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INTERGOVERNMENTAL NEGOTIATING COMMITTEE FOR AN  
INTERNATIONAL LEGALLY BINDING INSTRUMENT  
FOR IMPLEMENTING INTERNATIONAL ACTION ON  
CERTAIN POPS

Seventh session

Geneva, 14-18 July 2003

Item 5 of the provisional agenda\*

**Preparations for the Conference of the Parties**

**EFFECTIVENESS EVALUATION\*\***

**Note by the secretariat**

1. Paragraph 1 of article 16 of the Stockholm Convention on Persistent Organic Pollutants reads as follows:

“Commencing four years after the date of entry into force of this Convention, and periodically thereafter at intervals to be decided by the Conference of the Parties, the Conference shall evaluate the effectiveness of this Convention.”

2. Paragraph 2 of that same article continues:

“In order to facilitate such evaluation, the Conference of the Parties shall, at its first meeting, initiate the establishment of arrangements to provide itself with comparable monitoring data on the presence of the chemicals listed in Annexes A, B and C as well as their regional and global environmental transport...”

3. Paragraph 3 of the article reads:

“The evaluation described in paragraph 1 shall be conducted on the basis of available scientific, technical and economic information, including:

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\* UNEP/POPS/INC.7/1

\*\* Stockholm Convention on Persistent Organic Pollutants, article 16; Conference of Plenipotentiaries on the Stockholm Convention, resolution 1, paragraph 4, decision INC-6/17, in report of the Intergovernmental Negotiating Committee on its sixth session (UNEP/POPS/INC.6/22), annex I.

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- (a) Reports and other monitoring information provided pursuant to paragraph 2;
- (b) National reports submitted pursuant to article 15; and
- (c) Non-compliance information provided pursuant to the procedures established under article 17.”

4. At its sixth session, the Intergovernmental Negotiating Committee requested the secretariat in its decision INC-6/17 to begin to address the evaluation and monitoring needs as described in article 16 of the Convention and in doing so to:

- (a) Develop guidance on the nature of the effectiveness evaluation;
- (b) Identify the basic data needed to support the effectiveness evaluation;
- (c) Assess the capacity of existing monitoring programmes to make available necessary monitoring data and then begin making arrangements for the provision of comparable monitoring data for the effectiveness evaluation. This can be assisted by continuing the work initiated by UNEP Chemicals for the substances listed in annexes A, B, and C;
- (d) Identify where suitable monitoring data are not available;
- (e) Compile guidance for the collection of data and, subject to the availability of additional external funding, test the guidance by developing a pilot project in one or more regions;
- (f) Facilitate arrangements to obtain appropriate monitoring information on annexes A, B, and C substances for regions where such information would not otherwise be available, taking into consideration that cost effectiveness in other regional evaluations has been achieved by using a tiered approach (e.g. one which centralizes the most advanced laboratory capacity at regional nodes);
- (g) Report on progress to the Committee at its seventh session.

5. In response to the above request, the secretariat has prepared the progress report reproduced in annex to the present note for consideration by the Committee. The annex has not been formally edited.

#### Possible action by the Committee

6. The Committee may wish to consider:

- (a) Taking note of the progress report on secretariat activities in response to Committee decision INC-6/17 reproduced in annex to the present note; and
- (b) Requesting the secretariat to prepare a report on effectiveness evaluation of the Stockholm Convention for consideration and decision by the Conference of the Parties at its first meeting. The report would cover also possible arrangements to provide the Conference of the Parties with comparable monitoring data on the presence of the chemicals listed in annexes A, B and C as well as their regional and global environmental transport.

Annex

## PROGRESS REPORT ON SECRETARIAT ACTIVITIES IN RESPONSE TO DECISION INC-6/17

(a) Development of guidance on the nature of the effectiveness evaluation

Effectiveness evaluation should be conducted on the basis of available scientific, environmental, technical and economic information including, in addition to reports and other monitoring information, national reports and non-compliance information.

National reports will be submitted pursuant to article 15 (see also document UNEP/POPS/INC.7/18) and will contain information on measures taken by Parties to implement the provisions of the Convention and on the effectiveness of these measures in meeting the objectives of the Convention.

For intentionally produced persistent organic pollutants (POPs), such measures might include: regulations on production and use; cancellations and bans; identification of PCB-containing equipment; estimates of release (e.g., Pollutant Release and Transfer Registers); enforcement measures; enhanced customs control; stockpiles management and disposal; waste management; estimates of amounts destroyed or disposed of; measurements of levels in environmental media and residues in food, breast milk, etc.

