



**United Nations
Environment
Programme**

Distr.: General
25 March 2010

Original: English

**Intergovernmental negotiating committee
to prepare a global legally binding
instrument on mercury**

First session

Stockholm, 7–11 June 2010

Item 4 of the provisional agenda*

**Preparation of a global legally binding
instrument on mercury**

**Options for substantive provisions that might be included in the
mercury instrument**

Note by the Secretariat

Background

At its meeting in Bangkok from 19 to 23 October 2009, the ad hoc open-ended working group to prepare for the intergovernmental negotiating committee on mercury agreed on a list of information that the secretariat would provide to the committee at its first session to facilitate its work. Among other things, the secretariat was requested to provide a description of options for substantive provisions that might be included for effective implementation of the instrument, based upon the provisions set out in United Nations Environment Programme (UNEP) Governing Council decision 25/5 and relevant provisions from other conventions and, among other things, taking into account the principles of the Rio Declaration on Environment and Development. The present note responds to that request.

* UNEP(DTIE)/Hg/INC.1/1.

Contents

Abbreviations for instruments cited in the present note.....	3
Introduction.....	4
I. Options for specifying the objectives of the instrument	5
A. Outcomes versus actions	5
B. Primary and secondary actions.....	6
C. Clarity and precision	6
D. Options for the intergovernmental negotiating committee’s consideration.....	7
II. Options for control measures.....	7
A. Provisions to reduce the supply of mercury	8
1. Reduction and management of the extraction of elemental mercury	8
2. Reduce the availability of elemental mercury.....	9
B. Provisions to enhance capacity for environmentally sound storage.....	9
C. Provisions to reduce the demand for mercury in products and processes	10
1. General provisions for demand reduction.....	10
2. Sector-specific demand provisions	11
D. Provisions to reduce international trade in mercury	12
1. Trade with parties	12
2. Trade with non-parties	12
E. Provisions to reduce atmospheric emissions of mercury	13
1. National implementation strategies.....	13
2. Reduction goals, targets, and timetables.....	14
3. Substitute or modified materials, products and processes	14
4. Best available techniques and best environmental practices.....	15
F. Provisions to address mercury-containing waste	15
1. Environmentally sound management of mercury-containing wastes.....	15
2. Best available techniques and best environmental practices.....	16
3. Transboundary movement of mercury-containing wastes	16
G. Provisions to address remediation of contaminated sites	17
III. Options for provisions related to implementation	18
A. Provisions to increase knowledge through awareness-raising and scientific information exchange	18
1. Inventories of national use, consumption and environmental releases	18
2. Monitoring of mercury levels in various media.....	18
3. Assessment of impacts on human health and the environment.....	19
4. Information on transport, transformation, environmental cycle and fate.....	19
5. Information on commerce and trade.....	19
6. Enhanced collection and sharing of information	20
7. Public information, awareness and education.....	21
B. Provisions for capacity-building and technical assistance	21
1. General capacity-building provisions	21
2. Capacity-building assistance for developing countries and countries with economies in transition	22
3. Technology transfer.....	22
4. Regional centres.....	23

Abbreviations for instruments cited in the present note

Aarhus Convention	Aarhus Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters
Basel Convention	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
Biosafety Protocol	Cartagena Protocol on Biosafety to the Convention on Biological Diversity
CITES	Convention on International Trade in Endangered Species of Wild Fauna and Flora
Climate Change Convention	United Nations Framework Convention on Climate Change
Desertification Convention	United Nations Convention to Combat Desertification in Those Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa
Kyoto Protocol	Kyoto Protocol to the United Nations Framework Convention on Climate Change
London Protocol	1996 Protocol to the Convention on the Prevention of Marine Pollution by Dumping of Wastes and Other Matter, 1972
LRTAP Convention	United Nations Economic Commission for Europe Convention on Long-Range Transboundary Air Pollution
LRTAP Heavy Metals Protocol	Protocol to the 1979 Convention on Long-Range Transboundary Air Pollution on Heavy Metals
Montreal Protocol	Montreal Protocol on Substances that Deplete the Ozone Layer to the Vienna Convention on the Protection of the Ozone Layer
Ottawa Landmines Convention	Convention on the Prohibition of the Use, Stockpiling, Production and Transfer of Anti-Personnel Mines and on their Destruction
Rotterdam Convention	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
Stockholm Convention	Stockholm Convention on Persistent Organic Pollutants

Introduction

1. By paragraph 26 of its decision 25/5, the Governing Council of UNEP requested the Executive Director to convene an intergovernmental negotiating committee with the mandate to prepare a global legally binding instrument on mercury. The present note describes options for substantive provisions that the intergovernmental negotiating committee might wish to consider in its deliberations on the mercury instrument, as requested by the open-ended working group to prepare for the intergovernmental negotiating committee on mercury. For this purpose the term “substantive provisions”, as employed in the request from the open-ended working group, is understood to refer to provisions that the Governing Council agreed, in paragraph 27 of decision 25/5, should be included in the comprehensive and suitable approach to mercury called for by the decision, namely, provisions:

- (a) To specify the objectives of the instrument;
- (b) To reduce the supply of mercury and enhance the capacity for its environmentally sound storage;
- (c) To reduce the demand for mercury in products and processes;
- (d) To reduce international trade in mercury;
- (e) To reduce atmospheric emissions of mercury;
- (f) To address mercury-containing waste and remediation of contaminated sites;
- (g) To increase knowledge through awareness raising and scientific information exchange;
- (h) To specify arrangements for capacity-building and technical assistance.¹

2. The Governing Council listed two additional provisions in paragraph 27, on financial assistance and compliance. The ad hoc open-ended working group requested the secretariat to prepare separate documents for the intergovernmental negotiating committee that specifically address those two subjects. The present note therefore does not discuss them.²

3. During the meeting of the ad hoc open-ended working group to prepare for the intergovernmental negotiating committee on mercury a number of participants encouraged the secretariat, in preparing the present note, to maintain some elements of the comprehensive mercury framework developed by the ad hoc open-ended working group on mercury at its second meeting (6–10 October 2008), which are set out in the appendix to annex I of document UNEP(DTIE)/Hg/OEWG.2/13.³ Accordingly, where appropriate, the present note takes those elements into account in discussing possible provisions of the kind called for by paragraph 27 of decision 25/5.

4. Chapter I of the present note groups and presents options for provisions stating the objectives of the mercury instrument to be negotiated. It also includes background information on some of the various approaches that have been taken under selected multilateral agreements.

5. Chapter II describes options for control measures relating to the provisions listed in subparagraphs (b)–(f) of paragraph 27, as identified above. The options are presented in the order in which they are listed in paragraph 27. This presentation should not be interpreted as a suggestion about the possible structure of control measures in the mercury instrument. Whether some or all of the mercury control measures appear in the body of the convention, in its annexes or protocols (if any) or not at all is of course a matter for the intergovernmental negotiating committee to decide.

6. Chapter III describes options for provisions related to implementation, which include the provisions listed in subparagraphs (g) and (h) of paragraph 27. Implementation provisions also include financial assistance and compliance, which, as noted above, are addressed in separate meeting documents.

1 Report of the twenty-fifth session of the Governing Council/Global Ministerial Environment Forum (A/65/25), annex I, decision 25/5, para. 27

2 Financial assistance and compliance are discussed in documents UNEP(DTIE)/Hg/INC.1/8 and UNEP(DTIE)/Hg/INC.1/11, respectively.

