

Regional Workshop on Successful Experiences Implementing the Stockholm Convention and its Synergies with Basel and Rotterdam

Barcelona (Spain), April 7-8th 2009



**Regional Activity Centre
for Cleaner Production**

WORKSHOP REPORT

APRIL 2009

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1. Introduction about the workshop

1.1. Introduction and objectives of the workshop

On April 7th and 8th, 2009, the Regional Activity Centre for Cleaner Production (CPRAC) organized a “Regional Workshop on successful experiences implementing the Stockholm Convention and its synergies with Basel and Rotterdam”.

The participants of the workshop included representatives from different signatory Mediterranean countries of the Stockholm, Basel and Rotterdam Conventions such as Morocco, Egypt, Tunisia, Syria, Israel, Montenegro, Algeria, Lebanon, Albania, Croatia, Cyprus, Turkey, Bosnia, Serbia and Spain.

Workshop participants were also from international organizations such as the Regional Activity Centre for Cleaner Production (organizer of the workshop), the Secretariats of the Stockholm Convention (SC), the Basel Convention (BC) and the Rotterdam Convention (RC), UNITAR (United Nations Institute for Training and Research) and the Global Environment Facility (GEF). Last, representatives from research centres such as the Research Centre for Environmental Chemistry and Ecotoxicology (RECETOX) of Masaryk University, the Spanish National Research Council (CSIC) and the Research Center for Energy, Environment and Technology (CIEMAT) as well as consultants had also an active role in the workshop.

The workshop had simultaneous translation from English to French and from French to English. The working languages of the workshop were English and French.

The CPRAC has been nominated to serve as a Stockholm Convention (SC) regional centre for capacity building and transfer of technology. In the context of its nomination, the CPRAC organized the above-mentioned regional workshop with the following objectives:

1. Bring together different developing and developed countries as well as international institutions working on the implementation of the Stockholm, Basel and Rotterdam conventions.
2. Exchange experiences of the countries and institutions in the implementation of the three conventions;
3. Inform and search for financing to implement these three conventions;
4. Analyze the problems and solutions to implement these three conventions;
5. Propose future actions and help needed to improve the implementation of the three conventions.

1.2. Development of the workshop

The workshop organized by the CPRAC “Regional Workshop on successful experiences implementing the Stockholm Convention and its synergies with Basel and Rotterdam” was developed on April 7th and 8th, 2009 at the Department of Environment and Housing of the Government of Catalonia located in Avinguda Diagonal, 523-525 in Barcelona (Spain).

The workshop was attended by approximately 50 people from 17 different countries and international institutions, research centres and some consultants.

The Workshop agenda for April 7th, 2009 was the following:

TUESDAY, 7 APRIL (Morning session)		
09:00 – 09:15	Registration	
	Welcome statement	<p>Virginia Alzina, Regional Activity Centre for Cleaner Production. MAP-UNEP</p> <p>Suman Sharma, Secretariat of Stockholm Convention, in representation of Rotterdam Convention</p> <p>Nelson Sabogal, Secretariat of Basel Convention</p> <p>Maria Comellas, Department of the Environment and Housing, Government of Catalonia</p> <p>Victor Escobar, Ministry of Environment and Rural and Marine Affairs of Spain</p>
09:45 – 10:00	Presentation of the centre	Virginia Alzina, Regional Activity Centre for Cleaner Production. MAP-UNEP
10:00 – 10:15	State of the art of Mediterranean rim implementing the Stockholm, Basel and Rotterdam Conventions	Virginia Vidal, Regional Activity Centre for Cleaner Production
10:15 – 10:45	Implementation of Stockholm Convention in Spain	<p>Victor Escobar, Ministry of Environment and Rural and Marine Affairs of Spain</p> <p>Ana Garcia, Ministry of Environment and Rural and Marine Affairs of Spain</p>

TUESDAY, 7 APRIL (Morning session)		
10:45 – 11:00	NIP Implementation Project	Danijela Sukovic, Centre for Ecotoxicological Researches of Montenegro
11:00 – 11:30	<i>Coffee break</i>	
11:30 – 13:00	Experiences on Implementing projects for the elimination of POPs (Persistent Organic Pollutants) wastes	Gordana Vesligaj, Ministry of environmental protection, physical planning and construction of Croatia Hani Moubasher, Basel Convention Regional Centre of Egypt Farah Bouqartacha, Environmental department of Morocco Afef Siala Makni, National Agency of Waste Management of Tunisia
13:00 – 14:30	<i>Lunch break</i>	
4:30 – 15:20	Cooperation and Synergies among Stockholm, Basel and Rotterdam Conventions	Nelson Sabogal, Basel Convention Secretariat Adel Shafei Osman, Ministry of state of Environment Affairs. Ad hoc joint working group Egypt
15:20 – 15:50	Global Monitoring Plan	Ramón Guardans, Co-chair of the Coordination Group of Global Monitoring Plan
15:50 – 16:20	POPs Review Committee	Ivan Holoubek, RECETOX, Masaryk University in Czech Republic
16:20 – 16:30	Closure of the session	Virginia Vidal, Regional Activity Centre for Cleaner Production

The workshop registration was developed from 9.00 to 9.15 am.

After that, the workshop was opened by **Dr. Virginia Alzina, Director of the Regional Activity Centre for Cleaner Production**. In this introduction, **Mr. Nelson Sabogal from the Secretariat of the Basel Convention** presented briefly the institution, its goals and commitments. **Mr. Victor Escobar from Ministry of Environment and Rural and Marine Affairs of Spain** introduced the work developed by the Ministry on the Stockholm Convention. He expressed the strong commitment from the Ministry to protect human health and the environment from

Persistent Organic Pollutants (POPs) while showing some figures on the available budget (national and international) and related issues.

