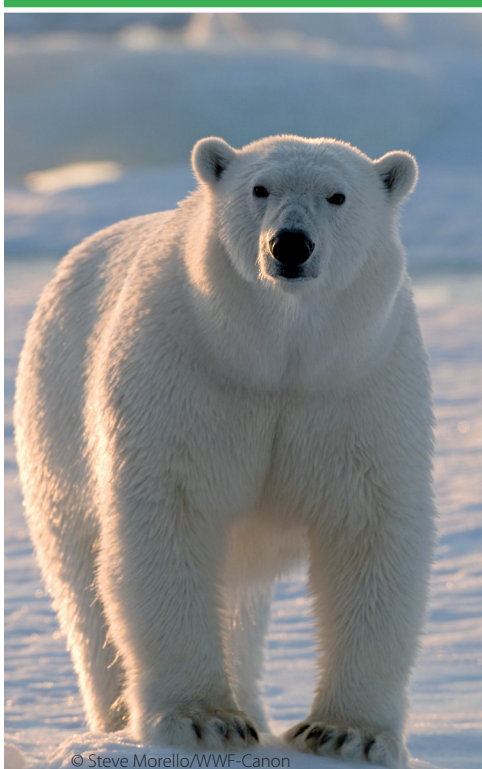


The European Union *and* the Stockholm Convention

Implementing measures on Persistent Organic Pollutants

Persistent Organic Pollutants (POPs) are chemicals that persist in the environment, bio-accumulate, and pose a risk of causing adverse effects to human health and/or the environment. The ecosystems and indigenous people of the Arctic are particularly at risk because of the long-range environmental transportation and bio-magnification of these substances. However, POPs pose a threat to the environment and human health all over the globe. In response, the Stockholm Convention to protect human health and the environment from POPs was formally adopted in 2001 and entered into force in 2004. The EC became a Party to the Stockholm Convention in 2005. This international regime promotes global action on an initial cluster of twelve POPs. Specific reference is made to a precautionary approach as set forth in Principle 15 of the 1992 Rio Declaration on Environment and Development. This principle is made operational in Article 8, which lays down the rules for including additional chemicals in the Stockholm Convention.

The twelve POPs: eight organo-chlorine pesticides: aldrin, chlordane, DDT, dieldrin, endrin, heptachlor, mirex and toxaphene; two industrial chemicals: hexachlorobenzene (HCB) and the polychlorinated biphenyl (PCB) group; and two groups of industrial by-products: dioxins and furans.



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EUROPEAN
COMMISSION



environment

The European Community as a Party

International environmental agreements such as the Stockholm Convention are ratified by both the **European Community** (EC) and by its **Member States**. The European Community has a legal identity and is one of the three pillars of the European Union established under the Maastricht Treaty. In general, we speak about the **European Union** (EU) when the European Community and its Member States act jointly.

The **European Commission** is the EU institution that has the right of initiative in proposing and drafting EU legislation. It is also responsible for ensuring the correct implementation of EU laws. Most EU laws have to be adopted both by the **Council of Ministers**, representing governments of the 27 EU Member States and the **European Parliament**, whose 785 members are directly elected by EU citizens.

The 27 EU Member States: Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, United Kingdom.

The EU candidate countries: Turkey, Croatia and the Former Yugoslav Republic of Macedonia.

During the Conferences of the Parties, as a regional economic integration organisation, the European Community votes on behalf of all the Member States that are Parties to the Convention on matters within its competence in accordance with Article 23 of the Stockholm Convention.

