



**Intergovernmental Forum on Chemical Safety**  
*Global Partnerships for Chemical Safety*

*Contributing to the 2020 Goal*  
*Sixth session – Forum VI*

**15-19 September 2008 (Pre-meetings 14 September 2008)**  
**Dakar, Senegal**

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## **Information Circular**

The Sixth Session of the Intergovernmental Forum on Chemical Safety (Forum VI) will be held from Monday 15 to Friday 19 September 2008 hosted by the Government of Senegal, in Dakar. The theme of Forum VI will be *Contributing to the 2020 Goal*.

Forum VI Provisional Agenda includes the following topics:

- Nanotechnology and nanomaterials: opportunities and challenges
- Substitution and alternatives
- International transport of lead and cadmium via trade: an international concern?
- Ecologically based Integrated Pest Management and Integrated Vector Management: key elements of pesticide risk reduction strategies
- Future of IFCS

The proposed Provisional Agenda, Overview of the Programme and Proposed General Time Schedule and meeting documents are available on the IFCS Forum VI website (<http://www.who.int/ifcs/forums/six/en/index.html>).

### ***Nanotechnology and nanomaterials: opportunities and challenges***

Nanotechnology is a rapidly emerging technological approach that is expected to result in major changes across many industry sectors. This may bring many advances to society and benefits for the environment, but also poses new challenges, especially in health and safety. To date discussions on the potential benefits of nanotechnology have, for the most part, taken place separately from those on the potential risks to human health and the environment of nanomaterials. Such discussions should take place concurrently. As a result of nanotechnology's rapidly burgeoning growth, it is important that all stakeholders concerned (governments, international, regional and national organizations, industry groups, public interest associations, labour organizations, scientific associations and civil society) engage in discussions to identify and address issues that may impact health and safety in positive or negative ways.

Governments around the world are looking at the new opportunities offered by nanotechnology and are keen to understand, avoid, reduce and manage risks associated with this new technology and nanomaterials.

The objective of the plenary session will be to exchange information in order to help raise the awareness of participants to the potential new opportunities, the new challenges and the new hazards and risks posed by nanotechnology. The meeting will provide a forum to share information on known and emerging issues, on the work of the OECD and ISO on nanotechnology and to foster an understanding of issues (applications and implications). The Forum will also be an opportunity to discuss the potential contributions of nanotechnology to sustainable development and to discuss how to achieve an equitable distribution of benefits and risks and role of responsible stewardship in addressing nanotechnology.

### ***Substitution and alternatives***

Substitution has been one of the tools for the protection of the environment virtually since the beginning of environmental policy. To replace harmful substances and processes with less harmful ones or with non-chemical alternatives, can be an effective strategy to reduce risks to human health and the environment. Substitution is thus a strategy of risk reduction through implementing solutions to prevent human and environmental exposure to certain chemical hazards while still achieving the intended goal. In other words: substitution is not a goal on its own. Moreover in most cases of chemicals management there are several paths for achieving a specific goal or service which offer the possibility to choose among various alternatives according to specific criteria.

Substitution is a common and inherent process of technological development, industrial business and innovation. The ability to substitute one chemical product should be approached on a life-cycle basis with a consideration of the risks, costs and benefits of substitution. It is important to assure that recommendations on substitution include a focus on performance of alternatives, and possible use of incentives as options to encourage a transition, particularly to encourage an understanding of what societal tradeoffs are to be expected. Beside the economic drivers, such as increase in resource-efficiency, improvement of the environmental and toxicological profile of industrial activities should be a reason to substitute a chemical substance or its application with more favorable substances/technologies. These alternative solutions shall not be seen as being restricted to chemical-based options.

The objectives of the plenary session is to raise awareness and discuss substitution (both chemical and non-chemical alternatives) as a proven and effective instrument to lower risks, in a multi-perspective, multi-stakeholder way; to identify and analyse potential triggers and drivers of substitution processes including analytical tools supporting prioritization and subsequent decision making; to determine ways and approaches to implement substitution, and to discuss process mechanisms for substitution, particularly for resource poor countries.

### ***International transport of lead and cadmium via trade: an international concern?***

The toxicity and eco-toxicity of lead and cadmium and their routes of exposure have been extensively studied and described by national governments and international bodies. Lead and cadmium can be toxic at very low exposure levels and have both acute and chronic effects on human health and the environment. Health and environmental harms caused by exposure to lead and cadmium throughout their lifecycles occur every day around the world.

Global trade in products and materials is expanding dramatically. The trade flows of lead and cadmium and products and wastes containing them are complex due to rapid globalization. Global use of ores, compounds, products, and wastes continues apace for cadmium, and is increasing for lead. Electronic wastes, the fastest growing component of municipal waste worldwide, are exported to countries that are unable to manage them in an environmentally sound manner.

Exposure to lead and cadmium ores, compounds, and products and wastes containing lead and cadmium that place people and wild flora and fauna at risk are well documented and occur in most, if not all, countries of the world. The UNEP Executive Director states that the “key findings developed by the [Lead and Cadmium] Working Group show that there is a significant international dimension of the risks to human health and the environment arising from the release of lead and cadmium into the environment. . . .”<sup>1</sup>

The objective of the Forum VI session on lead and cadmium is to examine whether the dispersal of lead and cadmium through international trade of these metals as commodities and in products and wastes may warrant coordinated international action to protect human health and the environment. The Forum is requested to consider whether such trade may lead to problems that cannot be addressed by countries acting alone, whether those problems may rise to the level of an international concern, and thus whether they call for a coordinated international approach to addressing them. The Forum may wish to examine this question from the point of view of both producing and consuming countries, and especially developing countries and countries in transition.

