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Items 4 and 6 of the provisional agenda*

Assessment, monitoring and early warning: state of the environment

**Follow-up to the World Summit on Sustainable Development: contribution
of the United Nations Environment Programme to the forthcoming session
of the Commission on Sustainable Development**

**Views submitted by Governments, intergovernmental organizations
and non-governmental organizations on the progress made on a
mercury programme**

Note by the Executive Director

The Executive Director has the honour to provide, in the annex to the present note, a background report on the views submitted by Governments, intergovernmental organizations and non-governmental organizations with regard to the progress made in the implementation of Governing Council decision 22/4 V of 7 February 2003 on a mercury programme, especially with regard to any goals or national actions taken, views on the need for further measures to address significant global adverse impacts of mercury and its compounds, and further action on other heavy metals such as lead and cadmium, as requested in decision 22/4 V. The annex is being circulated, without formal editing.

* UNEP/GC.23/1.

Annex

Progress made in implementation of decision 22/4 V of 7 February 2003 on a mercury programme, especially with regard to any goals or national actions taken, views on the need for further measures to address significant global adverse impacts of mercury and its compounds, and further action on other heavy metals

I. Conclusion

1. Owing to the limited number of Governments that responded to the invitation from the Executive Director to submit information on progress made in implementing decision 22/4 V on a mercury programme, and any views on need for further measures for addressing significant global adverse impacts of mercury and for further action on other heavy metals and the diversity in the views expressed, it is difficult to summarize any specific conclusions on progress made or formulate any consolidated views with regard to the way forward in addressing the significant global adverse impacts of mercury on human health and the environment.
2. A more detailed synthesis of the views and options submitted can be found in document UNEP/GC.23/3/Add1, chapter II, section B, on a mercury programme.

II. Background

3. Governing Council decision 22/4 V, in subparagraphs 9 and 10, requested the Executive Director to invite submissions from Governments on their views with regard to further measures for addressing the significant global adverse impacts of mercury and its compounds and submissions from Governments, intergovernmental organizations and other stakeholders on what further action might be taken with regard to other heavy metals, for example, lead and cadmium.
4. In response to that request, all Governments and other relevant organizations were invited, through a letter dated 23 February 2004, to submit views, with a response deadline of 1 July 2004, with regard to the following points:
 - (a) To report on any progress made in the implementation of decision 22/4 V, especially with regard to any goals or national actions taken since the last Governing Council session, with the objective of identifying exposed populations and ecosystems, and reducing anthropogenic mercury releases that have an impact on human health and the environment;
 - (b) To provide any views with regard to the need for further measures for addressing the significant global adverse impacts of mercury and its compounds, including, for example, views on the possibility of developing a legally binding instrument, a non-legally binding instrument or other measures or actions; and
 - (c) To provide any views on what further action might be taken with regard to other heavy metals, for example, lead and cadmium.
5. As of 15 December 2004, submissions had been received from 27 Governments and regional economic integration organizations (Afghanistan, Australia, Benin, Botswana, Burundi, Canada, Côte d'Ivoire, Czech Republic, Denmark, European Union, Guinea, Jordan, Hungary, Madagascar, Mauritius, Mexico, Monaco, Norway, Philippines, Republic of Moldova, Slovakia, Sweden, Switzerland, Syrian Arab Republic, Thailand, Turkey and the United States of America). In addition, five intergovernmental organizations (Arab Fund for Economic and Social Development, International Council for the Exploration of the Sea, United Nations Economic Commission for Africa, United Nations Economic and Social Commission for Western Asia and the World Trade Organization) and 13 non-governmental organizations (Uppsala University in Sweden, National Wildlife Federation, Sierra

Legal Defence Fund and Lake Wabamun Enhancement and Protection Association, the World Chlorine Council and a coalition of environmental organizations consisting of the following organizations: the Natural Resources Defense Council, the Mercury Policy Project, Greenpeace, the Basel Action Network, Arnika Association, the European Environmental Bureau, Associação de Combate aos POPs, Toxics Link and the Ban Hg Working Group) responded to the letter from UNEP.

III. Factual analysis of views and options submitted

6. Governing Council decision 22/4 V, in subparagraphs 9 and 10, requested the Executive Director to present the submissions, as described in section II above, a factual analysis of such submissions and a synthesis of views and options submitted for consideration by the Governing Council at its twenty-third session, in the light of progress in the further development of the UNEP global mercury programme.

7. The factual analysis of the views and options submitted is given in the appendix to the present document. The full text of each submission can be viewed on the UNEP mercury programme web page at <http://www.chem.unep.ch/mercury/Preparations-GC23-2005.htm>.

8. A synthesis of the views and options submitted before 1 October 2004, structured according to the points described above, can be found in document UNEP/GC.23/3/Add.1, chapter II, section B, on a mercury programme.

Appendix

Factual analysis of views and options submitted

The tables below contain brief summaries of the information contained in the individual submissions. As the summaries below have not been reviewed by the submitting institution, the full submission should be consulted for further details. The full text of each submission can be viewed on the UNEP mercury programme web page at <http://www.chem.unep.ch/mercury/Preparations-GC23-2005.htm>.

Country	Progress made in implementation of decision 22/4 V, especially with regard to any goals or national actions taken	Views on need for further measures for addressing the significant global adverse impacts of mercury and its compounds	Views on what further action might be taken with regard to other heavy metals, e.g., lead and cadmium
Afghanistan	Afghanistan confirms the implementation of the goals of decision 22/4 V, <i>inter alia</i> , promoting measures to reduce human-generated mercury release that have adverse impact on human health and environment. They identify a focal point to work and keep contact with future activities of the mercury programme and cooperate with the overall aim of reducing human-induced mercury releases and their adverse impacts on human health and the environment.		
Australia	<p>Since the twenty-second session of the Governing Council in February 2003, Australia has undertaken a number of actions to address sources, pathways and action in relation to mercury in Australia. These include:</p> <ul style="list-style-type: none"> • Review of sources, pathways and management of mercury releases, identifying those industries producing the highest levels of mercury releases; • Annual monitoring, through the National Residues Survey, of chemical residues and contaminants in food and fibre, including levels of mercury in seafood; • Updated recommendations on weekly consumption limits for seafood for certain vulnerable consumer groups (March 2004); • Lowered exposure standards for mercury as inorganic divalent compounds. The new limits are set as follows: Time Weighted Average (TWA) at 0.003 ppm and Short Term Exposure Limit at 0.025 mg/m³; • Review of possible health effects of mercury from dental amalgams. The report recommends that, where possible, exposure to mercury from dental amalgams be reduced if a safe and practical alternative exists, especially for special populations, including children, women in pregnancy and persons with existing kidney disease. Local governments are moving to 	<p>Australia states that the challenge for the international community is to identify the course of action that will reduce releases of mercury to the environment most rapidly and at least cost. In its view, the most efficient and effective way of consolidating and accelerating action on mercury is allocating available resources to national and regional action, supported and coordinated through the UNEP mercury programme, making use of the existing multilateral environmental agreements provisions to support and reinforce the programme.</p> <p>Australia therefore supports the continuation and intensification of these national and regional activities under the mercury programme, including further action to raise awareness and to fill data gaps with respect to mercury use, releases and exposures.</p> <p>More information is needed, in particular, in trends in different uses of mercury. Australia identifies a need for research to identify areas with concentration of mercury and better target measures to reduce the presence of mercury in the marine environment.</p>	<p>Australia states that the potential for lead and cadmium exposure to effect intellectual and physical development, particularly in children, is of concern. Unlike mercury, no significant transboundary movement has been identified for lead or cadmium.</p> <p>Australia therefore views national action rather than international action as a more appropriate response to addressing lead and cadmium releases and exposure.</p> <p>Australia strongly supports UNEP Governing Council decision 21/6 calling upon Governments that have not yet done so to eliminate the use of lead in gasoline.</p> <p>Australia has already undertaken a number of major activities aimed to manage and significantly reduce exposure to lead in Australia, such as the phasing out of leaded fuel and setting guidelines for maximum lead concentrations in air, food, drinking water,</p>

