



United Nations
Environment
Programme



UNEP

Distr.
GENERAL

UNEP/POPS/INC.4/2

18 November 1999

ORIGINAL: ENGLISH

INTERNATIONAL LEGALLY BINDING INSTRUMENT
FOR IMPLEMENTING INTERNATIONAL ACTION ON
CERTAIN PERSISTENT ORGANIC POLLUTANTS
Fourth session
Bonn, 20-25 March 2000
Item 2 (c) of the provisional agenda*

INTER-SESSIONAL WORK REQUESTED BY THE COMMITTEE

"Best available techniques" and related concepts

Report by the secretariat

1. The Intergovernmental Negotiating Committee for an International Legally Binding Instrument for Implementing International Action on Certain Persistent Organic Pollutants, at its third session, considered a draft provision concerning reduction in the release of persistent organic pollutants that are by-products [with the aim of their elimination]. Following the discussion, the Committee agreed that the secretariat would conduct research into the meaning of the term "best available techniques" and similar related concepts and provide the results of that research to the Legal Drafting Group for use in considering paragraph 3 of draft article D at the fourth session (UNEP/POPS/INC/3/4, para. 58).

2. This note, prepared in accordance with the above request of the Committee,

* UNEP/POPS/INC.4/1.

presents a summary of the use of the term "best available techniques" as well as a similar related concept, "best available technology", as contained in the following treaties:

The 1992 Convention on the Protection and Use of Transboundary Watercourses and International Lakes (hereinafter referred to as the "Watercourse-Lake Convention");

The 1992 Convention on the Protection of the Marine Environment of the Baltic Sea Area (hereinafter referred to as the "Baltic Sea Convention");

The 1992 Convention for the Protection of the Marine Environment of the North-East Atlantic (hereinafter referred to as the "OSPAR Convention");

The 1994 Convention on Cooperation for the Protection and Sustainable Use of the Danube River (hereinafter referred to as the "Danube River Convention");

The 1998 Protocol to the 1979 Convention on Long-range Transboundary Air Pollution on Persistent Organic Pollutants (hereinafter referred to as the "POPs Protocol").

Context and presentation

3. Among the five instruments above, the term "best available techniques" is used in the latter three, while the term "best available technology" is used in the other two. The contexts in which the terms are used in these instruments are the following:

| Instrument | Context |
|-----------------------------|--|
| Watercourse-Lake Convention | Prevention, control and reduction of transboundary impact, including emission limits for discharges from point sources into surface waters. ¹ |
| Baltic Sea Convention | Prevention and elimination of pollution, including pollution from land-based sources. ² |
| OSPAR Convention | Programmes and measures which, <u>inter alia</u> , take full account of the use of the latest technological developments and practices designed to prevent and eliminate pollution fully. ³ |

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| Danube River Convention | Emission limits in the discharge of hazardous substances. ⁴ |
| POPs Protocol | Reduction of the emission of the substances concerned in connection with new and existing stationary sources. ⁵ |

4. The common feature of the use of the terms in these instruments is that one or other of the terms is referred to in the relevant articles, with cross-references to an annex in which the meaning of the term is described in detail. The Watercourse-Lake Convention lists the term "best available technology" among the definitions set forth in article 1, with a cross-reference stating that "the definition is contained in annex I to this Convention". In the case of the POPs Protocol, the annex concerning "best available techniques" includes not only the meaning of the term but also the descriptions of approaches to controlling emissions of persistent organic pollutants in general as well as specific substances.

Definitions

5. The two terms are defined in the respective instruments as follows:

| Instrument | Term | Definition |
|-----------------------------|---------------------------|--|
| Watercourse-Lake Convention | Best available technology | The latest stage of development of processes, facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste. ⁶ |
| Baltic Sea Convention | Best available technology | The latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges. ⁷ |

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|----------------------------|------------------------------|--|
| OSPAR Convention | Best available techniques | The latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste. ⁸ |
| Danube River Convention | Best available techniques | The latest stage of development (state of the art) of processes, of facilities or of methods of operation which indicate the practical suitability of a particular measure for limiting discharges, emissions and waste. ⁹ |
| POPs Protocol | Best available techniques | The most effective and advanced stage in the development of activities and their methods of operation which indicate the practical suitability of particular techniques for providing in principle the basis for emission limit values designed to prevent and, where that is not practicable, generally to reduce emissions and their impact on the environment as a whole. ¹⁰ |

The terms "techniques" and "technology"

6. The relationship between the terms "techniques" and "technology" is described in the OSPAR and Danube River Conventions as well as in the POPs Protocol in an almost identical way, as follows:

"Techniques" include both the technology used and the way in which the installation is designed, built, maintained, operated and dismantled.¹¹

The terms "best" and "available"

7. The POPs Protocol also states that:

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"Available" techniques means those developed on a scale which allows implementation in the relevant industrial sector, under economically and technically viable conditions, taking into consideration the costs and advantages, whether or not the techniques are used or produced inside the territory of the Party in question, as long as they are reasonably accessible to the operator;

"Best" means most effective in achieving a high general level of protection of the environment as a whole.¹²

Criteria

8. In addition to defining the terms, the various instruments also set out criteria for identifying what constitutes "best available techniques" or "technology". The Watercourse-Lake, Baltic Sea, OSPAR and Danube River Conventions contain a similar introductory sentence preceding the criteria, as follows:

In determining whether a set of processes, facilities and methods of operation constitute the best available technology/best available techniques in general or individual cases, special consideration is/should be/shall be given to:¹³
[a set of criteria follows]

9. In the case of the POPs Protocol, the introductory sentence includes additional elements, as follows:

In determining the best available techniques, special consideration should be given, generally or in specific cases, to the factors below, *bearing in mind the likely costs and benefits of a measure and the principles of precaution and prevention*¹⁴ (italics added):
[a set of criteria follows]