If the Forum concludes that adverse effects related to mobility of these metals through international trade may warrant coordinated international action, then the Forum may wish to consider what additional steps or actions may be desirable, including the means for their implementation.

The Forum VI session on lead and cadmium responds to the requests of the World Summit on Sustainable Development (WSSD), UNEP Governing Council and Forum V to identify effective ways to reduce exposure and to promote reduction of risks. The session is intended to complement other ongoing United Nations work on lead and cadmium by providing input to discussions on the subject that may take place in 2009 at the second International Conference on Chemicals Management (ICCM-2) and the Twenty-Fifth Session of the UNEP Governing Council.

***Ecologically based Integrated Pest Management and Integrated Vector Management: key elements of pesticide risk reduction strategies***

There is strong and broad evidence that Integrated Pest Management (IPM) and Integrated Vector Management (IVM) offer valid alternatives for conventional pest and vector control that tend to rely on use of pesticides. As such, these approaches can make substantial contributions to reduction in the use of pesticides and associated risks.

There is a need for global support to strengthen IPM and IVM through policy reform, capacity building, and education. There is a need for countries and regions around the world to take the necessary legislative and/or administrative measures to achieve pesticide risk reduction through reduced use of chemical insecticides and selection of less hazardous products when use of pesticides is deemed justified. Replacement of pesticides by environmentally and

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<sup>1</sup> UNEP Governing Council, *Interim reviews of scientific information on lead and cadmium: Note by the Executive Director*, UNEP/GC/24/INF/16 (2006).

ecologically friendly measures such as biological control and environment management, are an important element of strategies to reduce reliance on pesticides.

The purpose of the session at Forum VI is to support and encourage governments, intergovernmental organizations, non-governmental organizations and the private sector to strengthen the role of IPM and IVM in pesticide risk reduction strategies, while maintaining the potential for agricultural pest and vector-borne disease control. The overall objectives of the session are to:

- describe the key features of ecologically sound pest management through IPM and IVM;
- provide information on existing IPM and IVM programmes;
- provide information on various stakeholders, programmes and activities contributing to implementing best practices in IPM and IVM;
- describe case studies of successful implementation of IPM and IVM;
- identify opportunities and challenges for broader application of IPM and IVM;
- consider policy and institutional impediments and how these could be addressed;
- consider ways and means to strengthen inter-sectoral collaboration and regional and international cooperation.

### ***Future of IFCS***

The Future of IFCS will be a substantive Forum VI agenda topic. At the International Conference on Chemicals Management (ICCM, February 2006) governments and other stakeholders invited IFCS to continue its important role in providing an open, transparent and inclusive forum for discussing issues of common interest and also new and emerging issues, and to continue to contribute through this to the implementation of the Strategic Approach to International Chemicals Management (SAICM) and the work of other chemicals-related international organizations and institutions. At the fifth session of the IFCS (Forum V), held in Budapest, Hungary, from 25-29 September 2006, participants acknowledged the unique and value added role IFCS has as a forum serving as a bridge between science and policy and for discussing issues and building consensus. Forum V recognized the desirability to continue to have such a forum and adopted a resolution on the future of IFCS. The Resolution expresses appreciation for "the unique multi-faceted role that IFCS has played as a flexible, open and transparent brainstorming and bridge-building forum for governments, intergovernmental organizations and non-governmental organizations including from the private sector which has facilitated consensus building". The Resolution established a working group to prepare a draft decision on the future role and functions of IFCS for consideration at Forum VI. The WG has prepared a draft decision document including proposals for the future role and functions of the IFCS, options for its institutional arrangement, its possible relationship to the ICCM, and its contribution to the implementation of the SAICM and the work of other chemicals-related organizations and institutions, for consideration at Forum VI.

Further information is available on the Forum WG on the Future of IFCS website at: [http://www.who.int/ifcs/standingcommittee/future\\_ifcs/en/index.html](http://www.who.int/ifcs/standingcommittee/future_ifcs/en/index.html)

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Forum VI will once again provide countries the opportunity to discuss issues on the international agenda and emphasize their special needs and concerns with respect to improving chemicals management.

The Forum Standing Committee (FSC) provides guidance for the preparation of plenary agenda topics and considers other topics that may be suggested by FSC members and IFCS participants. The FSC guides the process of development of meeting materials and documents following the practice of lead country/sponsor/organization approach to preparing materials for agenda items. Working Groups (WG) have been established for each of the topics. The list of lead sponsors and WG members are available on the IFCS website at: [http://www.who.int/ifcs/documents/standingcommittee/work\\_groups/en/index.html](http://www.who.int/ifcs/documents/standingcommittee/work_groups/en/index.html)

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The FSC consists of 25 members, including the IFCS President and 5 regional Vice-Presidents, who oversee and guide the work of the Forum between sessions. Under the guidance of the President, the FSC assists with preparations for Forum meetings. FSC members serve as conduits for the views of the regions, or organizations that they represent.

FSC members represent you in the ongoing work of the IFCS. IFCS participants are encouraged to contact your representative and actively contribute to the work of the FSC. For a current list of FSC members, FSC meeting reports, and the Terms of Reference for the FSC, please visit: <http://www.who.int/ifcs/standingcommittee/en/>