

1 Background and objectives

The Stockholm Convention on Persistent Organic Pollutants (POPs) (UNEP, 2001) entered into force 17 May, 2004. As of 12 December, 2006 the Convention had 136 Parties. The major features of the Convention are summarized in “Ridding the world from POPs” (UNEP, 2002), a layman’s guide to the Stockholm Convention available in the six official languages of the United Nations.

The objective of the Stockholm Convention on POPs can be stated as to:

Protect human health and the environment from persistent organic pollutants by reducing or eliminating releases to the environment.

Parties have agreed that they need a mechanism to measure whether this objective is reached. According to Article 16 of the Convention, its effectiveness shall be evaluated starting four years after the date of entry into force of the Convention and periodically thereafter at intervals to be decided by the Conference of the Parties (COP). Each effectiveness evaluation will consist of three elements; reports and other environmental monitoring information pursuant to paragraph 2 of Article 16; national reports submitted pursuant to Article 15 (i.e., reports by Parties on the measures they have taken and the effectiveness of those measure); and, non-compliance information submitted pursuant to Article 17. The Guidance Document is concerned only with the first of these elements, that is the development and implementation of arrangements to provide comparable monitoring information on the presence of the chemicals listed in Annexes A, B and C of the Convention, as well as their regional and global environmental transport.

To initiate consideration of this task UNEP Chemicals hosted 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 (UNEP, 2003). The outcome of the workshop was a set of conclusions and recommendations for the elements to be contained within a global programme, upon which the first edition of the Guidance Document for a Global Monitoring Programme was prepared and published, in 2004, by UNEP Chemicals.

The COP has decided (Decision SC-2/13¹) to complete the first effectiveness evaluation at its fourth meeting in 2009, and has agreed upon the essential modalities for the environmental monitoring component of the first evaluation. The decision included agreement to implement the elements of a global monitoring plan as proposed in an annex to that decision. It was also agreed to establish a provisional ad hoc technical working group (TWG) consisting of 15 Parties of the five United Nations regions to coordinate and oversee implementation of the plan. At that time the COP also decided upon the essential features of the GMP and requested the TWG to coordinate and oversee its implementation. One of the tasks specified by the COP was to develop guidance for data comparability taking into account the available guidance produced by UNEP Chemicals (i.e., the aforementioned 2004 edition of the “Guidance Document”).

At its first meeting in October 2006, the TWG noted that the 2004 document was produced for a different model for a GMP than the model now favored by the Conference of the Parties and identified the main elements of revision required to make the document applicable to the emerging GMP and the Implementation Plan for the first assessment. The revision was undertaken at a drafting session by a small group of experts based upon the expert team that prepared the original document, organized and facilitated by the Stockholm Convention Secretariat.

¹ See Addendum 2

1.1 The objectives of the POPs global monitoring programme

The use of the words “reduce” or “eliminate” POPs in Articles 3 and 5 of the Convention states that information on environmental levels of the chemicals listed in the annexes is intended to enable the detection of trends over time. As a result the focus is upon background levels of POPs at locations not influenced by local sources. It should however be noted that the word “trend” is used here to indicate the use of appropriate statistical methods, but does not imply the use of any particular method.

The objective of the POPs global monitoring programme can therefore be described as to:

Provide a harmonized organizational framework for the collection of comparable monitoring data on the presence of the POPs 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

Reports on these activities will form one of the components of information to be compiled by the Secretariat to enable periodic effectiveness evaluations of the Convention by the COP.

1.2 The objectives of the Guidance Document

In order to meet the objectives of the GMP, (i.e., support the preparation of reports of comparable information on environmental background levels), the monitoring programme must provide guidance on, for example, how information is to be collected, analyzed, statistically treated, and reported. This guidance must also, in some cases, accommodate using existing programmes and in other cases the establishment of new activities. It must also describe a harmonized regime for the preparation of monitoring reports to support the periodic evaluations of effectiveness to be undertaken by the COP. The information to be included in the first monitoring report will be heavily dependant on existing programmes and here the opportunities for the Guidance Document to change procedures may be limited.