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	<p>take action to reduce releases of dental amalgams by requiring dental surgeries to implement amalgam interception traps and send removed mercury for recycling;</p> <ul style="list-style-type: none"> • Compulsory reporting through the National Pollutant Inventory of the types and amounts of mercury compounds being released to the environment from various industries. A more complete picture of industrial mercury emissions in Australia for 2002/03 has been published in the National Pollutant Inventory; • Notification and assessment of any new mercury based industrial chemical through the National Industrial Chemicals Notification and Assessment Scheme (NICNAS) of any new pesticide or veterinary medicine through the Australian Pesticides and Veterinary Medicine Authority (APVMA); • Operation of a mercury recovery facility that accepts waste dental amalgam pieces, fluorescent light tubes, measuring instruments, electrical components, batteries and other mercury products. The end mercury product is sold for use in dental amalgam; and • Decommissioning of all mercury cell based chlor-alkali plants - the last plant closed in 2002. 	<p>The Governing Council and the concerned international community more generally should keep the mercury programme under close review so that further action can be considered if it becomes evident that progress is inadequate.</p>	<p>irrigation water, fresh and marine water and contaminated sites.</p>
Benin	<p>Benin has not made any comprehensive studies on the impacts of mercury in the country.</p>	<p>Benin does, however, intend to initiate some action in the close future, including:</p> <ul style="list-style-type: none"> • Establishment of inventories concerning the use of mercury, releases and contaminated sites; and • Awareness-raising among the general public of the adverse effects of mercury. 	<p>Actions have been taken, from March 2004 to December 2004 to eliminate lead in fuel.</p> <p>A national plan will be elaborated within the context of the Basel Convention, taking into account heavy metals.</p> <p>Raising awareness of the adverse impacts of mercury and other heavy metals among the general public is needed.</p>
Botswana	<p>Botswana has not been able to make an assessment of the national mercury situation.</p> <p>Clinical audits conducted in public health facilities (2002 and 2003) showed that there is a lack of appropriate facilities in the country to properly recycle and dispose mercury. The audits are continuing.</p>	<p>Botswana would like to be assisted in the development of a mercury inventory of uses and releases, identifying populations at risk, capacity building activities, etc. under the UNEP mercury programme.</p>	

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	Efforts are being made by the Environmental Health Unit (EHU) with other stakeholders to develop guidelines on collection and disposal of mercury.		
Burundi	<p>In Burundi, the use of mercury and its compounds as a pesticide in the agricultural sector has been banned since 2001. Other sectors, agreed unanimously that the mercury should be restricted where still in use.</p> <p>Burundi has concentrated its efforts on the following objectives, based on proposals made by the Mercury Focal Point, the Focal Point of the Basel Convention and the Focal Point to FICS:</p> <ul style="list-style-type: none"> • Seek data concerning the release of mercury and the assessment of mercury and inorganic mercury compounds and their adverse impacts; • Raise awareness among decision makers and general public about the impacts of mercury; and • Search for technical and financial assistance for a national evaluation of the mercury aiming to reduce the use of mercury and their stocks. <p>The identification of zones at risk is to be initiated very soon.</p>	<p>Burundi should take legislative and other measures in order to control mercury sales and transport at national level.</p> <p>Burundi would like to include, as one of the national priorities identified through the elaboration of their national profile for the management of chemicals, the reduction of the use of mercury.</p> <p>Burundi should carry out awareness raising campaigns to inform the general public, especially children, pregnant women, women planning to become pregnant, communities consuming fish, artisanal gold miners, and people working in hospitals and dental clinics about the adverse impacts of mercury.</p> <p>Burundi seeks technical and financial assistance for gradual substitution of mercury.</p>	Burundi encourages participating in relevant international conventions dealing with mercury and heavy metals.
Canada	<p>Canada continues to monitor mercury levels in various media and develop and implement domestic programmes to decrease its anthropogenic emissions of mercury. These include:</p> <ul style="list-style-type: none"> • The Canadian Northern Contaminants Programme monitors mercury levels in abiotic and biotic environmental media as well as in human blood and hair; • The North American Commission for Environmental Cooperation is currently undertaking a study of Persistent Organic Pollutants and various toxic metals including mercury in maternal blood in Canada, the United States and Mexico; • Domestically, the federal, provincial and territorial governments work together under the auspices of the Canadian Council of Ministers of the Environment in developing Canada-wide standards for mercury – currently, standards have been endorsed for emissions from incinerators and base metal smelters, mercury-containing lamps, dental amalgam waste, and are under development for the coal-fired electric power 	<p>Canada believes that key actions to reduce risks to human health and the environment from global anthropogenic mercury releases include taking action globally to:</p> <ul style="list-style-type: none"> • Reduce mercury emissions, including reducing or eliminating the use of mercury in products and processes; • Manage mercury currently used in products and processes in an environmentally sound manner; • Maintain inventories of mercury emissions; • Monitor environmental levels; • Enhance risk communication and awareness raising; and • Improve international cooperation, including through 	Canada is unaware of scientific evidence to indicate that other heavy metals, including lead and cadmium, pose a global rather than a regional-scale environmental and human health concern due to atmospheric transport. Should such evidence exist, Canada encourages its being made available as soon as possible. Without such evidence, Canada does not see a need to undertake global actions additional to those that already exist, for example the Basel Convention and UNEP decision 22/4 III on lead, to address other heavy metals.

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	<p>generation sector;</p> <ul style="list-style-type: none"> Individual provinces and territories have carried out the development of air emissions management framework for the electricity sector (Alberta), mercury emission reduction action plans (Eastern Provinces), programs to collect and manage mercury-containing products and regulations requiring closure of hospital incinerators (Ontario). <p>Canada has also been very active in advancing international action on mercury, since a large portion of the mercury deposited from the atmosphere in Canada comes from foreign sources. Current international activities in which Canada is engaged include a regional-scale binding agreement, regional action plans and strategies, a regional project and bilateral initiatives.</p> <p>Canada was pleased to make financial contributions to the UNEP global mercury assessment and the UNEP mercury programme in 2001 and 2003 and technical contributions in the form of resource materials and expertise for regional workshops.</p> <p>Canada has also engaged in a number of regional and bilateral mercury-related activities e.g. the UNECE Heavy Metals Protocol, the Great Lakes Binational Toxics Strategy, the Mercury Work Group of the New England Governors-Eastern Canadian Premiers Conference, the Arctic Council, etc.</p> <p>In 2003, in consultation with India's representative to the Global Mercury Assessment Working Group, Environment Canada commissioned a preliminary study of mercury emissions in India. In 2004, Environment Canada and China's State Environmental Protection Administration held a symposium on mercury management in Beijing. Future possibilities for collaborative work on mercury are being explored.</p>	<p>technical and financial assistance.</p> <p>Canada has, to date, indicated preference for a voluntary or action-plan approach over a binding agreement for mercury, with the emphasis on immediate actions that achieve results. This stance acknowledges the significant time and financial resources needed, both at the national and international levels, to negotiate and implement a binding agreement. In Canada's view, these valuable resources would be better directed towards more immediate and effective programmes.</p> <p>For the immediate future, Canada is interested in the continuance and strengthening of the UNEP Global mercury programme and in exploring other effective non-binding approaches with other countries before, at and following the February 2005 meeting of the Governing Council. It is possible that if countries assessed the potential costs of negotiating a binding agreement, and re-direct these resources to the Global Mercury Programme, some real advances could be made in the short to medium term.</p>	
Côte d'Ivoire	<p>Côte d'Ivoire has undertaken information and awareness raising campaigns among the general public in relation to the adverse impacts on human health and the environment from toxic persistent substances, including mercury.</p>	<p>Côte d'Ivoire would like to elaborate an inventory of mercury production and use, which should include the identification of vulnerable ecosystems.</p> <p>Côte d'Ivoire wishes to elaborate a national plan for the sound management of mercury.</p>	<p>In the view of Côte d'Ivoire, the management of lead and cadmium could be associated with the measures and actions proposed for mercury.</p>
Czech Republic	<p>As of the date of accession of the Czech Republic to the European Union, 1 May, 2004, the legislation of the Czech Republic related to the potential pollution of the environment by mercury and its compounds was fully</p>		

