



Stockholm Convention on Persistent Organic Pollutants

**Conference of the Parties to the Stockholm
Convention on Persistent Organic Pollutants
Sixth meeting**

Geneva, 28 April–10 May 2013

Item 5 (i) of the provisional agenda*

**Matters related to the implementation of the
Convention: effectiveness evaluation**

Guidance on the global monitoring plan for persistent organic pollutants

Global monitoring plan for persistent organic pollutants as amended after the fourth meeting of the Conference of the Parties to the Stockholm Convention

Note by the Secretariat

1. As referred to in document UNEP/POPS/COP.6/28 on the global monitoring plan for effectiveness evaluation, the Conference of the Parties to the Stockholm Convention on Persistent Organic Pollutants, in decision SC-4/31, adopted the global monitoring plan for persistent organic pollutants¹ and requested the Secretariat to make non-substantive changes as necessary.
2. In response to this request, the Secretariat, in consultation with the global coordination group for the global monitoring plan, made non-substantive changes to the global monitoring plan for persistent organic pollutants, contained in the annex to the present addendum. The revisions to the text are shown in track changes mode so that they can be easily identified. The annex has not been formally edited.

* UNEP/POPS/COP.6/1.

¹ UNEP/POPS/COP.3/22/Rev.1, annex II.

Annex

Global monitoring plan for persistent organic pollutants as amended after the fourth meeting of the Conference of the Parties to the Stockholm Convention

Note: At its fourth meeting, the Conference of the Parties to the Stockholm Convention, among others, considered the report by the co-chairs of the coordinating group² on the global monitoring plan and the global monitoring report³ and adopted decision SC-4/31 by which it adopted the global monitoring plan for persistent organic pollutants that was provisionally adopted at its third meeting⁴ and requested the Secretariat to make non-substantive changes as necessary.

I. Background to environmental monitoring and elements of effectiveness evaluation

A. Mandate

1. Article 16 of the Stockholm Convention on Persistent Organic Pollutants states:
 - “1. 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. 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. These arrangements:
 - (a) Should be implemented by the Parties on a regional basis when appropriate, in accordance with their technical and financial capabilities, using existing monitoring programmes and mechanisms to the extent possible and promoting harmonization of approaches;
 - (b) May be supplemented where necessary, taking into account the differences between regions and their capabilities to implement monitoring activities; and,
 - (c) Shall include reports to the Conference of the Parties on the results of the monitoring activities on a regional and global basis at intervals to be specified by the Conference of the Parties.
 3. The evaluation described in paragraph 1 shall be conducted on the basis of available scientific, environmental, technical and economic information, including:
 - (a) Reports and other monitoring information provided pursuant to Article 16, paragraph 2;
 - (b) National reports submitted pursuant to Article 15; and,
 - (c) Non-compliance information provided pursuant to the procedures established under Article 17.”

B. Decisions by the Conference of the Parties relating to implementation of Article 16

2. At its second meeting, the Conference of the Parties adopted decision SC-2/13 in which it decided to complete the first effectiveness evaluation at its fourth meeting in 2009 and agreed on the essential modalities for the first and second evaluations. The Conference also agreed in that decision to implement the elements of a global monitoring plan as proposed in the annex to that decision. It also agreed to establish a provisional ad hoc technical working group consisting of 15 representatives of Parties of the five United Nations regions to coordinate and oversee implementation of the plan. The

² Annex to the document UNEP/POPS/COP.4/31.

³ UNEP/POPs/COP.4/33.

⁴ UNEP/POPs/COP.3/22/Rev.1, annex II.

Conference of the Parties decided at its third meeting that the mandate of the provisional ad hoc technical working group was successfully completed and thanked the group for its work.

