



Organization for Security and Co-operation in Europe

The Secretariat

Follow-up Seminar to the 7th and 8th Economic Forum
“Strengthening the OSCE’s Role in the Realm of
Environment and Security”

Berlin 3 - 4 July 2001.

Final Report

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Final Seminar Programme

German Federal Foreign Office

German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Swiss Federal Department of Foreign Affairs

Organisation for Security and Co-operation in Europe

In co-operation with Ecologic -
Institute for International and European Environmental Policy

International Seminar

"Strengthening the OSCE's Role in the Realm of Environment and Security"

3 - 4 July 2001, Berlin



The occasion for this seminar is to follow-up on previous proposals initiated during the 7th and 8th OSCE Economic Forums. With this seminar it is intended to overcome environment and security challenges within the OSCE region and in particular how to use and address environmental issues in conflict prevention and post-conflict rehabilitation.

The purpose of the seminar will be to assess the OSCE's future role and current activities in this field and to develop operational recommendations to be forwarded to the Permanent Council for consideration on how to strengthen the role of OSCE in the context of environment and security.

The discussion process should include the active participation and input of invited experts from OSCE-Missions and OSCE-delegations, policy-makers, NGO's and academia. The seminar should also take into account the consideration of environmental and security issues dealt with in other international and regional institutions and to provide an assessment about the impact of environmental questions in the context of the comprehensive notion of security.

The outcomes of the seminar should encourage policy-makers and OSCE representatives to strengthen environmental policy in terms of conflict prevention and post-conflict rehabilitation activities by the OSCE and environmental co-operation and its contribution to confidence building in the OSCE region.

3 July 2001

09.30		Registration and Security Check		
11.00	Welcome Addresses	Dr. Ludger Volmer State Minister, German Federal Foreign Office		
		Thomas Borer Ambassador, Embassy of Switzerland in Berlin		
		Gila Altmann Parliamentary State Secretary, German Federal Environment Ministry		
	Plenary Session	Overview of OSCE's Activities in the Realm of Environment and Security Chair: Marc Baltès, Acting Co-ordinator of Economic and Environmental Activities, OSCE Secretariat		
11.30	Opening Speech	"Strengthening the Economic and Environmental Dimension of the OSCE" Dr. Daniel Daianu, OSCE Chairmanship in Office – Romania		
11.50	Keynote Speech	"State of the Environment and Security Debate" Dr. Laurent Goetschel, Director, Institute for Conflict Resolution, Swiss Peace Foundation		
12.10	Keynote Speech	"History of OSCE Environment and Security Activities" Tom Price, Co-ordinator Emeritus, OSCE EEA, USA		
12.30		Discussion and Questions		
13.00		Lunch sponsored by the German Federal Foreign Office		
	Working Group A	Confidence Building Through Environmental Co-operation	Working Group B	Civil Society and International Community: Preventing and Rehabilitating Conflicts
	Moderator	Dr. Petro Pavlichenko, Executive Director, REC Ukraine	Moderator	Ivo Sieber, Head of Section, International Environmental Affairs, Swiss Federal Department of Foreign Affairs
	Rapporteur	John Pearson, Head of Environmental Security Team, UK Foreign & Commonwealth Office	Rapporteur	George Strongylis; Principal Administrator, DG Environment, European Commission
14.30	Speakers	"Enhancing Effective Co-operation Among International Organisations: An Overview" Bert-Axel Szelinski, Head of Division, German Federal Environment Ministry	Speakers	"OSCE Environmental Co-operation with NGOs: The Case of Central Asia" Riccardo Lepri, Economic and Environmental Officer, OSCE Centre in Ashgabad
		"The International Commission for the Danube River: A Mechanism for Confidence Building " Joachim Bendow, Executive Secretary, International Commission for the Protection of the Danube River		"Utilising International Environmental Law for OSCE Security Building: Good Experience in Armenia" Dr. Frank Evers, Economic and Environmental Adviser, OSCE Office in Yerevan
		"Hydro-diplomacy in Western Europe" Prof. Evan Vlachos, Associate Director of International School of Water Resources, Colorado State University		"Enhancing Effective Co-operation among International Organizations: Case Study of the Aral Sea Region" Susan Milner, Programme Leader, Natural Resource Institute, UK
16.00		Coffee and Tea Break		Coffee and Tea Break
16.30 – 18.00		Discussion and Key Findings in the OSCE Context		Discussion and Key Findings in the OSCE Context
19.00 – 22.00	Social Event	Boat Cruise "Touring Berlin along the Spree"		

4 July 2001

Plenary Session		Development of an OSCE-Strategy and Elaboration of Operational Steps on Environment and Security Chair: Ambassador Jutta Stefan-Bastl, Head of Permanent Mission of Austria to the OSCE Rapporteur: Sorin Tanasescu, Counsellor, Romanian Permanent Mission to the OSCE
9.00	Opening	Reports from the Working Groups and Discussion
9.45	Keynote Speech	"Promoting the Implementation of Existing Legal Mechanisms for Conflict Prevention on Environmental Issues in the OSCE Area" Dr. Branko Bosnjakovic, Regional Adviser on Environment, UN Economic Commission for Europe (UNECE)
10.00 General Debate		
	Introductory Statements	"Implementation of the REACT Concept: Economic and Environmental Aspects" Barrie Meyers, Senior Adviser to the Director of Human Resources on REACT, OSCE Secretariat
		"OSCE Activities in Enhancing Co-operation and Early Warning" João Sabido Costa, 1st Secretary, Political Section, Embassy of Portugal
		"The Value Added of an Environmental Code of Conduct" Josef Aregger, Deputy Head of Delegation, Permanent Delegation of Switzerland to the OSCE
		"The Further Development of OSCE Activities in the Realm of Environment and Security" Claus Neukirch, Research Fellow, Centre for OSCE Research (CORE), University of Hamburg
11.30		Coffee and Tea Break
12.00		"Draft Operational Conclusions" Alexander Carius, Director, Ecologic – Institute for International and European Environmental Policy
12.15		Continuation of General Debate, Discussions and Questions
13.15		Lunch sponsored by the German Federal Environment Ministry
Plenary Session		Final Conclusions Chair: Marc Baltés, Acting Co-ordinator of Economic and Environmental Activities, OSCE Secretariat
14.30	Seminar Conclusions	"Next Steps for the OSCE" Sorin Tanasescu, Counsellor, Romanian Permanent Mission to the OSCE
		Closing Remarks
16.00		End of Seminar

Seminar Venue:
 German Federal Foreign Office
 Unterwasser Strasse 10
 10117 Berlin

Transport:
 Subway Connection: (U-2) to
 "Spittelmarkt" or "Hausvogteiplatz"

Bus Connections:
 100, 157, 348 "Lustgarten"
 147, 257 "Oberwallstraße"
 142 "Spittelmarkt"

There is a special entrance for this seminar. Participants should not use the main entrance at Werderscher Markt 1 to enter the building and should instead proceed directly to Unterwasser Strasse 10 for registration. All visitors will be required to complete a security check before entering the building and are required to bring an official source of identification. Only invited participants that have registered for the seminar will be admitted into the seminar.

Seminar Languages:
 English and Russian

Background Paper "Environment and Security: the Role and Work of the OSCE"

Prepared by Office of the Co-ordinator of OSCE Economic and Environmental Activities, Organization for Security and Co-operation in Europe, The Secretariat

Introduction

Since the early nineties, policy-makers have been faced with the complexity of an international security system in which non-traditional threats to local, national, regional and international stability are increasing in intensity and where many processes are beyond the control of individual governments. The role of regional institutions, such as the OSCE, is adjusting to this changing framework through adopting a comprehensive security approach.

The development of industrialised economies depends on natural resources and the possession of, or reliable access to such resources, and is often seen as central to the development and maintenance of state power. States have struggled throughout history to gain secure supplies of resources and this has often contributed to the onset of war. The peace which Western Europe has enjoyed for more than half a century, and the very foundations of the present European Union, were based on this insight, when exactly fifty years ago, the Treaty of Paris, establishing the European Coal and Steel Community, was signed on April 18, 1951.

The enormous growth in human population and its increasing demands on global resources are compromising the health of the planet as well as local conditions. In the last century, population has quadrupled, while air pollution has increased by a factor of 5, water use by 9, energy use by 16, carbon dioxide emissions by 17, marine fish catches by 35 and industrial output by 40. Most of the security implications of these trends remain unrecognised, although they are putting a strain on natural resources and therefore increase the potential for environmental conflicts¹.

While an immediate causal link between environmental issues and conflict is difficult to prove on the basis of empirical evidence, a number of factual observations can be made which suggest a sufficiently close relationship for such issues to be treated as genuine security issues. Certain problems, for instance disputes related to waterway management or nuclear waste, have trans-boundary dimensions and they can quickly lead to international tensions.

It is possible to identify different types of environmental change/degradation that, in combination with rapid population growth, economic decline, inequitable distribution of resources, lack of institutional support and political repression, could affect stability and ultimately trigger environmental conflicts². These types of degradation include: natural/man-made disasters, cumulative changes or slow onset changes (deforestation, land degradation, erosion, salinisation, water-logging, desertification and climate change), accidental disruptions or industrial accidents, water scarcity and damage to ecosystems.

Decrease in quality and quantity of natural resources, population growth and unequal access to resources can cause increased environmental scarcity. Environmental scarcity can, in turn, lead through processes of migration, expulsion and decreased economic

¹ Sir Crispin Tickell, "Risk of Conflict: Resource and Population Pressure", in *Environmental Change and Security Project*, Woodrow Wilson International Centre for Scholars (<http://ecsp.si.edu>).

² Environmental conflicts manifest themselves as political, social, economic, religious or territorial conflicts, or conflicts over resources or national interests, or any other type of conflict. They are traditional conflicts triggered by environmental degradation.

productivity, to the weakening of the state and ultimately, in extreme cases, to coups d'état, ethnic conflicts or deprivation conflicts³.

Food, water and energy are at the core of international, as well as domestic, security concerns of most of transition countries. Of central interest is the use of scarce trans-boundary water resources, which are of strategic importance in areas such as southern Russia and Central Asia. In addition, man-made disasters like the drying up of the Aral Sea compound these problems.

Linked to the water issue, the production of food, more precisely the availability of arable land, is another strategic issue. In Central Asia, food production in a number of regions is under threat. In the Fergana Valley with its 14 million inhabitants, where Uzbekistan, Tajikistan and Kyrgyzstan share a border, the struggle for sufficient land and water has already resulted in violent clashes. These water and land issues are sometimes entangled with border disputes, a legacy of the arbitrary way in which these borders were drawn.

Another important factor is pollution. The excessive exploitation and pollution of the Caspian and Black Seas, for example, have already led to tensions between the riparian states. In a number of areas it has to be expected that pollution, scarcity of resources and global warming will also lead to large-scale movement of populations. Government intervention, in co-operation with international organisations and NGO's, plays a critical role in determining whether population movements and migrations will cause conflict or not.