Ms. María Comellas from the Department of the Environment and Housing (Government of Catalonia, Spain) showed the activities developed by the institution with the Spanish Ministry of Environment including the start-up of a Interdepartmental Commission on Persistent Organic Pollutants (POPs), the Integrated Pollution Prevention and Control (IPPC) implementation, the REACH (Register, Evaluation, Authorisation and Restriction of Chemical Substances) implementation, etc.

After these initial remarks, **Dr. Virginia Alzina, Director of CPRAC** made a presentation about the centre, its origin, mission, goals, objectives and present and future activities on Cleaner Production and POPs. She also mentioned the recent nomination of CPRAC as a Nominated Centre of the Stockholm Convention.

Ms. Virginia Vidal, CPRAC staff, presented the study developed by CPRAC called “Study on the implementation among Basel, Rotterdam and Stockholm Conventions and the Strategic Approach to International Chemicals Management (SAICM) within the Barcelona Convention signatories”. The study showed the status in the implementation of the three conventions and SAICM among the Mediterranean countries.



Mr. Victor Escobar and Ms. Ana Garcia from Ministry of Environment and Rural and Marine Affairs of Spain presented the implementation of Stockholm Convention in Spain. Presenters showed that reporting is a complicated process where political will is absolutely necessary to move forward on POPs. They also stated that the Stockholm Convention is an excellent opportunity to put order in your own country. It's important to develop a system in your own country first and then start working at international level. As stated by the presenters, the Stockholm Convention is an opportunity to establish a system for clear control and management of POPs and participation of stakeholders in the POPs decision-making process.



Mr. Victor Escobar and Ms. Ana Garcia stated that countries should analyze the whole life cycle of POPs. POPs work should be decentralized to the different regions within the country. Another important issue mentioned was that too many regulations can cause a negative (or opposite) effect over the control and management of POPs in the country. In addition, it was mentioned that implementing participatory and voluntary agreements with the different stakeholders is a must. A participatory approach does not mean delay in the agreements but ownership, transparency and commitment. Mobilizing economic and human resources nationally and internationally, cooperation and exchange of information within signatory countries and establishing a network of networks on POPs were also cited as some key measures to advance on the Convention. Additionally, a National Reference Center (NRC) on POPs has



been established in Spain to help fulfill all these goals and objectives.

Mr. Victor Escobar and Ms. Ana Garcia also mentioned that the Spanish government supports multilateralism and is aware of the need of developing countries on technical and economic support for POPs. The Spanish government supports financially the CPRAC to help developing countries in the Mediterranean to implement the Stockholm Convention.

Ms. Danijela Sukovic from the Centre for Ecotoxicological Researches of Montenegro showed Montenegro's National Implementation Plan (NIP) of the Stockholm Convention. She presented Montenegro's experience on implementing the Stockholm Convention, mentioning the different Task Teams established on POPs and the training developed. In addition, it was also mentioned the national legislation put in place on chemicals and waste management in Montenegro, the awareness raising, the limited national monitoring system on POPs and the lack of funding for POPs management, analysis and decontamination.



Ms. Sukovic also mentioned that unintentionally POPs are not addressed in any law regulations in Montenegro. The country has in general good analytical experience on POPs, but there is no analytical capacity for PCDD (Polychlorinated dibenzodioxins), PCDF (Polychlorinated dibenzofurans) and dioxin-like PCB (Polychlorinated biphenyls). It was also mentioned in the presentation that some specific contaminated sites by PCBs in the country need to be resolved and additional funds are needed for these projects. Additionally, industries in

Montenegro do not use Best Available Techniques (BAT) and do often not consider Best Environmental Practices (BEP) and for these reasons some proceedings and operational measures are being put in place to promote BAT and BEP.

Ms. Gordana Vesligaj from the Ministry of environmental protection, physical planning and construction of Croatia introduced the implementation of the Stockholm Convention in Croatia with special emphasis on PCBs. Ms. Vesligaj showed that during 2008, the NIP was revised primarily on legislation and institutional organization issues. In Croatia the legislation prohibits any possible future production of POPs pesticides, but at the same time, any possible future PCBs production is not explicitly prohibited. This shouldn't be a problem because there has never been production of PCBs in Croatia, although there has been production of equipment containing PCBs.

Ms. Vesligaj also cited that in the field of unintentional POPs formation and release there is legal obligation for industry and industrial processes to apply BATs, but there is no prohibition on combustion of weeds in agricultural fields. In addition, Croatia has currently no incineration plant in the country since the only one went on fire in the year 2002. Additionally, the awareness level about POPs and their adverse effects is satisfactory within the scientific and professional institutions but is poor for the civil society. It was also stated that until 2006 there was no legal binding documents prohibiting import of PCBs or its use in closed systems. Now, several laws are put in place in this regard. She also mentioned that a new inventory on PCBs is being implemented by the Croatian Centre for Cleaner Production and it's expected to be finished on May 2009.



Mr. Hani Moubasher from the Basel Convention Regional Centre of Egypt (BCRC-Egypt) talked about the experiences on implementing projects for the elimination of POPs waste in the

Arab States. Mr. Hani Moubasher explained the role of the BCRC-Egypt and the geographical reach of the center. Mr. Moubasher indicated that for many Arab countries, no detailed information exists on the releases of industrial chemicals and pesticides as a result of lack of monitoring programs.

Mr. Moubasher cited that in spite of having legislation in force; there are still large amounts of PCBs in use, because in many countries, exemptions exist for the use in some equipment. There are also stockpiled amounts waiting to be eliminated. Mr. Hani Moubasher stated that among the member Arab Countries, only seven countries were able to develop and present their NIP to the Secretariat of the Stockholm Convention. Mr. Hani Moubasher express the need to support and encourage regional cooperation, strengthen the regional organizations and institutions and further utilized BCRC-Egypt experience and networking in implementing regional activities of Stockholm Convention.



Ms. Farah Bouqartacha from the Environmental Department of Ministry of Energy, Mines, Water and the Environment of Morocco made a presentation on the Project for the Environmentally Sound Management (ESM) and elimination of contaminated equipment or that contain PCBs. Morocco has implemented two relevant projects for the elimination of PCBs in specialized centers thru export (project called “Pilier I”) a project working on contaminated oils and its chemical and physical treatment at local level (project called “Pilier II”) as a way of basic treatment in Morocco.

