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Working Group on Strategies and Review
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Item 3 of the provisional agenda

**TECHNICAL INPUT FOR REVIEWING
THE PROTOCOL ON PERSISTENT ORGANIC POLLUTANTS**

Report by the Co-Chairmen of the Task Force on Persistent Organic Pollutants (POPs)
prepared with the assistance of the secretariat

Introduction

1. This progress report of the Task Force on POPs includes the results of its first and second meeting, held in the Hague (Netherlands) on 1-3 March 2004 and in Prague on 31 May-3 June 2004. The Presentations made at these two meetings are available on the Internet: www.unece.org/env/tfpops.

2. Experts from Austria, Canada, Czech Republic, Estonia, Finland, France, Germany, Italy, Netherlands, Norway, Sweden, Switzerland, Turkey, United Kingdom, United States and European Community (EC) participated in the meetings. Representatives from the UNECE secretariat, the Meteorological Synthesizing Centre-East (MSC-E) of EMEP, the United Nations Environment Programme (UNEP), the Arctic Monitoring and Assessment Programme (AMAP), the Euro Chlor sector group of the European Chemical Industry Council (CEFIC), the International Council of Chemical Associations (ICCA) and the Netherlands research organization TNO attended at least one of the meetings.

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3. Mr. David STONE (Canada) and Mr. Johan SLIGGERS (Netherlands) chaired the meetings.
4. The Task Force expressed its gratitude to the Netherlands and the Czech Republic for the hospitality and excellent arrangements provided during its meetings.

I. PROGRESS ON THE WORK OF THE TASK FORCE

5. In accordance with the work-plan for the implementation of the Convention (ECE/EB.AIR/79/Add.2, annex XII, item 1.5), the Task Force focused on the preparation of:

- (a) Elements for the technical reviews regarding the scheduled use reassessments, evaluations and reviews, taking into account the work of the former Expert Group on POPs, for submission to the Working Group on Strategies and Review in 2004;

- (b) Annotated chapter headings for the technical components of the sufficiency and effectiveness review for comment and approval by the Working Group on Strategies and Review in 2004; and

- (c) Generic guidelines and/or procedures for the technical review of dossiers of new substances that may be proposed by Parties for inclusion into annexes I, II and III to the Protocol.

A. Reviews, reassessments and re-evaluations of use and production

6. At the first meeting of the Task Force, Mr. Stone drew attention to previous relevant work by the Convention's Expert Group on POPs, noting the information gathered through its 2001 questionnaire.

7. Lead experts prepared updated dossiers for the substances scheduled for use, reassessment and re-evaluation: Ms. J. Jensen (United States) on DDT for health protection; Ms. S. Shaver (United States) for heptachlor; Mr. E. van der Plassche (Netherlands) DDT used as an intermediate to produce dicofol; Ms. I. Hauzenberger (Austria) for lindane; Mr. G. Filyk (Canada) for polychlorinated terphenyls; Mr. M. Herrmann (Germany) for "ugilec". The full dossiers with information submitted through the 2004 questionnaire are available at: www.unece.org/env/tfpops.

8. At its second meeting, the Task Force reviewed and approved summaries of the dossiers (annex I below), and thanked the lead experts for their valuable work.

B. Review of sufficiency and effectiveness of the Protocol

9. The attention of the Task Force was drawn to relevant work by other bodies and organizations, such as the Task Force on the Health Aspects of Air Pollution, the International Cooperative Programme on Forests, the EMEP centres, AMAP, the European Commission, the Expert Group on Techno-economic instruments, TNO and Euro Chlor. Attention was also drawn to the Stockholm Convention's procedures for adding new substances and its ongoing work on PCBs and dioxins/furans.

10. At its first meeting, the Task Force defined the terms "effectiveness" and "sufficiency", pursuant to article 10 of the Protocol, and agreed an interim list of elements for an effectiveness and sufficiency review. Draft contents for each element were prepared by experts from Austria, Canada, the Netherlands, Norway and the United States and circulated to the Task Force before its second meeting. The Task Force then reviewed this material and approved draft annotated chapter headings of the technical components of the sufficiency and effectiveness review (annex II).

11. The Task Force identified two further elements (see annex II, chap. V), which could be part of the effectiveness and sufficiency review and requested the Working Group on Strategies and Review to provide guidance on whether or not to include them (see paras. 18 (k) and (l) below).

**C. Generic guidelines/procedures
for the technical review of dossiers of new substances**

12. The Task Force heard presentations from Mr. P. Almodovar (United States), Mr. D. van Wijk (Euro Chlor), Ms. Yla-Mononen (EC) and Mr. M. Janssen (Netherlands). They drew attention to existing procedures under the Protocol, noted those used for the Stockholm Convention on POPs, identified possible issues in the technical review of new substances, and proposed new steps and procedures that might facilitate review.