Tensions are more likely in states where the authority of the government is weak or the population is divided along ethnic and/or religious lines. Corrupt political leaders might use these shortcomings to mobilise groups through appeals to group identity, disputes over land, water and other natural resources, and thus achieve a radicalisation of the groups addressed, with disruptive effects on the political process.

To deal with civil strife, eventually triggered by environmental causes, a system of fair laws and effective law enforcement, as well as mechanisms to redistribute resources, provide public goods and manage conflicts, are essential. Therefore, to prevent tensions from arising, there is a need to build state capacity. "Three areas deserve special attention when considering the role the international community can play to this respect: a) the need to underscore the importance of the rule of law, participatory politics and respect of human rights; b) build the capacity of the civil society; c) stress the importance of regional and global organisations in designing co-operative solutions to common problems, and constructing regimes of shared expectations and information"⁴.

The Role of the OSCE

The OSCE is neither an economic nor an environmental organisation and the OSCE has neither the intention nor the means to address long-term trends like global warming or the depletion of the ozone layer. Nevertheless the economic and environmental dimension is one of the components of the OSCE's comprehensive approach to security and it is the necessary complement to the politico-military and the human dimensions. It operates on the premise that economic and environmental solidarity and co-operation can contribute to peace, prosperity and stability. The OSCE can therefore address and tackle those environmental issues that may affect security and stability by making use of its capabilities. These include its ability to speak with the support of 55 countries, its field missions which are close to stakeholders affected by the threats posed by environmental degradation and instability, and its flexibility that permits it to respond to needs that are not being met by other

³ Thomas F. Homer-Dixon, "Environment, Scarcity and Violence", Princeton University Press, Princeton, New Jersey (1999).

⁴ OECD DAC Working Party on Development Co-operation and Environment, "State-of-the-Art Review of Environment, Security and Development Co-operation", OECD, February 2000.

international organisations. This role is a complementary one that helps to fill gaps in critical areas that call for action and that might not otherwise be addressed by other international organisations.

Increased attention needs to be given to the nexus between environment and security. As a regional security organisation, the OSCE has the authority to mandate peacekeeping operations, engage into conflict prevention and management, and foster economic and environmental co-operation and development throughout its area of responsibility.

What can the OSCE, as a regional security organisation, concretely do to address environmental threats to security?

By providing a platform for discussion among national governments, private business, international organisations and NGO's to interact, to exchange thoughts, comments and criticism, OSCE activities can have a lasting impact. By promoting the articulation of, and adherence to, shared standards and norms for economic and environmental behaviour, and by developing and intensifying contacts with relevant international organisations, an important step in alleviating the economic and environmental conditions that foster conflict can be taken.

Especially within the international community, the conflict and security frame of OSCE activities as well as OSCE security-building instruments should be made clear to OSCE partners. For reasons of division of competencies and labour, this is an essential prerequisite for mutual understanding and strategic co-operation. Additionally, selected cases of project implementation work should serve as an illustration of general OSCE intentions to the public and OSCE partners. Beyond the frame of security-building political work, project work should be left to implementing organisations.

In accordance with the platform concept⁵, the OSCE can identify priority projects and submit such projects to international organisations that have the economic and financial means to address them concretely. By its unique comprehensive approach to security, which is founded on a thorough political understanding of issues and relationships, the OSCE can act as a catalyst and propose to international organisations that they undertake activities related to an identified security issue.

Mutual exchange of information and regular contacts are organised, for instance, with international financial institutions, the United Nations Economic Commission for Europe (UNECE), the United Nations Environmental Programme (UNEP) and the European Commission. Also, NGO's have a valuable contribution to make to the economic and environmental dimension. If tapped, their independence, technical expertise and know-how with regard to fact-finding, promoting dialogue and building confidence is of substantial benefit to the OSCE process.

In the dialogue between OSCE headquarters, OSCE field activities and the Government, emphasis is to be put on a clear understanding of environmental security-related issues as a prerequisite to national confidence building and stabilisation. In contacts with partner organisations, the OSCE acts as a consciousness-raiser by stressing the necessity of a comprehensive and inter-disciplinary security approach. In field activities, consciousness-raising means public education about signed international agreements, such as the Aarhus Convention, the Helsinki Convention on Trans-Boundary Water Usage, the OECD Anti-Bribery Convention, etc. An educated and engaged public is one of the best guarantors of good governance and stability. Therefore, the OSCE undertakes public education campaigns about existing agreements. It works with governments on legislative reform and institution-building in order to promote good governance.

⁵ In the Istanbul Charter it was officially recognised that the OSCE is able to play an integrating role by offering to provide a flexible co-ordinating framework by which other international actors could combine their collective efforts.

Environment and Security: Some Relevant Recommendations from the Ninth OSCE Economic Forum

During the Ninth OSCE Economic Forum on "Transparency and Good Governance in Economic Matters", held in Prague from 15 to 18 May 2001, a number of recommendations were formulated by delegates. The Romanian Chairmanship, with the support of the OCEEA, is currently evaluating follow-up and implementation measures. Below some recommendations relevant for the discussions on the role and work of the OSCE in the realm of environment and security, are listed.

- The OSCE was requested to support energy sector reforms and provide advice on sound management of resources as a conflict-prevention measure.
- The OSCE was asked to support the elaboration of environmental legislation where needed.
- Delegates to the Forum stressed that, due to its level of political influence, the OSCE, through its awareness-raising activities, could promote better understanding of the importance of the environmental component of policies aimed at fostering stability.
- Participants appealed to the OSCE to act as a catalyst in attracting international attention to local environmental problems and to facilitate dialogue between civil society and government.
- It was recommended that the OSCE should assist in the creation of adequate instruments for early warning of large-scale environmental problems.
- Participants stressed that the current practice of regular reporting by OSCE field presences should continue, with a greater focus on economic and environmental aspects relevant for security. It was also argued that there is a need to increase the flow of information and political guidance coming from the CiO, the Permanent Council and the Office of the Co-ordinator of OSCE Economic and Environmental Activities. The analysis, processing and assessment of reports from the field carried out by the Office of the Co-ordinator should be enhanced.
- Delegates argued that field presences should be flexible in implementing their mandates in the economic and environmental dimension. Identification of new threats to security, taking into account the specific problems of each country, is part of the fulfilment of their basic functions. Participants concluded that all the field presences should receive the resources necessary for their specific economic and environmental activities.
- Better co-ordination and co-operation between field missions was recognised by delegates as a key element for the promotion of regional co-operation and rapprochement. Participants stressed that the OSCE South Caucasus network of field offices could serve as platform for co-operation between regional networks of other international, national governmental and non-governmental organisations.

The OCEEA and the Field Missions

In addressing environmental issues in a security-related context, the OCEEA relies heavily on the work of field officers⁶. Through regular communication and contact with representatives from government, private sector, civil society and the international community, the OSCE field presences, as per the work of the Economic and Environmental Officers (EEOs), serve as barometers of the local economic and environmental state of affairs in relation to security.

While identifying environmental and social issues posing a threat to security and stability, the OSCE Secretariat heavily draws on the EEOs' knowledge, advice and expertise. In co-operation with them, it acts as a convenor by offering neutral ground where concerned

⁶ The OCEEA does not limit its activities only to those countries where OSCE Offices have been established. However, in those countries where the OSCE has economic and environmental officers, the work is greatly facilitated and therefore more effective.

actors can come together and approach a politically sensitive problem in a constructive and co-operative way.

The addition of two professional posts in the Fall of 2000, including a Senior Economic Adviser and a Senior Economic Officer, has greatly increased the OCEEA's capacity to interact and support the work of OSCE Field Offices in the Economic and Environmental Dimension.

Missions continue to prepare spot reports on specific economic and environmental issues with security implications. Depending on the issue of concern, the OCEEA has served as a catalyst to contact and inform the appropriate organisation with the resources to address the problem.

Periodic documentation and compilation of field activities takes place as a means of allowing the OCEEA to better support field activities through information-sharing and cultivation of relationships, as well as to better inform OSCE delegations and other OSCE institutions of economic and environmental dimension activities. The Secretariat, with the participation of EEOs, holds regional-based meetings to address issues of regional and cross-border concern throughout the OSCE region. A meeting for EEOs in Central Asia was held in April 2001 in Bishkek, in parallel to the regional Heads of Mission meeting.

The OCEEA and OSCE field presences work together in the development of project proposals intended to catalyse country "ownership" in addressing particular economic and/or environmental issues. The OCEEA lends assistance to the EEOs in the presentation, formatting and budgeting of project proposals and supports the field presences in raising funds.

The Work in the Field

Following is a brief account of some of the activities in the field. This is not intended to be an exhaustive report, rather an illustrative example of the work done by some of the OSCE field presences in the realm of security and environment.

OSCE Presence in Albania

The EEO is a focal point for development agencies looking for advice in regard to sectors and areas where there is most need for involvement in Albania.

Under the Growth and Poverty Reduction Strategy (GPRS), an initiative of the Government of Albania towards a comprehensive top-down, bottom-up national economic development programme with a participatory approach, the EEO is a member of the World Bank working group for the technical realisation of this approach.

The EEO provides the Field Stations with background information and guidelines for the monitoring and catalysing of activities and developments in the sphere of economy and environment. It gives support in finding partners for training and capacity building.

In the framework of the Stability Pact, the EEO has been working continuously with the Ministry of Economic Co-operation and Trade. Last year, as member of the working group, the EEO, contributed to the Investment Compact of Albania. Presently, the EEO is a member of the working group, which develops a Sustainable Tourism Strategy for Albania.

The EEO is the co-ordinator of a round table consisting of parliamentarians, representatives from think tanks, university professors and businesspeople who discuss the issue of the need for competent young leaders in business and administration. Out of this initiative came the project proposal of the Student Debating Association of Albania, suggesting to conduct televised debating tournaments on regional and national TV on, among other topics, economic and environmental questions. The EEO invited in May potential sponsors to the OSCE HQ in Tirana, and the students gave a well-received presentation on their idea. The

project is now running with the first TV debate having taken place 3 June. The Debating Association is contrasted on TV with debates among professional politicians which take place one day after the student debates.

The EEO tries to raise the awareness of the Government for the much-needed electricity sector reform; in particular the implementation of an Action Plan agreed between Albanian Government and Donor Community and a Power Sector Reform Strategy developed with USAID.

One of the nation-wide Albanian TV channels broadcast in May 2001a three-part environmental series developed jointly by the EEO and the Environmental Students Club of Albania. The objective was to raise public awareness on the municipal waste problem and call on the responsibility of the individual citizen. The programmes alternated between live discussions with students, representatives from the Municipality and health experts and footage filmed with hidden camera. The positive feedback and thank you letters which the OSCE HQ in Tirana and the Field Stations received showed that many young people and complete school classes all over the country watched the three programmes.

The EEO organised, together with the World Bank, the first ever Donors Conference for Environment in Albania in May 2000. The EEO also wrote the conference catalogue and produced a database for donor activities in the environmental sector since 1991. The format for the database has since been adopted by the World Bank as a model for its GPRS database. Presently the EEO is working on an update of its catalogue.