Ms. Farah Bouqartacha explained these projects are being financed by the GEF and the government of Morocco. The private sector will also contribute to both projects financing. It is expected by the year 2009; Morocco will provide institutional and legal capacity for the management and elimination of the PCBs, the environmentally sound management of current PCB equipment, the identification of new sources of PCB and the elimination of PCBs by exporting them for treatment. In addition, it is expected to apply a new regulation on PCBs, eliminate in five years all PCB transformers and PCB waste and finally satisfy as a country the requirements of the Stockholm Convention.



Ms. Afef Siala Makni from the National Agency of Waste Management of Tunisia, made a presentation on the Tunisian experience in the implementation of the Stockholm Convention. Ms. Makni mentioned that Tunisia is currently implementing several programs and projects under this convention. These projects are being implemented in partnership with several international actors and donors namely the Global Environmental Facility (GEF) and the French Global Environmental Facility (FFEM).

She gave the example of the Africa Stockpiles Program. To undertake this initiative, a multistakeholder partnership was established bringing together skills and expertise of national and international institutions, organizations and NGOs; this initiative aims to address to the accumulation of obsolete pesticide stockpiles across the country, namely the Persistent Organic Pollutants (POPs). Tunisia has actually finalized an environmental and social assessment, conducted a national inventory, started the implementation of a national prevention strategy and launched the recruiting process of an international firm that will clean up Tunisia of the obsolete stocks.

Ms. Makni stated that thanks to these programs and projects, Tunisia is actively working on the elimination of pesticides and the management and treatment of medical waste, but these funds

are not sufficient. In regards to medical waste, Ms. Makni mentioned that medical waste in Tunisia is being sorted and managed in order to respect International protocols.

Ms. Makni stated the country has already, prepared a Medical waste management strategy. Tunisia has recently passed several regulations to improve the management of medical waste. At the same time, a pilot project is being implemented to know the current status of the management of medical waste in several areas (approximately 60% of the medical waste will be treated). Ms. Makni presented that the steam sterilization is the most suitable way to treat medical waste in the Tunisian context and the country is already betting on that. Nevertheless, Tunisia needs additional technical assistance and financial aid on how to manage and treat this waste adequately.



In addition, an integrated plan for the management and elimination of PCBs and equipment contaminated by the PCBs is being implemented in Tunisia. Actually, there is no local infrastructure to treat PCBs in Tunisia. Therefore, PCBs will be exported outside for treatment. However, the integrated plan for PCBs management is composed of two major actions: (i) priority is to eliminate PCBs stocks and PCB equipment still functioning in sensitive sites or that show anomalies (ii) progressive elimination of PCB equipment still functioning in good condition up to 2025. Additional financing is also required for this matter.

Mr. Nelson Sabogal from the Basel Convention Secretariat, made a presentation on the cooperation and synergies among Stockholm, Basel and Rotterdam Conventions. Mr. Sabogal mentioned that few countries are currently informing about the import and export of POPs. It was also mentioned that most POPs and many pesticides are covered by all three Conventions. Mr. Sabogal discussed the contents of all three conventions, what they covered and how they relate and interact. In addition, mechanisms for technical assistance and financial aid available were exposed. Mr. Sabogal presented how these three conventions are cooperating.



Mr. Sabogal mentioned that it has been established an Ad Hoc Joint Working Group to enhancing cooperation and coordination among Basel, Rotterdam and Stockholm Conventions. This cooperation is key to the strengthening of the Basel Convention Regional Centres (BCRC). All BCRCs are encouraged to contribute to the implementation of any activity regarding the Rotterdam and Stockholm Conventions. It was recommended to implementing countries to have human resources with clear responsibilities and roles regarding all three conventions and report on all conventions.

Mr. Adel Shafei Osman from the Ministry of state of Environment Affairs made a presentation about a study called “Assessment of Sources, Levels, Trends and Effects of POPs in the Mediterranean Coastal Environment of Egypt”. Mr. Osman said that the observed distributional variability of PCBs after broad sampling clearly reflected source differences, which in most cases can be attributed to local point sources. Mr. Osman exposed that high concentrations of PCBs were detected at sample locations closest to dense residential and

industrial areas with intensive local shipping traffic. He also indicated that the DDT (Dichloro diphenyl trichloroethane) data of sediment samples and bivalves of some sites indicated recent inputs (illegal practices) of DDT into the aquatic environment. In addition, Mr. Osman mentioned that high concentrations of lindane showed evidence of recent usage (identified as illegal practices) in Egypt.

In the second part of his presentation, Mr. Osman talked about the coordination in the implementation of Basel, Stockholm and Rotterdam Conventions. He exposed that all 3 Conventions complement, have synergies and reinforce each other. Mr. Osman exposed that the three Conventions could be implemented by the same department. In fact, in Egypt all three Conventions are managed by the same department, saving economic and human resources and using joint services such as administrative work, legal advice, etc. Mr. Osman said that this department works in consultation with an interministerial committee.



Mr. Ramón Guardans, Co-chair of the Coordination Group of Global Monitoring Plan (GMP) of the Stockholm Convention made a presentation about the monitoring plan, contents and status. The Convention at the COP3 adopted the implementation of the Global Monitoring Plan under article 16 on Effectiveness Evaluation. The first effectiveness evaluation was completed in 2009 including the assessment of the secretariat of reports by countries and the work of the five regional organization groups under the GMP. The GMP provides a unique opportunity to improve knowledge about POPs in the environment on a global scale. Mr. Guardans described the conclusions outlined in the five regional reports and the global report. For more information in this regard please visit:

<http://chm.pops.int/Programmes/GlobalMonitoringPlan/MonitoringReports/tabid/525/Default.aspx>

The reports indicate that adequate baseline levels of POPs in air and human milk or blood, together with information about current trends, are available from a relatively small number of existing national and international programs. In addition, Mr. Guardans mentioned that national and international monitoring programs should be maintained and newly initiated activities expanded. Mr. Guardans also stated that although baseline levels of POPs are available from all United Nations regions, long-term monitoring programs are lacking in most subregions and even entire continents. These regions need additional capacity building and financial aid to fill the data gaps.