13. The Task Force agreed that guidelines should be consistent with decision 1998/2. The guidance document should not require any information beyond the information requested in that decision.

14. Experts from Canada and the Netherlands prepared draft guidelines and procedures. At its second meeting, the Task Force reviewed and approved them (annex III). They are based upon a two-track approach and are consistent with decision 1998/2.

15. Some Task Force members suggested adding in the review process a procedure allowing the general public and stakeholders to provide comments and information on proposals to the Executive Body. The Task Force requested guidance from the Working Group.

16. Concerning participation in peer review teams, the Task Force, in accordance with its mandate, decided that these should consist of experts from Parties to the Convention. However, one member suggested that, to provide an incentive for Parties to ratify protocols, selecting the small peer review teams should give preference to experts from Parties to the Protocol. The Working Group on Strategies and Review is invited to elaborate on the two possibilities.

II. FURTHER WORK

17. The Task Force will continue its work on the effectiveness and sufficiency review and will conduct technical reviews on proposals for new substances forwarded to it by the Executive Body.

18. With regard to the effectiveness and sufficiency review, work will focus on the elements outlined in annex II below. The Task Force agreed that:

(a) A small team led by Canadian experts and including experts from Norway and MSC-E would gather best available scientific information on the effects of POP deposition (annex II, chap. I). AMAP, EMEP, the Working Group on Effects and the Task Force on Health would be invited to contribute;

(b) A small team led by United States experts and including experts from Austria, Canada and Norway would assess moves to eliminate reliance on listed exemptions (annex II, chap. II);

(c) It would request the secretariat to provide an overview of new developments on environmentally sound destruction/disposal within the Basel Convention and the Global Environment Facility (GEF) (annex II, chap. II, para. 13);

(d) No volunteer was identified for work on technological developments related to identifying articles still in use and wastes containing listed substances (annex II, chap. II, para. 14);

(e) A small team led by United States experts and including experts from Canada and the Netherlands would work on best available techniques (BAT) in relation to annex V to the Protocol for major stationary sources (new and existing) (annex II, chap. II, para. 15);

(f) Canadian experts, assisted by experts from the United States and the Netherlands would work on technological developments on limit values (annex II, chap. II, para. 16);

(g) German experts would work on technological developments on measures to control emissions from mobile sources (art. 3, para. 5 (b) (v)) (annex II, chap. II, para. 17);

(h) No volunteer was identified to compile information on major stationary sources beyond those identified in the Protocol's annex VIII (annex II, chap. II, para. 18);

(i) It would request the secretariat to provide information on changing economic conditions in countries with economies in transition with respect to PCBs and HCB (annex II, chap. III);

(j) MSC-E would prepare the synthesis document on the best available country-submitted emissions data (annex II, chap. IV);

(k) No volunteer was identified to prepare the general overview of the available information on emission sources not covered by the Protocol of substances listed in its annexes I, II and III, including existing and old production sites, obsolete stockpiles, old waste disposal facilities and contaminated sites (annex II, chap. V, para. 22);

(l) Norwegian experts would consider preparing a report on management strategies to phase out articles in use containing POPs for sources currently not covered by the Protocol (annex II, chap. V, para. 23).

19. A first draft of the reviews described in (a) to (j) will be sent to the secretariat by 15 January 2005 for circulation to the Task Force. Comments should be sent to lead authors and copied to the secretariat by 15 March 2005. Lead authors will send final drafts to the secretariat by 1 May 2005 for discussion and approval by the Task Force in June 2005.

20. Work on the elements in paragraphs 18 (k) and (l) above depend on guidance from the Working Group. If a decision is made to include them, a draft will be sent to the secretariat by 1 May 2005 for discussion and approval by the Task Force in June 2005.

21. Parties are invited to nominate experts to participate in or lead work on the elements in the sufficiency and effectiveness review for which there were no volunteers.