The EEO, together with SNV, has been co-ordinating an Environmental Advocacy Platform consisting of representatives from NGOs, the Parliamentary Commission on Health and Environment, the National Environmental Agency and international organisations. The group has recently agreed to implement an action program to combat the American Butterfly, which destroys thousands of trees in Albania.

The EEO has produced an overview of environmental governmental institutions in Central and South Eastern European countries and distributed it to the government and parliamentarians. The objective was to raise awareness of the need for institutional reform in the environmental sector, especially the need for a Ministry of the Environment.

The EEO met with the team from UNEP and suggested further partners for the gathering of data. After the publication of the Post-Conflict Environmental Assessment, the EEO produced a brief version on the main hot spots and UNEP recommendations and distributed it to NGOs and parliamentarians. As a result the issue was raised several times in Parliament.

The EEO provided the working group in the Ministry of Public Economy and Privatization preparing a draft law on the 'administration of dangerous substances' with information on such laws and contact persons in other Central and South Eastern European countries.

Alerted by recent studies of Albanian and international seismological experts warning of a major earthquake in Albania, the EEO is collecting information from the Seismological Institute, the Ministry of Public Works and the construction police on this issue.

OSCE Centre in Almaty

Aarhus Convention

On 5 to 6 June 2000, the OSCE Centre in Almaty conducted a regional seminar on the Aarhus Convention (access to information, access to justice, public participation in decision making process). It resulted in a trilateral Memorandum of Understanding between the Ministry of Natural Resources and Environment Protection of the Republic of Kazakhstan, the Committee on the Use of Natural Resources of the Majilis of the Parliament of the Republic of Kazakhstan and the Bureau of the Special Working Group of Kazakhstani

NGOs. In October 2000, Kazakhstan ratified the Aarhus Convention. The OSCE Centre will concentrate more activities on implementation of the Convention at the regional level in 2001.

The OSCE Centre is promoting the Aarhus Convention through four workshops. Two workshops will take place in the East Kazakhstan Region and Atyrau Region. The workshops in Akmola and Pavlodar Region took place in June.

These workshops will be organised in co-operation with regional administrations. Local administrations are actively involved in the discussion on mechanisms to ensure effective implementation of the Aarhus Convention. The workshops will result in the elaboration of recommendations by NGOs, local administrations and representatives from the Government.

In 2002, the OSCE Centre plans to pay more attention to the problems concerning ecological audit and ecological expertise as those come under the principles of Aarhus Convention. The most common problem is that private companies do not permit ecological expertise, justifying their actions by arguing for the protection of commercial secrets.

Water Pollution

Based on the regional co-operation priorities, set at the Regional Heads of Mission Meeting in Bishkek in April 2001, and recent data on water quality and its shortage in Kazakhstan, the OSCE Centre in Almaty has plans to conduct a two-day regional workshop on water pollution. It will be aimed at the elaboration of a policy for each of the five countries in Central Asia on improvement of the quality of water using legal and financial tools.

Active participation will be required from all OSCE field presences in Central Asia, international organisations, regional institutions, ministries and other government bodies dealing with environmental and health issues, NGOs and local authorities. Background research on the problem has to be performed by the EEOs in each of the five countries.

This exercise should result in encouraging international organisations and donors to assist government authorities in managing this issue. At the same time, the problem of lack of access to clean water should be highlighted as an element threatening important aspects of human security and regional stability.

Transboundary water management

It was decided at the Regional Heads of Mission Meeting in Bishkek that the OSCE Centre in Bishkek and the Interstate Council will organise the seminar on transboundary water management. However, the Centre in Almaty monitors the situation, as it is one of the most important issues impacting regional security. The Centre plans to provide varied support for the preparation of the regional meeting.

Environmental Code

The Centre has already organised two meetings with NGO's and representatives from the government on the issue of the Environmental Code in Kazakhstan. Such a Code would systematise all legal acts related to environmental issues. There are many contradictions in the existing legislation. It was decided to further develop the Ecological Code and, if necessary, to start work on an ecological strategy/policy for Kazakhstan. The organisation of the international conference on an environmental code and environmental strategy and policy could be one of the most important OSCE projects over the next year. The idea is supported by the Kazakh Government and by environmental NGOs.

Environmental Monitoring

The Centre has plans to support the activities of the implementation of an ecological audit. The Centre has already participated in the launching of an automated information monitoring

system of ecological risk management in one the Kazchrome companies - Aksu ferroalloy plant. The Kazchrome project enjoys governmental support. Currently, the company participates in seminars and workshops organised by environmental organisations and shares knowledge about ecological risk management with other private companies and public organisations. The Centre plans to join these activities and to give political support for the implementation of environmental risk management systems.

OSCE Centre in Ashgabad

Introductory remarks

The OSCE Centre in Ashgabad was opened in January 1999. Its activities in the field of environment have been rather limited and focused on four main directions:

- Involvement of representatives from Turkmenistan in OSCE events in the Economic and Environmental Dimension;
- Monitoring of developments within the Economic and Environmental Dimension;
- Co-operation with other international organisations;
- Projects.

Involvement of government representatives and NGOs in OSCE events

The OSCE Centre in Ashgabad organised the participation of government officials and NGO from Turkmenistan in the following OSCE events:

- 7th meeting of the Economic Forum, April 1999;
- Preparatory seminar for the 8th Economic Forum on "Economic Rehabilitation and Next Steps in the Transition: Institution-Building, Rule of Law and the Role of Civil Society", Tashkent, October 1999;
- 8th meeting of the Economic Forum, May 2000;
- Regional seminar on "Global Environmental Law", organised by the OSCE Centre in Almaty in September 2000;
- Regional NGO conference on the occasion of the Almaty meeting of European and NIS environmental ministers within the framework of the process "Environment for Europe", organised in by the OSCE Centre in Almaty in October 2000;
- Preparatory Seminar to the 9th meeting of the Economic Forum on "Good Governance and Transparency in Economic Matters", Almaty, November 2000.

Monitoring developments in the Economic and Environmental Dimension

The OSCE Centre in Ashgabad focused its attention on issues related to water management, a problem particularly acute in Turkmenistan. Reports on this subject were produced in 1999, on the occasion of the meeting of the Central Asian Heads of State within the framework of the IFAS (International Fund for the Aral Sea), and in 2000, on the occasion of the 8th meeting of the Economic Forum.

The Centre monitored and reported on the situation of the Internet in Turkmenistan, where in 2000, the government virtually created a state monopoly by closing down the existing private providers.

The Centre attends regular information-sharing meetings with representatives of other international organisations, embassies and other international entities on various problems related to the development of Turkmenistan. Particularly, the Centre attends meetings on

water issues, with particular focus on the drought that has affected the Central Asian region for two years.

Co-operation with other international organisations

The OSCE Centre in Ashgabad actively participated in the Local Programme/Project Advisory Committee (LPAC) of the UNDP office in Turkmenistan. This procedure consists of an appraisal of the proposed programs and projects of the UNDP in Turkmenistan by other parties, within and outside the UN system.

The OSCE Centre in Ashgabad took part in three such meetings, concerning the projects "National Report and Action Plan on Biodiversity", "Support to Agenda 21 Process in Turkmenistan" and the UNDP / Turkmenistan Country Co-operation Framework 2000-2004.

On the occasion of the meeting on Agenda 21, the Centre suggested incorporating the Aarhus Convention into the project document. The suggestion was taken into account and reflected in the final version of the project.

Co-operation and regular sharing of information is also taking place with the offices in Turkmenistan of Counterpart Consortium and the ABA (American Bar Association).

Projects

In May 2000, the OSCE Centre in Ashgabad organised a UNECE/UNEP/OSCE Central Asian regional seminar on the Aarhus Convention. Participants were a carefully selected group of government officials and NGOs from the Central Asian countries. The aim was to provide the participants with an opportunity to share their relevant experience and to discuss the most optimal approach to implementation.

The main results of the seminar were: a) summing up the current state of Central Asian legislation and practices with respect to the Aarhus Convention; and b) recommendations on activities that would promote the implementation of the convention.

On the basis of these recommendations, the OSCE Centre in Ashgabad in co-operation with the Ministry of Environment of Turkmenistan and the NGO "CATENA Ecological Club" developed a project consisting of a series of roundtables aiming at informing government officials, businesspeople, journalists and NGOs at the central and local levels about the Aarhus Convention and to formulate proposals for its implementation in Turkmenistan.

Each roundtable consists of informative lectures on the Aarhus Convention and related Turkmen legislation and practices, and of discussion and proposals on its implementation. Lecturers are both national and foreign specialists, and care is taken to distribute information materials to participants before the roundtable in order to facilitate discussion and the formulation of proposals.

The proposals formulated at each roundtable will be consolidated in a final proposal to be delivered to the National Commission on Implementation of International Environmental Conventions and Programmes, an inter-ministerial body created in March 2000 with the task of proposing ways to implement international environmental conventions ratified by Turkmenistan.

In addition, the OSCE supported and partially financed a conference organised by the NGO "Green Guards of University" on the subject of environmental education.

OSCE Mission in FRY

Present situation

After many years of economic, social and political deterioration, Yugoslavia has reached the stage where almost no state function is operating properly. This, of course, reflects on all elements of civil society and economy. Yugoslavia is an integral and very important part of

the Balkan region. Its geographical position, industrial, transport, and cultural links with the region clearly display the necessity for its rapid rehabilitation.

The environmental situation in FRY is critical because of a number of causes: ignorance and negligence of environmental issues, aged industrial structures and destruction during the conflict in 1999. Absence of appropriate structures on all levels of governance, inconsistent, misused or abused legislation, poor taxation and environmental funding policy, insufficient regional co-operation, exclusion from international processes, low level of public awareness, weak non-governmental sector, absence of a national environmental strategy, lack of a development policy and procedures that would involve all interested parties in policy and decision making process, have resulted in a rapidly worsening status of the environment and a heavy burden for the new authorities.

Priority Area

Establishing and strengthening an environmental legal and institutional framework aiming to enable overall development of the country and its economical and social stabilization through restoration and reconstruction programmes is the priority area for action in FRY.

Objectives of OSCE Mission in FRY

Institutional and capacity building at all levels (federal, republic, regional and local) aiming to enable compatible structures capable of planning and applying environmental policy with vertical and horizontal synchronisation.

Efficient co-operation with respective international organisations, bodies and structures. Support to environmental strategic and action planning (REAPs, NEAPs and LEAPs).

Support in drafting legislation aiming to obtain synchronisation between different level of local regulations as well as with international laws. Adoption and ratification of international legal documents related to environmental issues.

Strengthening of the third sector aiming to obtain consistent co-operation of all stakeholders, particularly on the local level, and to introduce strong controlling element in decision making process.

Support for EU accession processes by active governmental and other organisation's involvement into international organisations, processes and planning activities with emphasis on regional programmes.