Mr. Guardans said that for the future the recommended interval between effective evaluations is six-year intervals with a report to the Conference of the Parties at the end of each period. Mr. Guardans mentioned that for future evaluations, all regions should continue monitoring and reporting levels of POPs at least in the current core media (ambient air and human milk or blood). Valuable data on other regional media resulting from long term well established programs will be welcomed for further evaluations. He stated that efforts should be focused to achieve comparable data sets over time that is consistent with a program. Comparability between air monitoring programs should be increased by comparison and Quality Assurance and Quality Control exercises.

An important conclusion is the relevance of long range transport atmospheric modeling to interpret the data and trends. In addition, he said the future evaluations of changes in POPs levels over time should include information on regional and global environmental transport, establishing a coordinated cross-regional approach to analysis and assessment of data to meet that objective. Mr. Guardans stated that the initial focus should be to establish a monitoring plan that at least in the case of air monitoring, focuses on a small number of sampling sites that are absolutely needed for future evaluations.

Countries need to engage actively in the implementation of the global monitoring plan, it's a national responsibility of the signatory parties. It is strongly recommended that these monitoring plans build on existing programs. Mr. Guardans also mentioned that international review teams seem to indicate that there is a lot of technical competence in the countries that could do much more with well targeted and sustained technical and financial support. Mr. Guardans also mentioned the synergies between the MAP/LBS protocol and the SC and the role that CPRAC and the GMP can have on this.

Mr. Ivan Holoubek from the Research Centre for Environmental Chemistry and Ecotoxicology (RECETOX) of Masaryk University in Czech Republic talked about the POPs Review Committee (POPRC). The POPRC is a subsidiary body of the Stockholm Convention that is mandated to assess any proposal by a Party or country for a chemical to be listed as a POP in the annexes of the Convention. Mr. Ivan Holoubek explained the process for listing a new chemical and the work done so far by POPRC, noting that nine (9) chemicals are proposed for listing to the Conference of Parties IV of the Stockholm Convention (COP IV).

Mr. Holoubek stated that Parties, in relation to POP listing, should identify exemption requirements such as its use and production, alternatives, particular conditions preventing use of alternatives (accessibility) and the socio-economic impact. Mr. Ivan Holoubek also mentioned that countries when making a proposal for new candidates of POPs should look for substitutes and alternatives before the chemical is banned. Sometimes there is a lack of data on the effects of these pollutants in the environment and the human health.



Mr. John Haines from the Chemicals and Waste Management Programme of the United Nations Institute for Training and Research (UNITAR) made a brief intervention about UNITAR; referring to its support to countries in the implementation of chemicals related



international agreements through capacity building and training, including the provision of tools and methodologies, as well as assistance in project development. As examples, guidance and training is given in the development of National Chemicals Management Profiles; preparing National Implementation Plans (NIPs) for the Stockholm Convention and advising on their implementation; and assisting countries in capacity assessment and project implementation for the Strategic Approach to International Chemicals Management (SAICM). SAICM is a global policy framework that seeks by 2020 all chemicals should be produced and used in ways that lead to the minimization of significant adverse effects on human health and the environment.

Mention was also made to the UNITAR assistance with promoting integrated national chemicals management programmes, the undertaking of Pollution Release and Transfer Registers (PRTRs) and implementing the Globally Harmonised System for Classification and Labelling of Chemicals (GHS).

Ms. Virginia Vidal from the Regional Activity Centre for Cleaner Production closed the day session.

The Workshop agenda for April 8th, 2009 was the following:

WEDNESDAY, 8 APRIL (Morning session)		
	<p>Monitoring Programmes:</p> <ul style="list-style-type: none"> • Spanish Monitoring Programme • MONET Project 	<p>Ana García, Ministry of Environment and Rural and Marine Affairs of Spain. Begoña Jiménez, <i>Centro Superior de Investigaciones Científicas</i> (CSIC) Paloma Sanz, <i>Centro de Investigaciones Energéticas, Ambientales y Tecnológicas</i> (CIEMAT) Ramón Guardans. WEOG Regional Organization Group. Ivan Holoubek. RECETOX, Czech Republic.</p>
10:15 – 10:35	Guidelines on Best Available Techniques and Best Environmental Practices	Fazia Dahlab, National Centre for Cleaner Production Technologies of Algeria
10:35 – 11:05	<i>Coffee break</i>	
11:05 – 12:30	<p>Technical Assistance and Financial Resources</p> <p>Financial resources</p> <p>Presentation of CPRAC document</p>	<p>Suman Sharma, Secretariat of Stockholm Convention, representative of Rotterdam Convention</p> <p>Laurent Granier, Global Environmental Facility (GEF)</p> <p>Belén Gállego, Regional Activity Centre for Cleaner Production</p>
12:30 – 12:45	Preparation for COP IV	<p>Virginia Alzina, Regional Activity Centre for Cleaner Production. MAP-UNEP</p> <p>Ivan Holoubek, RECETOX, Masaryk University in Czech Republic</p> <p>Fazia Dahlab, National Centre for Cleaner Production Technologies of Algeria</p>

WEDNESDAY, 8 APRIL (Morning session)		
12:45 – 13:00	Coordination, Conclusions, and Future Challenges	Frederic Gallo, Regional Activity Centre for Cleaner Production
13:00 – 13:15	Closure of the event	Virginia Alzina, Regional Activity Centre for Cleaner Production. MAP-UNEP

Ms. Ana Garcia from the Ministry of Environment and Rural and Marine Affairs of Spain, Dr. Begoña Jiménez from the Consejo Superior de Investigaciones Científicas (CSIC) and Dr. Paloma Sanz, Centro de Investigaciones Energéticas, MedioAmbientales y



Tecnológicas (CIEMAT) presented the Spanish Monitoring Programme on POPs. The main objective is to establish a national monitoring network of POPs able to characterize the current status and time trends to evaluate the effectiveness of measures taken. Initial work has focused on POPs monitoring in air based on PAS (Passive Air Sampling) in selected points across the national territory covering remote and urban sites although the program might expand into rural and hot-spots zones. The program by now is using existing sampling networks in Spain (EMEP) and a very close collaboration was implemented with the Spanish Agency of Meteorology (AEMET) being this experience very successful.