22. With regard to the review of proposals to add new substances to the Protocol:

(a) According to the annexed guidelines, track A and track B of the review will begin simultaneously, subject to decision by the Parties to the Protocol at a session of the Executive Body. The Task Force is invited to propose candidates for any necessary review teams to the secretariat by 15 December 2004 indicating their availability and with information on their expertise relative to the proposal and the requirements of Executive Body decision 1998/2. From the list of candidates, which will be circulated to the Task Force, five Task Force members (including the Co-Chairs) will prepare a proposal on the composition of review teams for approval by the Task Force;

(b) Decisions on the composition of the review teams will be made by early January 2005, so that the track A review can be initiated at that time;

(c) To ensure that the review team addresses its work adequately, the Co-Chairs or volunteers from the Task Force will monitor progress. A draft report on the track A review and a progress report on the track B review should be circulated to the Task Force at the end of March/beginning of April 2005 for comment. Comments should be submitted by the first week of May 2005 and circulated by the secretariat;

(d) The Task Force will meet in late May/early June 2005 to prepare and approve a final report on the track A review for submission to the Working Group. It will prepare and approve progress and/or final reports on the track B review as required in the work-plan. Progress reports on the track B review will be made available to the Task Force. Substantive reports on the track B review will be made available to the Working Group as specified in the work-plan.

Annex ISUMMARY INFORMATION ON THE SCHEDULED REASSESSMENTS OF
SUBSTANCE-RELATED PROVISIONS IN THE PROTOCOL ON POPsIntroduction

1. The Task Force prepared a compendium of dossiers provided by experts on the scheduled use reassessments and evaluations and reviews of substances listed in annexes I and II to the Protocol on POPs. This annex summarizes each of the substance dossiers.
2. The substance dossiers included the responses to a questionnaire distributed in January 2004 to all Parties to the Convention, as well as other information. The 2004 questionnaire was restricted to questions on the scheduled reassessments of substance-related provisions in the Protocol, and was essentially the same as that used in 2001 by the former Expert Group for its review. The results of the 2001 review (EB.AIR/WG.5/2002/2) complement the present review.
3. Not all Parties to the Convention responded to the questionnaires (see table) and not all responses were complete.

Table: Summary of responses to the 2001 and 2004 questionnaires on POPs

Respondents	Replies 2004	Replies in 2001 only	Replies per substance 2001/2004					
			DDT	DDT for dicofol	Heptachlor	Lindane	PCT	Ugilec
Parties to the Protocol on POPs	13	2	14	13	14	14	15	14
Signatories to the Protocol on POPs	11	2	13	13	13	13	13	13
Parties to the Convention only	1	3	3	4	4	4	4	4
Total	25	7	30	30	31	31	32	31

A. DDTProtocol review requirements

4. Parties to the Protocol on POPs are required to eliminate the production of DDT within one year of consensus by the Parties that suitable alternatives are available for public health protection from diseases such as malaria and encephalitis.

5. To this end, Parties are required to review no later than one year after entry into force of the Protocol and periodically thereafter the availability and feasibility of alternatives to DDT in consultation with the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO) and the United Nations Environment Programme (UNEP).

6. Annex II to the Protocol allows the use of DDT for public health protection only as a component of an integrated pest management strategy and only to the extent necessary and only until one year after the elimination of production in accordance with annex I to the Protocol.

Production and use of DDT relative to annexes I and II to the Protocol

7. The 2001 and 2004 questionnaires requested information on DDT production, use, alternatives and control measures. None of the responses reported production or use of DDT for public health protection.

8. Malaria is not a significant health problem in the UNECE region at this time. However, outside the region, it is. According to WHO, malaria kills at least 1 million people each year. Nine out of ten cases occur in Africa south of the Sahara. Indications are that malaria is re-emerging in other areas of the world where it was considered “eradicated.” Increases in the frequency of reported cases have also been noted in some areas. DDT continues to be a tool in some countries for the control of malaria. According to the information available to WHO, DDT is currently not routinely used for the control of tick-borne encephalitis and WHO does not recommend it for this purpose.

9. Through the Roll Back Malaria initiative, WHO assists countries to reduce their reliance on DDT. It also has an international programme to promote and coordinate the testing and evaluation of new public health pesticides. WHO is uniquely suited to identify alternatives to DDT for disease vector control.

10. Building on successes in agriculture, the combination of vector and disease management strategies using an integrated vector management (IVM) approach seems the best way forward, rather than simply replacing DDT with another insecticide.

Conclusions

11. According to WHO, FAO and UNEP, DDT is still needed for public health protection in certain regions outside UNECE. Therefore, effective, economically viable and less environmentally hazardous alternatives to DDT continue to be needed there.

B. DDT in dicofol

Protocol review/reassessment requirements

12. The Protocol on POPs requires the use of DDT as a chemical intermediate to produce dicofol to be reassessed no later than two years after its entry into force. The introductory paragraph of its annex II provides that annex II shall not apply to the substances listed in it when they occur, inter alia, as site-limited chemical intermediates in the manufacture of one or more different substances and are thus chemically transformed.