10. The following are the criteria listed in the various instruments:

| Instrument | Criteria ("consideration should be given to ...") |
|------------|---|
|------------|---|

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Watercourse- Lake
Convention

Comparable processes, facilities or methods of operation which have recently been successfully tried out;

Technological advances and changes in scientific knowledge and understanding;

The economic feasibility of such technology;

Time-limits for installation in both new and existing plants;

The nature and volume of the discharges and effluents concerned;

Low- and non-waste technology.¹⁵

Baltic Sea
Convention

Comparable processes, facilities or methods of operation which have recently been successfully tried out;

Technological advances and changes in scientific knowledge and understanding;

The economic feasibility of such technology;

Time-limits for application;

The nature and volume of the emissions concerned;

Non-waste/low-waste technology;

The precautionary principle.¹⁶

OSPAR Convention

Comparable processes, facilities or methods of operation which have recently been successfully tried out;

Technological advances and changes in scientific knowledge and understanding;

The economic feasibility of such techniques;

Time-limits for installation in both new and existing plants;

The nature and volume of the discharges and emissions concerned.¹⁷

Danube River
Convention

Comparable processes, facilities or methods of operation which have recently been successfully tried out;

Technological advances and changes in scientific knowledge and understanding;

The economic feasibility of such techniques;

Time-limits for installation in both new and existing plants;

The nature and volume of the discharges and emissions concerned.¹⁸

POPs Protocol

The use of low-waste technology;

The use of less hazardous substances;

The furthering of recovery and recycling of substances generated and used in the process and of waste;

Comparable processes, facilities or methods of operation which have been tried with success on an industrial scale;

Technological advances and changes in scientific knowledge and understanding;

The nature, effects and volume of the emissions concerned;

The commissioning dates for new or existing installations;

The time needed to introduce the best available technique;

The consumption and nature of raw materials (including water) used in the process and its energy efficiency;

The need to prevent or reduce to a minimum the overall impact of the emissions on the environment and the risks to it;

The need to prevent accidents and to minimize their consequences for the environment.¹⁹

Change with time

11. As for the evolution of "best available techniques" and "best available technology" over time, the Watercourse-Lake Convention provides that:

It therefore follows that what is "best available technology" for a particular process will change with time in the light of technological advances, economic and social factors, as well as changes in scientific knowledge and understanding.²⁰

Similar clauses are to be found in the Baltic Sea, OSPAR and Danube River Conventions.²¹

Technical characteristics and local conditions

12. The POPs Protocol supplies clarification of the concept of "best available techniques" as follows:

The concept of best available techniques is not aimed at the prescription

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of any specific technique or technology, but at taking into account the technical characteristics of the installation concerned, its geographical location and the local environmental conditions.²²

Experience, costs and efficiencies

13. The POPs Protocol also supplies the following further clarification:

Information regarding the effectiveness and costs of control measures is based on documents received and reviewed by the Task Force and the Preparatory Working Group on POPs. Unless otherwise indicated, the techniques listed are considered to be well established on the basis of operational experience.²³

Experience with new plants incorporating low-emission techniques, as well as with retrofitting of existing plants, is continuously growing. The regular elaboration and amendment of the annex will therefore be necessary. Best available techniques (BAT) identified for new plants can usually be applied to existing plants provided there is an adequate transition period and they are adapted.²⁴

The annex [i.e. annex V] lists a number of control measures which span a range of costs and efficiencies. The choice of measures for any particular case will depend on a number of factors, including economic circumstances, technological infrastructure and capacity, and any existing air pollution control measures.²⁵

Additional measures

14. The OSPAR Convention also makes provision for possible additional measures, as follows:

If the reduction of discharges and emissions resulting from the use of best available techniques does not lead to environmentally acceptable results, additional measures have to be applied.²⁶

The Baltic Sea and Danube River Conventions contain similar language.²⁷

Notes

1. Article 3.
2. Articles 3 and 6.
3. Article 2, para. 3.
4. Article 7.
5. Article 3, para. 5.
6. Annex I, para. 1.
7. Baltic Sea Convention, annex II, under the title "Regulation 3: Best available technology", para. 1.
8. Appendix 1, para. 2.

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9. Annex I, part 1, para. 2.
10. Annex V, para. 2.
11. OSPAR Convention, appendix 1, paragraph 5. Danube River Convention, annex I, part 1, para. 5. POPs Protocol, annex V, paragraph 2. The POPs Protocol replaces "dismantled" by "decommissioned".
12. Annex V, para. 2.
13. Watercourse-Lake Convention, annex I, para. 1; Baltic Sea Convention, annex II, under the heading "Regulation 3: Best available technology", para. 2; OSPAR Convention, appendix 1, para. 2; Danube River Convention, annex I, part 1, para. 2.
14. Annex V, para. 2.
15. Annex I, para. 2.
16. Baltic Sea Convention, annex II, under the heading "Regulation 3: Best available technology", para. 2.
17. Appendix 1, para. 2.
18. Annex I, part 1, para. 2.
19. Annex V, para. 2.
20. Watercourse-Lake Convention, annex I, para. 2.
21. Baltic Sea Convention, annex II, under the heading "Regulation 4: Future developments"; OSPAR Convention, appendix 1, para. 3; Danube Convention, annex I, part 1, para. 3.
22. POPs Protocol, annex V, para. 2.
23. Ibid., para. 3.
24. Ibid., para. 4.
25. Ibid., para. 5.
26. OSPAR Convention, appendix 1, para. 4.
27. Baltic Sea Convention, article 3, para. 3; Danube River Convention, annex I, part I, para. 4.