Initially, targeted analyses were: PCDDs, PCDFs, dioxin-like PCBs, DDTs, HCB (Hexachlorobenzene) and PBDEs (Polybrominated diphenyl ethers). They mentioned that regarding sampling and analytical methodologies, there was relevant exchange of information with other international Monitoring Programs on POPs (e.g .GAPs, Canada, and University of Lancaster). A relevant part of the presentation was devoted to show air and soil monitoring techniques and geographical sampling location. It was stated that the implemented monitoring program intends to become a long-term and stable program currently analyzing air and soil although the program seeks to expand into other environmental matrices.



Mr. Ivan Holoubek from the Research Centre for Environmental Chemistry and Ecotoxicology (RECETOX) of the Masaryk University in Czech Republic presented the Monitoring Program called MONET (MONitoring NETwork). MONET monitors POPs in ambient air using the passive air sampling technique. Mr. Holoubek presented the different pilot projects being developed in Central and Eastern Europe, Africa and Pacific Islands (Fiji). Mr. Holoubek exposed that the future of the global air monitoring includes incorporating key issues such as the comparability of data at global scale, the particle-bound compounds, the new POPs to be monitored, climate and meteorological variability and its effect on monitoring. It also seeks to incorporate existing and new air programs, data availability and global cooperation and coordination.

Mr. Holoubek also mentioned that the future development includes moving from measurements, monitoring and modelling of POPs into the development of tools to evaluate the effects, impacts and risk assessment of POPs. One example of this, said Mr. Holoubek, is an analytical tool called GENESIS (Global Environment Assessment and Information System) and includes a system for the assessment of environmental contamination by POPs. This tool is being

developed by RECETOX and includes analytical tools such as the interactive selection of POPs data via tables and maps, comparison of POPs compounds, etc.

Ms. Fazia Dahlab from the National Centre for Cleaner Production Technologies of Algeria expressed the current status and experience on the implementation of the Stockholm Convention in Algeria. Ms. Dahlab talked first about the unintentional emission of POPs. In particular, Ms. Dahlab mentioned the production and management of municipal waste, in Algeria, the emission of POPs to the air, the health risk to local communities located in the vicinity and the impact on the environment. She mentioned that due to the environmental problems occurring in country, the Ministry conducted a complete diagnosis at local level, including the problem with municipal waste. After that, a national debate on the status and future of the environment in Algeria started in the year 2000 producing a National Action Plan on the Environment and Sustainable Development. This Action Plan included a National Plan on integrated management of municipal waste besides other plans.



Ms. Dahlab stated that since the adoption of the municipal waste plan, out of 856 municipalities, 612 municipal waste management plans are finished or under preparation. The plan also includes the construction of 82 Municipal Waste Management and Recovery Centers, of which 28 are finished and 30 are under construction adopting international

standards. These centers are adopting impermeable sanitary landfills, collection and treatment of leachate, waste sorting and recovery lines, recovery of biogas, etc. Ms. Dahlab mentioned by the year 2014, 300 Municipal Waste Management and Recovery Centers will be opened allowing the treatment of more than 75% of the total municipal waste generated in Algeria. She said that in addition to the creation of new state-of-the-art municipal waste management centres, a plan has been developed to eradicate waste dumps and recover contaminated sites.

Mr. Suman Sharma from the Secretariat of Stockholm Convention and representative of Rotterdam Convention presented on the arrangements of technical assistance (TA) and financial resources and mechanisms under the Stockholm Convention. Mr. Sharma mentioned that the Stockholm Convention considers that the TA is essential for the successful implementation of the Convention for the developing country Parties and Parties with economies in transition. The assistance will be provided by the developed country Parties through their bilateral development assistance programs, and other Parties in accordance with their capabilities. In addition to the Parties, NGOs, IGOs, Research institutions and universities, etc. can also provide technical assistance under this Convention.



Mr. Sharma expressed that the identified areas of technical assistance encompasses wide areas relating to the management of POPs such as the development and updating of NIPs, institutional capacity building, training, strengthening research and laboratory capacity, strengthening regulatory capacity, Identification and disposal of POPs, remediation of contaminated sites, awareness raising, etc. The Convention has the provision of providing such assistance to the eligible Parties through the

arrangement of regional and subregional centres. There are already 12 Stockholm Convention centres nominated and are in different stages of providing assistance to the eligible Parties.

Mr. Sharma also made a presentation on the financial resources and mechanisms under the Stockholm Convention. The Stockholm Convention has designated the Global Environment Facility (GEF) as the principal entity entrusted with the operations of the financial mechanism. Other funding entities include developed country Parties / bilateral development agencies, NGOs, private and corporate foundations, etc. that could also be the part of this mechanism.

Mr. Laurent Granier from the Global Environmental Facility (GEF) exposed the GEF experience with POPs and sound chemicals management and the financial resources available. Mr. Granier explained the reform that the GEF is carrying out to simplify the project approval process and financing. Mr. Granier stated that there is a limited ability to deal with POPs in developing countries due to lack of basic chemicals management capacities. Most countries already prepared a National Implementation Plan (NIP) and now they are ready for NIP implementation. According to Mr. Granier, the GEF-4 shifted towards NIP implementation and the GEF-5 plans to shift towards a more integrated life-cycle-based approach.