3. In addition to the present document, which provides a short, concise and non-technical description of the main operational elements of global monitoring, various texts provide information on environmental information gathering and reporting methodologies to support effectiveness evaluation. In order of increasing complexity, these texts include:

(a) Article 16 of the Convention;

~~(b) Decisions of the Conference of the Parties, relevant to the effectiveness including decision SC-2/13;~~

~~(b) (e) The implementation plan for the first evaluation amended by the Conference at its third meeting, which is contained in the annex to document UNEP/POPS/COP.3/23/Rev.1 and itemizes the work to the global monitoring plan as well as documents elaborated in follow-up to those decisions be completed for the first evaluation. It sets out actions, modalities, responsibilities and time lines for the completion of the work;~~

(c) The ~~amended preliminary version of the~~ guidance document on the global monitoring plan, which is contained in document UNEP/POPS/COP.3/INF/14/Rev. and focuses on the core media for the first evaluation. This document provides detailed technical guidance on, for example, how information is to be collected, analysed, statistically treated and reported in order to obtain comparable information in all regions. It also describes a harmonized regime for the preparation of monitoring reports to support the periodic evaluations of effectiveness to be undertaken by the Conference of the Parties.

(d) Media specific protocols on methodology. These are highly detailed media specific technical documents (e.g. on human milk) that describe exactly how activities such as sampling and chemical analysis are to be carried out in order to obtain comparable data. Examples for such protocols are included in the amended guidance document on the global monitoring plan.

II. Objective of the global monitoring plan

4. Article 1 of the Stockholm Convention states that the objective of the Convention is to protect human health and the environment from persistent organic pollutants. The Convention calls for the reduction or elimination of releases of persistent organic pollutants, which should translate into reduced environment levels over time. The working objective of the global monitoring plan ~~is~~ ~~described as~~ providing a harmonized organizational framework for the collection of comparable monitoring data or information on the presence of the persistent organic pollutants listed in Annexes A, B and C of the Convention in order to identify trends in levels over time as well as to provide information on their regional and global environmental transport.

5. The information required under Article 16 on the environmental levels of the chemicals listed in Annexes A, B and C of the Convention is intended to enable the detection of ~~changes in level~~ ~~trends~~ over time for the purposes of effectiveness evaluation. Rather than using data from emission sites, however, effectiveness evaluation should be based on background environmental levels of persistent organic pollutants at locations not influenced by local sources. In the case of human samplings, focus will be on the general population.

6. The structure of the present global monitoring plan closely reflects the elements for the plan as proposed in the annex to decision SC-2/13. The plan will be updated as and when necessary to reflect the future decisions of the Conference of the Parties. The outputs of the data collection activities under the plan will provide information for the reports that will enable the periodic evaluation of the effectiveness of the Convention by the Conference of the Parties.

III. Strategic attributes of the global monitoring plan

7. The provisions of Article 16 of the Convention and the decisions of the Conference of the Parties have defined the main attributes of the plan, which is designed to ensure that cost effective comparable monitoring information on the environmental levels of persistent organic pollutants is available from all regions and is presented in a form suitable to support the effectiveness evaluation of the Convention. The arrangements for the global monitoring plan should be implemented on the basis of a regional approach. The plan has a range of attributes, which include:

(a) It is strategic and cost effective;

- (b) It is practical, feasible and sustainable;
- (c) It is inclusive, providing global coverage;
- (d) It has a long-term purpose;
- (e) It allows for data supplementation;
- (f) It allows for capacity enhancement.

8. The Conference of the Parties decided that information-gathering on environmental levels of persistent organic pollutants will focus on core media and that information on these core media should be obtained from all regions for global coverage. For the first monitoring reports, ~~which will be~~ prepared to support the first effectiveness evaluation, the core media are air, human milk and human blood. Regions should focus on data relating to the core media. Data relevant to other media may be also covered if already available. Concentrating ~~initial~~ efforts on these media will ensure that the plan remains cost-effective, sustainable and inclusive and will help ensure that activities associated with capacity enhancement are effectively focused. Air was selected in particular because it is available everywhere and because Article 16 of the Convention specifically asks for information on the regional and global transport of persistent organic pollutants. Very few biological species have a global distribution, which therefore makes it very difficult to find a single suitable subject for the provision of comparable biological monitoring information. Humans, however, do have a near global distribution and are at the top of their food chain. Thus, human milk and human blood were chosen as indicators of human exposure. For future evaluations, it is envisaged that additional media will be taken into consideration.