Implementation of the Stockholm Convention in the European Union

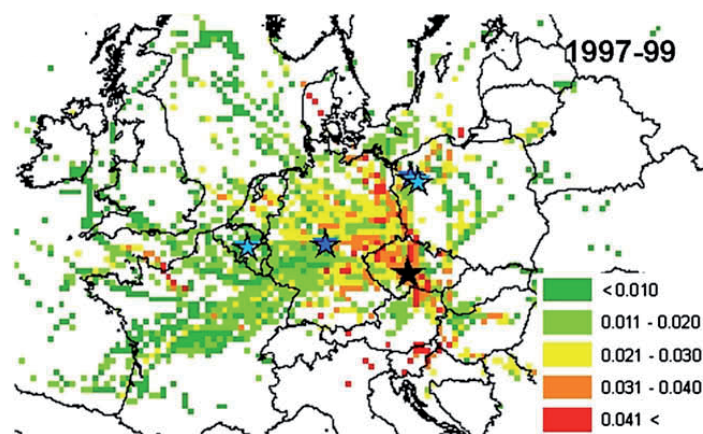
The EU legal instrument for implementing the Stockholm Convention is Regulation (EC) No 850/2004. The Regulation complements earlier EU legislation on POPs and aligns it with the provisions of international agreements on POPs. The Regulation goes further than international agreements, emphasising the aim to eliminate the production and use of the internationally recognised POPs. For example, the Regulation bans production, placing on the market and use of the 10 intentionally produced POP substances listed in the Stockholm Convention. This Regulation entered into force on 20 May 2004 and is directly applicable in all EU Member States.

Identification and management of substances with POP characteristics

Throughout the negotiations on the Stockholm Convention, the EU put much emphasis on extending the initial list of 12 POP substances that warrant global action. The EU has now nominated seven substances to be added to the list. In addition, the EU has identified 27 substances as PBT (Persistent, Bio-accumulative and Toxic) or vPvB (very Persistent and very Bio-accumulative). The EU Regulation REACH ensures that these substances of very high concern are properly controlled within the EU and provides a mechanism to progressively replace them with suitable alternative substances or technologies.

Reduction in environmental contamination

The Convention's ultimate objective is to eliminate or reduce the release of POPs into the environment. As a result of its measures, the EU is observing a reduction of POP concentrations in its environment. The figure below demonstrates a decrease in the PCB ground source loading in Central Europe, between 1997-





Main legal instruments covering the obligations of the Stockholm Convention in the EU:

- ▶ Regulation (EC) No 850/2004 of the European Parliament and Council of 29 April 2004 on persistent organic pollutants and amending Directive 79/117/EC.
- ▶ Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) contains provisions specifying how substances should be assessed with regard to their POP characteristics. Under REACH, the production and use of substances exhibiting POP characteristics can be prevented and new POP candidates can be identified.
- ▶ Regulation (EC) No 689/2008 of the European Parliament and Council of 17 June 2008 concerning the export and import of dangerous chemicals (PIC Regulation) prohibits the export of 10 out of the 12 POP substances currently listed in the Stockholm Convention.
- ▶ Council Directive 96/59/EC of 16 September 1996 on the disposal of polychlorinated biphenyls and polychlorinated terphenyls (PCB/PCT) aims to completely dispose of PCBs and equipment containing PCBs as soon as possible and equipment with PCB volumes of more than 5 litres before the end of 2010. It also sets requirements for the environmentally sound disposal of PCBs.
- ▶ Directive 96/61/EC concerning integrated pollution prevention and control (the IPPC Directive) lays down control measures to reduce emissions of unintentionally produced POPs by covering the major industrial stationary sources of these POPs.
- ▶ Directive 2000/76/EC on the incineration of waste covers all waste incineration facilities that are a very important source of POPs by-products. The Directive sets strict limits for emission rates of dioxins /furans in the air.

Development of standardised toolkit for identification and quantification of dioxins and furans releases

1999 and 2004-2006. A decreasing trend is further observed in median air concentration for most of the POPs measured by the Central European EMEP station, Košetice (Czech Republic). There is also a decreasing trend in POP precipitation concentrations measured by two German stations, Zingst and Westerland.

The Standardised Toolkit for Identification and Quantification of Dioxin and Furan Releases ensures a harmonised framework for the release inventories required under the Stockholm Convention. The European Commission participates in the expert work on improving emission factors for technologies typically used in developing countries, specifically in the task teams on brick production, primitive stoves and preliminary screening of unidentified sources. Experimental surveys to obtain missing emission factors are in progress. As an in-kind contribution the European Commission made available the first emission data from brick production and simple stoves.