Draft proposals for:

Institutional and capacity building

- Institutional capacity building, adjustment and creating new institutional structures (National Environmental Agency);
- Training programs for authorities and administrators;
- Empowerment of monitoring procedures and their appropriate structures (i.e. inspectorates);
- Defining or establishing implementing body/agency/organisation/institution;

Legislation

- Support to respective governmental bodies and independent institutions for adjustment and harmonisation of legal regulations and procedures, including legislation, and economic instruments, including taxation, penalty policy and Environmental Funds, with appropriate international standards and regulations;
- Assistance in drafting and revision of Environmental Laws and in adoption of international legal standards;

Environmental civil society development

- Assistance in the development of a strategy for implementation of the Aarhus convention;
- Promoting and supporting the networking of environmental NGOs and partnership with other stakeholders on all levels (authorities, business, trade unions);
- Assistance in the development of environmental legal advocacy/advisory centers and support for setting up the Ombudsman for environmental rights;
- Assistance to the media as a part of (environmental) civil society building through its collection, processing and dissemination of information relevant to the environmental problems. Media are very important for awareness raising and in the educational process as they are an outstanding source of information, communication and dialogue that serve all parties involved.

International co-operation

- Support to regional project and intergovernmental co-operation;
- Supporting accession to international organisations, treaties, conventions and processes;
- Introduction to EU environmental programmes and bilateral co-operation with EU member states;
- Encouragement of local partnerships, international, bilateral and multilateral projects;
- Supporting the regional Environmental Emergency Response and Early Warning Centre.

Overall, the Programme should be synchronised with other international agencies, governments and donors to avoid overlap and to achieve efficient co-operation and implementation of the projects. In this respect, it certainly would be useful to set up an environmental donors' pool. The OSCE might act as a co-ordinator of the group.

OSCE Mission to Skopje

Introduction

The FYR of Macedonia shares its environmental problems with many other countries in transition. The goal of the former Yugoslavia in the post-WW II years was to increase the share of industrial production of GDP, very much at the expense of environmental concerns. Many of the environmental side effects of production obviously compromise human security. Unsustainable use of resources in some respects also has an impact on relations to other countries. At the same time, environmental policy in the FYR of Macedonia is a product of the institutional framework, in which structure and effectiveness is a function of the democratisation process. Consequently, human security, international relations and institutions make up the three dimensions of the environment-security nexus, thereby also covering many aspects of the OSCE comprehensive definition of security as outlined in the 1975 Helsinki Document.

The Three Aspects:

Production/Human Security: The north-eastern part of the country is very dependent on the mining industry, especially on the extraction of lead and zinc. As of 1990, prices on lead, in particular, have decreased dramatically due to competing exports from Russia, which increased with the disintegration of the former Soviet Union. Reduced profitability precludes capital investments, and several mines operate with equipment from the 1940s. Hence, production is far from fulfilling environmental standards. Until 20 years ago, various forms of reactive airway diseases such as "black lung" were very common. After the introduction of wet drilling, which binds the dust, this problem has subsided. However, the dust from the flotation above ground contains toxic substances, solid particles of heavy metals (lead in particular), which may affect the population living close to the flotation areas. Wastewater from the tailings contains poisonous cyanide and may reach groundwater and rivers.

Psychological problems caused by long hours in the pit, are perhaps the most common work related disease. Many mines operate 24 hours per day, and employees work one of three shifts for six days, resting two days, and changing to the next shift.

(In the mid- and long-term, economic and environmental problems in the north-east will have demographic effects, as the young migrate to north-western municipalities. Increased competition for opportunities in those ethnically mixed areas may have an impact on domestic stability.)

International relations: The Ohrid border lake is shared between the FYR of Macedonia and Albania. A severe energy shortage in Albania is partly the result of over-reliance on hydropower, which is an unpredictable source of energy. A substantial amount of electricity is generated by hydro-stations on the river Drin. Drin runs into and out of Ohrid on the Macedonian side, and eventually makes a small loop into Albania by the Debar. Consequently, Albania is completely dependent on Macedonian co-operation. In November 2000, when the government of the FYR of Macedonia allowed Albania to use Ohrid water for its hydro-stations on Drin and the water level in Ohrid sunk, it triggered strong reactions on the Macedonian side and not only among environmentalists. The problem is likely to recur given the energy situation in Albania, and has the potential of straining otherwise good neighbourly relations. Any problem with Albania has a double dimension for this country. It was recognised by multi-ethnic civil society organisations (such as "Search for Common Ground") that this issue, as well as the issue of depleted uranium, fell into the category of environmental issues where public opinion was divided according to ethnic lines. Other issues in the nexus became highlighted as well.

Institutional frameworks: The bilateral agreement on the sharing of Ohrid, was signed by the former Yugoslavia and the former Socialist Republic of Albania, and its legal validity today is subject to question according to international lawyers. A UNESCO Convention on protection of natural heritage (concerning Ohrid) has been signed and ratified by the FYR of Macedonia but not by Albania.

Energy and in particular water management, suffer from confusing institutional frameworks. Water is formally dealt with by the Ministry of Agriculture, but the Ministry of Environment is regarded as accountable by NGOs. The Ministry of Economy deals with energy, and the Ministry of Foreign Affairs with bilateral issues.

Activities and Role of the OSCE Spill-over Monitor Mission to Skopje, and the OSCE EED

Generally, an important role of the Mission is to identify issues with a security dimension, and to examine and explain them to interlocutors from the OSCE perspective.

With regard to the environmental side effects of pre-independence production and human security, the Mission has a *reporting and information-sharing function*. World Bank consultants tasked to make recommendations on enterprise sector reform regularly visit the Mission in order to get information on the environmental aspects of the problems of loss-making companies. The Mission focuses attention on the various threats to human security it has identified during fieldtrips, as well as shares information on the institutional and legal framework in the environmental field.

Information shared with the OCEEA can serve as basis for discussion at a higher level, in particular when it relates to issues with a cross-border dimension.

The Mission has also worked with the East West Institute and the Council of Europe to *promote NGO trans-frontier networks, and inter-sectoral dialogue* (between business and environmental NGOs) not the least in the Lake Prespa and Ohrid area.

In order to make institutions more accountable and responsive to civil society, the Mission is committed to support seminars on lobbying techniques for environmental NGOs and

parliamentarians. The objective would be to *promote the understanding and implementation of the Aarhus Convention*. The OCEEA, in this context, can assist in raising funds for these activities, particularly among interested delegations of participating states. Another way of ensuring accountability is by promoting a clear division of competences both horizontally, between line ministries, and vertically, between the central and the local level of government. In conformity with the latter objective, the Mission is active in its support of a coherent decentralisation process.

OSCE Centre in Tashkent (CiT)

To fulfil its mandate as a primary instrument for early warning, conflict prevention, and crisis management in the environmental area, CiT is pursuing initiatives aimed at promoting sound environmental management practices in Uzbekistan. This year CiT has planned a variety of initiatives related to Uzbekistan's accession to and implementation of the Aarhus "Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters" ("Aarhus Convention"), a convention based upon principles of governmental accountability, responsiveness and transparency. Uzbekistan is scheduled to accede to the Aarhus convention in the coming months, and CiT is working to facilitate the effective implementation of the convention.

CiT has had various meetings with officials of the State Committee for Nature Protection of the Republic of Uzbekistan, and the Oliy Majlis Environment Nature Protection Committee, to discuss the Aarhus Convention. In addition, CiT arranged for an Advisor of the Chairman of the Ukrainian Parliament's "Committee on the Problems of Environmental Policy, Nature Resources Utilization and Elimination of Chernobyl Catastrophe" to speak with Uzbek governmental officials about the Aarhus Convention implementation process in Ukraine. Ukraine ratified the Aarhus Convention on July 6, 1999, and has subsequently been active in pursuing a variety of activities (conducting workshops for governmental officials and NGOs, reviewing existing legislation, publishing booklets for the public) to effectively implement the convention.

In March CiT conducted a workshop entitled "Enhancing NGO Participation in Environmental Decision-Making in Uzbekistan". Approximately forty representatives from Uzbek non-governmental organizations (NGOs) attended the workshop, along with governmental officials. The workshop included a review of Uzbek national environmental legislation relating to public participation, and a discussion of the Aarhus Convention. Workshop participants discussed factors impeding the development of a robust Uzbek environmental NGO movement, and as a result of this workshop they have begun to organize an Uzbek environmental NGO network.

In early May CiT organised a training workshop entitled "The UN/ECE Aarhus Convention on Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters" in Tashkent for thirteen state ministries and agencies, five Tashkent khokimiyats (districts), and four Tashkent mahallah (community organisations). NGO representatives also attended, and with other participants they studied Uzbek national environmental legislation relating to access to information and public participation. Workshop representatives also prepared a set of recommendations regarding the effective implementation of the Aarhus Convention, and the recommendations will be forwarded to appropriate state officials.

In addition, CiT is currently planning two other activities to promote the Aarhus Convention in Uzbekistan. As part of the first activity, local and regional trainers will give a series of Aarhus Convention workshops in Uzbekistan's thirteen provinces in order to ensure that governmental officials and NGOs throughout Uzbekistan understand the principles of the Aarhus Convention. The workshops will focus on the need for increased access to information, public participation in decision-making, and access to justice in environmental matters. The workshops will last from two to three days, and include: (1) a review of Uzbek

legislation relating to public participation; (2) a presentation about the Aarhus Convention's provisions and strategies for its implementation; (3) an overview of opportunities for solving environmental problems through the implementation of the Aarhus Convention; and (4) a focus on positive examples of the Aarhus Convention implementation process in countries of the Former Soviet Union.

With the second activity and in order to facilitate the accession and implementation process of the Aarhus Convention in Uzbekistan, CiT will establish an Uzbekistan "Aarhus Convention Experts' Working Group". Towards this end, the group will: (1) review existing Uzbek legislation and make recommendations to the government regarding proposed legislative changes for compliance with the Aarhus Convention; (2) ensure that an official translation of the Aarhus Convention into Uzbek language is completed and distributed to Oliy Majlis deputies and members of various state agencies; (3) prepare a booklet about the Aarhus Convention for distribution to governmental officials, NGOs and the public; (4) prepare a draft workplan for the Aarhus Convention implementing body in Uzbekistan; and (5) prepare a draft of the document concerning procedures to be followed in the implementation of the Aarhus Convention in Uzbekistan.

Through their contacts with local authorities, universities, research institutions and NGOs, field offices like CiT are able to effectively monitor environmental developments. In addition, through initiatives such as those pursued by CiT, these field missions enhance their monitoring abilities and promote sound environmental management practices.

OSCE Office in Yerevan

Introduction: Nexus of environment and security

Within its environmental mandate, the OSCE Office in Yerevan focuses on security-related aspects of national and regional environmental affairs. It sees protection of the natural environment as a means of efficiently using limited natural resources and contributing to economic recovery. From the Office's point of view, environmental balance is a main basis for comprehensive and sustainable development. Balanced environmental and economic development is a vital precondition for social welfare. In their turn, social welfare and economic prosperity are key components in public confidence-building and national security. In the same way, environmental protection is a means of preventing social tensions and avoiding conflicts.