Use of DDT as a chemical intermediate to produce dicofol relative to annexes I and II to the Protocol

13. Within UNECE one active producer produces DDT as a non-isolated on-site intermediate to produce dicofol. In the European Union (EU) the production and use of DDT as a site-limited, closed-system intermediate for the production of dicofol is allowed until 1 January 2014 (EC Regulation 850/2004).

14. Non-UNECE countries producing dicofol include China, Brazil and India, but no information is available on production processes.

15. Several countries restrict the DDT (and related substances) content of commercial dicofol. In the EU, the United States and Canada the limit of DDT is 0.1%. No information is available for other Parties.

Conclusions

16. The one known remaining active producer of DDT in the UNECE region produces it as a non-isolated on-site intermediate in the production of dicofol. Because the Protocol allows such use, the restricted use of DDT as a chemical intermediate to produce dicofol allowed in the table in annex II is technically no longer being used.

C. Heptachlor

Protocol review/reassessment requirements

17. Annex I to the Protocol states that there shall be no production of heptachlor and no use of it except by certified personnel for the control of fire ants in closed industrial electrical junction boxes. Such use shall be re-evaluated no later than two years after the entry into force.

Use of heptachlor relative to annex I to the Protocol

18. During the negotiations of the Protocol, the United States indicated the need for this exemption, as it had no registered alternatives for this use of heptachlor. Since then, it has registered five alternatives.

Conclusions

19. No Party to the Convention has recorded the need for the heptachlor use exemption specified in annex I to the Protocol.

D. Lindane

Protocol review/reassessment requirements

20. Annex II to the Protocol requires that all restricted uses of lindane shall be reassessed no later than two years after the entry into force.

Use of lindane relative to annex II to the Protocol

21. Technical HCH is restricted to use as an intermediate in chemical manufacturing and applications of lindane are restricted to:

- (a). Seed treatment;
- (b). Soil applications directly followed by incorporation into the topsoil surface layer;
- (c). Professional remedial and industrial treatment of lumber, timber and logs;
- (d). Public health and veterinary topical insecticide;
- (e). Non-aerial application to tree seedlings, small-scale lawn use, and indoor and outdoor use for nursery stock and ornamentals;
- (f). Indoor industrial and residential applications;

22. Because of its toxic, suspected carcinogenic, persistent, bioaccumulative and suspected endocrine disrupting properties, lindane was scrutinized and regulated. Production and marketed volumes have steadily decreased in the UNECE region. In 2004, 16 Parties reported available and well-known alternatives, compared to 5 countries in 2001.

23. The recent European Community Regulation on POPs (EC 850/2004) provides for the complete phase-out of lindane. The stepwise procedures will still allow its use for professional remedial and industrial treatment of lumber, timber and logs, and indoor industrial and residential

applications until September 2006. Technical HCH for use as an intermediate in chemical manufacturing, as well as lindane-containing products for public health use and as veterinary topical insecticide, will be banned by 31 December 2007.

24. According to the 2004 questionnaire, the most common reported use of lindane was for public health and as a veterinary topical insecticide. Canada and the United States stated explicitly that their pharmaceutical use of lindane is limited for treatment of humans. The remaining countries, except Switzerland and Croatia, i.e. EU members (Austria, Czech Republic (only for human health), Germany, France and Ireland), are expected to terminate the pharmaceutical uses and uses as a veterinary topical insecticide by the end of 2007 according to the new EC Regulation on POPs.

25. A major use of lindane was historically for plant protection. However, only the United States reported the use of lindane for seed treatment to be relevant. All other Parties responding to the 2004 questionnaire had already banned all authorization and use of lindane-containing plant protection products or were about to do so.

26. France and Spain also reported indoor industrial and residential applications. Lindane is still used for wood preservation (professional remedial and industrial treatment of lumber, timber and logs) in France. Since no non-EU country reported these applications, use for indoor industrial and residential applications, as well as wood preservation, will also be terminated by September 2006 under the new EC Regulation on POPs.

27. No responding Party reported current use for soil applications and non-aerial application to tree seedlings, small-scale lawn use, and indoor and outdoor use for nursery stock and ornamentals.

Conclusions

28. The use of lindane is definitely reduced. Only two of the six restricted uses listed in the Protocol will continue after 2007: pharmaceutical use for public health and as a veterinary topical insecticide, and seed treatment. Within the EU, a complete phase-out is scheduled by 2007. No responding Party to the Protocol will have the need for the restricted uses in annex II after 2007 with the exception of the pharmaceutical use and for veterinary purposes (Canada (only for human health), Croatia and Switzerland). At least one Signatory to the Protocol is still using lindane for pharmaceutical purposes for humans and for seed treatment.