3 Report of the ad hoc open-ended working group to prepare for the intergovernmental negotiating committee on mercury (UNEP(DTIE)/Hg/WG.Pre/1/10), para. 51.

7. Pursuant to the ad hoc open-ended working group's request that the secretariat should avoid pre-empting possible positions that might be taken by countries,⁴ the note describes options for substantive provisions but does not propose text. The note relies significantly on ways that relevant issues have been addressed under other legally binding multilateral agreements, using them to suggest a range of options that could be employed in respect of each provision listed in paragraph 27 of decision 25/5. Where applicable, each option is followed by an abbreviation, in brackets, of the name of the agreement upon which it is based. A list of those abbreviations precedes the present introduction.

8. For several paragraph 27 provisions the note presents many possible options. Before considering each option, the intergovernmental negotiating committee may wish first to consider what the desired outcome might be and only then identify which of the options presented, if any, might best achieve that outcome. In some situations the committee might conclude that an issue should be left to national discretion, such that no specific treaty measure is needed.

9. The committee may wish to bear in mind two additional points. First, the present note is presented as a reference document that covers a comprehensive range of options. It should not be considered to represent a draft mercury instrument, nor should it be interpreted to suggest the structure or actual content of such an instrument.

10. Second, each option presented represents a possible way that an issue might be addressed, in whole or in part. The options represent choices, but do not necessarily correspond to convention articles. In many cases, the choice of one option may necessarily preclude the choice of another, while in other cases options could complement one another. Additional approaches may exist; indeed, the committee may wish to consider novel approaches that could be especially well-suited to addressing the global challenges of mercury.

I. Options for specifying the objectives of the instrument

11. An objective is an aim, goal, or end towards which effort is directed.⁵ The objectives of the mercury instrument will thus reflect the outcomes that the parties' efforts and actions are intended to achieve. A convention may express desired outcomes explicitly or implicitly under its various substantive provisions. Many multilateral agreements, however, also contain among their introductory provisions an article that specifies an overarching objective for the entire agreement. The present chapter discusses options for such an article.

A. Outcomes versus actions

12. Agreement on a clear, succinct overarching objective may assist States in developing a coherent and comprehensive approach to achieving desired outcomes. Few agreements reviewed in preparing the present note contain objectives that specify overarching desired outcomes. Instead, they more often use verbs to identify an action or actions that should be taken in response to the challenge that the treaty is intended to address.

13. For example, the objective of the Stockholm Convention "is to protect human health and the environment from persistent organic pollutants".⁶ Similarly, the objective of the World Health Organization (WHO) Framework Convention on Tobacco Control "is to protect present and future generations from the ... consequences of tobacco consumption and exposure to tobacco smoke".⁷ In both examples, the agreed objective is the effort that parties should make (i.e., "to protect").

14. Such an approach might allow States, in negotiating an agreement, to focus on procedures and activities that facilitate their undertaking the basic action, while not requiring them to specify the ultimate outcome that those procedures and activities are expected to achieve. A disadvantage of this approach is that States may not share a common understanding of what they hope the agreement will achieve, which may make it more difficult for them to agree upon a common path forward. An advantage is that it may allow States to begin to address a problem collectively, even if they have not yet reached a consensus on what, precisely, the ultimate outcome of their collective action should be.

4 Ibid., para. 50.

5 Merriam-Webster's Online Dictionary, <http://www.merriam-webster.com/dictionary/objective>.

6 Art. 1.

7 Art. 3.

15. Some instruments do specify desired outcomes as their objectives. They may do so in an aspirational and idealistic way or in a way that is more determinable or measurable. An example of the former is article 1 of the Constitution of the World Health Organization, which states that the objective of WHO “shall be the attainment by all peoples of the highest possible level of health.”⁸ Likewise, the United Nations Framework Convention on Climate Change states that its “ultimate objective” is to achieve “stabilization of greenhouse gas concentrations in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system”.⁹

B. Primary and secondary actions

16. Instruments that specify their objective as actions instead of outcomes may name both primary actions and secondary actions that are related to the primary ones. An article on objectives in an instrument taking this approach may reference all the major categories of actions contained in the full instrument, and may thus serve as a summary or overview of what the instrument does rather than a declaration of the outcome that it seeks to achieve. Article 1 of the Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade exemplifies this approach:

The objective of this Convention is to promote shared responsibility and cooperative efforts among Parties in the international trade of certain hazardous chemicals in order to protect human health and the environment from potential harm and to contribute to their environmentally sound use, by facilitating information exchange about their characteristics, by providing for a national decision-making process on their import and export and by disseminating these decisions to Parties.¹⁰

17. In other examples, secondary actions may in fact represent the outcome that the instrument is intended to achieve. The elements of a comprehensive mercury framework developed by the Ad Hoc Open-ended Working Group on Mercury at its second meeting (as contained in the appendix to annex I of document UNEP(DTIE)/Hg/OEWG.2/13) include a sample statement of the framework’s objective:

To protect human health and the global environment from the release of mercury and its compounds throughout their life-cycles by minimizing and, where feasible, ultimately eliminating global, anthropogenic mercury releases to air, water and land.¹¹

18. The text beginning with the word “minimizing” is thus the outcome that collective action would be intended to achieve, namely, the minimization and, where feasible, ultimate elimination of global anthropogenic mercury releases to air, water and land.

C. Clarity and precision

19. An effective statement of an instrument’s objective is one that clearly and succinctly conveys what the instrument is intended to achieve. Complicated objectives that contain many compound phrases and secondary actions, or that contain numerous vague qualifying terms, can be difficult to understand, may lose their common meaning when translated into other languages and may not be fully successful in providing a unified statement of the overarching goal towards which the parties are collectively working.

8 Art. 1.

9 Art. 2.

10 Art. 1.

11 Report of the Ad Hoc Open-ended Working Group on Mercury on the work of its second meeting (UNEP(DTIE)/Hg/OEWG.2/13), annex I, appendix. This sample objective is based on the UNEP Global Mercury Partnership goal, which was developed by UNEP in consultation with Governments and other stakeholders. See UNEP Global Mercury Partnership, Overarching framework (2009 version), <http://www.chem.unep.ch/mercury/Sector-Specific-Information/Docs/Overarching%20Framework.pdf>.

20. For example, the objectives articles of the Stockholm Convention and the Cartagena Protocol on Biosafety to the Convention on Biological Diversity each specify actions rather than outcomes. Both begin with a dependent clause recalling the precautionary approach of Principle 15 of the Rio Declaration on Environment and Development. The Stockholm Convention objective concludes clearly and succinctly, “the objective of this Convention is to protect human health and the environment from persistent organic pollutants”,¹² while the Biosafety Protocol states:

The objective of this Protocol is to contribute to ensuring an adequate level of protection in the field of the safe transfer, handling and use of living modified organisms resulting from modern biotechnology that may have adverse effects on the conservation and sustainable use of biological diversity, taking also into account risks to human health, and specifically focusing on transboundary movements.¹³

D. Options for the intergovernmental negotiating committee’s consideration

21. The intergovernmental negotiating committee may wish to consider including, among the introductory provisions of the mercury instrument, an article patterned after one or more of the following examples:

(a) Article 1 of the WHO Constitution, which specifies an aspirational outcome:

The objective of the World Health Organization (hereinafter called the Organization) shall be the attainment by all peoples of the highest possible level of health;

(b) Article 1 of the Stockholm Convention, which references the precautionary approach and specifies a succinct action goal:

Mindful of the precautionary approach as set forth in Principle 15 of the Rio Declaration on Environment and Development, the objective of this Convention is to protect human health and the environment from persistent organic pollutants;

(c) The sample objective contained in the appendix to annex I of document UNEP(DTIE)/Hg/OEWG.2/13, setting forth elements of a comprehensive mercury framework, which combines an action goal like that of the Stockholm Convention with a desired outcome of minimization and elimination of anthropogenic mercury releases:

To protect human health and the global environment from the release of mercury and its compounds throughout their life-cycles by minimizing and, where feasible, ultimately eliminating global, anthropogenic mercury releases to air, water and land.

