decisions, as these countries might not be amenable to the IFCS’s recommendations. They stressed that these countries can often dominate discussions in other fora, and indicated that this might be of particular concern within the ICCM and the UNEP Governing Council, where IFCS VI’s decisions are expected to be taken up. On the positive side, however, at least one delegate pointed out that the meeting could have had very different dynamics and might not have concluded with a realistic and balanced resolution on the IFCS’s future if these countries had actively participated.

However, the future of the IFCS is still uncertain. Even if efforts to integrate the IFCS into the ICCM, are successful, the fact remains that SAICM is still in its infancy, with its own structure still under development and financial challenges. This might constrain its ability to effectively incorporate the IFCS. Of critical importance will be the political will of countries to continue to support the Forum in its new incarnation. But the first and crucial step has now been taken to ensure the Forum’s survival, and from that perspective, it is a successful outcome. The next few months will be critical as some countries will be working hard to shore up support by ICCM2 in May 2009 to

ensure that the value of the Forum and those characteristics that make it unique on the international stage do not disappear into the sunset.

UPCOMING MEETINGS

SECOND MEETING OF THE *AD HOC* OPEN-ENDED WORKING GROUP ON MERCURY: This meeting will be held from 6-10 October 2008, in Nairobi, Kenya. For more information, contact: UNEP Chemicals Branch, Division of Technology, Industry and Economics; tel: +41-22-917-8183; fax: +41-22-797-3460; e-mail: mercury@chemicals.unep.ch; internet: <http://www.chem.unep.ch/mercury/OEWG2/Meeting.htm>

FOURTH MEETING OF THE PERSISTENT ORGANIC POLLUTANTS REVIEW COMMITTEE (POPRC-4): POPRC-4 will meet in Geneva, Switzerland, from 13-17 October 2008. The 31 Committee members will review the chemicals proposed for listing under Annex A, B and/or C of the Stockholm Convention and to discuss other relevant issues. For more information, contact: Stockholm Convention Secretariat; tel: +41-22-917-8729; fax: +41-22-917-8098; e-mail: ssc@pops.int; internet: <http://www.pops.int>

MEETING OF THE OPEN-ENDED LEGAL AND TECHNICAL WORKING GROUP FOR THE ICCM: The Open-ended Legal and Technical Working Group for ICCM 2 will take place in Rome, Italy, from 22-24 October 2008. For more information, contact SAICM Secretariat; tel: +41-22-917-8532; fax: +41-22-797-3460; e-mail: saicm@chemicals.unep.ch; internet: <http://www.chem.unep.ch/saicm/OELTWG/Open-ended.htm>

FOURTH MEETING OF THE CONFERENCE OF PARTIES TO THE ROTTERDAM CONVENTION (PIC COP-4): The fourth meeting of the Conference of Parties to the Rotterdam Convention will take place in Rome, Italy, from 27-31 October 2008. For more information, contact: Rotterdam Convention Secretariat; tel: +41-22-917-8296; fax: +41-22-917-8082; e-mail: pic@pic.int; internet: <http://www.pic.int>

STAKEHOLDERS' MEETING TO REVIEW THE DRAFT BUSINESS PLAN TO PROMOTE A GLOBAL PARTNERSHIP FOR DEVELOPING ALTERNATIVES TO DDT: This meeting will be held in Geneva, Switzerland, from 3-5 November 2008. For more information, contact: Stockholm Convention Secretariat; tel: +41-22-917-8729; fax: +41-22-917-8098; e-mail: ssc@pops.int; internet: www.pops.int

TWENTY-FIFTH SESSION OF THE UNEP GOVERNING COUNCIL/GLOBAL MINISTERIAL ENVIRONMENT FORUM: The 25th session of the UNEP Governing Council/Global Ministerial Environment Forum will take place in Nairobi, Kenya, from 16-20 February 2009. For more information, contact: Secretary of UNEP Governing Council; tel: +254-20-76234311; fax: +254-20-7623929; e-mail: unepinfo@unep.org; internet: <http://www.unep.org>

FOURTH MEETING OF THE CONFERENCE OF PARTIES TO THE STOCKHOLM CONVENTION ON PERSISTENT ORGANIC POLLUTANTS: The fourth meeting of the Conference of Parties to the Stockholm Convention on Persistent Organic Pollutants will take place from 4-8 May 2009, in Geneva, Switzerland. It will address, *inter alia*: a non-compliance mechanism; synergies between the Rotterdam, Basel and Stockholm Conventions; and

recommendations from the POPRC to schedule further chemicals under the Convention. For more information, contact: Stockholm Convention Secretariat; tel: +41-22-917-8729; fax: +41-22-917-8098; e-mail: ssc@pops.int; internet: <http://www.pops.int>

SECOND SESSION OF THE INTERNATIONAL CONFERENCE ON CHEMICALS MANAGEMENT:

ICCM2 is tentatively scheduled to take place 11-15 May 2009 in Geneva, Switzerland, immediately before the 62nd World Health Assembly. For more information, contact: SAICM Secretariat; tel: +41-22-917-8532; fax: +41-22-797-3460; e-mail: saicm@chemicals.unep.ch; internet: <http://www.chem.unep.ch/saicm/iccm/ICCM2/iccm2.htm>

GLOSSARY

CEE	Central and Eastern European Group
CIEL	Center for International Environmental Law
FAO	UN Food and Agriculture Organization
GHS	Globally Harmonized System for the Classification and Labeling of Chemicals
ICCM	International Conference on Chemicals Management
IFCS	Intergovernmental Forum on Chemical Safety
ILO	International Labor Organization
IPCS	International Programme on Chemical Safety
IPM	Integrated Pest Management
ISDE	International Society of Doctors for the Environment
ITUC	International Trade Union Confederation
IVM	Integrated Vector Management
JPOI	Johannesburg Plan of Implementation
OECD	Organization for Economic Cooperation and Development
PAN	Pesticide Action Network
PAN AP	Pesticide Action Network Asia and the Pacific
PRTRs	Pollutant release and transfer registers
SAICM	Strategic Approach to International Chemicals Management
UNEP	United Nations Environment Programme
UNCED	United Nations Conference on Environment and Development
WEOG	Western European and Others Group
WHO	World Health Organization