The OSCE Office in Yerevan sees public participation in environmental decision-making as an indispensable tool of democracy building. Last but not least, the settlement of environmental issues – first of all the rational and co-ordinated use of resources – opens up prospects for bilateral and regional rapprochement within the South Caucasus.

The OSCE Office in Yerevan has sought to raise national and international awareness about the dimension of security-relevance of environmental issues in Armenia. It has focussed on the leading role of the environmental protection movement in Armenia in identifying public interest in and individual capabilities for social and economic recovery. The OSCE Office in Yerevan gives special support to governmental and non-governmental endeavours aimed at making environmental issues more transparent and public.

OSCE activities in the field of environmental protection in Armenia

In its environmental activities, the OSCE Office has the following objectives:

- Promotion of political stabilisation and national confidence-building by encouraging public participation in governmental decision-making in environmental affairs; campaigning for more transparency in environmental affairs and their consolidation on legal grounds;
- Promotion of economic stabilisation and recovery by advocating efficient protection, use and recycling of limited natural resources;

- Promoting social stabilisation and welfare by campaigning for sustainability, i.e., for a balanced environmental, social and economic development;
- Promoting regional stabilisation and rapprochement within the South Caucasus by campaigning for resolving cross-border environmental issues;
- Promoting international security involvement in Armenia and the South Caucasus region by encouraging international organisations and interested foreign governments in supporting environmental implementing work.

The OSCE Office in Yerevan implements its environmental endeavours by publicly highlighting most urgent and high-profile environmental topics, campaigning for the translation of international environmental legislation into national law, giving assistance in implementing national environmental regulations, and supporting main environmental actors and activities.

Main activities include:

Promoting the Aarhus Convention's ratification. At the initiative of Armenian environmental groups, the OSCE Office in Yerevan took the lead in campaigning for ratification of the *UN ECE Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Aarhus Convention, 1998)*. To Armenia's environmental family, the *Convention* is both a highly needed political landmark and a legal precedent for the authorities' obligation to guarantee general transparency in public affairs.

As a result of this campaign, which included series of round tables and bilateral meetings with Armenian Ministry of Nature Protection, various Standing Parliamentary Committees and international organisations, the process of the *Aarhus Convention's* ratification was formally initiated in September 2000 and was ratified by the National Assembly on May 14 2001.

Promoting the Aarhus Convention's forthcoming implementation. It is now common task to campaign for some first awareness-raising projects. The OSCE Office in Yerevan is currently on a way of launching the following programmes, which will be implemented by Ministry of Nature Protection and environmental NGOs.

The Public Environmental Information Room. Equipping a public environmental information room – a library room with two or three PC working stations plus internet access at the Ministry of Nature Protection;

Workshops on implementation of the Aarhus Convention. Conducting regional South Caucasus and national workshops in co-operation with the UN ECE Headquarters.

South Caucasus Environmental Information Exchange Web Site. Trilateral NGO-run web-site – electronic magazine highlighting South Caucasus environmental issues.

Environmental TV slots. Production of a series of short TV slots with environment-friendly and responsible attitudes promotion/advertisement;

Supporting regional co-operation in environmental issues. In order to encourage regional conflict-resolution, post-conflict rehabilitation and general mutual rapprochement, it is advisable to promote regional co-operation in environmental affairs too. The OSCE Office in Yerevan politically supports cross-border initiatives. The *Caucasus Regional Environmental Centre (REC Caucasus)* is seen as main counterpart for forthcoming OSCE activities in the field of regional environmental co-operation. In this regard, the Office was proposed to organise a working meeting on issues related to the REC Caucasus and more effective participation of Armenia in activities of this institution. It is planned to bring together representatives of NGOs, the Government and international organisations directly involved in management of REC Caucasus.

The support of local border-near activities within the triangle of Armenia, Azerbaijan and Georgia is seen as an instrument of grass-roots conflict settlement complementing parallel top-level political dialogues. The OSCE Office in Yerevan pays special attention to the reconstruction of cross-border water supply systems, urging the necessity of regional co-operation in this context. The Office sees similar initiatives as a measure of both post-conflict rehabilitation and conflict-prevention.

Background Paper "Linkages and Institutional Approaches to the thematic 'Environment and Security'"

Prepared by Ecologic- Institute for International and European Environmental Policy (Eileen Petzold-Bradley and Alexander Carius)

Introduction

The concept of 'environment and security' has gained new political prominence on the international political agenda since the end of the Cold War. Due to the end of the East-West conflict, a fundamental shift of thinking has occurred (i.e. particularly to a North-South focus) since the number of conflicts, especially intra-state conflicts, have significantly increased in developing countries and countries in transition. Additionally the traditional threat to security policy posed by possible military hostilities on the international level has reduced, but environmental risks have assumed more importance as a security policy challenge. As a result, policy-makers and academics in the North in the early 1990s began discussing and scientifically exploring the linkages between environmental degradation and resource scarcity and the potential for the outbreak of violent conflicts mainly in the developing world.

The linkage between environmental stress, resource degradation and security is hardly a new theme in the social science disciplines of environmental research and conflict studies nor in the political debate (Baechler et al 1996; Carius and Lietzmann 1999; Homer-Dixon 1999). Likewise, conflicts and violent disputes over access to natural resources and their equitable distribution are not new types of conflict in international politics (Gleditsch 1997, 1998). In the political arena in Germany, for example, the German Federal Foreign Office, the German Federal Environment Ministry, and the German Federal Ministry for Economic Co-operation and Development conducted an international workshop "Environment and Security: Crisis Prevention through Co-operation" in June 2000 on the topic of environment and security to bridge the gap of institutional fragmentation at the national level. The workshop outlined the latest research findings and progress on the debate concerning the environment, security and crisis prevention (Petzold-Bradley, Carius, March 2001).

A primary finding from the environment and security debate is that it is not possible to identify purely environmental conflicts, just as it is not possible to identify purely migration or ethnic conflicts. The mesh of causes is much more complex. Therefore there is no one definition or set of coherent views on the theme of environmental change and security. Instead the debate has concentrated on several distinct areas and can be clustered primarily into five different categories which are outlined below in the first half of the paper. This paper provides a general overview on the origins and the development of the debate on security-related environment risks. It also illustrates in the second part how different international institutions have included environment and security aspects in their strategies and in pilot projects.

Overview of Environment and Security Debate

Non-traditional security concerns

Security today is a particular type of politics applicable to a wide range of issues. Some actors approach it from the policy side (i.e. the state) or approach it from the academic side (peace research, environmental policy, internal political economy or classic strategic security studies). This has resulted from the end of the Cold War, where the traditional security concept based on national sovereignty and territorial security were increasingly been brought under scrutiny. In contrast to the narrower classic concept of security (protection of national sovereignty and territorial integrity against external and in particular military threats), the extended concept proceeds from a differentiation of levels of analysis (individual, national, regional and international security) and a differentiation of factors impacting security (poverty, environmental degradation, illegal arms trade, international drug

trafficking, etc). Security definitions have shifted from a strictly narrow nation-state perspective to include a broader notion of security to include socio-economic, demographic and environmental threats. Explicit calls to include environmental concerns within definitions of security became particularly intense during the late 1980s and 1990s as a resulting search for an orienting security paradigm (i.e. Brown 1977; Ullman 1983; Mathews 1989; Buzan 1991; Myers 1993).

Human Security Concerns

In 1994, the United Nations Development Programme's (UNDP) Human Development Report introduced the 'human security' concept. The report argued for a movement away from the narrow definition of security that focused in states to one that focused on people. The changing nature of conflict and a clearer understanding of the threats faced by most people called for this redefinition of security. The UNDP Report outlined a concept of human security that included seven dimensions: economic, food, health, environmental, personal, community and political (UNDP 1994).

The origins of the focus on human security are often traced to the publication of *An Agenda for Peace* by UN Secretary-General Boutros Boutros-Ghali in 1992. This document pointed out that threats to global security were not only military in nature. Boutros-Ghali argued that not only were environmental instability, poverty, famine and oppression critical security issues in and of themselves, they were also both sources and consequences of conflict.

The World Bank's new initiatives to ensure that the benefits of incorporating sustainability into all its activities is also taking into account human security issues. By linking poverty alleviation and sustainable development, the Bank is focusing on finding ways to ensure that economic growth does not come at the expense of the world's physical and ecological systems or the world's poor (World Bank 2000).

Various governments are also trying to develop new policy responses, to set priorities and to justify their actions in relation to human security issues. Applying a human security perspective to international problems has the potential to re-energise political processes aimed at settling conflicts, establishing and securing peace and promoting development. For example, there is now an international 'Human Security Network' which involves high-level representation from ten countries, including Norway, Switzerland and Canada.

Definitions on human security place a focus on the security of people instead of the security of the state. By broadening the focus to include the security of people, human security encompasses a spectrum of a new range of threats (Page 2000). For example, various authors argue that human security refers to the degree to which human beings are protected from environmental degradation, resource scarcity and environmental hazards by their own social institutions and processes (Opschoor 1996). Therefore the appeal of the term 'human security' is that it recognises the interlinkages of environment and society and acknowledges that our individual perceptions of the environment are historically, socially and politically constructed. According to the Global Environmental Change and Human Security (GECHS) project, "Human security is achieved when and where individuals and communities have the options necessary to end, mitigate, or adapt to threats to their human, environmental, and social rights; and have the capacity and freedom to exercise these options and actively participate in attaining these options" (Lonergan et al. 1999).

Greening the Military

Part of the environment and security debate has led to concrete efforts in 'greening the military.' Given the environmental damage by military activities, many governments are requiring that their militaries develop greener management techniques on military bases and training exercises, develop dual-use environmental clean-up technologies and to comply with domestic and international treaty obligations. For example, during the Clinton administration, the Office of the Deputy Under Secretary of Defense for Environmental

Security was established. This office is charged with, among other responsibilities, compliance with national environmental regulations, taking a more ecological approach to doing business, and cleaning bases where military excesses threaten civilian populations. Other countries in Europe are also making significant efforts toward promoting environmental protection in the armed forces. For example in Germany, there are many conferences held each year to focus on how the German Armed Forces can contribute to environmental policy. In the German Ministry of Defense there is a special department for environmental protection and several military institutions who are responsible for environmentally related activities, notably the monitoring and control of the environmental impact of military equipment and installations.

Under the auspices of the North Atlantic Treaty Organization's Committee on the Challenges of Modern Society (NATO/CCMS), several studies and initiatives by NATO Member States and Co-operation Partner Countries have been conducted to examine the role of the military and the environment. For example, common themes covered include the following: environmental aspects of re-using former military land; conversion of military enterprises; protection of civil populations from toxic material spills during movements of military goods, etc. Furthermore, the various NATO/CCMS pilot studies have allowed for enhancing dialogue and fostering co-operation between the military sector, environmental ministries and international organisations on the development of national environmental policies for the military sector.