II. Options for control measures

22. The present chapter describes options for control measures relating to the provisions called for in subparagraphs (b)–(f) of paragraph 27 of decision 25/5, namely, provisions:

- (a) To reduce the supply of mercury and enhance the capacity for its environmentally sound storage;
- (b) To reduce the demand for mercury in products and processes;
- (c) To reduce international trade in mercury;
- (d) To reduce atmospheric emissions of mercury;
- (e) To address mercury-containing wastes and remediation of contaminated sites.¹⁴

12 Art. 1.

13 Art. 1.

14 In the interests of clarity the present chapter presents mercury supply and storage in separate sections, and similarly presents wastes and remediation separately.

23. In paragraph 27 (h) the Governing Council recognized that the ability of developing countries and countries with economies in transition to implement some legal obligations effectively was dependent on the availability of capacity-building and adequate financial assistance. As noted in the introduction to the present note, the secretariat is presenting a separate document on financial assistance arrangements. The present note recognizes that some countries may require financial and technical assistance in implementing some options presented below. It does not, however, endeavour to establish linkages between particular options and the assistance requirements that may be associated with them, to avoid pre-empting possible positions that countries might take.

A. Provisions to reduce the supply of mercury

24. The aim of the options presented in the present section is to minimize the release of mercury to the biosphere by reducing the global supply of mercury. Reducing the global supply of mercury reduces its availability and can lead to higher mercury prices, thereby decreasing demand for it as a feedstock in industrial processes and mercury-added products and stimulating research on and the application of alternatives to mercury. In addition to linkages between supply and demand, close linkages exist between mercury supply, trade and environmentally sound storage.

25. The issue of supply has two components: first, the source of the supply; and, second, the availability of the supply to industrial and other uses once it leaves its source. Accordingly, two categories of measures might be relevant to reducing the supply of mercury. The first would include measures to prevent or manage the extraction of mercury. These types of measures may focus on primary mercury mining, mercury produced as a by-product of mining for other metals and mercury derived from recycling and other recovery sources. Second, there may be measures to prevent or manage the availability of mercury for other uses. Such measures could deal with the three source categories just named and could also focus on supply from existing stocks, particularly decommissioned chlor-alkali cells and mercury stockpiles.

26. Subsection 1 immediately below describes options for provisions to reduce and manage the extraction of elemental mercury. Subsection 2 then presents options for provisions to reduce the availability of elemental mercury supplies.

1. Reduction and management of the extraction of elemental mercury

(a) Primary mining

27. Because primary mining permanently adds new mercury to global supplies, it is the least desirable source of mercury. The committee may wish to consider one or more of the following options for addressing primary mercury mining, which are based on paragraph 4 of the appendix in annex I of document UNEP(DTIE)/Hg/OEWG.2/13:

- (a) Each party not to allow the opening of new primary mercury mining operations;
- (b) Each party not to allow the expansion of existing primary mercury mining operations;
- (c) Each party to eliminate existing primary mercury mining by a specified date (either within a stated time following the entry into force of the instrument or by a date specified in the instrument).

(b) By-product mercury

28. The committee may wish to consider one of the following options for addressing mercury produced as a by-product of mining:

- (a) Each party to encourage the capture, recovery and environmentally sound storage of by-product mercury;
- (b) Each party to require the capture, recovery and environmentally sound storage of by-product mercury.

(c) Recycling

29. The committee may wish to consider one or more of the following options for addressing mercury derived from the recycling of mercury-containing products:

- (a) Each party to require the recovery and environmentally sound storage of mercury derived from recycling (Stockholm Convention annex A, II (d));

(b) Conference of the parties to develop, adopt and recommend the application of standards on best available techniques and best environmental practices to support the environmentally sound recycling of mercury from mercury-containing products and specified processes that use mercury;

(c) Each party to promote and require the use of standards on best available techniques and best environmental practices to support the environmentally sound recycling of mercury from mercury-containing products and specified processes that use mercury (Stockholm Convention article 5 (d)).

2. Reduce the availability of elemental mercury

30. Whether mercury is newly mined, recaptured from recycling or other processes or held as existing stocks (including mercury in chlor-alkali cells), the mercury instrument could contain measures to restrict or manage the extent to which it may be made available for use. The aim of the options in the present section is to minimize and prevent the movement of mercury from supply sources to potential users. The committee may wish to consider one or more of the following options:

(a) *Prohibition of supply*: Each party to prohibit the sale, transfer or use of mercury from identified supply sectors, except for the purpose of environmentally sound storage:

- (i) Could apply only to parties that exceed specified (domestic) supply sector production thresholds or targets;
- (ii) Time-limited exemptions could be available for specific uses (Stockholm Convention articles 3 and 4);

(b) *Phase-out of supply*: Each party to phase out the sale, transfer or use of mercury from identified supply sectors (except for the purpose of environmentally sound storage) according to a phase-out schedule established under the mercury instrument or by its parties after entry into force:

- (i) Could apply only to parties that exceed specified (domestic) supply sector production thresholds or targets;
- (ii) Essential-use and critical-use exemptions could be available for specific uses (e.g., Montreal Protocol article 2H);

(c) *National, subregional and regional action plans*: Each party to develop and implement a national action plan and, as appropriate, participate in the development and implementation of a subregional or regional action plan for identifying locations and quantities of domestic stocks of elemental mercury and specified mercury compounds in specified sectors (Stockholm Convention articles 5, paragraph (a), and 6, paragraph 1 (a));

(d) *National inventories*: Each party to develop a national inventory of its stocks of elemental mercury and specified mercury compounds in specified sectors (Climate Change Convention, article 4, paragraph 1 (a));

(e) *Domestic licensing systems*: Each party to establish a domestic licensing or tracking system to monitor and regulate domestic production and trade in elemental mercury and specified mercury compounds; requirement could apply only to parties that exceed specified domestic supply sector production thresholds or targets (Montreal Protocol article 4B);

(f) *Party inability to obtain adequate supply*: Upon notice by a developing-country party through the secretariat, the conference of the parties to decide upon appropriate action to be taken in the event that the party is unable to obtain an adequate supply of mercury (Montreal Protocol article 5, paragraph 4).

B. Provisions to enhance capacity for environmentally sound storage

31. Mercury derived from stockpiles, wastes and other anthropogenic sources should be stored in an environmentally sound manner that reduces the possibility of future releases into the environment. Provisions for environmentally sound storage may have close links with supply, waste management and international trade. In addition, the availability of technical knowledge, capacity-building and financial assistance may affect the ability of some parties to contribute effectively to the promotion of environmentally sound storage of mercury.