The objective of the Guidance Document is therefore to:

Provide a uniform activity framework for all tasks associated with collection, assessment and reporting of environmental background levels of the POPs listed in annexes A, B, and C of the Convention in order to provide comparable information for the COP as required in paragraph 2 of Article 16.

The framework will assist programmes initiated specifically for the purposes of Article 16 and existing programmes that may wish to contribute to the Article 16 monitoring reports. In addition, the document will also be a key source of information for the comprehensive regional inventories of capacities together with the corresponding needs assessment, and the step by step capacity enhancement plan, that are to be prepared by the Secretariat at the request of the COP (SC-2/13). It will also help laboratories identified through the inventory building process in developing their capacity and in preparing targeted proposals for support from their government or from other donors.

The Guidance Document should be viewed as one part of a continuum of documents that inform the reader about environmental information gathering and reporting methodologies to support effectiveness evaluation. In terms of increasing complexity, this continuum includes the following: Article 16 of the Convention; decisions of the COP, including decision SC-2/13; the Global Monitoring Plan and its Implementation Plan for the First Evaluation; the Guidance Document, and media specific protocols on methodology.

This second edition of the Guidance Document is focused upon the requirements of preparing for the first effectiveness evaluation in 2009. However, the first monitoring report will provide information that will in the future help to indicate whether changes in environmental levels of the listed POPs can be detected. Therefore the document also looks to the future. It is intended to be a living framework, that is, one that may evolve and be elaborated over time to reflect further direction from the COP, experience gained, and emerging specific needs. The present edition draws heavily on the Global Monitoring Plan and Implementation Plan for the Global Monitoring Plan for the First Evaluation” prepared by the TWG. The most recent versions of these documents are available at <http://www.pops.int/documents/meetings/gmptwg/default.htm>

1.3 General principles

The framework developed by the TWG for the GMP closely follows the direction given in COP Decision SC2/13. This decision provides the general elements that the COP has requested should form the basis of the GMP, and from this it is possible to identify the following underlying principles.

It outlines that the GMP should:

- a) Outline 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;
- b) Be practical, feasible and sustainable;
- c) Be inclusive, achieve global coverage and contain at least core representative data from all regions;
- d) Be designed to go beyond the first monitoring report and address long-term needs for attaining appropriate representative data in all regions;
- e) 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;
- f) Enable phased enhancement of the ability of parties to participate in regional arrangements for producing comparable data.

Substantial geographic differences currently exist in the availability of present monitoring capacity to contribute comparable data and information for the purpose of an effectiveness evaluation of the Stockholm Convention. Therefore COP decision SC-2/13 has specified a number of tasks to identify needs and opportunities to increase participation. These generic tasks include the following:

- a) That a comprehensive regional inventory of capacities should be developed and maintained and a corresponding needs assessment conducted by the Secretariat with contributions from national Stockholm Convention focal points;
- b) That 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;
- c) That relevant regional centres could play a role in coordination efforts;
- d) That a network of databases containing monitoring information should be developed and maintained.

The needs and opportunities for capacity-building to increase participation in the global monitoring plan are to be taken into account during the implementation of COP decision SC-2/9 on technical assistance.

In addition to the general principles of the GMP, a number of attributes of a cost effective monitoring framework focused upon the needs of Article 16 and decision SC-2/13 have been identified as requiring particular emphasis. They are presented here because of their potential to assist in decision making in the regional and global context as the programme becomes operational