E. Polychlorinated terphenyls (PCTs) and ugilec

Protocol review/re-assessment requirement

29. Under the Protocol on POPs (annexes I and II) the Parties agreed to reassess the production and use of polychlorinated terphenyls (PCTs) and ugilec by 31 December, 2004.

Production and use of PCTs and ugilec relative to annexes I and II to the Protocol

30. During negotiations of the Protocol, it became evident that the definition of polychlorinated biphenyls (PCBs) sometimes differed between the EU and other UNECE countries. In the EU, PCTs are included in certain legislation together with ugilec under the definition of PCBs. However, Canada and the United States have chemically specific definitions: “PCBs” include only isomers of polychlorinated biphenyls and “PCTs” include only isomers of polychlorinated terphenyls. As a result, the Protocol considers “PCBs” to be only isomers of polychlorinated biphenyls, and production and use of PCTs and ugilec will be reassessed.

PCTs

31. Historically PCTs have been used for similar purposes as PCBs.

32. PCTs are known to have been produced by four Parties - the United States, France, Germany and Italy. The only other known historical producer of PCTs is Japan. Total global production of PCTs is estimated to have been 60,000 metric tons between 1955 and 1980. Production quantities of PCTs were 15-20 times less than the chemically similar PCBs. PCTs are not known to have been produced anywhere since the early 1980s.

33. PCTs are known to have been used historically in Canada, the United States, Austria, Bulgaria, France, Germany, Italy, Latvia, Monaco, Spain and Sweden. Experts indicate that PCTs have never been used in Cyprus, the Czech Republic, Lithuania, Norway and Slovakia. In most responding countries, historical use of PCTs is unknown due to insufficient information. However, it is possible or even probable, given its wide range of applications and its use as a PCB substitute in many products up to the 1970s and later.

34. PCTs are not known to be currently used in the UNECE region. However, as with PCBs, they may be found in old electrical capacitors, transformers and other equipment, or as constituents or contaminants of some products and treated materials.

35. Based on the questionnaire responses, Parties in North America, the EU, as well as

Monaco, Norway and Switzerland have taken, or are required to take, measures to ensure destruction or disposal of PCTs in an environmentally sound manner, and to ensure that the transboundary movement of PCTs is conducted in an environmentally sound manner. In these countries there are no known stockpiles of PCTs, and measures to destroy and/or dispose of PCTs are similar to measures to destroy and/or dispose of PCBs.

36. The existence of PCT stockpiles is unknown in other non-EU countries such as Armenia, Bulgaria, Georgia, Kazakhstan, the Republic of Moldova and Turkey; there are no stockpiles reported in Croatia. Armenia, Bulgaria, Croatia, Georgia, the Republic of Moldova and Turkey either have or are developing national laws and regulations for environmentally sound disposal and transboundary movement of hazardous wastes. Bulgaria and the Republic of Moldova are following the EC directive regarding PCT disposal. Disposal measures for PCTs were reported as unknown for Kazakhstan.

37. All Parties to the Protocol have ratified the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal, but three Parties to the Convention are not Parties to the Basel Convention. Therefore, notwithstanding current disposal measures, all Parties to the Protocol are required to ensure that destruction or disposal and/or transboundary movement of PCT wastes is environmentally sound, as part of their obligations under the Basel Convention.

38. Based on the questionnaire responses, Parties in North America, the EU, Norway and Switzerland have taken or are taking measures to directly prohibit or effectively control production and use of PCTs, through regulations on production and/or marketing, use and import. In addition, Armenia, Croatia, Georgia, Monaco, the Republic of Moldova and Turkey have also taken action to control production and use of PCTs. Control actions were not reported as being in place in Bulgaria and were reported as unknown in Kazakhstan.

Ugilec

39. The phasing-out of PCB in many countries caused an intensive search for safe alternatives. Ugilec 141 and ugilec 121 or 21 were considered as potential PCB replacements for various applications. However, shortly after its commercial introduction, elevated concentrations of ugilec found in fish and sediments revealed environmental behaviour comparable to that of PCB. Hence, ugilec failed to take off as a PCB substitute.

40. No distinction was made in the questionnaires between ugilec 141 and ugilec 121 or 21. No Party reported the production of ugilec; it either never happened or was discontinued years ago. Two companies in France are known to have produced it in the past but no reliable data on

manufactured volumes are available. Canada and the United States apparently never produced it.

41. Reliable information on current and historic uses of ugilec is generally very scarce: ugilec 141 was on the EU market from 1981 until its prohibition by June 1994, but an exemption applies for continuation in equipment and machinery already in use at that date. Ugilec 121 or 21 was allowed to be marketed in the EU from mid-1984 until it was banned in mid-1992. These legal provisions apply to all 25 EU members as of 1 May 2004. No evidence was found that ugilec has been used in Canada or the United States.