For unintentionally produced POPs (*i.e.*, by-products), such measures might include: source identification; development of source inventories and release estimates; emission control measures; release reduction measures; products and materials substitution; retrofitting; management of waste contaminated with by-products; new technologies for disposal of by-product POPs; amounts of POPs destroyed; stack emission measurements; measurements of levels in environmental media and residues in food, breast milk, etc.

Non-compliance information will be provided pursuant to the procedures established under article 17, following the development by the Conference of the Parties of procedures and institutional mechanisms for determining non-compliance.

The primary focus of the effectiveness evaluation will be on comparable monitoring data on the presence of the POPs listed in annexes A, B and C as well as their regional and global environmental transport. Useful recommendations for this were provided by a Workshop to Develop a POPs Global Monitoring Programme (GMP) to Support the Effectiveness Evaluation of the Stockholm Convention on POPs, held in Geneva from 24 to 27 March 2003. The full workshop report is available as UNEP/POPS/INC.7/INF/10. More than 70 experts from all United Nations regions participated in the workshop that recommended that the Committee and/or Conference of the Parties establish a subsidiary body to oversee all three elements of the effectiveness evaluation specified in paragraph 3 of article 16.

In consultation with relevant experts, the secretariat will develop draft guidance on the nature of the effectiveness evaluation based on the workshop outcome and any considerations that the seventh session of the Committee may wish to include.

Issues (b) to (e)*Overall conclusions and recommendations from the workshop*

A POP GMP should be established to identify temporal and, as appropriate, spatial trends. The GMP would be designed primarily to follow background levels of POPs in locations far from potential sources. Assessments would be made on a regional basis and a global evaluation report would be developed based on the regional assessments.

The programme should strive for simplicity and, to the extent possible, build on existing programmes to meet future needs. There is an urgent need for capacity building in developing country regions including the

establishment of a holistic, ongoing capacity building plan based on effective networking within and between regions.

The Committee and/or Conference of the Parties should consider establishing a subsidiary body to oversee all elements of the effectiveness evaluation specified in paragraph 3 of article 16. In fulfilling this task, the subsidiary body might wish to set up a mechanism, such as a Global Co-ordinating Group (GCG), to co-ordinate monitoring activities.

In order to deliver a completed assessment four years after entry into force of the Convention, operational arrangements should be formally established as expeditiously as possible.

#### *Operational Framework for an Assessment of Monitoring Activities*

A probable format for the assessment would be a compendium of assessment reports for each region, together with a global overview report. A global guidance document should be prepared, including a common strategy for the completion of the regional, global, and global transport assessments. It should include *inter alia* a proposed draft annotated structure for each type of report, and accountabilities and responsibilities for those involved in the assessment. Information developed under article 11 and from other initiatives could also be used in the regional and global assessment reports, where appropriate.

Each region would produce a substantive regional assessment using its own drafting team. These assessments would be the main means by which the Conference of the Parties would be informed of the regional trends and transport of POPs in the environment. The global report should be produced by a team under the purview of the GCG that should also include representatives of the writing teams of the regional assessments.

In addition to detecting temporal trends of POPs with monitoring programs, modelling approaches should be used to develop information for the Conference of the Parties on regional and global transport. Regional fate and transport models can aid in the analysis of data generated by the GMP, *e.g.*, with respect to the quantification of regional and global transport and the interpretation and extrapolation of time trends. Such models can assist in reconciling the variability in time trends observed for different media, locations, chemical properties and time periods.

Article 16, sub-paragraph 2(a) requires that existing monitoring programmes and mechanisms be used to the extent possible. It is recommended that opportunities for collaborative arrangements be identified as a priority. The mutual benefits would include harmonization and data availability, cost effectiveness and avoidance of duplication of effort.

#### *Substances and analytical techniques*

Prevailing levels for all 12 POPs should be determined initially at background sites in all regions. Individual regions may then establish priorities for further analysis.

As numerous methods are available for determination of all 12 POPs in food and environmental matrices, no detailed step-by-step analytical methods are recommended. Appropriate methods should be selected from those already available and reliable analyses would be achieved using an inter-laboratory calibration program.

A three-tiered structure for laboratories is proposed to meet analytical needs and to promote opportunities for improving capacity. Each region should have at least one laboratory with a capability to analyse all 12 POPs. All laboratories must select and validate methods that are capable of determining the 12 POPs and meet data quality objectives. They must continue to demonstrate their capability throughout the life of the program.