- The programme should strive for simplicity and, to the extent possible, build on existing programmes to meet present and future needs. It should encourage plasticity, which is the ability to evolve over time in order to respond to the needs of the Convention while maintaining comparability. Plasticity is enhanced by simplicity of the original design.
- Clarity of design should be promoted for the sampling activities; of expectations for standards of analytical performance; and of arrangements for QA/QC.
- Differences in capacity within and between regions provide opportunities for regional capacity building focused to ensure a capability to detect regional trends. In order to put the GMP into regional reality, capacity building and sustainability will be a crucial aspect for implementation. Sustainability is strongly linked to both simplicity and effectiveness.
- Only the substances contained in Annexes A, B and C of the Convention are considered in the context of Article 16.
- It is essential to ensure inclusiveness and transparency in all aspects of the GMP design, conduct and reporting process without which there is a risk of lack of confidence and interest in the final reports.
- Monitoring for effectiveness evaluation (Article 16, paragraph 2) will not address: issues of compliance; preparation of dossiers for substances that may be proposed for addition to the Annexes of the Convention; hot spot detection and evaluation; or, specific issues of scientific understanding.

1.4 Other information sources

The basis for the Global Monitoring Programme are: Article 16 of the Convention, COP Decision SC-2/13; and the Global Monitoring Plan and the Implementation Plan for the First Evaluation” prepared under the guidance of the TWG. The later two documents will evolve over time and the reader can access the most recent versions at <http://www.pops.int/documents/meetings/gmptwg/default.htm>.

In order to obtain an overview of laboratory capacity for POPs analysis worldwide, UNEP Chemicals maintains an inventory of POPs laboratories, which provides information on the technical and analytical capabilities of each laboratory so that potential partners for a POPs GMP may be identified. The title of the project is "Assessment of Existing Capacity and Capacity Building Needs to Analyze POPs in Developing Countries" and further information is available at: <http://www.chem.unep.ch/databank/Home/Welcome.aspx> and at: <http://www.chem.unep.ch/pops/laboratory/default.htm>

During the assessment process, the assessment teams should be able to use information derived from sources external to the GMP, providing that quality standards are not compromised. To assess the capacity of existing monitoring programmes, the interim Secretariat has opened

discussions with organizations such as the World Health Organization, and other data producers and providers regarding access to information. When appropriate, memoranda of agreement with such organizations have or can be developed.

Article 11 of the Convention is concerned with the conduct of research and monitoring aimed to improve the basic understanding of such characteristics as the sources, movement, fate, behaviour and toxicity of POPs in the environment. Those activities which can be conducted at any level of organization (e.g. national, regional or global) and are not restricted to the substances listed in the Convention are not formally linked to effectiveness evaluation. However it is possible that information resulting from such activity could be of assistance in the preparation of the Article 16 environmental reporting.

Article 16 does not specifically exclude non-parties from contributing information. Non-parties would be encouraged to contribute information and work that conforms to the framework described in this document, but would not be able to take part in decision making.

1.5 References

GEF/UNEP 2000/3. Project Decision Sheet: Regionally-Based Assessment of Persistent Toxic Substances; Project Management; and, Regional Reports

UNEP, 2001. Stockholm Convention on POPs , Text and Annexes, Interim Secretariat for the Stockholm Convention on Persistent Organic Pollutants, UNEP Chemicals, Geneva, Switzerland

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UNEP, 2004 Guidance for a Global Monitoring Programme for Persistent Organic Pollutants Isr Edition,

Web references

Stockholm Convention on POPs <http://www.pops.int>

Ridding the world from POPs <http://www.pops.int/documents/guidance>

Assessment of Existing Capacity and Capacity Building Needs to Analyze POPs in Developing Countries". <http://www.chem.unep.ch/databank/Home/Welcome.aspx> and at: <http://www.chem.unep.ch/pops/laboratory/default.htm>

GMP website <http://www.chem.unep.ch/gmn/default.htm>

GMP workshop, 2003 http://www.chem.unep.ch/gmn/Files/popsmonprg_proc.pdf

GEF/UNEP, 2000/3 http://www.chem.unep.ch/pts/gr/Global_Report.pdf

UNEP/POPs/INC.7/20 http://www.pops.int/documents/meetings/inc7/en/7_20.pdf

UNEP/POPs/INC.7/INF/15 http://www.pops.int/documents/meetings/inc7/en/7_15.pdf

UNEP/POPs/GMP-TWG.1.6 <http://www.pops.int/documents/meetings/gmptwg/default.htm>