Environmentally-induced conflicts

Since the mid 1980s, environmental degradation and the shortage of renewable resources have become an evermore central topic due to their potential for triggering violent domestic and international conflicts. Global environmental problems such as global warming, deforestation, soil erosion, the marginalisation of arable land and increasing water shortages with regional and local effects are seen as major contributing factors that could lead to environmentally-induced conflicts. Due to these concerns, the scientific and policy community began to examine the linkages between environmental change and security and in particular to consider the conflict potential of resource depletion, distributional conflicts over scarce resources (i.e. water, soil, wood, etc.) rapid population growth, the growth of migratory movements and its potential to destabilise other regions and possibly induce conflicts and other social ills.

Violent disputes over natural resources or a degraded environment cannot be proven empirically. In general, the degradation of the environment and resource shortages (or the asymmetrical distribution of natural resources) are seen to have a catalytic function. They can trigger or accelerate the outbreak of violence or can be just one of many variables leading to conflict. Conflicts concerning the environment which are carried out violently are the result of complex human-environment-relations. The manner in which such conflicts arise and are carried out depends strongly upon a number of framework conditions (Baechler et al. 1996, Carius and Lietzmann 1999). Foremost among these are patterns of resource use, the stability of political institutions, the rule of law, the economic dependency upon resources, alternatives for action (or the awareness thereof), technological, economical and institutional capacities for action, the ability to mobilise actors and their readiness for violence. In this respect, the structure of environmental conflicts resembles that of migration, poverty and ethnic conflicts.

The debate on security-related environmental risks resulted in a general rethinking about the causes of war and of strategies for peace. As a result there are new research attempts to analyse the whole constellation of factors that promote or impede violence. This renewed research is trying to focus more on the causes of regional conflict and trying to generate useful policy advice. So far classical approaches for conflict intervention fall short of the mark, as does the belief that complex environmental crises can be mastered by means of developmental or environmental politics alone.

Environmental co-operation as tool for peace promotion

Environmental change and resource scarcity does not necessarily lead to violent conflict but many times increases co-operation. New research efforts are trying to study how environmental issues can lead to greater co-operation and establish dialogue and lines of communication which are valuable in reducing regional tensions also over non-environmental issues (Levy 1995). Present research efforts are also examining the issue of co-operation and confidence building in the context of international environmental co-operation to determine how policy makers can apply this empirical research into concrete policy.

Intergovernmental co-operation on reducing environmental stress has been established at the global and regional levels in many institutional frameworks. In addition to making progress on the environmental issues involved, such co-operative environmental institutions have contributed to confidence building and to avoiding conflict escalation between countries. This is exemplified by the environmental agreements in the framework of the UN Economic Commission for Europe (UNECE) and various co-operative institutions for the management and protection of water resources. For example, the co-operative management of joint rivers (i.e. the Mekong River or the Jordan River basin) have facilitated the building of trust between countries in a state of tension and thus help reduce the conflict potential.

There are also various policy attempts that intend to foster co-operation (especially over shared water courses) for the purpose of sustainable water management and confidence building. This includes the success of the 1st Petersberg Round Tables International Dialogue Forum on "Global Water Politics-- Co-operation for Transboundary Water Management" that took place in March 1998 in Petersberg/Bonn, Germany. The upcoming World Water Conference to take place in Bonn in 2003 along with other initiatives by the World Bank and the UNDP in the water sector are examples of efforts to build peace through environmental co-operation.

Experience shows that the solution of environmental issues in regional frameworks, and in others, involves many sectors of society and needs the involvement of various non-governmental actors. Those that are concerned by the impacts of environmental problems and/or the policies considered to mitigate them have to have the opportunity to take part in the co-operative design of the solutions. Transboundary protected areas (TBPAs) and Biosphere Reserves also provide an important tool for building confidence and trust, resolving environmental conflicts and establishing environmental co-operation across boundaries. The Balkan Stability Pact adheres, for example, to this orientation.

Today, aspects such as stability and confidence-building within the framework of multilateral environmental agreements (MEAs) are gaining recognition in the debate at the political level. This pertains especially to those cases in which conflicting parties carry out negotiations with one another, which can help to build confidence, over shared environmental resources rather than leading to conflict. Although the general consensus is that a potential for confidence-building exists within multilateral and regional or bilateral agreements, experience is lacking which would highlight those mechanisms of the agreements which could make concrete contributions to politics of peace.

Institutional Approaches at the International and Regional Levels

Overview

Apart from the OSCE, several institutions are attempting to address environmental issues as another factor on the international agenda alongside traditional security and economic development approaches. These various institutional developments can be attributed to the environment and security debate referred to above that gained prominence during the 1990s in North America and Western Europe. Although still in the early phases of development, the following institutions are undertaking activities in the realm of environment and security.

The World Commission for Environment and Development (WCED) was the first international institution to explicitly refer to the connection between environmental degradation and conflict. The 1987 Brundtland Commission Report identified future environmental crises and violent conflicts as key challenges to be addressed by the international community. The Brundtland Commission developed an extended definition of security, going beyond the traditional understanding of security as political and military integrity of the national territory and its national sovereignty, and including the risks posed by growing environmental degradation on the local, national, regional and global level. The Commission also recognised that "environmental stress is seldom the only cause of major conflicts within or among nations" and that "environmental stress can thus be an important part of the web of causality associated with any conflict and can in some cases be catalytic" (WCED 1997).

The need to manage environmental stress and its consequences for security has also been acknowledged by numerous organisations including the Organisation for Economic Co-operation and Development (OECD), the North Atlantic Treaty Organisation (NATO), the European Union (EU) and United Nations entities. Among these various organisations working in the field of environment and security, there is now an acknowledgement and more acceptance that conflict prevention has an environmental element and that traditional missions of organisations need to be broadened accordingly in order to respond to these challenges.

Organisation for Economic Co-operation and Development

In a Ministerial Declaration in May 1997, the Development Assistance Committee of the OECD adopted a Policy Statement entitled "Development Assistance, Peace and Development Co-operation on the Threshold of the 21st Century", which provides in part for constructively addressing the growing problems over resources as a cause of conflict (OECD 1997). In 1998, the OECD Group on Economic and Environmental Policy Integration (Environment Directorate, Environment Policy Committee) issued a scoping paper on the economic dimension of the environmental security problem. Since this publication, the aspect of crisis prevention and the importance of integrating of environmental interests into development co-operation was extended. However, the conclusions derived from this committee so far have not been strategically integrated into development or adjustment programs (IUCN 1999). More recently the Informal Task Force on Conflict, Peace and Development Co-operation has engaged in a policy development and consultative process which is targeted at updating the Development Assistance Committees' (DAC) "Guidelines on Conflict, Peace and Development Co-operation" by December 2000.

North Atlantic Treaty Organisation

Since the end of the Cold War, NATO has enhanced its co-operation and dialogue with partners outside NATO and with countries of Central and Eastern Europe and the former Soviet Union. As a result, NATO has expanded its security definitions and approaches in both the regional and global context. In particular, the Strategic Concept of 1991, complements the emphasis on the defence dimension of security and recognises that security and stability have political, economic, social and environmental elements (NATO 1991).

Through NATO's CCMS framework, Member States conduct pilot studies and projects on a wide range of topics such as transboundary air and water pollution, marine oil pollution, and environmental problems stemming from the use of modern technology. Most recently, a Pilot Study was completed in 1999 that examined the theme of "Environment and Security in an International Context" (Lietzmann and Vest 1999). This Pilot Study is unique since it compiles the state-of-the-art research on the relationship between environmental change and security and is directed towards political stakeholders from different policy sectors. Most importantly, the interdisciplinary nature of the study provided a multilateral forum for co-

operation, exchange and dialogue between and among policy makers from the environmental, development, foreign and security policy communities. Overall this Pilot Study has substantially influenced the political discussion of this topic in numerous states and within the European Union.

Within the NATO Scientific and Environmental Affairs Division (i.e. the Science Programme), several Advance Research Workshops (ARWs) have been carried out on environment and security themes which include the following: "Conflict and the Environment"; "Environmental Change, Adaptation and Security"; "Responding to Environmental Conflicts: Implications for Theory and Practice"; and "The Caspian Sea: A Quest for Environmental Security."

European Union

Various European Union institutions have internally addressed the environment and security debate with a diverse array of approaches.

The Committee on Foreign Affairs, Security and Defence Policy of *the European Parliament* recently prepared the so-called Theorin-Report (Theorin 1999). This report primarily focuses on the ecological consequences of military activities but also covers the relationship between environmental degradation and its security implications. The Theorin-Report was followed by the European Parliament issuing a Resolution on environment, security and foreign affairs which calls for the preparation of a common strategy dealing with the relationship between security, environment and other EU policies (Official Journal 1999). This resolution builds upon the Cardiff Process to integrate environmental and resource conservation into a Common Foreign and Security Policy (CFSP) (European Commission 1999a, 1999b; European Parliament 1999).

Within the European Commission, *the Directorate-General for External Relations*, deals with conflict prevention and the environment on a conceptual level. Specifically in the context of environment and security, the DG External Relations launched two programs in 1997. The first program was the pilot phase work carried out by the Conflict Prevention Network (CPN) which categorised conflictual situations and possible political approaches of conflict prevention. The CPN is a network of academic institutions, NGOs and independent experts. The second program consisted of a series of seminars on 'European Security and the European Union's External Economic Policies' launched in 1996/97 which looked at new threats to European security. One of these seminars specifically dealt with questions of environmentally related threats to European security.

Within the European Commission, the *Directorate-General for Environment* conducted an informal assessment of its present and future policies in order to begin examining the subject of the environment and security. As a first step, the DG Environment is undertaking preliminary activities that will complement the work being undertaken in the other directorates (trade policy, development assistance, research and development).

The European Commission's *Directorate-General Joint Research Centre (JRC)*, has taken up the issue regarding the monitoring of international environmental agreements and natural disasters. Apart from supporting research for improving the technical knowledge and applications for environmental monitoring, it commissioned a study on the use of satellite earth observation in support of environment and security (Pfahl and Carius et al. 2000). The results of the study are reflected in the European Commission's strategy for space that promotes the Global Monitoring for Environment and Security (GMES) approach (European Commission 2000). GMES addresses the relationship between global change, environmental stress, natural disasters, and security policy. It provides a link between European environmental and security information needs and appropriate policy responses in the area of foreign, security, environment and development policies.

United Nations

Initiatives taken by the United Nations Environment Programme (UNEP) to develop preventive strategies, however, demonstrate the political hazards of addressing this theme in international committees. Developing countries in particular have often feared that international initiatives would interfere with their state sovereignty. In 1999, in response to the shifting agenda on environment and security since the end of the Cold War, the Task Force on Environment and Human Settlement led by the Executive Director of the UNEP, Klaus Töpfer, further developed the UNEP's planned contribution to the prevention of environmental conflicts, and formulated specific tasks (UN 1998). The central elements of this strategy, which should reinforce the status of the only international environment organisation, are monitoring, early detection and crisis prevention. Specific instruments include early warning, environmental monitoring and reporting, elaborating environmental action plans, initiating new legal agreements and building environmental capacity in developing countries (Scwhartz and Singh 1999).