32. The aim of the options in the present subsection is to reduce or eliminate mercury releases from mercury stockpiles and wastes by developing and using environmentally sound, long-term storage solutions. The committee may wish to consider one or more of the following options:

(a) *Best available techniques and best environmental practices:* Conference of the parties to develop, adopt and recommend the use of guidelines on best available techniques and best environmental practices to support the environmentally sound terminal, long-term or short-term storage of elemental mercury and specified mercury compounds. Such guidelines could define the scope of applicability, including sectors and quantity thresholds (Stockholm Convention article 5, paragraph (d); document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 6 (a));

(b) *International cooperation:*

(i) Parties to cooperate to develop global long-term capacity for the sequestration and storage of elemental mercury and specified mercury compounds (Kyoto Protocol article 2, paragraph 1 (a) (iv));

(ii) Parties to cooperate to develop arrangements to enhance capacity for domestically and regionally sited environmentally sound storage, including through regional centres (Basel Convention article 14, paragraph 1; Stockholm Convention article 12, paragraph 4);

(c) *Domestic action:*

(i) Each party to promote the environmentally sound storage of elemental mercury and specified mercury compounds, within specified time frames (Stockholm Convention article 6, paragraph 1 (d) (i));

(ii) Each party to phase in requirements for the environmentally sound storage of elemental mercury and specified mercury compounds, within specified time frames (Stockholm Convention article 6, paragraph 1 (d) (i));

(iii) Each party to develop and implement a national action plan and, as appropriate, participate in the development and implementation of a subregional or regional action plan for achieving the environmentally sound storage of elemental mercury and specified mercury compounds (Stockholm Convention articles 5, paragraph (a), and 6, paragraph 1 (a));

(d) *Linkage with trade:* Each party to permit the export of elemental mercury and specified mercury compounds only for the purpose of environmentally sound storage (Stockholm Convention article 3, paragraph 2; Basel Convention article 4, paragraphs 8 and 9).

C. Provisions to reduce the demand for mercury in products and processes

33. The aim of the options in the present section is to minimize mercury exposures and releases by reducing demand for mercury in products and processes. Reducing demand for mercury in products and processes can decrease the amount of mercury in waste streams and thereby decrease the likelihood of eventual mercury releases. Reductions in mercury supply and international trade may significantly influence the reduction of demand. The committee may wish to consider one or more of the options set out below.

1. General provisions for demand reduction

34. The committee may wish to consider one or more of the following options in respect of general provisions for demand reduction:

(a) *Best available techniques and best environmental practices:* Conference of the parties to develop, adopt and recommend guidelines on best available techniques and best environmental practices, including the use of non-mercury alternatives, to support demand reduction in relevant sectors, including artisanal and small-scale gold mining, vinyl chloride monomer and chlor-alkali production, mercury-added products and packaging and dental practice (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 5 (c));

(b) *Information tools*: Parties to cooperate in the development and dissemination of information tools that promote research into and the use of substitute or modified materials, products and processes, including non-mercury alternatives (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 5(b));

(c) *Prevention of new uses*: Each party to prevent the production and use of new products or industrial processes that contain or use mercury or mercury compounds (Stockholm Convention article 3, paragraph 3);

(d) *New subsidies*: Each party to refrain from providing new subsidies, aid, credits, guarantees or insurance programmes for the export to non-parties of products, equipment, plant or technology that would facilitate the production of mercury-added products or processes that use mercury (Montreal Protocol article 4, paragraph 6); provision not to apply to products and processes for the environmentally sound treatment of mercury-containing wastes or environmentally sound sequestration and storage of mercury and mercury-containing compounds (Montreal Protocol article 4, paragraph 7).

2. Sector-specific demand provisions

35. The committee may wish to consider one or more of the following options in respect of provisions on demand reduction in specific sectors:

(a) *Industrial processes that use mercury, e.g., vinyl chloride monomer and chlor-alkali production*:

- (i) *New facilities*: Each party not to allow the construction of new production facilities or the expansion of existing facilities (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 5 (a) (i));
- (ii) *Decommissioning of existing plants*: Each party to decommission existing plants within a fixed time period; a party unable to do so might request a one-time extension of a fixed period (Ottawa Landmines Convention article 5, paragraphs 1 and 3);

(b) *Artisanal and small-scale gold mining*:

- (i) *Prevention of diversion*: Each party to prevent the diversion of dental mercury amalgam to other uses, including artisanal and small-scale gold mining;
- (ii) *International cooperation*: Parties to cooperate to address illegal diversions of mercury to the artisanal and small-scale gold mining sector (Basel Convention article 9);

(c) *Manufactured products that contain intentionally-added mercury*:

- (i) Each party to phase out the manufacture or sale of specified products according to an agreed schedule; time-limited specific or essential-use exemptions could be available for some products under specific situations (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 5 (a) (ii));
- (ii) Each party to prohibit the export of specified products for which an allowed use or exemption has expired except for the purpose of environmentally sound disposal (Stockholm Convention article 3, paragraph 2 (b));
- (iii) Each party to require mercury-added products that are intended for sale, distribution in commerce or export to include warning labels regarding the mercury content of the products, environmental and health risks of mercury and information on safe handling, storage, transport, use and environmentally sound disposal (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 5 (a));

(d) For products for which non-mercury alternatives are unavailable, parties to cooperate in the development and implementation of mercury content standards (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 5 (a) (iii)).

D. Provisions to reduce international trade in mercury

36. The aim of the options in the present section is to reduce mercury use and exposures by minimizing international trade in mercury. Actions to reduce international trade in elemental mercury may significantly affect the local availability of mercury and the success of demand reduction measures. Similarly, reductions of international trade in mercury-added products may reduce demand for them and diminish the volume of mercury-containing wastes, including in developing countries. As do other multilateral instruments, the mercury instrument could contain measures on international trade with parties and with States not party to the instrument.

1. Trade with parties

37. The committee may wish to consider one or more of the following options in respect of international trade with parties:

(a) *Imports and exports*: Except for the purpose of environmentally sound disposal, each party not to allow the import and export of elemental mercury and specified mercury-containing compounds and mercury-added products, in conformance with the party's supply and demand reduction commitments under the mercury instrument (Stockholm Convention article 3, paragraph 2);

(b) *Restriction of imports*: Each party to import elemental mercury and specified mercury-containing compounds and mercury-added products only in conformity with their supply and demand reduction commitments under the mercury instrument; any import must be accompanied by a valid export licence issued by the exporting party (CITES articles IV and V);

(c) *Establishment of licensing systems*: Each party to implement a system for licensing the import and export of elemental mercury and specified mercury-containing compounds and mercury-added products; requirement may be deferred for a fixed time period for parties that are not in a position to establish and implement such a system (Montreal Protocol article 4B);

(d) *Labelling requirements*: Each party to comply with labelling requirements when exporting elemental mercury and specified mercury-containing compounds and mercury-added products to ensure the adequate availability of information with regard to risks and hazards to human health or the environment (Rotterdam Convention article 13, paragraphs 2 and 3);

(e) *Data reporting*:

(i) Parties to cooperate to develop a data reporting system to monitor global mercury trade (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 6 (d));

(ii) Each party to report data at prescribed intervals on its import and export of elemental mercury and specified mercury-containing compounds and mercury-added products (Montreal Protocol article 7);

(f) *Prior informed consent*: Mercury instrument to establish a prior informed consent procedure for international trade in elemental mercury and specified mercury-containing compounds and mercury-added products not subject to the Rotterdam Convention's prior informed consent procedure (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 6 (c); Biosafety Protocol article 8);

(g) *Illegal traffic*: Mercury instrument to provide that transboundary movements in contravention of the instrument constitute illegal traffic (Biosafety Protocol article 25, paragraph 1; Basel Convention article 4, paragraph 3).