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	<p>harmonised with the existing legislation of the European Communities in this area. The necessary amendments to the laws and relevant implementing regulations related to the pollution of the environment by mercury and other heavy metals were adopted during 2003–2004. The Czech Republic will attempt to comply with all its obligations from the EC legislation and also to implement voluntary agreements. No further measures are being proposed, because of the high costs for both the state and the private sector.</p> <p>Mercury is used in major amounts in the country only in the electrolytic production of chlorine – there are currently two production companies with mercury based production. As a consequence of legislative pressure, the conversion of amalgam electrolysis to a membrane process in a company carrying out production of chlorine, could take place from 2010 or later.</p> <p>Another problem associated with the plants is mercury contamination in the immediate surroundings from many years of using this mercury-based technology. The state has financed the remediation of old burdens and decontamination from the amalgam electrolysis operations. Financial means are preferentially directed towards remedying old mercury burdens and only subsequently will emphasis be placed on replacement of the chlorine production technology.</p> <p>With regard to international commitments, in 2002, the Czech Republic ratified the Protocol on Heavy Metals to the Convention on Longrange Transboundary Air Pollution. The Czech Republic, under the Convention on International Protection of the Labe, included a set of legislative and non-legislative measures to reduce introduction of mercury into the aquatic environment (April, 2004)</p> <p>The Czech Republic has also signed the Protocol on the Pollution Release and Transfer Register (PRTR) under the Aarhus Convention and in this connection has introduced a system for reporting pollutants –including mercury, cadmium and lead and their compounds (Government Order No. 368/2003) on the Integrated Pollution Register.</p> <p>A voluntary agreement between the Ministry of Environment and the Czech Dental Chamber was signed in 2001 for the reduction of the environment load by mercury from stomatological medical facilities, through the installation of amalgam separators with minimum efficiency of 95 per cent in gradual steps by the year 2005. The Water Mains and Sewer Association joined the agreement in April 2004.</p>		

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Denmark	<p>Since the last Governing Council session in February 2003, Denmark issued revised and strengthened legislation restricting the use of mercury in products. There is a general ban on import, sale, and export of mercury and mercury containing products (1 July 2003).</p> <p>On the regional level Denmark has supported and co-ordinated a regional project under the Arctic Council Action Plan (ACAP) "Reduction of atmospheric mercury emissions from Arctic countries". The project includes assessment activities covering all the Arctic countries as well as a special mercury release inventory for the Russian Federation. The activities form the background for initiating a demonstration project on mercury release reductions in the Russian Federation.</p> <p>Denmark also co-ordinates the support of "priority setting" for the Russian Federation as well as preparation of proposals for further action for the other Arctic countries, including two ACAP reports that can be accessed in January 2005 as submissions from Denmark on the UNEP mercury programme webpage at http://www.chem.unep.ch/mercury/Preparations-GC23-2005.htm. While extensive mercury release reductions have been attained in the Arctic countries over the last decades, the report identifies potentials for further reductions and provides a basis for mutual inspiration for reduction efforts.</p>	<p>According to Denmark, the challenge is what "further international action" can be agreed to abate the mercury problems. The UNEP mercury programme seems to be one step in the right direction. It is, however, not sufficient to reduce and eliminate anthropogenic uses and releases of mercury and mercury compounds in an efficient way.</p> <p>Denmark is of the opinion that the most efficient way to tackle the mercury problem is to minimise the deliberate use of mercury. Mercury should be banned and restricted as much as possible also on all levels nationally, regionally and globally. Denmark chose many years ago to make severe restrictions on use of mercury in products. According to Denmark's experience, alternatives exist for nearly all uses, and the use of mercury in Denmark has been drastically reduced.</p> <p>The development of an international binding instrument on mercury, preferably in the form of an instrument on heavy metals, is in Denmark's opinion the best way forward and the most effective measure to tackle the serious mercury problems. Denmark hopes that the immediate start of the process towards such an instrument will be the result of the Governing Council meeting in 2005.</p>	<p>Denmark states that the environmental fate and the toxicity of lead and cadmium call for a global initiative aimed at minimising human and environmental consequences of the ongoing emissions. The relevance of considering a global initiative comes, furthermore, from the fact, that lead and cadmium used intentionally in products is traded globally.</p> <p>In the long term, Denmark would support the development of a global binding instrument not only for mercury, but also including other heavy metals as cadmium and lead. Denmark's vision is a binding instrument on heavy metals, however, Denmark believes that it should start with mercury.</p> <p>A possible first step could be to initiate a global assessment on lead and cadmium including collection and evaluation of the present data on production, use, emissions and restrictions.</p>
European Union	<p>There is already a significant body of European Union legislation and policy in place or in the pipeline relating to mercury, several of the measures have been updated or newly developed since the last Governing Council's discussions on mercury. In particular, the Council of the European Union and the European Parliament agreed on a fourth "daughter" directive, relating to arsenic, cadmium, nickel, mercury and polycyclic aromatic hydrocarbons, under the European Union's air quality framework legislation. This will require measurement of mercury concentrations in ambient air and deposition.</p> <p>In addition, also, an assessment of dietary exposure to mercury and other metals (arsenic, cadmium and lead) of the population of the European Union Member States was recently published (Commission's Directorate-General for Health and Consumer Protection). Based on this and other work, the European Food Safety Authority (EFSA) has published an opinion regarding the possible risks to human health associated with the consumption of foods contaminated</p>	<p>The question of whether further international agreements relating to mercury would be desirable, and what further action could be taken to support or promote mercury control and emission reduction programmes in other parts of the world, are being considered in the development of the European Union mercury strategy. Further information will be provided after adoption of the strategy later this year.</p>	<p>Lead and cadmium have been subject to control through a variety of European Union and national measures.</p> <p>Cadmium is presently subject of an ongoing risk assessment within the European Union's "Existing Substances" programme (expected to be finished by the end of 2004). A proposal for a risk reduction strategy is expected in mid 2005.</p> <p>The Community does not presently have a final position on the need of additional international action for these two metals. Further information will be provided in the</p>