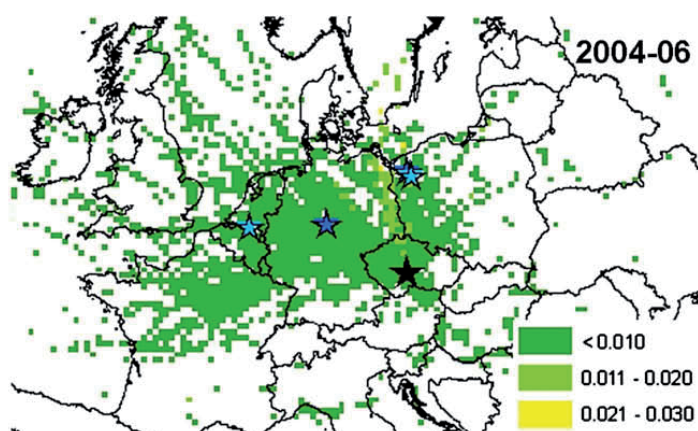


Figure: Distribution of ground source loading (L_g) for PCB153 in each 1997-1999 and 2004-2006. White areas comprise cells with less than three trajectory segment endpoints. Black star depicts position of Košetice, light blue star depicts position of reference centres of gravity (COGs), dark blue star depicts position of COGs relevant to the respective pollutant. (Dvorská et al., 2009 Atmospheric Environment 43(2009) 1280-1287 © 2008 Elsevier Ltd).





Priority Actions

The EU developed a "Community Implementation Plan" on POPs. The overall purpose of the plan is not only to fulfil the legal obligations of the EU's international obligations and EU law but also to take stock of actions underway and to lay down a strategy and action plan for further EU measures related to POPs and in particular to the Stockholm Convention. The Community Implementation Plan lists 32 actions. When new information on releases of POPs and appropriate control measures becomes known or additional POP substances listed in the Stockholm Convention or the UNECE Protocol on POPs, the Community Implementation Plan can be revised.

Two key actions:

Authorisation of plant protection products

The obligations of article 3(3) and 3(4) of the Stockholm Convention were incorporated in the EU legislation on the authorisation of plant protection products. The placing on the market of plant protection products containing chemicals that are deemed to be of «very high concern» should normally not be authorised. Very high concern chemicals are substances that are classified carcinogenic, mutagenic or toxic to reproduction, POPs, PBTs and vPvBs as well as endocrine disrupters. A similar approach is expected to be followed in the new EU legislation on biocides.

Domestic source of dioxins

To contribute to the aim of reducing the total releases of the chemicals listed in Annex C of the Stockholm Convention (dioxins, PCBs and HCB) the European Commission did a study on emissions of dioxins from domestic sources. The study summarised and assessed current knowledge on dioxins emissions from these sources and identified and analysed measures to tackle them. Heating and cooking with solid fuels and waste burning came out as the main domestic sources of dioxins in EU. The study further concluded that the potential for domestic emission reduction is high and even simple measures can sometimes achieve more than an 80% reduction. Awareness raising and education on the potential health and environmental effects of dioxins is a crucial element for all the recommended measures. For this reason, the Commission will work with national and regional authorities.

Financial and Technical Assistance

The promotion of international measures to address worldwide environmental problems is a key objective of EU policy on the environment. The aim is to foster stronger international policy development by improving the understanding of the state of the environment. The European Commission has a specific programme for environmental support, the «Thematic programme on environment and sustainable management of natural resources, including energy» (ENRTP, €15 million, 2007-2010). This programme provided support to the Secretariat of the Stockholm Convention.

Some examples:

The further elaboration of the dioxin and furan toolkit: €100,000 in 2007, to better adapt the toolkit guidance to the needs of developing countries by including the type of industrial installations and levels of pollution found in those countries.

The evaluation of the Convention's effectiveness: €400,000 is expected to be allocated in 2009 for completing data on the levels of POPs in the air, and in breast milk for Africa, Latin America and the Caribbean to establish an adequate baseline for further evaluations. Local officials will be involved in the data collection.

Further ENRTP support includes €4.5 million to FAO for the cleaning up of obsolete pesticides in the Africa Stockpiles Programme; €1 million to UNEP for reducing mercury emissions from coal combustion.

Further information

POPS:

http://ec.europa.eu/environment/pops/index_en.htm

Chemicals:

<http://ec.europa.eu/environment/chemicals/index.htm>

http://ec.europa.eu/enterprise/reach/index_en.htm

<http://echa.europa.eu/>

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