2. Trade with non-parties

38. The committee may wish to consider one or more of the following provisions in respect of international trade with States not party to the instrument:

(a) *Trade with non-parties not allowed*:

(i) *Trade in mercury and mercury-containing products*: Each party not to allow the import and export of elemental mercury and specified mercury-containing compounds and mercury-added products to and from States not party to the mercury instrument (Montreal Protocol article 4, paragraphs 1 and 2);

(ii) *Production and process methods*: Conference of the parties may decide not to allow or to restrict the import of products produced with, but not containing,

mercury or mercury compounds from States not party to the mercury instrument (Montreal Protocol article 4, paragraph 4);

- (b) *Trade with non-parties permitted:*
 - (i) *Non-parties in compliance with control measures:* Parties may allow the import and export of specified mercury-containing compounds and mercury-added products with States not party to the mercury instrument if the conference of the parties determines that the State is in compliance with the control measures of the instrument, and has submitted data to that effect (Montreal Protocol article 4, paragraph 8);
 - (ii) *Annual certification from non-parties:* Parties may allow the export of specified mercury-containing compounds and mercury-added products to a State not party to the mercury instrument only if the State has provided an annual certification to the exporting party specifying its intended use of the compound or product and including a statement that, with regard to that compound or product, the importing State is committed to protecting human health and the environment by taking the necessary measures to prevent releases and by complying with the relevant control measures of the instrument (Stockholm Convention article 3, paragraph 2 (b) (iii));
- (c) *Other options:*
 - (i) Transboundary movements of elemental mercury and specified mercury-containing compounds and mercury-added products between a party and a State not party to the mercury instrument to be consistent with the objectives of the instrument (Biosafety Protocol article 24, paragraph 1);
 - (ii) Parties to encourage States not party to the instrument to adhere to the terms of the instrument (Biosafety Protocol article 24, paragraph 2).

E. Provisions to reduce atmospheric emissions of mercury

39. The aim of the options in the present section is to reduce, minimize and, where feasible, eliminate atmospheric emissions of mercury derived from anthropogenic sources in key sectors. Actions taken in this area that could result in the recovery or capture of mercury or mercury-containing wastes could have close links with the capacity for the environmentally sound storage of mercury and management of wastes. This section provides four categories of options: national implementation strategies; reduction goals, targets and timetables; substitute or modified materials, products and processes; and best available techniques and best environmental practices.

1. National implementation strategies

40. The mercury instrument could include provisions for national implementation strategies or action plans related to the reduction of atmospheric mercury emissions. The committee may wish to consider one or more of the following options:

- (a) *Action plans:* Each party to develop and implement a national action plan and, as appropriate, participate in the development and implementation of a subregional or regional action plan to identify, characterize and address the release of atmospheric emissions of mercury from specified source sectors. Each plan could include:
 - (i) Evaluation of current and projected emissions, including the development and maintenance of source inventories and release estimates;
 - (ii) Evaluation of the efficacy of legislation and policies of the party relating to the management of emissions;
 - (iii) Strategies and actions to reduce and, where feasible, eliminate emissions from intentional use and to minimize unintentional emissions;
 - (iv) Steps to promote education, training and awareness in respect of strategies and actions;
 - (v) Periodic review of strategies and actions, including reporting of reviews to the conference of the parties;

- (vi) Schedule for implementation of the plan (Stockholm Convention article 5, paragraph (a));
- (b) *Indicative list of actions:* Mercury instrument to include an indicative list of actions that parties could take under their plans, e.g.:
 - (i) Use of economic instruments to encourage the adoption of cost-effective approaches to reducing mercury emissions;
 - (ii) Development of covenants and voluntary agreements between Governments and industry bodies;
 - (iii) Encouragement of the more efficient use of resources and raw materials;
 - (iv) Encouragement of the use of less-polluting energy sources;
 - (v) Measures to phase out certain mercury-emitting processes when alternatives are available;
 - (vi) Measures to develop and employ cleaner processes to prevent and control pollution;
 - (vii) More stringent measures than those required by the mercury instrument (LRTAP Heavy Metals Protocol article 5, paragraphs 2 and 3);
- (c) *Mainstreaming and sectoral integration:* Each party to integrate the objective of reducing atmospheric emissions of mercury into relevant sectoral or cross-sectoral plans, programmes and policies (Convention on Biological Diversity article 6 (b); Climate Change Convention article 4, paragraph 1 (f));
- (d) *Periodic review of policies:* Each party to identify, periodically review and revise as necessary its policies and practices that encourage activities that lead to greater atmospheric emissions of mercury (Climate Change Convention article 4, paragraph 2 (e)).

2. Reduction goals, targets, and timetables

41. The mercury instrument could include provisions setting forth reduction goals, targets and timetables related to atmospheric mercury emissions. The committee may wish to consider one or more of the following options:

- (a) *Global goal:* Mercury instrument to include a global goal of reducing anthropogenic emissions of mercury to the atmosphere to [x] level by [y] date (Climate Change Convention article 4, paragraph 2 (b));
- (b) *Country reduction targets:* Each party to reduce its total annual atmospheric emissions of mercury by specified percentages from a baseline emissions level within a specified time frame (LRTAP Heavy Metals Protocol article 3, paragraph 1; Montreal Protocol articles 2A–2I); compliance period could be extended by a fixed time for some classes of parties (Montreal Protocol article 5, paragraph 1);
- (c) *Emissions limit values:* Each party to apply emissions limit values to each new and existing stationary emissions source within a major stationary source category; alternatively, each party to apply other emissions reduction strategies that achieve equivalent overall emission levels (LRTAP Heavy Metals Protocol article 3, paragraph 2);
- (d) *Promotion of reduction measures:* Each party to promote the application of measures to reduce atmospheric mercury emissions or to eliminate their sources (Stockholm Convention article 5, paragraph (b)).

3. Substitute or modified materials, products and processes

42. The instrument could include provisions on substitute or modified materials, products and processes that could reduce atmospheric mercury emissions. The committee may wish to consider one or more of the following options:

- (a) *International cooperation:* Parties to cooperate in promoting the development and use of alternative or modified materials, products and processes to reduce atmospheric mercury emissions; such cooperation could include appropriate technical and financial assistance (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 7 (c));

(b) *Development of guidelines*: Conference of the parties to develop and adopt guidelines on substitute or modified materials, products and processes to reduce atmospheric mercury emissions (Stockholm Convention article 5, paragraph (c));

(c) *Party actions*: Each party to promote research and development and to require the use of alternative or modified materials, products and processes to reduce atmospheric mercury emissions, taking into consideration relevant guidelines (Stockholm Convention article 5, paragraph (c)).

4. **Best available techniques and best environmental practices**

43. The instrument could include provisions on best available techniques and best environmental practices intended to reduce atmospheric mercury emissions. The committee may wish to consider one or more of the following options:

(a) *General guidance*: Mercury instrument to include general guidance on best available techniques and best environmental practices to reduce atmospheric mercury emissions (Stockholm Convention annex C, part V; LRTAP Heavy Metals Protocol annex III);

(b) *Development of guidelines*: Conference of the parties to develop and adopt guidelines on best available techniques and best environmental practices to reduce atmospheric mercury emissions (Stockholm Convention article 5, paragraph (d));

(c) *New sources*: For new emissions sources, each party:

(i) To phase in the use of best available techniques or equivalent measures for identified sectors and to promote the use of best environmental practices;

(ii) To promote the use of best available techniques or equivalent measures and best environmental practices for other key sectors (Stockholm Convention article 5, paragraph (d));

(d) *Existing sources*: For existing emissions sources, each party to promote the use of best available techniques, best environmental practices, environmentally sound technology or equivalent measures within key sectors (Stockholm Convention article 5, paragraph (e)).