42. Ugilec has been used for similar industrial applications as PCBs, e.g. dielectric fluid in transformers and capacitors, and as hydraulic fluids in coal mine equipment. Topping-up or fluid change may have led to mixing of PCB and ugilec in the equipment. Such maintenance operations have normally not been documented by the holders of the equipment, leading to further lack of clarity on the uses of ugilec in the past.

43. Legal provisions on waste management of PCB do not differentiate between PCB, ugilec and PCT in the EU, offering no incentive to holders of blends of these substances to identify separate components in decommissioned fluid. Consequently, some respondents preferred an “unknown” over a “no” on current uses, as it cannot be certain that some “PCB fluid” still in service in certain machinery does not include ugilec components. However, a tight phasing-out programme for PCB, terminating use by 2010, is established across the EU. This will ultimately remove the possibility of ongoing (unidentified) uses of ugilec in those countries.

44. Bulgaria communicated that ugilec is still in use on its territory today. France and Turkey left a blank to that part of the questionnaire. All other countries indicated either an “unknown” or a “no” for current use of ugilec.

Conclusions

45. There is no known production or new use of PCTs and ugilec in the UNECE region. PCTs and ugilec that are included in existing fluids with PCBs will be disposed of according to the destruction provisions for PCBs of the Protocol. No international agreement specifically covers the production and use of PCTs and ugilec.

Annex II

DRAFT ANNOTATED CHAPTER HEADINGS OF THE TECHNICAL COMPONENTS OF THE REVIEW OF THE SUFFICIENCY AND EFFECTIVENESS OF THE OBLIGATIONS SET OUT IN THE PROTOCOL ON POPS

Introduction

1. The Task Force on POPs is expected to prepare annotated chapter headings of the technical components of the review of the sufficiency and effectiveness of the obligations set out in the Protocol on POPs for comment and approval by the Working Group on Strategies and Review in 2004. Subsequently, the Task Force is expected to draft the technical elements of the review for comment and approval by the Working Group in 2005.
2. The sufficiency and effectiveness review should examine whether fulfilment of the Protocol's basic obligations (art. 3 and 4) is resulting in control, reduction or elimination of discharges, emissions and losses of persistent organic pollutants. The review should focus on obligations related to substances currently listed in annexes I, II and III to the Protocol. It could also identify other substances that exhibit POP characteristics and whose effects due to deposition from long-range atmospheric transport cause concern, and provide information about their typical emissions sources and uses.
3. The effectiveness and sufficiency review will take into account the four elements identified in article 10, paragraph 3, of the Protocol:
 - (i) Best available scientific information on effects of deposition of POPs;
 - (ii) Assessments of technological developments;
 - (iii) Changing economic conditions;
 - (iv) Fulfilment of the obligations on emission levels.

The Task Force has identified further elements which might be included, depending on the guidance provided by the Working Group. These are dealt with in chapter V below.

Annotated chapter headings for the elements of the effectiveness and sufficiency review

I. BEST AVAILABLE SCIENTIFIC INFORMATION ON EFFECTS OF DEPOSITION OF POPS

4. Article 10 states that this review should take into account the effects of the deposition of POPs. The review will consider best available scientific information on atmospheric transport, deposition and levels in environmental media, with emphasis on biota and humans where effects may be anticipated. Consideration of effects will include simple comparison of the deposition levels and levels in biota to various available and relevant indicators of significance (e.g. lowest observed effect levels for similar species, tolerable daily intake levels for humans). The effects of deposition can be investigated from measured and modelled levels.

5. The review will consider the 16 POPs currently included in the annexes to the Protocol and other substances with POP characteristics whose effects due to their deposition from long-range atmospheric transport cause concern. It will result in a synthesis of best available information. The review will use existing international review documents and peer-reviewed material from published scientific literature. Sources will include, inter alia: reports from EMEP centres and the Working Group on Effects; the 2003 Regionally Based Assessment of Persistent Toxic Substances (UNEP); the report on POPs from the Task Force on the Health Aspects of Air Pollution led by WHO; and the assessments undertaken for the circumpolar Arctic (AMAP 2004) and for Europe (European Environment Agency 1998).

6. The review will be 20-30 pages including an executive summary of 2-3 pages.

II. ASSESSMENTS OF TECHNOLOGICAL DEVELOPMENTS

7. The aim of the review is to provide a synthesis of assessments on technological developments related to basic obligations in articles 3 and 4.

A. Production and use, including exemptions, of substances listed in annexes I and II

8. This review will not cover the following substances in annex I, which are no longer produced or used in the UNECE region: aldrin, chlordecone, chlordane, dieldrin, endrin, hexabromobiphenyl, mirex and toxaphene.