An inventory of existing laboratories with a potential to participate in this project should be compiled and assessed for each region. The final selection would be carried out by a group of experts based on a performance assessment.

#### *Matrices, sampling and site selection*

The workshop recommended that the following matrices be considered.

Air: The GMP should contain a limited number of active sampling sites per region, using existing stations (*e.g.*, World Meteorological Organization locations) to the extent possible. Passive sampling should also be considered and passive stations may be set up in each region, linked to national weather and/or air sampling locations.

Bivalves: Bivalves are suggested as an aquatic sentinel that could be used for spatial mapping and trends. Species may be freshwater and/or coastal, as appropriate for the region. The site selection could be based on the Global Mussel Watch or on national programmes.

Other biota: Sensitive species that are responsive indicators to time trends should be used (*e.g.*, bird eggs, fish, marine mammals). The species should be regionally selected, based on a number of recommended criteria to aid in trend monitoring.

Human milk: Pooled samples from individual countries may be used. The results may trigger further studies at national level concerning sources and/or exposure pathways. The World Health Organization approach may be adopted, provided that it fulfils the requirements of the effectiveness evaluation of the Convention.

#### *Quality assurance and quality control (QA/QC)*

An effective quality assurance system should be established for the whole programme. A mechanism should be established to coordinate QA/QC aspects, and to set criteria in accordance with the range of POPs concentrations of interest that would be specified for the different matrices.

A system of responsibility for QA/QC should be set up including at least one reference laboratory per region, monitoring laboratories, and institutions responsible for sample collection. Laboratories should use validated or internationally recognised methods, fit for the purpose of this programme, and demonstrate their ability for the matrix to be analysed in the concentration range of interest. A mechanism should be established to make certified reference materials and laboratory reference materials available from a central source. A proficiency testing system should be organised on an annual basis for all POP/matrix combinations involved in the program. In each region a review panel should be installed to evaluate the data prior to acceptance. A statistical evaluation is necessary before identifying trends beyond the site-specific level.

#### *Data communication*

The primary storage for information gathered for the effectiveness evaluation should be at the regional level to: provide the flexibility required to incorporate new and existing data; provide the option for data confidentiality; accommodate existing regional database structures; build a sense of ownership within the region; and offer opportunities for capacity building. Where available, existing data centres can be used for handling data at the regional level. Regions that do not have existing databases should be assisted in developing a regional database to support the management of GMP data. This will provide an opportunity for capacity building in these regions.

A *data policy* needs to be developed, including the process by which data are submitted to a regional data centre. The data policy should recognize the concept of *data ownership* and should address public accessibility to the results of monitoring activities.

Under the Conference of the Parties, a mechanism should be established to oversee work with respect to the GMP, including responsibility for: the development and management of a Convention Information Warehouse; ensuring the capacity required to establish and manage regional data centres that would support preparation of the regional assessment reports; developing the detailed data policy; and preparing guidelines to ensure consistency of data analyses between regional assessments.

All aggregated data used in the regional reports and the global transport report should be made publicly available to assure complete transparency of the process.

To assess the capacity of existing monitoring programmes, the Secretariat will continue discussions with the World Health Organization, Arctic Monitoring and Assessment Programme and other data producers and providers regarding access to data. Development of Memoranda of Agreement with some of these organizations is underway.

Concerning identification of where suitable monitoring data are not available, input will also be provided by the regional reports of the Regionally Based Assessment of Persistent Toxic Substances. Additional information is available in the fifth edition of the Master List of Actions on the Reduction and/or Elimination of releases of POPs (UNEP/POPS/INC.7/INF/15). At a later stage, a proposed Global Environment Fund PDF-B project on Regional and National Laboratories in Developing Countries for Measuring POPs would provide valuable input to identify where data and capacity are missing.

(f) Facilitation of arrangements to obtain information from regions where it does not exist.

Substantial background material is provided in the regional and global reports from the Regionally Based Assessment of Persistent Toxic Substances. This item will be further considered as work proceeds in other areas and consideration of laboratory capacity at greater depth will be undertaken as part of a proposed Global Environment Facility PDF-B project on Regional and National Laboratories in Developing Countries for Measuring POPs. Several national and regional activities are also ongoing. For example, a Japanese programme for monitoring of POPs in East Asian countries is being discussed and a consultant has been requested by the Canadian POPs Trust Fund to prepare a proposal for a pilot project in a developing country region.

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