F. **Provisions to address mercury-containing waste**

44. The aim of the options in the present section is to reduce anthropogenic releases of mercury by managing mercury-containing wastes in an environmentally sound manner. Action in this area may be closely linked to the capacity for environmentally sound storage of mercury and to the reduction of mercury in mercury-added products. The section provides options for provisions in three categories: the environmentally sound management of mercury-containing wastes; best available techniques and best environmental practices related to mercury-containing wastes; and the transboundary movement of mercury-containing wastes.

1. **Environmentally sound management of mercury-containing wastes**

45. The committee may wish to consider one or more of the following options related to the environmentally sound management of mercury-containing wastes:

(a) *General requirement*: Each party to manage mercury-containing wastes in a manner protective of human health and the environment (Stockholm Convention article 6, paragraph 1);

(b) *Identification strategies*: Each party to develop strategies for identifying products and articles in use and wastes consisting of, containing or contaminated with mercury (Stockholm Convention article 6, paragraph 1 (a));

(c) *Adequate management facilities*: Each party to ensure the availability of adequate facilities for the environmentally sound management of mercury-containing wastes, located, to the extent possible, within its territory (Basel Convention article 4, paragraph 2 (b));

(d) *Pollution prevention*: Each party to ensure that the persons involved in the management of mercury-containing wastes take all necessary measures to prevent pollution arising from such management and, if such pollution occurs, to minimize the consequences for human health and the environment (Basel Convention article 4, paragraph 2 (c));

(e) *International cooperation*: Parties to cooperate in activities with other parties and relevant organizations to improve the environmentally sound management of mercury-containing

wastes, including through the provision of technical and financial assistance (Basel Convention article 4, paragraph 2 (h));

(f) *Cooperation with Basel Convention*: Parties to cooperate, including with the appropriate Basel Convention bodies, to develop further and implement relevant international technical guidelines on the environmentally sound management of mercury-containing wastes and to assist developing countries and countries with economies in transition in the implementation of those guidelines (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 8 (b) (ii)).

2. Best available techniques and best environmental practices

46. The committee may wish to consider one or more of the following options in respect of best available techniques and best environmental practices in the management of mercury-containing wastes:

(a) *General guidance*: Mercury instrument to include general guidance on best available techniques and best environmental practices for the environmentally sound management of mercury-containing wastes (Stockholm Convention annex C, part V; LRTAP Heavy Metals Protocol annex III);

(b) *Guidelines on best available techniques and best environmental practices*: Conference of the parties to develop, in cooperation with the appropriate Basel Convention bodies, and adopt guidelines on best available techniques and best environmental practices for the environmentally sound management of mercury-containing wastes, using a life-cycle approach (Stockholm Convention article 5 (d)); in particular, such guidelines could address:

- (i) Reduction of the generation of mercury-containing wastes;
- (ii) Promotion of the separate collection, separation, transport and environmentally sound treatment of mercury-containing wastes;
- (iii) Reduction of mercury releases from incinerators and landfills;

(c) *Implementation*: Parties to require the use of best available techniques and best environmental practices or equivalent measures for identified waste management categories and to promote their use for other categories.

3. Transboundary movement of mercury-containing wastes

47. The committee may wish to consider one or more of the following options in respect of the control of transboundary movements of mercury-containing wastes:

(a) *General provisions*:

- (i) *Establishment of threshold levels*: Conference of the parties to cooperate closely with the appropriate Basel Convention bodies to establish threshold levels of mercury or mercury compounds present in wastes that render such wastes subject to the provisions of the mercury instrument (Stockholm Convention article 6, paragraph 2 (a));
- (ii) *Relevance of international rules*: Each party to take measures to prevent the transport of mercury-containing wastes across international boundaries in violation of relevant international rules, standards and guidelines (Stockholm Convention article 6, paragraph 1 (d));
- (iii) *Restriction or phase-out of trade*: Cooperating closely with the appropriate Basel Convention bodies, each party to restrict or phase out trade in wastes containing mercury or mercury compounds except for the purpose of environmentally sound management, particularly when there is no environmentally sound facility in the exporting country (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 8 (b) (i));
- (iv) *Minimization of transboundary movement*: Each party to ensure that the transboundary movement of mercury-containing wastes is reduced to a minimum consistent with the environmentally sound management of such wastes and is carried out in a manner calculated to protect human health and the environment (Basel Convention article 4, paragraph 2 (d));

- (b) *Imports and exports:*
 - (i) *Prior informed consent for exports:* Each party to export mercury-containing wastes only for the purpose of environmentally sound storage, with the prior informed consent of the importing party, and in conformity with relevant international rules, standards and guidelines (Basel Convention article 4, paragraph 1 (c); Stockholm Convention article 6, paragraph 1 (d));
 - (ii) *Prohibited exports:* Each party to prohibit the export of mercury-containing wastes to a State that has prohibited all imports of such wastes or if the party has reason to believe that the wastes in question will not be managed in an environmentally sound manner (Basel Convention article 4, paragraph 2 (e));
 - (iii) *Prevention of imports:* Each party to prevent the import of mercury-containing wastes if it has reason to believe that they will not be managed in an environmentally sound manner (Basel Convention article 4, paragraph 2 (g));
- (c) *Liability:*
 - (i) *Cooperation in the adoption of liability rules:* Parties to cooperate with a view to adopting rules and procedures in the field of liability and compensation for damage resulting from the transboundary movement and disposal of mercury-containing wastes (Basel Convention article 12);
 - (ii) *Process for elaborating liability rules:* Conference of the parties to adopt a process for the elaboration of international rules and procedures in the field of liability and redress for damage resulting from the transboundary movements of mercury-containing wastes (Biosafety Protocol article 27).

G. Provisions to address remediation of contaminated sites

48. The aim of the options in the present section is to reduce mercury releases and the potential for future releases by remediating existing contaminated sites. Actions in this area may be closely linked to the capacity for the environmentally sound storage of mercury and management of mercury-containing wastes. Actions could also have linkages to mercury supply if the remediation of contaminated sites involves, for example, the recovery and sale of mercury by reprocessing abandoned mine tailings.

49. The committee may wish to consider one or more of the following options:

- (a) *Development of remediation strategies:*
 - (i) Each party to develop appropriate strategies for identifying sites contaminated by mercury and mercury compounds. If remediation is undertaken, it should be performed in an environmentally sound manner (Stockholm Convention article 6, paragraph 1 (e));
 - (ii) Parties to cooperate in developing and implementing strategies and methodologies for identifying, assessing, prioritizing and remediating contaminated sites, including through the provision of financial and technical assistance (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 10 (a));
- (b) *Guidance on best available techniques and best environmental practices:*
 - (i) Conference of the parties to develop guidance on best available techniques and best environmental practices for:
 - a. Identifying and assessing contaminated sites;
 - b. Preventing mercury contamination from spreading;
 - c. Managing and, if feasible, remediating and rehabilitating contaminated sites (document UNEP(DTIE)/Hg/OEWG.2/13, annex I, appendix, paragraph 10 (b)).