This initiative was blocked in the UN General Assembly in 1999 by the reservations of the G77 states, which feared that UNEP was exceeding its mandate (Drayton 1999). Currently there appears to be no consensus among members of the UN on the necessity to develop the UNEP mandate further, although UNEP is one of the most suitable forums for work on the political and social implications of resource scarcity and global environmental changes. This is one reason why this theme did not appear in Agenda 21 during the Rio preparation process back in the early nineties (it was more the developed countries that blocked further developments of this issue). Since geopolitical framework conditions have changed and the pressure of the problem has heightened, the theme is gaining in political significance once again.

Important support could come from the new initiative outlined in September 2000 by the presiding UN General Secretary, Kofi A. Annan, in his "Millennium Declaration." His initiative aims to reinforce the role of the UN in crisis prevention. He pointed out that on the one hand, economic globalisation has considerably widened the discrepancies in income between population groups and individuals, and the scale of a potential future crisis should not be underestimated, a major contributory factor being the destruction by economic processes of the natural resources on which humanity depends. On the other hand, he felt that globalisation opened up completely new possibilities for co-ordinating national measures to control this process. Similar aims are outlined in the UN Agenda for Peace and the UN Agenda for Development (UN 1992).

Next Steps for a Constructive Strategy for a Sustainable Peace Policy

The upcoming World Summit on Sustainable Development in 2002 offers the opportunity to concretise a broader approach towards 'environmental policy and sustainable peace.' The goals of crisis and conflict prevention must therefore be complemented by the goal of sustainable peace politics. The next steps for building a common strategy for a sustainable peace policy will require an appropriate communication of political goals (avoidance of development crises, constructive conflict prevention, analysis of structural causes of conflict) and an intensive dialog with governments and representatives of non-governmental organisations from developing countries. The positive effects of preventing environmental conflicts and co-operating with respect to shared resources through utilising existing mechanisms and instruments for coping with such conflicts should be accentuated. Emphasis should be given to fostering transboundary co-operation on environmental issues that contribute to stability and sustainable peace.

So far the build-up of political pronouncements on the security policy relevance of environmental change continues to be a challenge. These pronouncements have yet to be matched by a similar intensity of concrete political action or a systematic approach to crisis prevention. It is urgently required to intensify international co-operation through the various institutional frameworks in order to operationalise comprehensive and preventative policy

approaches. To solve or prevent environmental conflicts, it is necessary to more consistently integrate environmental concerns in other relevant policy sectors, in particular in development, foreign and security policy, but also in agricultural, energy and social policy. These measures need to be equally applied and implemented over the long-term at the relevant international and national levels. The need for new diplomacy, institutions and regulatory regimes is required to cope with the reality that we now operate in a closely integrated system. Therefore building bridges between environmental diplomats and security policy diplomats in both industrialised and developing countries is of high importance to incorporate non-traditional security concerns (i.e. those related to the environment) into the mainstream of foreign security policy, and to ensure that effective environmental co-operation is perceived as part of a sustainable peace policy.

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Background Paper "Environment and Security Challenges in the OSCE Region"

**Prepared by Ecologic- Institute for International and European Environmental Policy
(Eileen Petzold-Bradley and Alexander Carius)**

Overview

Despite the end of the Cold War, the number of security threats have not diminished within the Organization for Security and Co-operation in Europe (OSCE) region. The role of the OSCE is adjusting to this changing framework through adopting a comprehensive and broad security approach as reflected in its official mandates such as the Helsinki Act, the Charter of Paris, the Bonn Document, the Budapest and Lisbon Documents, and the Charter for European Security. It is recognised that there are security risks which include those related more specifically to the environment that characterise the OSCE region. For example, according to section 2.3 of the OSCE's Parliamentary Assembly's "Petersburg Declaration," environmental risks within the OSCE region include the following: managing fresh and sea water resources; curtailing emissions of carbon dioxide (CO²) and the consumption of fossil fuels; reducing the local pollution of rivers, lakes and seas; balancing the use of renewable resources (i.e. forests and land for agricultural use, potable water, fish stocks, etc.); limiting the transport of toxic radioactive waste; or preventing a nuclear catastrophe.

These are just a few of the complex environmental problems that are commonly found in the Participating States in the OSCE region that have the tendency -- if not addressed appropriately through environmental policy measures -- may lead to further security challenges. One of the most visible examples is the growing tension among Central Asian states over energy and water issues, which are considered as a potential threat to regional stability. Other regions within the OSCE sphere of influence with environmental and security challenges include South-eastern Europe, the Caucasus, and Central and Eastern Europe.

Environment and Security Challenges in OSCE region

The poor state of the environment in the OSCE region can be attributed to the Cold War legacy and now presents as a burden to economies in transition in this region. For example during the Former Soviet Union (FSU) period, countries of the FSU region depended on highly-polluting and risky energy sources (nuclear power, coal) and heavy industrialisation which has led to significant transboundary pollution challenges. Environmental and security challenges such as the responding to the shortage of drinking water, combating organised crime for example in the fishing sphere, safely transporting and disposing of radioactive waste, preventing and minimising human loss during natural or man-made disasters constitute a whole series of "non-traditional" security risks for the OSCE.

Highlighted below are more case examples of several hotspots in the OSCE region which highlight the relationship between the environment and security in more detail.

Environment and Security Case Studies

The Balkans (South Eastern Europe)

The outbreak of conflict in the Federal Republic of Yugoslavia brought about many security challenges including ethnic warfare, environmental damage from military invasion, spill-over effects from refugee flows, and economic instability that had a transboundary effect on neighbouring countries (Albania, Bosnia and Herzegovina, Bulgaria, Croatia, Hungary, Romania, the former Yugoslav Republic of Macedonia). Since all the South Eastern European transition economies were in a very precarious state before the conflict, they were extremely vulnerable to all the related impacts from the Yugoslavia crisis including those related to the environment. In particular, the recent conflict in Kosovo has underlined the recursive relationship between environment and security. In this case, Balkan states

experienced added environmental stress due to conflict itself. For example in Macedonia and Albania, population pressures resulting from influxes of refugees from war zones seriously strained their natural resources, water and sanitation infrastructure.

Despite the environmental challenges that the Balkan states faced prior to the crisis, mutual co-operation on environmental issues were lost as countries as they descended into territorial disputes or war. Now in a post-conflict rehabilitation phase, environmental issues will play an important role in two main areas: 1) reconstruction and clean-up not just of the environmental damage caused by war but also of the inefficient socialist industrial base; and 2) democratisation, nation building and regional stabilisation. Regional environmental co-operation has been recognised as an important element for post-conflict rehabilitation efforts and for bringing about greater peace and stability in South Eastern Europe (i.e. through the Stability Pact for South Eastern Europe). The key challenge remaining in the region is to establish economic stability and economic growth in order to reduce the risk to security in the future.

Central Asia

The Central Asian republics currently have a common catastrophic environmental situation that directly impacts the sustainable development of the region. The poor state of the environment in Central Asia can be attributed to the communist industrial and political legacies inherited which now presents as a burden to the Central Asian economies. During the former Soviet period, the various countries of Central Asia stated that they depended entirely on Moscow for the management of their natural resources which led to significant policy challenges today. For example, the Central Asian states inherited a central command system from the Soviet era that gave preference to economic activities such as mono-culture agriculture. As a result of this system, unsustainable water management strategies such as excessive development of irrigation in the basin for the production of cotton and uncontrolled water pollution occurred and led to many environmental consequences. This includes the desiccation of the Aral Sea, the drying of the lake bed, the deterioration of water quality, the salinisation of the adjacent land, food scarcity with the diminishing of fish supplies, and the resulting impoverishment of the affected population.

Other environmental challenges in Central Asia that could have a conflict potential include the following:

- A main inherent source for potential conflict is managing its common water resources from the Aral Sea Basin in a collective way. Resource competition and tensions are increasing among users over issues of water quantity and quality of the two main rivers of the region. One of the most acute disagreements over resource sharing concern the "energy-agriculture" trade-off between upstream countries and downstream countries. The deterioration and depletion of water resources (both ground water and fresh water) for human consumption and the agricultural and industrial sectors was cited as a large environmental challenge.
- The safe storage, transport, recovery and disposal of radioactive and toxic waste. In particular, it was pointed out the pollution from industrial activities (especially uranium tailings from mining and related spoil dumps) are particularly problematic, costly and dangerous to human health and the ecosystem.
- The prevention and minimisation of human loss during natural or man-made disasters constitute a whole series of "non-traditional" security risks the Central Asian republics. For example, the recent inundation of villages, towns, cities and industries located along the coastal area of the Caspian Sea has brought about wide-spread damages and economic losses.

- Mountain ecosystems degradation and extensive land degradation and desertification which has led to the depletion of forests and arable land has directly impacted the livelihoods of local communities (i.e. this includes migration and displacement of populations due to land degradation). Extensive environmental degradation has also had a corresponding impact on climate change and biodiversity.
- The transboundary affects of environmental pollution (i.e. this includes air, ground, and water pollution) also poses a serious threat to the environment and human health. It is also a source conflict between neighbouring states where there is a lack of effective mechanisms for pollution control and monitoring. Furthermore, related health and socio-economic factors from environmental challenges are also primary concerns for the region. For example, many people are living in environmentally degraded areas or on top of 'environmental time-bombs' that have a significant impact on health.

Black Sea and Caspian Sea Region(s)

Two areas within the OSCE region that are becoming a potential security concern are the Black Sea and Caspian Sea regions. Within the past 40 years, the Black Sea has been unable to cope with increased demands and extensive environmental degradation and is today in a state of environmental crisis. The Black Sea's ecosystem (especially the coastal waters) has suffered from increased anthropogenic impacts including river drain changes, the use of chemicals for agricultural production, and the pollution of marine water and sediments. All these factors have influenced the physical and chemical properties of the water and the biological composition of marine communities leading to extensive environmental degradation, economic losses and environmental stress in the Black Sea. Shipping and transport-related problems (i.e. discharges near coastal zones, oil spills, shipping accidents, water pollution and excessive transport) also continue to be a primary environmental and security concern for the Black Sea region. Countries within the region are also experiencing environmental tensions over issues such as fisheries disputes, disagreements over the development of transboundary rivers, and regulating shipping and the transport of hazardous materials.

Within the Caspian Sea Region, intense geo-strategic, political and economic competition and ethnic and environmental challenges are becoming a problem for regional stability. All of these complex factors make developments in the region unstable and unpredictable with direct consequences for the economies and societies of the Caspian Sea states. In terms of environmental issues that have potential effects on security includes the following: environmental degradation and desertification, over-fishing of Caspian fish stocks (particularly sturgeon) and the loss of biological diversity in coastal areas. Security implications may also arise from building possible oil and gas pipelines through areas characterised by political tensions and where natural disasters and geological instability is common (i.e. earthquakes, flooding from sea level rises, mudslides and sinkholes, etc). Another challenge is the unresolved legal status of the Caspian Sea which hinders the creation of an environmental regime that could contribute to greater environmental co-operation and regional stability. The point of contention concerning the legal status is that currently the Caspian Sea, in whole or in part, does not definitively come under the jurisdiction of a single littoral state and the boundaries for its offshore resources and water column still have to be demarcated.