9. Further details of the attributes of the plan are provided below.

(a) Strategic and cost-effective

10. To achieve a strategic and cost-effective approach and build on, but not be limited to, existing and scientifically sound human health and environmental monitoring programmes to the extent possible, with the aim of providing appropriate and sufficient comparable data for the effectiveness evaluation of the Convention, the global monitoring plan is structured to include:

- (a) Global and regional inventories of programmes and capacities;
- (b) Distinct criteria developed to categorize existing programmes and activities according to their ability to provide comparable data, using for example, established quality assurance and quality control procedures;
- (c) Cooperative arrangements with existing programmes and activities to enable them to contribute to the global monitoring plan, providing that they can provide useful data on the core matrices. This data must satisfy the criteria for evaluating the ability of programmes to provide comparable data or information;
- (d) Activities to supplement existing information in order to achieve monitoring data from all regions. Specific measures are summarized in section (e) and in chapter IV below.

(b) Practical, feasible and sustainable

11. Elements to achieve a practical, feasible and sustainable plan include:

- (a) Participation of existing research institutions as long as they can provide (or can be expected to be able to provide) comparable monitoring information;
- (b) Mechanisms for linking global monitoring plan activities with national implementation plans as an option that for some countries may help secure funding assistance (for example, through the Global Environment Facility);
- (c) Capacity-building through strategic partnerships;
- (d) Collaborative networks between Governments and institutions;
- (e) Taking care to ensure consistency between future measurements and baseline data (for example, by taking into account site location, sampling strategy and time and by ensuring broad representation in accordance with the objectives of the global monitoring plan);
- (f) Using a tiered approach by identifying programmes and projects that monitor core matrices including air and human milk and blood to provide minimal trend information (tier 1), and building on these for future evaluations including other matrices (tier 2);
- (g) Allowing integration of existing information from other projects and programmes.

(c) Inclusive, with global coverage

12. In order to be inclusive, achieve global coverage and contain at least core representative data from all regions, the global monitoring plan aims at:

(a) Establishing global coverage by obtaining comparable data or information for all core media in all the global monitoring plan regions. In other words, the focus of implementation (data gathering and reporting) is regional, as stated in Article 16, and not national. Globally uniform criteria have been developed as a management tool that can be regionally applied to assess the ability of existing programmes, activities and laboratories to provide comparable monitoring data for the monitoring reports. Use of the criteria will allow Parties to the Convention within regions to categorize existing activities into for example, those activities that can immediately provide data for the first reports, those that with identified capacity support may be able to contribute data and those that may with further support provide information for future reports;

(b) Maintaining as the priority for the first monitoring reports (in support of the first evaluation) activities associated with the core media, but not restrict the use of other media for the first reports if comparable data for those media are already available;

(c) Allowing in global monitoring plan reports the use of any data or information that may be available, providing that the potential for the comparability of the data or information can be assured (for example, it should contain reference to valid quality assurance and quality control protocols and histories of successful inter-calibration exercises). This may include the use of comprehensive surveys that have been reported in peer-reviewed scientific literature;

(d) Strengthening or creating partnerships within each global monitoring plan region to address identified needs;

(e) For a global monitoring plan region for which strategic or implementation needs have been noted, identifying at least one strategic or implementation partner from another region that already possesses capacity for that activity. A potential role of Stockholm Convention focal points might be to help link national institutions. This concept could be applied to a variety of global monitoring plan activities such as data collection, chemical analysis and procedures to obtain data comparability and various global monitoring plan management functions such as regional data management, regional reporting for the first effectiveness evaluation and reporting on the regional and global transport of persistent organic pollutants;

(f) Establishing outreach efforts and incentives (such as active participation in different stages of monitoring through strategic partnerships and capacity-building).