III. Options for provisions related to implementation

50. The present chapter describes options for provisions related to the implementation of the mercury instrument. It includes two provisions listed in paragraph 27 of decision 25/5, i.e., provisions to increase knowledge by raising awareness and exchanging scientific information and to specify arrangements for capacity-building and technical assistance. As noted in the introduction to the present note, the secretariat has considered two other important implementation issues – financial assistance and compliance – in separate papers, meaning that options for them are not presented herein.

51. The secretariat note on compliance (UNEP(DTIE)/Hg/INC.1/11) includes a discussion of party reporting and its importance for transparency and compliance review. The note identifies various ways in which some multilateral environmental agreements have established requirements for party reporting. In addition to containing an overarching article on party reporting, some multilateral environmental agreements include reporting requirements that are specific to some of their control measures. The committee may wish to consider whether some substantive articles in the mercury instrument should similarly include article-specific reporting requirements.

52. An additional implementation action that multilateral environmental agreements may require or recommend is the preparation of national action plans. As with reporting requirements, multilateral environmental agreements may require both an overarching action plan (e.g., Stockholm Convention article 7) and individual plans related to specific control measures. In contemplating options for substantive provisions for the mercury instrument, the committee may also wish to consider whether national action plans might assist parties in their implementation of one or more of their treaty commitments.

A. Provisions to increase knowledge through awareness-raising and scientific information exchange

53. The aim of the actions in the present section is to increase knowledge by filling gaps in data and information on mercury. The section lists seven categories of options: inventories of national use, consumption and environmental releases; monitoring of mercury levels in various media; assessment of impacts on human health and the environment; information on transport, transformation, environmental cycle and fate; information on commerce and trade; enhanced collection and sharing of information; and public information, awareness and education.

1. Inventories of national use, consumption and environmental releases

54. The committee may wish to consider one or more of the following options in respect of inventories of national use, consumption and environmental releases:

(a) *Harmonized methodologies*: Parties to cooperate in developing harmonized methodologies for establishing inventories of mercury sources and analytical techniques for the measurement of mercury emissions (Stockholm Convention article 11, paragraph 1 (g));

(b) *National inventories*: Each party to develop, update and make available inventories of national use, consumption and environmental releases for mercury using, at a minimum, methodologies specified by the conference of the parties (LRTAP Heavy Metals Protocol article 3, paragraph 5; Climate Change Convention article 4, paragraph 1 (a));

(c) *National systems*: Each party to have in place a national system to estimate anthropogenic mercury emissions by sources; guidelines for national systems to be decided upon by the conference of the parties (Kyoto Protocol article 5, paragraph 1).

2. Monitoring of mercury levels in various media

55. The committee may wish to consider one or more of the following provisions in respect of monitoring mercury levels:

(a) *Monitoring by parties*: Within their capabilities, parties to monitor at the national and international levels mercury sources, emissions, presence, levels and trends in humans and the environment (Stockholm Convention article 11, paragraph 1);

(b) *Encouragement by parties*: Parties to encourage research, development, monitoring and cooperation on existing levels of mercury in the biotic and abiotic environment (LRTAP Heavy Metals Protocol article 6, paragraph (a));

(c) *Technical cooperation*: Parties to initiate and cooperate in the conduct of research and development in respect of instrumentation and other techniques for monitoring and measuring anthropogenic mercury emission rates and ambient concentrations in air, soil, water, fish and vegetation (LRTAP Convention article 7, paragraph (b)).

3. Assessment of impacts on human health and the environment

56. The committee may wish to consider one or more of the following options related to assessing and disseminating information on the impact of mercury and mercury compounds on human health and the environment:

(a) *Research on effects and impacts*:

- (i) Parties, within their capabilities, to encourage and undertake research on the effects of mercury on human health and the environment (including human reproductive health), along with its social, economic and cultural impacts (Stockholm Convention article 11, paragraphs 1 and 2);
- (ii) Parties to encourage research, development, monitoring and cooperation on relevant effects of mercury on human health and the environment, including quantification of those effects (LRTAP Heavy Metals Protocol article 6, paragraph (c));

(b) *Public availability of results*: Parties to make the results of research, development and monitoring activities accessible to the public on a timely and regular basis (Stockholm Convention article 11, paragraph 2 (e));

(c) *International cooperation*: Parties to cooperate in monitoring the effects of the management of mercury on human health and the environment (Basel Convention article 10, paragraph 2 (b)).

4. Information on transport, transformation, environmental cycle and fate

57. The committee may wish to consider one of the following options related to the collection of information on transport, transformation, environmental cycle and fate of mercury:

(a) Within their capabilities, parties to undertake research, development, monitoring and cooperation on environmental transport, fate and transformation of mercury (Stockholm Convention article 11, paragraph 1 (c));

(b) Parties to encourage research, development, monitoring and cooperation on mercury emissions, long-range transport and deposition levels, pollutant pathways and inventories in representative ecosystems (LRTAP Heavy Metals Protocol article 6, paragraphs (a) and (b)).

5. Information on commerce and trade

58. The committee may wish to consider one or more of the following options in respect of information on commerce and trade of mercury and mercury-added products:

(a) *Provision of statistical data*: Each party to provide to the secretariat statistical data on the amount of its annual imports from and exports to parties and non-parties, respectively, of mercury, mercury compounds and specified mercury-added products; data to be forwarded to the secretariat not later than nine months after the end of the year to which the data relate (Montreal Protocol article 7, paragraph 3);

(b) *Maintenance of trade records*: Each party to maintain records of trade in mercury, mercury compounds and specified mercury-added products, including the names and addresses of exporters and importers, the identity and quantities of mercury and mercury-containing products traded and the States with which such trade occurred (CITES article 6);

(c) *Gathering of information*: Each party to gather information on levels of mercury in some products, on the potential for emissions of mercury during the manufacture, processing, distribution in commerce, use and disposal of products and on techniques to reduce such emissions (LRTAP Heavy Metals Protocol article 6, paragraph (i)).

6. Enhanced collection and sharing of information

59. The committee may wish consider one or more of the following provisions in respect of enhanced collection and sharing of information:

- (a) *Information generation and the development of information programmes:* Parties to support and further develop programmes aimed at defining, conducting, assessing and financing research, data collection and systematic observation; strengthening systematic observation; and promoting access to data and analyses and their exchange between parties (Climate Change Convention article 5);
- (b) *International cooperation:* Parties to cooperate in promoting, directly or through competent international bodies, research, development and exchange of information on best technologies for reducing their mercury emissions; alternatives to mercury; and costs and benefits of control strategies (Montreal Protocol article 9, paragraph 1);
- (c) *Information exchange:*
 - (i) Each party to facilitate the exchange of information relevant to the reduction or elimination of the production, use and release of mercury and mercury compounds and alternatives to mercury, including information relating to their risks and their economic and social costs (Stockholm Convention article 9, paragraph 1);
 - (ii) Parties to facilitate the exchange of information relevant to mercury control, taking into account the special needs of developing countries (Convention on Biological Diversity article 17, paragraph 1);
 - (iii) Parties to promote and cooperate in the full, open and prompt exchange of relevant scientific, technological, technical, social, economic and legal information related to mercury pollution and the economic and social consequences of various response strategies (Climate Change Convention article 4, paragraph 1 (h));
- (d) *National focal points:*
 - (i) Each party to designate a national focal point for the exchange of information (Stockholm Convention article 9, paragraph 3);
 - (ii) Each party to designate one or more national authorities to act on its behalf in the performance of information exchange required by the instrument; parties to ensure that that authority has sufficient resources to perform its tasks effectively (Rotterdam Convention article 4, paragraphs 1 and 2);
- (e) *Information clearing houses and storage:*
 - (i) Conference of the parties to establish a clearing-house mechanism to promote and facilitate technical and scientific cooperation (Convention on Biological Diversity article 18, paragraph 3);
 - (ii) Mercury instrument to establish a clearing house to facilitate the exchange of scientific, technical, environmental and legal information and to assist parties in implementing the instrument, taking into account the special needs of developing-country parties (Biosafety Protocol article 20, paragraph 1);
- (f) *Role of the secretariat:* The secretariat to serve as a clearing-house mechanism for information on mercury, including information provided by parties, intergovernmental organizations and non-governmental organizations (Stockholm Convention article 9, paragraph 4);
- (g) *International cooperation:* Within their capabilities, parties to encourage and/or undertake cooperation with regard to the storage and maintenance of information generated from research, development and monitoring (Stockholm Convention article 11, paragraph 2 (f));
- (h) *Confidential information:* For the purposes of the mercury instrument, information on the health and safety of humans and the environment not to be regarded as confidential; parties that exchange other information to protect any confidential information as mutually agreed (Stockholm Convention article 9, paragraph 5).