Mr. Granier commented that the GEF-4 Strategic Program 1 on POPs seeks to strengthening capacity for NIP development and implementation devoting 40% of the total GEF POPs budget. The GEF-4 Strategic Program 2 on POPs looks for partnering in investments for NIP implementation devoting about 45% of the total GEF POPs budget. In addition, the GEF-4 Strategic Program 3 on POPs looks for partnering for demonstration of feasible, innovative technologies and best practices for POPs reduction and substitution investing about 15% of the budget.



Mr. Granier discussed that the GEF-5, a strategy revision process launched with outside experts from several countries and institutions, looks into a more holistic-integrated approach, including POPs and its synergies with climate change mitigation, biodiversity, international waters, sound chemical management, land degradation, etc. Mr. Granier mentioned that significant additional resources are needed to implement the Stockholm Convention provisions including Best Available Technologies (BAT) and Best Environmental Practices (BEP).

Ms. Belén Gállego from the Regional Activity Centre for Cleaner Production presented the study developed by CPRAC on “Mobilization of economic resources to implement the Stockholm Convention in Mediterranean countries”. Ms. Gallego showed the international and regional organizations working on POPs and the financial resources available and the projects of financed by international organizations. Ms. Gallego stated that the main funding for the implementation of the Stockholm Convention in the Mediterranean Countries is the Global Environment Facility (GEF). In addition, the target of the majority of projects financed by GEF was the elaboration of NIPs and to facilitate the implementation of the Convention.



Ms. Gallego commented that there are also some examples of financed projects focused on specific items like PCBs. Ms. Gallego stated that projects financed by the International Pops Elimination Network (IPEN) are referred to specific

areas of activity to implement the Convention being six Mediterranean countries beneficiaries (Turkey, Morocco, Lebanon, Egypt, Croatia and Albania). Ms. Gallego mentioned that the Mediterranean Action Plan (MAP) thru the Land Based Sources (LBS) Protocol includes activities that also pursue goals of the Stockholm Convention. Ms. Gallego also stated that besides the financial resources mentioned there is other financial funding that co-finance actions related to POPs, sustainable management of chemicals and improvement of technologies. This additional funding should be used. Ms. Gallego exposed that countries should carry out, a detailed economic study for every planned needed action of the Stockholm Convention.

Dr. Virginia Alzina, Director of the Regional Activity Centre for Cleaner Production (CPRAC) of the MAP-UNEP made a presentation on the preparation for Conference of Parties IV of the Stockholm Convention (COP IV). Dr. Alzina stated that the CPRAC is getting ready to participate in the COP IV and ask the present countries in the workshop to propose ideas, make proposals and express needs, problems and complaints allowing the CPRAC to communicate them in the COP IV meeting. Dr. Alzina also cited that, as a Stockholm Convention nominated center, the served countries by the CPRAC includes Albania, Algeria, Bosnia Herzegovina, Croatia, Egypt, Israel, Lebanon, Libya, Malta, Montenegro, Morocco, Syria, Tunisia and Turkey.



Dr. Alzina presented the CPRAC compliance with the Terms of Reference (TORs) of the Stockholm Convention to be a nominated center. In addition, Dr. Alzina showed the areas of expertise of the CPRAC, as Stockholm Convention Nominated Center, that can assist the Mediterranean signatory parties of the SC.

Dr. Ivan Holoubek from the Research Centre for Environmental Chemistry and Ecotoxicology (RECETOX) of Masaryk University in Czech Republic presented the RECETOX as a nominated Stockholm Convention Center. He showed the activities of the center at regional level and the technical assistance that RECETOX can provide including the development of NIPs and other activities.

Ms. Fazia Dahlab from the National Centre for Cleaner Production Technologies of Algeria said that it is necessary to advance in the Stockholm Convention implementation to help industries to meet environmental legislation. The need for technical and financial assistance to signatory Parties on how to stock waste and how to develop inventories of the different chemicals and POPs in the country was cited as a very important issue to take into account.

Mr. Frederic Gallo, from the Regional Activity Centre for Cleaner Production Coordination (CPRAC) commented the conclusions and future challenges of a study developed by the CPRAC called "Study on the implementation and synergies among Basel, Rotterdam and Stockholm Conventions and the Strategic Approach to International Chemicals Management (SAICM) within the Barcelona Convention signatories". Mr. Gallo showed nearly 60% of MAP countries (13) have their National Implementation Plans (NIPs) submitted to the Secretariat. The main difficulties in the NIP implementation are lack of data, lack of technical assistance, lack of capacity building, limited economic resources and administration obstacles.

The quantitative data on the production, import and export of POPs, as said by Mr. Gallo, is scarce in the Mediterranean area. Only 9 countries report to have measures to reduce unintentional releases of POPs. During the presentation, it was also expressed that roughly 50% of the countries of the MAP have strategies to allocate financial resources to projects on

POPs. In regards to the Basel Convention, most of the countries have implemented measures to restrict the transboundary movement of waste except for some countries that have partially implemented such measures.

Regarding the Rotterdam Convention, Mr. Gallo remarked that most of the countries that have ratified the Convention fulfill the requirements with the regulatory decisions on chemicals contained in Annex III. In addition, most of the countries that have reported declare to have



mechanisms to control the import and export of chemicals. Regarding the SAICM implementation, this study showed that the SAICM is currently in an incipient stage in the Mediterranean region but also worldwide. Only 9 Mediterranean countries have their National Profiles available.

Mr. Gallo presented the future challenges in regards to the three conventions. Mr. Gallo stated that in regard to the SC, it is necessary provide technical assistance and capacity building to ensure that all countries' NIPs are developed and properly enforced, periodically monitored, updated and reviewed. Mr. Gallo stated that it should be more clarity from and about the active institutions as well as the means of financial assistance from developed countries to developing countries.