(d) Long-term purpose

13. It is intended that the core media identified for the initial monitoring reports will continue to be monitored for all future reports. Subject to the availability of resources, however, it is anticipated that the reports will be supplemented with information on other media such as biota, water, soil and sediments. To support the elaboration of information collection (core media and future supplementation with other media), additional organizational measures will be necessary to achieve comparable datasets from all regions.

14. In order to apply also to the second and subsequent monitoring reports and to address long-term needs for attaining appropriate representation in all regions, the global monitoring plan aims:

(a) To secure long-term commitments concerning financial and institutional support for the global monitoring plan and its infrastructure requirements (e.g. data storage), particularly in terms of ensuring that each global monitoring plan regional monitoring report contains information on each of the core media. This may require, for some countries, the linking of global monitoring plan efforts with national implementation plans as an option to help secure funding;

(b) To endeavour to maintain the sustainability of intra and inter-regional strategic and implementation partnerships for the global monitoring plan, for as long as they may be required;

(c) To maintain an updated inventory of programmes that may contribute to the global monitoring plan, hence enabling identification of new programmes to adjust to possible expansion of the core media, chemicals listed in Annexes A, B or C and the needs for establishing new regional baselines.

(e) Providing for data supplementation

15. The global monitoring plan should also provide for supplementing data, where necessary, taking into account the differences between regions and their capabilities to implement monitoring activities. Such progressive enhancement should be planned at the outset. Substantial geographic differences presently exist in the capacity of regions to contribute comparable data and information for the purpose of an effectiveness evaluation of the Stockholm Convention. Therefore, decision SC-2/13 sets out a number of tasks that might be undertaken to identify needs and opportunities to increase participation. Elements to achieve this are discussed in chapter IV below.

16. In addition, operational elements will build upon the identification of existing comparable data and data gaps and the identification of programmes with the potential to provide such data with certain capacity enhancement. Such elements will include:

- (a) Defined capacity enhancement (through training, support, etc.) to fill regional data gaps identified from the global and regional inventories of programmes and capacities;
- (b) Targeted new projects and programmes (based upon the analysis of data gaps);
- (c) Strategic partnerships between existing programmes with appropriate capacity (group 1)⁵ and programmes identified as requiring some additional capacity (group 2)⁶ may also help to fill data gaps, encourage capacity-building (training, etc.) and improve comparability of data. The elements of a strategic partnership may include:
 - (i) Identifying the strengths of existing programmes or projects possessing the capacity to produce comparable monitoring data and matching them with the needs of potential programmes in regions highlighted for attention through the gaps analysis;
 - (ii) Encouraging mechanisms to assist countries and regions with data gaps to collaborate with programmes identified through the above activities to achieve cost effective generation of comparable data and information;
- (d) Elements of the agreed cooperative projects may include:
 - (i) Transfer of knowledge and technology such as:
 - a. Training and capacity-building;
 - b. Organization of inter-calibration programmes;
 - (ii) Data production, such as:
 - a. Sampling (in countries or partner laboratories);
 - b. Sample analysis and data analysis;
 - (iii) Data integration and review such as:
 - a. Data handling;
 - b. Data review, summary and reporting;
 - (iv) Establishment of partnership programmes to provide for knowledge transfer and support for data production through the enhancement of regional capacity, which may include activities to support:
 - a. Information gathering;
 - b. Data generation through sampling and analysis in collaboration with existing programmes and laboratories;
 - c. Data analysis and interpretation by regional experts;
 - d. Data management and transfer protocols between scientists, countries and regions and the Stockholm Convention Secretariat.

⁵ Group 1: programmes that can immediately provide information for the first evaluation.

⁶ Group 2: programmes that with identified capacity enhancement can provide information coverage in areas that would otherwise be inadequately represented in the first evaluation.