7. Public information, awareness and education

60. The committee may wish to consider one or more of the following options in respect of public information, awareness and education:

- (a) *Public awareness*: Parties to cooperate in promoting public awareness of the environmental effects of mercury (Montreal Protocol article 9, paragraph 2);
- (b) *Access to information*:
 - (i) Each party, within its capabilities, to ensure that the public has access to information about mercury and that the information is kept up-to-date (Stockholm Convention article 10, paragraph 2);
 - (ii) Each party to consider developing mechanisms, such as pollutant release and transfer registers, for the collection and dissemination of information on estimates of the annual quantities of mercury and mercury compounds that are released or disposed of (Stockholm Convention article 10, paragraph 5);
 - (iii) Each party to establish nationwide mercury pollution inventories or registers on a structured, computerized and publicly accessible database (Aarhus Convention article 5, paragraph 9);
- (c) *Public participation*:
 - (i) Parties to promote and cooperate in education, training and public awareness related to mercury and to encourage the widest participation in the process, including that of non-governmental organizations (Climate Change Convention article 4, paragraph 1 (i));
 - (ii) Parties to promote and facilitate the development and implementation of education and public awareness programmes on mercury pollution and its effects; public access to information; public participation in addressing mercury pollution and its effects and developing adequate responses; and training of scientific, technical and managerial personnel (Climate Change Convention article 6, paragraph (a));
 - (iii) Parties to provide for effective participation at the local, national and regional levels of non-governmental organizations and local populations in policy planning, decision-making and implementation and review of national action programmes (Desertification Convention article 10, paragraph 2 (f)).

B. Provisions for capacity-building and technical assistance

61. The aim of the options in the present section is to assist developing countries in implementing and achieving compliance with their commitments under the mercury instrument. The section presents four categories of provisions: general capacity-building provisions; capacity-building assistance for developing countries and countries with economies in transition; technology transfer; and regional centres.

1. General capacity-building provisions

62. Certain capacity-building provisions might be applicable to both developed and developing-country parties. The committee may wish to consider one or more of the following options in respect of such provisions:

- (a) *International cooperation*: Parties to cooperate in promoting technical assistance for the development of the infrastructure and capacity necessary to manage mercury; parties with more advanced programmes should provide technical assistance to those parties developing their infrastructure and capacity (Rotterdam Convention article 16);
- (b) *Bilateral and multilateral support*: Parties to promote bilateral and multilateral support to those parties that request it for the training of scientific and technical personnel for research, monitoring and enforcement, including as appropriate the supply of necessary equipment and facilities, with a view to strengthening national capabilities (London Protocol article 13, paragraph 1.1);

(c) *Promotion of training*: Each party, within its capabilities, to promote and facilitate the training of workers, educators and technical and managerial personnel (Stockholm Convention article 10, paragraph 1 (e)).

2. Capacity-building assistance for developing countries and countries with economies in transition

63. The committee may wish to consider one or more of the following options for capacity-building provisions for the specific benefit of developing countries and countries with economies in transition:

(a) *Technical research capabilities*: Parties, within their capabilities, to support efforts to strengthen technical research capabilities, particularly in developing-country parties and parties with economies in transition (Stockholm Convention article 11, paragraph 2 (b));

(b) *Promotion of education and training programmes*: Parties to cooperate in, and promote at the international level, the development and implementation of education and training programmes, including the strengthening of national capacity-building, in particular human and institutional capacities and the exchange of personnel to train experts, in particular for developing countries (Kyoto Protocol article 10, paragraph (e));

(c) *Development of human and institutional capacities*: Parties to cooperate in the development and strengthening of human resources and institutional capacities in developing-country parties, including through existing institutions and organizations and, as appropriate, through facilitating private sector involvement (Biosafety Protocol article 22, paragraph 1);

(d) *Technical assistance to strengthen capacity*: Parties to cooperate to provide timely and appropriate technical assistance to developing-country parties and parties with economies in transition, to assist them, taking into account their particular needs, to develop and strengthen their capacity to implement their obligations under the mercury instrument (Stockholm Convention article 12, paragraph 2);

(e) *Least developed countries and small island developing States*: Parties to take full account of the specific needs and special situation of least developed countries and small island developing States in their actions with regard to technical assistance (Stockholm Convention article 12, paragraph 5);

(f) *Support for communicating required information*: Conference of the parties to arrange, on request, the provision of technical support to developing-country parties for compiling and communicating information required under the mercury instrument (Climate Change Convention article 12, paragraph 7).

3. Technology transfer

64. The committee may wish to consider one or more of the following options related to technology transfer:

(a) *Party cooperation*: Parties to cooperate actively in the transfer of technology and management systems and development of technical capacity between parties (Basel Convention article 10, paragraph 2 (d));

(b) *Assistance from developed countries*: Developed-country parties to take all practicable steps to promote, facilitate and finance, as appropriate, the transfer of environmentally sound technologies and know-how to other parties, particularly developing-country parties, or access to such technologies by such parties, to enable them to implement the provisions of the mercury instrument; developed-country parties to support the development and enhancement of endogenous capacities and technologies of developing-country parties; other parties and organizations in a position to do so may also assist in facilitating the transfer of such technologies (Climate Change Convention article 4, paragraph 5);

(c) *Environmentally safe substitutes*: Each party to take every practicable step to ensure that the best available environmentally safe substitutes and related technologies are expeditiously transferred to developing-country parties and that the transfers occur under fair and most favourable conditions (Montreal Protocol article 10A);

(d) *Fair and most favourable terms; intellectual property rights*: Access to and transfer of technology to developing countries to be provided and/or facilitated under fair and most favourable terms; technology subject to patents and other intellectual property rights to be accessed or transferred subject to terms that recognize and are consistent with the adequate and effective protection of intellectual property rights (Convention on Biological Diversity article 16, paragraph 2).

4. Regional centres

65. The committee may wish to consider the following option in respect of regional centres as a means of providing technical assistance: Parties to establish arrangements including regional and subregional centres for capacity-building and transfer of technology to assist developing-country parties and parties with economies in transition in fulfilling their obligations under the mercury instrument; further guidance to be provided by the conference of the parties (Stockholm Convention article 12, paragraph 4).