In regards to the BC, Mr. Gallo stated that a shift from a reactive attitude to a preventive approach is needed to minimize the use of hazardous substances at source when manufacturing products (life cycle approach). In addition, the transit of tank ships with hazardous wastes through the Exclusive Economic Zone (250 miles from the coast) is an issue not yet solved for the MAP countries (Izmir Protocol, only ratified by 5 countries).

In regards to the RC, a very important challenge that faces according to Mr. Gallo is to ensure that developing countries have the technical and financial capacity to implement the Convention's procedures.

In regards to the SAICM future challenges, the results obtained from research activities undertaken by developed countries need to be disseminated properly to enable developing countries to benefit from them. It was also stated that findings derived from the enforcement of the new EU Chemicals Legislation REACH should improve the availability of data for chemicals, improving their risk assessment and risk management.

Dr. Virginia Alzina, Director of the Regional Activity Centre for Cleaner Production closed the successful event remarking the need of strengthening collaboration and information exchange between countries and Regional centres to promote a environmentally sound management of chemicals and the implementation of all Conventions. She stated that the Stockholm Convention is in continuous evolution and update meaning that countries and the Regional Centres need to be proactive in the implementation of the Stockholm Convention and in the provision of Technical Assistance.

Dr. Alzina thanked the assistance to all participants and encouraged them to enhance regional communication and cooperation taking advantage of the opportunity that the workshop brought.

1.3. Distribution of documents

The following documents were distributed at the workshop to all participants:

CPRAC Documents

- Workshop folder including agenda and other documents.
- CPRAC: Nominated Stockholm Convention Center.
- Study on the implementation and synergies among Basel, Rotterdam and Stockholm Conventions and the Strategic Approach to International Chemicals Management (SAICM) within the Barcelona Convention signatories.
- E-course on pollution prevention in enterprises (CD: Compact Disc).
- GOOD Practices, GOOD Environment, GOOD Olive Oil (CD: Compact Disc)
- CPRAC: The GRECO Initiative: finding business opportunities through cleaner production.
- CPRAC: Sustainable management of industrial areas (SMIA).
- CPRAC: Integrated pollution prevention and control: key tool promoting sustainable production.
- CPRAC: Sustainable consumption and production and climate change: The consumption-based approach to greenhouse emissions.
- CPRAC: The sustainable consumption and production patterns (SCP) in the Mediterranean industry.
- CPRAC Annual Technical Publication. Environmentally Sound Management of Chemicals, 2006.
- CPRAC Annual Technical Publication. Innovative approaches to sustainable consumption and production, 2007.
- CPRAC Presentation Leaflet

Basel Convention (BC) Documents

- The Basel Convention Mechanism for Promoting Implementation and Compliance.
- The Basel Convention regional and Coordinating Centres at a Glance.
- The Basel Convention regional and Coordinating Centres.
- The Basel Convention at a Glance.
- The Basel Convention Bulletin, 2008.
- Our Sustainable future: the role of the Basel Convention.
- The online reporting database of the Basel Convention

Research Centre for Environmental Chemistry and Ecotoxicology (RECETOX) of Masaryk University Document

- 5th Summer School of Environmental Chemistry and Ecotoxicology, July 2009.

Basel Convention Regional Centre of Egypt (BCRC-Egypt) Documents

- The Basel Convention Regional Centre for Training and Technology Transfer for the Arab States in Egypt (BCRC-Egypt).
- BCRC-Egypt Newsletter.

UNITAR Documents

- UNITAR experience assisting with Stockholm Convention Implementation.

Morocco Documents

- Summary of the National Implementation Plan (NIP) of the Stockholm Convention of Morocco. Publication in French. Department of Environment, Morocco.
- “Environmentally Sound Management of PCBs”. Publication in French. Department of Environment, Morocco.
- “Guide of Environmentally Sound Management of PCBs”. Publication in French. Department of Environment, Morocco.

Algeria Document

- Document about the National Centre for Cleaner Production Technologies of Algeria.

2. Conclusions of the workshop

Some of the comments, recommendations and conclusions made at the workshop were as follows:

Public Administration strategy

- For the Stockholm Convention implementation, countries should first properly organize, plan and carry out a strategy in the country and then meet international obligations.
- Reporting on POPs is a complicated process and needs political will and budget.
- All countries will need to update their NIPs for new POPs, set new priorities, establish synergies with all 3 conventions, increase testing and sampling, develop new activities, establish more laboratories, develop additional awareness activities and training, promote better BAT and BEP, etc.
- Too many regulations on POPs might not work and cause a negative (or opposite) effect over the control and management of POPs in the country.
- The whole life cycle of POPs has to be analyzed for better planning and effectiveness.
- The future POPs strategy should look into a more holistic-integrated approach, including POPs and its synergies with climate change mitigation, long range atmospheric transport, biodiversity, international waters, sound chemical management, land degradation, etc.
- Arab countries present inventory, monitoring, capacity building and awareness problems on POPs.
- Establishing a National Center working on POPs in the country can be an important help to advance on the implementation of the Stockholm Convention.
- Establishing a well trained and effective laboratory network on POPs, based on existing capacities and programs in the country is a mandatory step.
- There is a lot of technical capacity in all countries that should be well targeted and supported (technically and financially) to move forward in the implementation of all Conventions. Sometimes very little support is needed (Ex. Reactives for sampling, etc.).
- It's important to get advice from experts to take wise decisions.
- The Spanish government supports multilateralism and is aware of the need of developing countries on technical and economic support for POPs.
- In regards to the Basel Convention, a shift from a reactive attitude to a preventive approach is needed to minimize the use of hazardous substances at source when manufacturing products (life cycle approach).

Financial issues

- Parties would benefit of being better informed about the active international institutions working on the three Conventions and the means of financial assistance for developing countries on all Conventions.

- There are no sufficient available economic resources to implement all conventions in all countries.
- The Spanish government supports financially the CPRAC to help developing countries in the Mediterranean to implement the Stockholm Convention.
- Significant additional economic resources are needed to implement the Stockholm Convention provisions including the Best Available Technologies (BAT) and Best Environmental Practices (BEP) in the future.