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	<p>with mercury.</p> <p>At the request of the Council of the European Union, the European Commission is presently developing a European Union strategy on mercury, in order to set out measures to protect human health and the environment from the release of mercury based on a life-cycle approach, taking into account production, use, waste treatment and emissions. To this end, the European Commission's Environment Directorate published a consultation document on development of the mercury strategy (March 2004). The document is intended to inform stakeholder consultation on the European Union mercury strategy. Further information on the European Union mercury strategy will be provided once it has been finalised and adopted later in 2004.</p>		<p>event that such a position is formed.</p>
Guinea	<p>Guinea has drafted, adopted and implemented regulations prohibiting the production, import, use and discharges of mercury and its compounds in the environment (Orders from the Ministry of Agriculture and Breeding, June 2001 and from the Ministry of Mining, Geology and Environment, October 2001). In spite of the application at country level of those preventive regulatory measures, however, some difficulties still remain. These include illegal import to Guinea, by the informal sector, of mercury compounds used in diamond processing and lack of pertinent information and laboratory facilities for the identification of the chemical composition of cosmetic products imported in Guinea. Guinea has identified human populations, animal populations and ecosystems potentially more exposed to mercury and its compounds.</p>	<p>Guinea considers that it is necessary, even indispensable, for the international community to undertake as soon as possible, the development of a legally binding international instrument in order to address the significant harmful effects of the mercury and its compounds.</p> <p>The Guinean view is justified by the experience associated with the voluntary implementation of the voluntary PIC procedure of the London Guidelines and the FAO Code of Conduct. The non-binding nature of this originally voluntary procedure would some times allow stakeholders to circumvent the procedures, to the detriment of other Parties, mainly the developing countries and countries with economies in transition.</p>	<p>Guinea considers that it is necessary that the international community undertake, as soon as possible, an assessment of the impacts on the health and the environment of lead and cadmium, in collaboration with other intergovernmental organizations such as the World Bank.</p>
Hungary	<p>In December 2003, as an accession country to the European Union, Hungary forwarded a national report to the designated body of the European Council pertaining to the European Pollutant Emission Register (EPER) decision. The report contains data for discharges and quantities of wastes containing mercury or its compounds.</p> <p>Comprehensive surveys, which are periodically carried out, are focused on priority pollutants involving mercury and its compounds. Environmental performance of industrial facilities, previously characterized as major polluters, were significantly improved in the last years.</p>	<p>In Hungary's opinion further extension of the current legislation that applies in Hungary with new rules is not reasonable.</p> <p>Hungary actively participate in the implementation of the relevant international conventions and protocols and prepared to do the adequate actions in due time.</p>	<p>Hungary is planning to ratify the Aarhus Protocol of the UNECE this year.</p> <p>The Hungarian implementation plans for mercury, lead, and cadmium are in progress.</p> <p>Reduction of emissions of lead into the aquatic environment is already elaborated within the framework of pollution reduction programme of contaminants (Directive 76/764/EEC).</p>
Jordan	<p>A technical committee has been formed in Jordan with members from the</p>	<p>The Government of Jordan needs to build capacities among</p>	

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	<p>different stakeholders to undertake a global assessment of mercury and its compounds.</p> <p>The following measures have been undertaken, in order to manage the chemicals and the hazardous waste including mercury and its compounds:</p> <ul style="list-style-type: none"> • Development of a set of regulations for hazardous waste transfer and management; • A pilot project will commence shortly in Amman for the sorting and collection of domestic hazardous waste, including mercury; • Updating the inventory of restricted chemicals (to be prepared by the Ministry of Environment in cooperation with the concerned stakeholders); and • The Ministry of Environment is currently working on the preparation of the Suwaqa hazardous waste landfill. 	<p>the different stakeholders to deal with mercury compounds disposal and developing the required legislation and to establish a legally binding instrument for the management of mercury and its compounds.</p>	
Madagascar	<p>Madagascar has established (March 2004) an inter-ministerial committee entrusted with:</p> <ul style="list-style-type: none"> • Development of legislation for the safe management of mercury; • Development of a national inventory of uses and releases of mercury; • Identification of populations at risk; and • Development of a national information and awareness raising campaign. <p>Information and awareness-raising events with relation to international conventions have also been organized during 2004 (six provinces).</p>	<p>Madagascar proposes and seeks financial assistance for a project to develop:</p> <ul style="list-style-type: none"> • Inventory of mercury releases and uses, in Madagascar (six provinces); • National census of the populations exposed to mercury; and • National campaign of information and awareness raising. 	<p>Madagascar has developed a national strategy to eliminate the use of lead (based on the Declaration of Dakar, Regional Conference on the phasing-out of leaded gasoline in sub-Saharan Africa, 26–28 June 2001).</p> <p>It has established an inter-ministerial committee, specifically entrusted with the introduction and promotion of lead-free gasoline (decree No. 8913/2002/MEM, 31 Dec. 2002).</p> <p>The committee is working for a progressive reduction of the content of lead in gasoline from 0.6 mg/l to 0.2 mg/l before 2005.</p>
Mauritius	<p>Mauritius reports that a number of new legislative acts have been promulgated in recent years, such as the Environment Protection (Standards for effluent for use in irrigation) Regulations 2003, Environment Protection (Standards for effluent discharge into the ocean) Regulations 2003, and the Dangerous Chemical Act 2004.</p>	<p>Mauritius proposes that trade in mercury-containing skin-whitening creams and soaps be addressed, in response to concerns of adverse effects in babies born from mothers who have been using such products.</p>	<p>A survey on existing studies on different heavy metals and impacts from research institutions are being carried out to assess the status.</p> <p>Mauritius proposes that lead be considered</p>

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	<p>Areas of concern are currently being identified and the potential releases of mercury from activities are still to be listed. It is envisaged to set up a steering committee to get started on the course of action.</p> <p>Further action including analyses would have to be undertaken and based on the severity of the problem, an action plan should be devised and a proposal for external technical assistance developed.</p>	Mauritius also emphasizes the need to identify the types of fish that are most prone to accumulate methylmercury.	for discussion at the forthcoming Governing Council meeting, as it is recommended for phase-out by the World Summit on Sustainable Development (2002).
Mexico	<p>Mexico has taken actions to reduce the risks from mercury and other toxic, persistent and bio-accumulative substances within the framework of the regional environmental cooperation in North America (the Commission for Environmental Cooperation or CEC), in particular under resolution 95 -5 adopted in 1995 on the sound management of chemicals and the North American Regional Action Plan (NARAP). The objectives of the NARAP are to eliminate non-essential uses of mercury in processes and products and reduce releases of mercury to the environment.</p> <p>Control equipment and measurement control devices have been installed in certain industrial plants and mining operations around the country. It is believed that due to the establishment of new coal-fired plants around the country, mercury emissions to the atmosphere have increased, however, there is a lack of monitoring to confirm it.</p> <p>A programme to eliminate mercury use in hospitals is under planning, in order to promote the substitution of mercury in medical equipment in hospitals and medical establishments.</p>	<p>A number of the objectives of the UNEP Mercury Programme are consistent with the objectives of the NARAP.</p> <p>Mexico considers that it is important to develop a national inventory of uses and releases of mercury, to establish an integral programme for the reduction of mercury releases from industrial activities and to formulate legal frameworks for the control of consumer use of mercury and its trade.</p> <p>Although Mexico has current legislation/legislation under planning for mercury emissions to the atmosphere and water from cement kilns and incinerators, Mexico considers it important to establish other instruments to regulate trade in mercury, as currently any buyer has easy access to mercury through both formal and informal suppliers.</p>	Prior to the establishment of the NARAP, the Commission for Environmental Cooperation (CEC) published a document related to lead for public consultation among Mexico, the United States and Canada. With regards to lead, the next phase would be the establishment of a monitoring programme.
Moldova (Republic of)	<p>The issue of heavy metals such as mercury, cadmium and lead has a high priority for the Government of the Republic of Moldova. The Republic of Moldova has adopted a number of legislative and regulatory acts (twelve relevant legislative acts in total) to protect the environment and human health against the impact posed by hazardous products, waste and chemical substances, including mercury, other heavy metals and its compounds.</p> <p>The Republic of Moldova has done relevant work under the UN/ECE Convention on Long-range Transboundary Air Pollution (LRTAP), including:</p> <ul style="list-style-type: none"> • Implementation of annual estimations of mercury, cadmium, lead and other heavy metals emissions; 	<p>The Republic of Moldova welcomes the work that has been done by UNEP and considers the establishment of a global mercury programme as big step forward.</p> <p>The Republic of Moldova considers that, in addition to the short term actions agreed upon through the establishment of the UNEP mercury programme in 2003, it is necessary to establish a legally binding instrument to eliminate mercury releases as far as possible. Further measures should include concrete international actions, for instance a legally binding instrument or other appropriate instruments, which addresses all aspects of the mercury cycle. Good precedents could be the Stockholm Convention and the Protocol on Heavy Metals to the UN/ECE LRTAP Convention.</p>	<p>Other heavy metals such as lead and cadmium are also transported over long distances and pose a risk for human health and the environment.</p> <p>The challenges relating to both lead and cadmium should be addressed at a global level, because lead and cadmium-containing products are manufactured, used and stored. Lead and cadmium-containing products are also traded internationally and the substances as well as their compounds are released to the environment and transported far from their</p>