9. The Task Force will review available information on technological developments relative to production, use and exemptions of the following substances listed in annex I and/or II that are produced or used in the UNECE region: DDT, HCH (lindane), heptachlor, HCB and PCB.

10. Information will be compiled, primarily on the basis of the substance-specific assessments included in responses to the 2001 and 2004 questionnaires on POPs. The review will assess moves to eliminate reliance on listed exemptions in annexes I and II and article 4, paragraph 2, of the Protocol, including alternative products, control strategies, and technical improvements and associated costs, if available.

11. A new targeted questionnaire may be developed and circulated to supplement existing data. The secretariat will be asked to provide information on production and use of PCBs and HCB by countries with economies in transition. Additional information may come from reports under the Convention, information provided to the secretariat to the Stockholm Convention on POPs and others.

12. The table below lists the types of additional information that will be included in the review. The document will consist of 3 pages.

Substance	Assessment of technological developments/costs (if available)
DDT	<ul style="list-style-type: none"> Review will provide information from GEF/WHO projects on DDT.
HCH (lindane)	<ul style="list-style-type: none"> Review will provide information – if available – on HCH used as a chemical intermediate.
Hexachlorobenzene	<ul style="list-style-type: none"> Review will include information on requests for limited use from countries with economies in transition. If there are such requests, the review will address new technologies that may impact these limited uses.
PCB	<ul style="list-style-type: none"> Review will include the Arctic Council Action Plan (ACAP) project on PCBs in the Russian Federation.

B. Waste management

13. The review will include technological developments on environmentally sound destruction/disposal of substances listed in annexes I-III to the Protocol. This information will come, inter alia, from the technical documentation on POPs from the Basel Convention and from GEF, such as the 2004 non-incineration technologies report and GEF-sponsored pilot projects. This document will consist of 1 page.

14. The review will also include available information on the technological developments related to identifying articles still in use and wastes containing listed substances, for example technological advances on field tests for wastes, such as immunoassay field test kits for specific POPs. This document will have a one-page summary.

C. By-products

15. Technological developments on best available techniques (BAT) (art. 3, para.5 (b) (i) and (iii)). This will include an overview of the most recent technological BAT developments in relation to annex V for both new and existing major stationary sources. The work will draw upon the guideline development undertaken by the Convention, the Stockholm Convention's Expert Group on BAT/best environmental practice (BEP) and other relevant information. Feasibility of implementing BAT developments will be considered. The document will have a summary of two pages.

16. Technological developments on limit values (art. 3, para. 5 (b) (ii) and (iv)). This section will include a compilation of current international and national limit values for both new and existing facilities in those sectors identified in annex IV. It will also include a compilation of current limit values for both new and existing facilities in sectors identified in annex VIII not covered in annex IV. A survey of Parties to the Convention will be undertaken to determine these values. The document will have a summary of two pages.

17. Technological developments on measures to control emissions from mobile sources (art. 3, para. 5 (b) (v)). This will include a review of national and international emission standards applied to mobile sources and their fuels. It will also include a survey of Parties to the Convention and general scan of technological developments with respect to annex VII. The document will have a summary of one page.

18. Another aspect of the review will be a compilation, including a literature search and survey of Parties to the Convention, of information on major stationary sources beyond those identified in the Protocol's annex VIII. The document will have a summary of one page.

III. CHANGING ECONOMIC CONDITIONS

19. The Task Force invites the secretariat to prepare information on countries with economies in transition with respect to PCBs and HCB. The document should consist of one page.

IV. FULFILMENT OF THE OBLIGATIONS ON EMISSION LEVELS

20. The required data from Parties to the Protocol cannot be available for the review as countries will not report 2004 emission data until 2006, after the review is completed. As a result, the scope of the current review in this area will be limited; however, the Executive Body may find it useful to have a synthesis of best available country data.

21. The Task Force on POPs invites MSC-E to prepare a synthesis document on the best available country-submitted emissions data, including 1990 and more recent years. Countries outside the EMEP region should provide information through national reports to the secretariat. The document should consist of three pages.

V. OTHER CONSIDERATIONS

22. The control measures on production and use in the Protocol do not directly address all emission sources of substances listed in its annexes I and II, nor does the Protocol address emissions from sites contaminated with substances listed in its annex III. The review will provide a general overview of the available information on these possible emission sources, including existing and old production sites, obsolete stockpiles, old waste disposal facilities and contaminated sites.

23. It could also include information about management strategies to phase out articles in use containing POPs (e.g. PCBs in sealants) for sources currently not covered by the Protocol.