(f) Allowing capacity enhancement

17. Decision SC-2/13 requires the Secretariat to identify needs and opportunities to increase participation, specifically through the development of a comprehensive regional inventory and analysis of capacities and of a corresponding needs assessment with contributions from national Stockholm Convention focal points. The implementation of Article 16 does not however intend and cannot provide for the fully-fledged establishment of analytical capacity in countries. For an inclusive global monitoring plan, designed to achieve global coverage and to provide for additions to existing monitoring data, however, some amount of capacity strengthening activity is required. An inventory of capacities and capacity-building needs has been undertaken to extend the knowledge of existing human health and environment monitoring programmes around the world and to help identify the needs of programmes that can contribute to the global monitoring plan on persistent organic pollutants for effectiveness evaluation of the Stockholm Convention.

18. Programmes included in the inventory of monitoring programmes and other programmes that may contribute to the global monitoring plan are grouped into four categories following the application of the criteria developed by the provisional ad hoc technical working group and set out in annex I to document UNEP/POPS/COP.3/23, as follows:

- (a) **Group 1:** Programmes which can immediately provide information for the first evaluation;
- (b) **Group 2:** Programmes which with identified capacity enhancement can provide information coverage in areas that would otherwise be inadequately represented in the first evaluation;
- (c) **Group 3:** Programmes which may be enhanced with capacity-building for future evaluation;
- (d) **Group 4:** Programmes for which additional information is needed before they can be categorized.

19. These groupings will form the basis of the phased enhancement of the capacities of Parties to participate in regional arrangements for producing comparable data. Elements to achieve this are explored in paragraphs 17 and 18 above and chapter IV below.

IV. Needs and opportunities for capacity-building to increase participation in the global monitoring plan through financial and technical assistance

20. Decision SC-2/13 also requires that:

- (a) Capacity-building for the purpose of implementing Article 16 should be guided by a plan for step-by-step capacity enhancement for Parties on a regional basis;
- (b) Relevant regional centres could play a role in coordination efforts;
- (c) A network of databases containing monitoring information should be developed and maintained.

21. The capacity-building to increase the participation in the global monitoring plan will be based on the capacity inventory and initial analysis described above and would be in accordance with the provisions of Article 12 on technical assistance and Article 13 on the financial mechanism. The identified needs and opportunities are to be taken into account during the implementation of decision SC-2/9 on technical assistance.

22. Specific capacity-building needs that are related to putting into operation individual elements of the ~~draft~~ implementation plan (such as, for example, the development and operation of an air monitoring sampling and analytical capacity in a region) will be addressed through the regional modalities within the ~~draft~~-implementation plan. The activities foreseen may cover the availability of materials regarding study design, sampling, storage, extraction, analysis and data treatment and training regarding study design with particular emphasis on sampling, sample storage and preparation, analysis and data treatment. Implementation of limited⁷ capacity enhancement for the production of supplemental data on the core media (including quality assurance and quality control) may also be considered.

⁷ ~~“Limited” means that institutionally organized personnel and basic infrastructure are already in place and available for capacity enhancement for the first assessment.~~

V. **Implementation plan for the global monitoring plan ~~for the first evaluation reports~~**

23. The ~~draft~~-implementation plan **for the first evaluation** was developed by the provisional ad hoc technical working group on the global monitoring plan and amended by the Conference of the Parties at its third meeting⁸. It is expected to be a living document that will evolve over time to meet the needs of the global monitoring plan.~~The amended implementation plan is available in document UNEP/POPS/COP.3/23/Rev.1.~~

24. The primary responsibility for implementation is with Parties, on a regional basis. It is proposed that regional organization groups be established that will bring together the countries of a region to collaborate for the preparation of regional persistent organic pollutant monitoring reports for the purposes of effectiveness evaluation. The Secretariat will support the work of the regional organization groups through the provision of guidance documents and by facilitating contacts and communications within and between regions.

⁸ UNEP/POPS/COP.3/23/Rev.1