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	<ul style="list-style-type: none"> • Amendment of the Law on the Payment for Environmental Pollution; • Provisions relating to mercury and other heavy metals in the National Plan of Activities for Health in Relation with Environment; • Statistical registration of mercury and other heavy metals into atmospheric air, etc. <p>The programme for emissions reduction from mobile sources has been elaborated and approved. A national network for observations and laboratory control has been established. A draft regulation on waste management, which includes provision on management of wastes containing mercury and other heavy metals, is under development.</p>		emissions source.
Monaco	<p>Monaco has achieved substantive emission reductions, since 1994, from waste incineration, which are envisaged to continue to be reduced according to European norms.</p> <p>Monaco has also achieved a selective collection of batteries containing mercury and it is in the process of preparing a waste management plan.</p> <p>There are no further industrial uses of mercury in Monaco.</p>		
Norway	<p>The Norwegian Food Control has issued specific recommendations and guidance on food consumption (especially freshwater and marine fish and marine mammals) to reduce exposure to mercury, targeted specially to pregnant and breastfeeding women.</p> <p>Since most of Norway's deposition of mercury to the environment come from sources outside Norway, international action is particularly important for Norway. However, policies are also actively pursued to stop national releases of mercury. Norway has established a national target of eliminating all releases of mercury by 2020, in line with the one-generation target of the OSPAR Convention. A short-term target is to reduce significantly mercury releases by 2010, compared to 1995 levels. Norway is developing an action plan to intensify action on mercury at both the national and international level.</p> <p>In addition to measures implemented before the last Governing Council in 2003, Norway has since 2003 imposed new restrictions on the emissions of mercury from respectively secondary steel and ferromanganese production and emissions from the Norwegian oil and gas offshore industry were reduced by 95 percent from 1995 to 2001.</p>	<p>According to Norway, it can be argued that mercury poses an even greater challenge than most POPs since as an elemental substance it cannot be degraded, and the environmental fate of the global pool of mercury in the environment must be seen over hundreds of years. This is why the Norwegian Government advocates firm action to reduce releases of mercury globally.</p> <p>Norway considers that, in addition to the short-term actions agreed upon through the establishment of the UNEP mercury programme in 2003, it is necessary to establish a legally binding instrument to eliminate mercury releases as far as possible. Although in theory it would be possible to address mercury under the Stockholm Convention, since the organic substance methyl mercury would fulfil all criteria for being classified as a POP, a better option may be to address the heavy metals under a separate instrument. A good starting point for developing a legally binding instrument for mercury</p>	<p>Other heavy metals, such as lead and cadmium, are also transported over long distances and pose a risk for human health and the environment. This was documented in the Nordic Council papers on lead and cadmium that were distributed at the 22nd session of the UNEP Governing Council in 2003.</p> <p>The challenges for both lead and cadmium should be addressed at a global level since these substances are traded internationally and the substances once released to environment, are transported far from their emission sources.</p> <p>Other heavy metals may also pose problems that we are not sufficiently aware of. Norway therefore believes that a legally binding</p>

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	<p>In 2003, Norway introduced stricter controls on releases from crematoria and emissions from waste incineration, imposing strict limits on the releases of mercury.</p> <p>Norway has for long collected mercury from the releases connected with the use of amalgam fillings. On a voluntary basis, in response to recommendations to phase out amalgam, dentists will not use such fillings significantly in the future.</p>	<p>would be the Protocol on heavy metals of the Convention on LRTAP, in addition to the Stockholm Convention.</p> <p>The concern over resources will in any case not exceed the concern over the global threat from mercury pollution itself. But it is important to draw on the result and experience from other conventions in order to minimise the effort and resources needed to establish a legally binding instrument.</p>	<p>instrument for mercury should also include actions and address risks on other heavy metals, in particular lead and cadmium.</p>
Philippines	<p>The Government of the Philippines has established a Chemical Control Order for mercury and mercury substances and there is continuous coordination with other government agencies on research, monitoring and industry compliance on matters related to mercury pollution.</p> <p>The entry of mercury into the country has been strictly monitored since 2000.</p> <p>There is continuous coordination among government agencies on research, monitoring and industry compliance on matters relating to mercury pollution.</p>	<p>The Philippines considers that the development of a legally binding instrument is the best option to mitigate the ill effects of mercury in daily lives. With an international agreement or protocol, developing countries will be given equal technical assistances, extension of capacity building activities and training/awareness of matters related to mercury.</p> <p>Another measure is to develop inventory use and release of mercury which is an important data and guidance documents to assist countries like the Philippines in the evaluation, risk and assessment of mercury pollution.</p>	<p>The Philippines has included lead and cadmium in an Administrative Order, in order to address the ill-effects of these substances.</p> <p>The Philippines considers that there is a need to develop a database for these heavy metals (exposure, use, trade, disposal management, release and production) to serve as a guidance document and training materials. UNEP must look upon the adverse effects of the toxic chemicals in terms of developing a programme for international action on mercury and other heavy metals.</p> <p>The Philippines also requests that funding assistance be extended to developing countries in international meetings and regional workshops, in order to be part of the global plan for mercury.</p>
Slovak Republic	<p>Slovakia is monitoring heavy metals in the surface water and air, in order to designate background concentrations and establish environmental quality standards.</p> <p>Mercury, lead, cadmium and their compounds belong to the list of pollutants which have to be regularly reported according to the new Slovak Act on Integrated Pollution Prevention and Control.</p> <p>Slovakia has elaborated an executive regulation, which involves the List of certain chemical substances and certain chemical preparations whose placing on the market an application are limited or prohibited. According to this regulation, the use of mercury, lead and cadmium and their compounds is from 15 February 2002 limited or prohibited.</p>		