Annex III

**DRAFT GENERIC GUIDELINES FOR THE TECHNICAL REVIEW OF DOSSIERS OF
NEW SUBSTANCES THAT MAY BE PROPOSED BY PARTIES FOR INCLUSION
INTO ANNEXES I, II AND III TO THE PROTOCOL**

Introduction

1. Article 14 of the Protocol on Persistent Organic Pollutants (POPs) lays down procedures for Parties that make a proposal (dossier) to add a substance to its annex I, II or III. It refers to Executive Body decision 1998/2, which details the information the proposal must contain, and provides a framework for reviewing it. The Task Force on POPs will prepare technical reviews of a proposal when requested to do so, and will present relevant documentation on it to the Working Group on Strategies and Review (Executive Body decision 2003/10, para. 4)

A. Objective and intent

2. These guidelines provide generic guidance for the Task Force when undertaking technical reviews of a proposal (ECE/EB.AIR/79/Add.2, item 1.5 (c)). They are intended to provide a simple framework to achieve uniformity and consistency in expeditious reviews, and to reduce the level of uncertainty for all involved (i.e. the Party making the proposal, the Task Force and its reviewers, the Working Group on Strategies and Review, the Parties to the Protocol and the Executive Body).

B. Procedure for review

3. Upon receipt of a proposal in accordance with article 14 of the Protocol, the Executive Body will decide if the risk profile element is deemed acceptable. If so, the Executive Body will ask one or more technical reviews of the proposal to be undertaken. The Task Force will then simultaneously begin two-track review.

4. Track A will review those elements of the proposal and other information that may have been forwarded by the Executive Body which are relevant to a decision being made whether or not the substance should be considered POP. This review will focus upon the elements in paragraph 1 (a) - (d) of Executive Body decision 1998/2, and be evaluated, inter alia, in accordance with its paragraph 2 (a) and (b), taking note of paragraph 3.

5. Track B will review those elements of the proposal and other information that may have been forwarded by the Executive Body which are related to the development of a strategy for the

substance. This review will focus upon the elements referred to in paragraph 1 (second part) of Executive Body decision 1998/2 and be evaluated in accordance with its paragraph 2, taking note of paragraph 3.

6. Small ad hoc peer review teams of experts may be created to prepare draft reviews for consideration by the Task Force. Participation in such teams will be decided by the Task Force. They will consist of well-recognized experts from Parties to the Convention [preferably Parties to the Protocol]. They should not include an expert who participated in the preparation of the proposal. Separate teams may be established to deal with individual proposals or a single team may deal with several proposals, as decided by the Task Force. Different teams may be established to deal with different elements in a given proposal. Teams for track A reviews will preferably consist of three experts. It is expected that teams will work mainly remotely although meetings may be necessary. Peer review teams would be disbanded as soon as they have completed their task(s).

7. The Task Force will discuss the draft peer reviews prepared by the review teams and prepare reports for the Working Group on Strategies and Review.

C. Nature of the task force reviews

8. The review's assessment of the proposal will provide critical scientific evaluation of the technical content of the proposal against each of the requirements outlined in Executive Body decision 1998/2, and advise on the degree to which the information provided supports the proposal.

9. The review will be transparent and will include critical evaluation of such aspects as, inter alia, availability, reliability, completeness and relevance of the information and references.

10. In the case of reviews of track B, the Task Force will respond to any additional requests from the Working Group on Strategies and Review for technical advice.

D. Time schedule and reporting (outputs)

Following decision by the Parties to the Protocol at a session of the Executive Body that a submitted risk profile is deemed acceptable, and the Task Force is requested to undertake a technical review, the Task Force will:

- (a) Simultaneously initiate track A and B reviews without delay;

(b) Report in writing to the Working Group on Strategies and Review on its work related to track A as specified in the annual work-plan of the Executive Body. If so instructed, the Task Force will report on its track A review at the meeting of the Working Group on Strategies and Review that immediately precedes the next session of the Executive Body. This will enable the Parties to the Protocol to decide on the need to further consider the proposal at that time, should they wish to do so;

(c) Continue with its track B review of the proposal (should the Parties to the Protocol decide to further consider the proposal), and provide the necessary review information in writing to the Working Group on Strategies and Review according to the work-plan of the Executive Body and as may be elaborated by the Working Group. This will facilitate the development of a strategy for the substance and provide Parties to the Protocol with the necessary information for decision-making at sessions of the Executive Body. If the Parties to the Protocol meeting at a session of the Executive Body decide not to further consider the substance, the Task Force will terminate its work on the proposal.

All reports will be prepared and approved by the Task Force according to the provisions contained in Executive Body decision 2003/10.