Awareness issues

- It is necessary to increase and improve awareness on unintentional generation of POPs.

Monitoring issues

- A number of national and international institutions support monitoring programs on POPs but to a limited amount. Signatory Parties have the main responsibility and should actively engage in the implementation of the Global Monitoring Plan (GMP).
- The GMP aims at establishing regional monitoring on POPs based on stable long term national initiatives managed and implemented by the signatory countries of the Stockholm Convention.
- Signatory countries have a responsibility on implementing monitoring programs on POPs in the country under the Stockholm Convention.
- It is necessary to continue the implementation of the Global Monitoring Program (GMP) on POPs to establish baseline values and trends, as well as improve the understanding of long range transport and climate variability. Existing national and international monitoring programs should be maintained and newly initiated activities consolidated.
- Most Arab countries have only sporadically monitored POPs in the environment; there are many opportunities to improve the situation by cooperating under the GMP to develop long term monitoring strategies.
- Monitoring efforts should be focused on achieving comparable data sets of POPs over time.
- The future evaluation of changes in POPs levels over time should include information on regional and global environmental transport, establishing a coordinated cross-regional approach to analysis and assessment of data.
- The future development includes consolidating and improving measurement methods, monitoring and modelling strategies of POPs and also the development of tools to evaluate the exposure, effects, and impact of POPs and the effectiveness of implemented strategies.

Synergies of all three conventions

- It's recommended to implement Basel, Stockholm and Rotterdam Conventions by the same team (more efficient).
- Implementing all three conventions does not constrain financially (in fact, it can save economic and human resources).

- One department should be in charge of all three conventions and report to International bodies.
- It can be established in the country a joint service for legal, administrative advice, etc. for all three conventions.
- Few countries inform sufficiently on all conventions.
- The implementation process of the three conventions should be decentralized to be more effective. Regional and local governments in the country should play a greater role.

Participation and voluntary agreements on the three conventions

- The Stockholm Conventions is an opportunity to establish a system for clear control of POPs and public participation.
- In general, there is little participation of society on POPs decision-making processes. This participation should be promoted in all countries.
- Participatory and voluntary agreements with industry are absolutely necessary to advance in the implementation of all conventions.
- A participatory approach does not mean delay in convention agreements but ownership, transparency and commitment from the different stakeholders.

Regional cooperation

- It is necessary to support and encourage regional cooperation and strengthen the regional organizations and institutions.
- A Network of Mediterranean Countries should be established for regional cooperation, exchange of experiences, dissemination of research, information, legislation and technology transfer specially from developed countries to developing countries, etc. on all three Conventions.
- A regional implementation plan on the Stockholm Convention could be envisaged.
- A regional work program on all conventions and the synergies between all of them should be regularly established, distributed and updated.
- The results obtained from research activities undertaken by developed countries in the Strategic Approach to International Chemicals Management (SAICM) need to be disseminated properly to enable developing countries to benefit from them.
- Findings derived from the enforcement of the new EU Chemicals Legislation REACH should improve the availability of data for chemicals, improving their risk assessment and risk management for Mediterranean developing countries.

Annexes

Participants list

#	Name	Country	Institution / Department
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34	Nelson Sabogal	Switzerland	Basel Convention Secretariat
35	Nermina Sekjovic-Huric	Bosnia	Ministry of Foreign Trade and Economic Relations
36	Paloma Sanz	Spain	Centro de Investigaciones Energéticas Medioambientales y Tecnológicas
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40	Sílvia Martí	Spain	CPRAC
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43	Urwa Al Alouni	Syria	General Commission for Environment Affaires
44	Valentina Radjenovic	Serbia	Ministry of Environment and Spatial Planning
45	Vanessa Rodriguez	Spain	CPRAC
46	Victor Escobar	Spain	Ministry of Environment and Rural and Marine Affairs
47	Virginia Alzina	Spain	CPRAC
48	Virginia Vidal	Spain	CPRAC

Acronyms

AEMET: Agencia Española de Meteorología (Spanish Agency of Meteorology, in English)

BAT: Best Available Techniques

BCRC-Egypt: Basel Convention Regional Centre of Egypt

BCRC: Basel Convention Regional Centres

BC: Basel Convention

BEP: Best Environmental Practices

CIEMAT: Centro de Investigaciones Energéticas, Medioambientales y Tecnológicas (Research Center for Energy, Environment and Technology, in English)

COP IV: 4th Conference of Parties of the Stockholm Convention

CPRAC: Regional Activity Centre for Cleaner Production

CSIC: Centro Superior de Investigaciones Científicas (Spanish National Research Council, in English)

DDT: Dichloro diphenyl trichloroethane

ESM: Environmentally Sound Management

GEF: Global Environment Facility

GEF-4: GEF's strategy revision process number 4.

GEF-5: GEF's strategy revision process number 5

GENESIS: Global Environment Assessment and Information System

GMP: Global Monitoring Plan

HCB: Hexachlorobenzene

IGOs: Inter-governmental organizations

IPEN: International POPs Elimination Network

IPPC: Integrated Pollution Prevention and Control

MAP: Mediterranean Action Plan

MONET: MONitoring NETwork

NIP: National Implementation Plan

NRC: National Reference Center

LBS: Land Based Sources Protocol

PBDE: Polybrominated diphenyl ethers

PCB: Polychlorinated biphenyls

PCDD: Polychlorinated dibenzodioxins

PCDF: Polychlorinated dibenzofurans

POPs: Persistent Organic Pollutants

POPRC: POPs Review Committee

RC: Rotterdam Convention

REACH: Register, Evaluation, Authorisation and Restriction of Chemical Substances

RECETOX: Research Centre for Environmental Chemistry and Ecotoxicology of the Masaryk University

SAICM: Strategic Approach to International Chemicals Management

SC: Stockholm Convention

TA: Technical Assistance

TORs: Terms of Reference

UNEP: United Nations Environment Program

UNITAR: United Nations Institute for Training and Research