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Sweden	<p>Sweden has, as part of its national environmental quality objective of a non-toxic environment, an objective relating to mercury that implies that before 31 December 2003, newly manufactured products as far as possible should be free from mercury (later extended to as soon as possible, but no later than 2005).</p> <p>In order to meet this objective, the Swedish Chemicals Inspectorate has proposed a general ban on handling, export and import of mercury and mercury containing products (30 June 2004). The submission contains a report describing the proposed ban in detail.</p> <p>The general ban would cover placing mercury or articles containing mercury on the Swedish market or for professional export out of Sweden. It would also ban the use of mercury. Articles already on the market or in use today would continue to be used. Moreover, the proposal contains a ban on export of waste containing mercury. The Swedish Chemicals Inspectorate is proposing that the Swedish Environmental Protection Agency in individual cases be authorized to issue exemptions for export of waste for recycling where particular reasons exist and to issue conditions on returning the mercury to Sweden to be finally disposed of. The ban would not include mercury that occurs naturally, in coal, ore or concentrated ore.</p> <p>The proposal also covers time-limited exemptions from the ban for some applications (dental amalgams, analysis chemicals, research and development, chlor-alkali production, seam-welding), based on the assumption of an entry into force of a general ban on 1 July 2005. Details of these limited exemptions (specific applications and deadlines) can be found in the submission. In addition, there are a number of uses where harmonized EU legislation makes it very difficult to implement national rules and which are, therefore, exempted from the ban in the proposed ordinance. This applies, for instance, to batteries, light sources and vehicles.</p> <p>The Swedish Government and Parliament has taken a policy decision on deep rock terminal storage of mercury by 2015. Legislation is expected soon.</p>	<p>Sweden considers the establishment of a global mercury programme as a big step forward towards reducing the severe negative impacts of mercury and Sweden welcomes the work that has been done by UNEP so far.</p> <p>Sweden believes that measures on a global level should aim to break the mercury cycle by taking actions with a holistic approach and in every phase of its cycle. Actions at a global level should include measures to deal with:</p> <ul style="list-style-type: none"> • Mercury supply (introduction of trade-restrictions to curb global dispersion of mercury and encourage housekeeping, substitution and phase-out of use); • Mercury demand (introduction of bans or restrictions of use of mercury in products and process for those uses where alternatives are available, information and awareness rising activities carried out to reduce the use of mercury); • Mercury emissions from point sources (use the concept of best available techniques BAT); and • Safe disposal of mercury containing wastes and surplus mercury. <p>Sweden proposes that further measures to address the mercury problem should include concrete international actions, e.g., a legally binding instrument or other appropriate instruments that address all aspects of the mercury cycle. The Stockholm Convention on POPs can form a model for a convention on mercury and heavy metals. Experience could also be drawn from the UNECE Convention on LRTAP protocol on heavy metals.</p> <p>In Sweden's view, a legally binding instrument is more likely to be applied worldwide than voluntary actions. A legal framework would ensure a level playingfield for actors around the world, leading to stability and certainty in a global market. Voluntary actions, such as partnerships, are also of importance, especially during the time period until a legally binding instrument is in place.</p>	<p>Sweden states that, unlike mercury, neither cadmium nor lead has a global distribution as gaseous atmospheric pollutants. Both cadmium and lead emitted to the atmosphere are attached to particulates and thus primarily have a local and regional distribution. Long range transport of cadmium and lead by air is nevertheless reflected in ice core samples from Greenland.</p> <p>Sweden considers that lead and cadmium have a global adverse impact on the environment, which calls for concrete global actions aimed at minimising human and environmental consequences of the ongoing cadmium and lead emissions.</p> <p>Sweden also draws attention to the Nordic Council papers on lead and cadmium that were distributed at the 22nd session of the UNEP Governing Council in 2003. The submission contains summaries of these reviews.</p>

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Switzerland	<p>It is very probable that the true percentage of the Swiss anthropogenic mercury emissions has been continuously declining since 2001 as mercury continues to be phased out of many of the earlier applications i.e. older mercury containing electrical equipment, batteries containing high percentage of mercury, recycling rate of batteries, etc.</p> <p>The programmes pursued since February 2003 are actually targeting the whole population and the efforts to raise public awareness have to be continued.</p> <p>There is an existing mercury analysis programme pursued by some of the more than 100 permanent so -called NABO -stations monitoring the contamination of soil.</p>	<p>Switzerland is of the view that the mercury problem has to be further addressed with efficient and effective measures. Therefore, a legally binding instrument is the best option, as it has the advantage to strengthen directly political commitment and trigger concrete actions.</p> <p>This approach should not, however, hamper the progress of other environmentally important endeavours, such as the implementation of the Stockholm Convention on POPs and inclusion of mercury in that Convention seems not to be the preferred option.</p> <p>While other conventions, such as the Basel Convention, could be regarded as possible tools to strengthen the control of international mercury fluxes, Switzerland still takes the view that additional legally binding rules on mercury are necessary. A legally binding instrument would be advantageous in view of the global impact of the mercury pollution.</p>	<p>Lead and cadmium are actually strictly controlled in Switzerland since the introduction of the Ordinance on Environmentally Hazardous Substances (1986).</p> <p>Switzerland is certainly of the opinion that mercury is not the only heavy metal to be addressed. It might not, however, be the right approach now to just deal with these two additional metals by repeating the approach pursued in the case of mercury (such as formation of a dedicated global working group, etc.). One might rather consider a broadening of the scope of the actual mercury-related efforts in the sense that governments are invited to include lead and cadmium in their mercury-related studies and discussion of measures.</p> <p>In addition, in the case of lead and cadmium, a strengthening of the respective international control might be considered by exploiting the respective possibilities as presented, e.g., by the Basel Convention, and by including these substances in a new legally binding instrument. Thus, measures regarding lead and cadmium could as a slower train and on the same rails just follow the mercury fast train.</p>
Syrian Arab Republic	<p>The Syrian Arab Republic has created a new group in the Chemical Safety Department, General Commission of Environmental Affairs, Ministry of Local Administration and Environment. Syria will nominate a Focal Point concerning UNEP's Mercury programme later on, and will continue the work in this sector.</p>		
Thailand	<p>There is no study for mercury measurement in the atmosphere in Thailand. Presently, Thailand emphasizes on the reduction of mercury from marine-source activities, for instance, oil and gas operations, which is one of the main sources of mercury contaminations in Thailand. Both short-term and long-</p>	<p>A national organization has been set up in order to control and manage mercury contamination as a whole. Thailand considers that it is time to reduce mercury contamination by proposed measures in the future, which include, <i>inter alia</i>,</p>	<p>There are plans to control other heavy metals in general. The conventional end-of-pipe method is still the most common strategy to control pollution, but the Thai Government</p>

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	<p>term measures have been imposed in order not only to minimize the waste load into the Gulf of Thailand, but also to reach the ultimate goal of “Zero Discharge” policy from oil and gas operations. Tremendous attempts have been made by oil and gas operators to achieve those goals through state of the art removal technologies and monitoring programmes.</p> <p>Research is underway regarding:</p> <ul style="list-style-type: none"> • The determination and application of the total maximum daily loading for mercury from various point sources especially from oil and gas operation in the Gulf of Thailand, • The study of mechanisms controlling transport, transformation and fate of mercury species from fresh into brackish water system and eventually to marine ecosystem, • The process and mechanism on biological uptake of mercury; and • Technology for mercury removal to achieve “zero discharge” practices. <p>The Pollution Control Department (PCD) has made available and accessible all mandatory documents concerning mercury issues in form of brochures, pamphlets, manuals and guidelines (Further details at www.marinepcd.org/hgtaskforce/index.htm).</p>	<p>the monitoring and control of mercury levels, phasing-out of mercury containing items, increasing import taxes on mercury containing items or pure mercury, promoting new technology, educating hospital employees, enacting regulations to prohibit disposal of mercury containing wastes, promoting good management practices for people working in factories using mercury, establishing strategies and public information campaigns regarding mercury contaminated fish for populations at risk, etc.</p>	<p>has been working to incorporate various economic instruments such as pollution fees and technical guidance programmes into policy to drive a paradigm shift towards cleaner production.</p> <p>Thailand has undertaken measures through the Department of Fisheries, to further reduce problems relating to cadmium contamination in cephalopods (squid, octopus and cuttlefish) by considering an action plan that includes monitoring of cadmium levels in Thai waters and in imported cephalopods, tightening of inspections for exports to the European Union, etc.</p>
Turkey	<p>Mercury discharge standards resulted from related sectors are placed in the Regulation on Water Pollution Control for protection of waters.</p> <p>Limit values for mercury, lead, cadmium and other heavy metals are placed in the Regulation on Soil Pollution Control for protection of soils.</p> <p>Limit values for mercury in batteries and storage batteries are placed in the Regulation on Dangerous Chemicals.</p>		
United States of America	<p>The United States continues further to reduce releases and uses of mercury domestically, using both regulatory and non-regulatory tools at the national, state and local level. The United States has engaged international partners, multilaterally and bilaterally, to address key mercury issues including data collection and inventory development, source characterization, and best practices for emissions and use reduction.</p>	<p>The United States continues to be an advocate for supporting the operation of the UNEP mercury programme as the most effective use of the resources available to address mercury by facilitating action in support of the UNEP programme.</p> <p>Given that the UNEP mercury programme has only recently</p>	<p>The United States believes that it is appropriate to treat other heavy metals individually and to allow countries to prioritize what actions are most appropriate for their individual circumstances in the context of their domestic regulatory</p>

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	<p>Recent actions include:</p> <ul style="list-style-type: none"> • USEPA issued a regulation that will require a reduction in air emissions of mercury from chlor-alkali plants; • USEPA proposed a regulation that will require regulations of mercury emissions from coal-fired electric power plant boilers; • US Food and Drug Administration and USEPA issued a joint national fish advisory on mercury in fish and shellfish; • USEPA launched a program to promote lamp recycling, with the goal of doubling recycling rates within two years; • USEPA voluntary partnership programme with hospitals and healthcare associations continues to make progress in reducing mercury emissions; • USEPA provided expertise to the UNIDO global mercury programme artisanal mining project; • USEPA has strengthened capacity-building and technical cooperation programmes implemented in the context of the Arctic Council Action Plan (ACAP) and the Arctic Monitoring and Assessment Program (AMAP); • USEPA has developed bilateral mercury cooperation programmes to foster assessment and sector specific improvements in China and India; • The United States of America has developed international cooperation programs for ambient and trends monitoring for specific facilities and air transport pathways, including modeling and analytical work; • The United States of America provided \$1.3 million to the UNEP mercury programme in 2003 and 2004, and detailed a USEPA employee for two years to support the Program. 	<p>been established, it is appropriate to provide it adequate time to initiate activities aimed at helping countries better understand and characterize their mercury problem and then at some later time assess the effectiveness of the programme before embarking on a different set of activities.</p> <p>There are still considerable data gaps, particularly in developing countries, with respect to mercury use, releases and exposures. It is appropriate that the Governing Council continue to monitor progress made in this area at its future meetings.</p>	<p>framework and human health and environmental protection priorities.</p> <p>The United State supports continuing the existing UNEP facilitative activities supporting countries' efforts to deal with certain of these concerns, and in particular looks forward to monitoring progress in phasing out leaded gasoline and lead-based paint.</p> <p>Other heavy metals are generally less prone than mercury to long-range transport and significant bioaccumulation in the food chain. Therefore, human health and environmental problems associated with other heavy metals are more closely related to local or national issues rather than global release patterns, although cross-border impacts may be significant in some cases.</p> <p>The United States supports continued work by UNEP to facilitate the transition to unleaded gasoline and to deal with lead-based paint, which are primary areas of concern for this heavy metal, as called for in Governing Council decision 22/4 III.</p>

Intergovernmental organization	Progress made in implementation of decision 22/4 V, especially with regards to any goals or national actions taken	Views on need for further measures for addressing the significant global adverse impacts of mercury and its compounds	Views on what further action might be taken with regard to other heavy metals, f. ex. lead and cadmium
Arab Fund for Economic and Social Development	<p>The Arab Fund appreciates the efforts of UNEP to promote the reduction of mercury, cadmium and other heavy metals emissions into the environment and to build awareness of the dangers of these pollutants.</p> <p>Although the Arab Fund is not directly involved in such activities, it is interested in promoting regional awareness and encourages UNEP to hold the West and Central Asia regional awareness workshop as scheduled.</p>		
International Council for the Exploration of the Sea (ICES)	<p>ICES has been developing the concept of Ecological Quality Objectives (EcoQOs) as one means to implementing an ecosystem approach to management. One ecological quality element that is currently under development relates to the concentrations of mercury in the body feathers of selected species of seabirds and in the eggs of selected species of seabirds. ICES hopes that this work may be of assistance to UNEP activities.</p>		
United Nations Economic Commission for Africa (UNECA)	<p>UNECA recognizes the significant adverse impacts of mercury and the attempts to limit the releases of this heavy metals into the atmosphere and would like to be part of the activities.</p>		
United Nations Economic and Social Commission for Western Asia (ESCWA)	<p>The ESCWA work programme does not involve any assessment of mercury levels or reducing its releases that impact human health and the environment.</p>		
World Trade Organization (WTO)	<p>WTO has no contribution to offer with regard to this issue.</p>		

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<p>Coalition of environmental organizations</p> <p>This coalition consists of the following organizations: the Natural Resources Defence Council, the Mercury Policy Project, Greenpeace, the Basel Action Network, Arnika Association, The European Environmental Bureau, Associação de Combate aos POPs, Toxics Link, and the Ban Hg Working Group.</p>	<p>The Coalition emphasises in its submission new information which, in its view, confirms the need for meaningful global action on mercury. Among the issues raised are:</p> <ul style="list-style-type: none"> • Joint FAO/WHO Expert Committee on Food Additives recommended a more stringent mercury standard for tolerable weekly intake of methylmercury, effectively recommending that the standard be cut in half; • The European Union and the United States of America both have recently (March 2004) taken action further to limit mercury exposure, through the issuance of updated fish consumption advisories, especially for vulnerable populations; • The United States of America calculates new and more alarming exposure estimates. The experts now estimate 15.7 per cent of women of childbearing age in the United States tested had blood levels that would pose adverse risks to a developing fetus, raising the number of babies at risk born annually in the United States to 630,000; • Several new reports and articles published since the Global Mercury Assessment provide greater insight into worldwide mercury flows and the key demand sectors. The inescapable conclusion from these reports is that mercury uses and practices considered illegal or outmoded in the developed world are continuing or growing in the developing world, leading to exports of excess mercury supplies from the European Union and the United States to Asia, Africa, and Latin America, and a shift in the mercury burden to the developing world; • UNEP workshop experiences to date show that many countries find themselves without an inventory of current uses and emissions sufficient to chart a course for future action. These countries will need technical assistance on how to do an inventory, for which the anticipated UNEP guidance will be particularly helpful. 	<p>The Coalition calls for action dramatically to reduce the global demand for mercury over the next 10 years in the key sectors currently responsible for the bulk of this demand, and the concurrent promotion of non-mercury alternative processes and products.</p> <p>In the Coalition's view, the imprimatur of the Governing Council to establish mercury as a global environmental priority, and to foster the development of regional mercury action plans within new or established institutions, will be critical if meaningful global action is contemplated. The global mercury problem has many facets, and not all of these facets are global priorities. The challenge facing UNEP is to identify the global priorities requiring its immediate leadership and action, while creating the climate, proper framework and facilitation of assistance so that issues with more localized or regional significance can be effectively addressed.</p> <p>The Coalition sets forth in its submission explicit and detailed recommendations in the form of a blueprint of steps that should be taken to aggressively address global mercury contamination, consisting of the following elements:</p> <ul style="list-style-type: none"> • Immediate action to promote mercury trade transparency (standardized reporting and analysis, and licensing of mercury traders); • Immediate cessation of the manufacture and trade of mercury-containing soaps and skin lightening cosmetics; • Phase-out of mercury cell chlor-alkali plants by 2015 at the latest; • Phase-out of mercury switches, relays and measuring instruments over the next 5–10 years; • Mercury use reduction targets of 50 per cent by 2010, and 80 per cent by 2015, versus 2000 levels to be achieved by targeting principal demand sectors such as battery production; • Emissions reductions priorities and objectives (chlor-alkali plant 	

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	<p>They will also need financial assistance to perform the inventory. Many countries are interested in forming regional partnerships (under United Nations or other auspices) to facilitate inventory development, environmental monitoring, and subsequent action to reduce uses and emissions.</p>	<p>emission and demand reduction of 50 per cent by 2010; small-scale mining improvements; coal-fired power plants – mandatory use of best available technology to control mercury air emissions from major coal-fired power plants by 2012);</p> <ul style="list-style-type: none"> • Development of global mercury action plans for the chlor-alkali and small-scale mining sectors, and regional/national action plans to address other sources and uses; • Managing global mercury supply and trade (storage of mercury from decommissioned chlor-alkali plants and other excess mercury supplies by 2010 at the latest, the end of primary mercury mining by 2010 at the latest); • Creation of a UNEP mercury unit (policymaking leadership in targeted priority areas, investigation and recommendation on uses/emissions where additional global data needed, such as incinerator emissions and vaccine use, and creation and maintenance of clearinghouse for targeted priority global information needs); • Development of a binding international treaty on mercury. <p>The Coalition envisages and recommends a binding international treaty as the best mechanism to implement this blueprint for action, but above all calls upon UNEP and its member countries to take action to implement this blueprint in a timely manner, with the inclusion of fixed interim goals. The blueprint proposes various deadlines for worldwide action. As worldwide deadlines, they take into account many factors that may not apply to individual countries or regions, particularly developed nations. Indeed, we recommend and enthusiastically support earlier action by countries or regions with legislation existing or pending requiring such earlier action, and in countries or regions capable of taking earlier action.</p>	
Lars Hylander, Uppsala University	<p>Mr Hylander, Uppsala University refers to an article by Hylander L.D. and Meili, M. where studies were carried out on the rise and fall of mercury after 500 years of mining and pollution. It demonstrates detailed consumption patterns for a number of mercury-consuming countries. It also provides</p>	<p>Mr. Hylander, Uppsala University, considers that the previous comment made to the previous question also responds to this question.</p>	<p>In Mr Hylander's view, it is extremely important to reduce the exposure to lead and cadmium, considering their effects on the nervous system, skeleton and</p>

Non-governmental organization	Progress made in implementation of decision 22/4 V, especially with regards to any goals or national actions taken	Views on need for further measures for addressing the significant global adverse impacts of mercury and its compounds	Views on what further action might be taken with regard to other heavy metals, f. ex. lead and cadmium
	details on the relation between historic mercury prices and mercury production and consumption, of value when predicting effects of political and other interventions.		kidneys, respectively. Irresponsible uses still continue, such as loaded gasoline and fertilizers containing Cd.
National Wildlife Federation (NWF)	<p>NWF endorses the comments submitted by the Coalition of environmental organizations listed above. Its separate submission is intended to ensure that additional information of which it is aware concerning mercury is brought to the attention of UNEP in preparation for the next Governing Council meeting, especially regarding mercury control options for coal-fired power plants.</p> <p>The submission also draws attention to a newly published journal issue on mercury in the Laurentian Great Lakes, and an upcoming issue of a journal focusing on mercury in northeastern North America.</p>	<p>NWF believes additional global action is warranted to reduce and virtually eliminate human generated mercury releases to the environment.</p> <p>NWF emphasizes various approaches that can be pursued to reduce mercury releases from coal-fired power plants, e.g., fuel switching, coal cleaning and pre-combustion processes, co-benefits associated with controls for other pollutants (e.g., for sulphur dioxide and nitrogen oxide), mercury-specific control approaches (e.g., activated carbon injection) and conservation and efficiency improvements. Because of projected increases in coal-fired electric power generation over the next two decades, including in developed countries, it is imperative that mercury emissions from these facilities are addressed as part of a global initiative. NWF urges UNEP to factor these findings related to mercury control at coal-fired power plants into its consideration of options for moving forward to address global mercury uses and releases.</p> <p>NWF believes that a binding international treaty – taking into account additional information needs, research, and technology transfer issues – would be the most effective approach to address the threat posed by continuing mercury use and release to the environment.</p>	
Sierra Legal Defence Fund (SLDF) and Lake Wabamun Enhancement and Protection Association (LWEPA)	Through their submission, SLDF and LWEPA state that they want to bring to the Governing Council's attention Canada's failure to take feasible and timely steps to control and reduce mercury emissions from coal-fired power generation plants. According to SLDF and LWEPA, Canada's coal-fired utility sector has increased its mercury emissions, while Canada's national process for developing an emission standard has shown little progress. SLDF and LWEPA express their concern that Canada is not living up to its international obligation, as recorded in decision 22/4, to initiate actions as	<p>SLDF and LWEPA urge the Governing Council to request clarification and clear commitment from Canada on the steps which it will take towards a national emission standard, and the specific reduction targets that it will meet over an identified timeline.</p> <p>SLDF and LWEPA also wish to draw the Governing Council's attention to concerns regarding the United States Environmental Protection Agency's draft utility mercury reduction rule for coal-fired utilities as the rule is not sufficiently rigorous, and fails to adequately safeguard the environment and public health. SLDF and LWEPA</p>	

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	soon as possible to protect human health by reducing or eliminating mercury emissions.	encourage the Governing Council to request a clear commitment from the United States of America to take timely and aggressive action in achieving feasible emission reductions over and above those contemplated by the draft Rule. Without that action, Canada's mercury problem will persist, to the detriment of present and future generations.	
World Chlorine Council (WCC)	WCC reports in its submission that the organization has, together with regional chlorine associations, organised workshops in South America (São Paulo, Brazil, September 2003) and India (Manesar, April 2004). The aim of the workshops was to raise awareness and exchange information on best available techniques and best practices with regard to the use of mercury cells in the chlor-alkali industry. WCC is committed to continuing with this important global capacity-building activity, in line with Governing Council decision 22/4 V.		