Baltic Sea Region

Within the Baltic Sea region, there are a number of environmental and traditional security issues that impact all states in the region. For example there are unresolved border disputes in the region among the NIS such as Latvia, Lithuania, and Estonia. With independence and political territorial division, these states now face challenges over determining ownership for terrestrial and maritime resources such as forestry, oil and fisheries. In essence there are significant resource-related distribution challenges among Baltic states and more importantly

with Russia. The importance of dividing lines between states is also accompanied by equally important internal divisions. The distribution of resources between and within ethnic and minority communities presents a large security challenge at the sub-national level.

Another key environmental challenge in the Baltic (especially in Russia's Northwest) relates directly to the considerable toxic legacy from the Cold War. Environmental damage in this region is attributed to a host of radioactivity activities and industrial pollution in the form of nuclear reactor safety (e.g. 1986 Chernobyl disaster), spent fuel storage and disposal, sulphur and heavy metals from heavy industry and transboundary air pollution. In particular, radioactive contamination has negatively impacted the agricultural sector (degradation of soil and water) while extensive environmental damage has occurred in the marine sector due to either illegal dumping of pollution, naval military activities, and over-fishing of salmon and cod fish stocks in and around the Baltic Sea region.

Caucasus Region

Over the past decade in the south Caucasus region, there have been several bloody internal conflicts in Nagorno-Karabakh, Abkhazia and to a lesser extent South Ossetia. Due to these conflicts, there has been large scale ecological damage and significant economic and human losses. As a result, the security and economic situation in the region remains precarious, as Armenia, Azerbaijan and Georgia are trying to recover as war-torn societies and to transition to market economies.

Due to the instability in the region, there has been large scale displacement of populations which poses as a challenge in the post-conflict rehabilitation phases. In particular, there is a danger if former combatants, warring ethnic groups and displaced populations are not peacefully reintegrated civil society this could damage any efforts for long-term sustainable peace. Renewed armed confrontations would have serious economic, political and security implications both within the region and across national borders. Since there are strong interests by regional and international powers in the region's energy resources and its strategic location a transportation route, future conflict in the Caucasus could jeopardise cross border trade and foreign economic investment. Moreover, spill-over of conflicts from the Caucasus region into other volatile zones could bring about the open intervention of powerful neighbours, such as Iran, Iraq, Russia and Turkey, and could threaten larger peace and security arrangements.

Like other countries in transition, environmental challenges within the Caucasus region are predominantly the result of Soviet-era industrialisation. Similarly, countries in the Caucasus are currently experiencing many environmental challenges in the agricultural, energy and industrial sectors. Due to years of unsustainable environmental management practices, air, water and soil resources are tremendously polluted while human health has been negatively impacted. Other environmental problems such as water shortages and limited access to clean drinking water also pose as a challenge to countries in the Caucasus region. Environmental risks that pose as a threat to populations in the region include recurring earthquakes, landslides, and floods.

Conclusion

These examples highlighted above are not exhaustive but are meant to illustrate the variety of factors that impact the potential for environmental conflict in the OSCE region. More importantly, the regional cases illustrate how social, political, economic and environmental challenges experienced by most of the countries in these regions are key factors that create both internal and external conflict. Within these regions there is also the common trend that there is a lack of legitimate environmental agreements for resource management, and also limited regional co-operation in all policy sectors (energy, industry, agriculture, environment, etc.) that limit regional co-operation between the affected states. Furthermore, these cases highlight the links between security, democracy and prosperity, as well as the risk to security from environmental degradation. International and regional organisations need to critically

assess the security implications of environmental problems and foster transboundary and domestic co-operation among states and societal groups to enhance stability and peace.

Summary of the Research Project "New Challenges for the UN-ECE as International Environmental Institution"

Prepared by Ecologic- Institute for International and European Environmental Policy

Background and Questions of the Study

In August 2000, the German Federal Ministry for the Environment, Nature Conservation, and Nuclear Safety commissioned Ecologic, Institute for International and European Environmental Policy, Berlin, Prof. Juliane Kokott, University of St. Gallen, and the law firm Shearman & Sterling, Düsseldorf, to conduct an "Analysis of the Environmental Co-operation within the framework of the UN Economic Commission for Europe (ECE) in selected Central and Eastern European countries (CEE States) with particular consideration of special ECE environmental agreements and the development of proposals for new co-operation structures."

The study analysed the entire spectrum of the UN-ECE's environmental policy activities within the context of the "Environment for Europe" process that was initiated during the early 1990s. Considering the changed political circumstances after the end of the East-West conflict and because of the EU enlargement process, proposals for determining priorities in the future and improved utilisation of potential synergy effects in the UN-ECE's environmental work are in development. The presented summary briefly discusses the most important results. In view of the seminar "Strengthening the OSCE's role in the Realm of Environment and Security," the following describes particularly the connection between environment and security as well as possible areas for increased co-operation between the UN-ECE and OSCE in more detail.

The UN-ECE's environmental policy activities gained in political importance at the end of the 1970s with the negotiation and adoption of the pan-European "Convention on Long-range Transboundary Air Pollution." After the end of the Cold War, the UN-ECE assumed additional environmental policy activities within the context of the economic recovery of the CEE and Newly Independent States (NIS) of the former Soviet Union. Here, the emphasis is placed on intensifying the environmental policy co-operation between and with these countries. The so-called "Environment for Europe" process, which the UN-ECE co-ordinates by holding regular ministry conferences, is the central program for promoting environmental co-operation within the pan-European region. By now, this has developed into a complex process with numerous subjects, instruments, and participating organisations. The European Union and the World Bank contribute the largest funding portion for the environmental policy modernisation of the CEE- and NIS-countries.

Even though the UN-ECE successfully promoted the environmental policy co-operation during the 1970 and 1980s in spite of difficult political conditions initially, the question about the future role of the UN-ECE for the regional environmental co-operation arises. Due to the changed general political conditions after the end of the East-West conflict, the UN-ECE's tasks in the area of environmental co-operation in Central- and Eastern Europe changed accordingly. Three factors appear to be of particular importance: first of all and due to the EU enlargement process since 1997, many countries in this region were first included in the EU's environmental policy introduction strategy and later in the accession process. Accordingly, in the accession countries the environmental co-operation within the UN-ECE is of less priority. Furthermore, a number of other international organisations are active in this region in the environmental policy area, whose goals and tasks are directly or indirectly connected with environmental policy issues. In addition to the economic development, functioning ecosystems and the availability of natural resources are an important prerequisite for peaceful conflict resolution. This ecological and environmental policy aspect of crisis prevention, security, and stability particularly in Central and Eastern European

countries as well as in Central Asia is therefore also taken into account in the programs and pilot projects of the World Bank, the OECD's Development Assistance Committee, the OSCE, and the Council of Europe.

For the same reason, the question regarding general pan-European confidence building and promotion of co-operation through increased environmental co-operation arises in a different form today. Considering the foreseeable entry of a number of CEE countries into the EU, it now only concerns the successor states of the former Soviet Union and the Balkan region. The multitude of parties active in the regional environmental co-operation thus raises the question about the future focuses of the UN-ECE's environmental policy goals and areas of activity.

With this background, this study examines at how these developments change the UN-ECE's work in the environmental area and which new range of potential tasks may open up. For this purpose it was mainly examined, what effects the UN-ECE's environmental Conventions have on the environmental co-operation in Central- and Eastern Europe and the NIS, what the strategic advantages and disadvantages of environmental policy initiatives within the framework of the UN-ECE are, which possibilities exist for increasing efficiency, and which future tasks emerge in connection with the EU enlargement. Three case studies using the examples Hungary, Bulgaria, and Ukraine address the problems and synergies created by the implementation of the UN-ECE Conventions in different countries.

The general result of the study shows that in spite of the political turmoil since the late 1980s, which partially question the UN-ECE's traditional role, a number of important tasks still remain for the UN-ECE. The UN-ECE can supplement these tasks with new activities and structure them more efficiently. In this context, four aspects play a particularly important role: the UN-ECE continues to offer an established pan-European negotiation forum for developing environmental Conventions that is accepted by the member states. The "egalitarian," multilateral character of the negotiations, which strongly contrasts the asymmetrical relationships during the entry negotiations with the EU, is of particular importance. A second issue is the promotion of the comprehensive political confidence building, which indirectly results from an increased environmental co-operation within the UN-ECE. The historical experience and expertise that exists particularly within the UN-ECE can contribute to a co-operative resolution of the still existing political tensions in parts of the region. The UN-ECE also supports the development and implementation of the environmental policy in the CEE and NIS on a national level using – among other things – "Environmental Performance Reviews." Finally, the environmental policy co-operation within the UN-ECE offers countries with advanced environmental policies the opportunity to work towards the application of innovative instruments and measures in the entire region. In this context, the effects for the cross-border co-operation emanating from the UN-ECE Conventions should be pointed out.

The analysis also shows that due to the connection between environmental degradation and security policy aspects in the Central and Eastern European countries and the Central Asian countries, a direct correlation between the OSCE's and UN-ECE's work exists, which makes a closer co-operation appear reasonable and desirable.

Environment and Security within the UN-ECE's Context

It has become undisputed that the destruction of natural resources, conflicts about the distribution of scarce resources (water, land, forests, etc.), population growth, the increasing migration and the resulting danger of destabilization in areas unable to cope with the influx of immigrants, as well as all the related social problems contain the elements for social conflict. However, the connection between environmental degradation, scarcity of resources, and conflicts is not based on a single cause. Environmental degradation and scarcity of resources are rather embedded in a wider context of factors that may contribute to or accelerate the occurrence or escalation of conflicts. Also, scientific studies indicate that due

to these contextual factors, a society may be predisposed for instability and particularly susceptible for environmental conflicts. Examples for contextual factors that may lead to a security risks if they coincide with other socio-economical and political factors are – among others: unstable economies, unjust distribution of land and socio-economic welfare gains, repressive governments, competition in the joint use of resources (water, fishing grounds, energy, etc.), increasing environmental pollution, ethnic and religious rivalries, as well as migration and refugee streams.

The most urgent environmental policy problems with security-policy relevance within the UN-ECE's area of influence may be summarised as follows:

- Management of water and energy resources.
- Destruction of forests and farmland and the effects on biodiversity and climate.
- Impoverishment/migration because of environmental degradation.
- Environmental destruction through mining and improper storage of nuclear waste.

The transboundary character of these environmental problems illustrates that the co-operative solution of problems requires new and innovative political approaches to conflict prevention and management. Successful crisis prevention therefore requires resolution methods from national governments and international institutions where prevention approaches of environmental and developmental policy complement those of foreign and security policy. Based on these connections, a limited mandate for the implementation of international environmental policy agreements within the UN-ECE context may be accredited to the OSCE.

Within the UN-ECE context, five environmental protection Conventions were passed so far that deal directly or indirectly with the security-relevant environmental problems discussed above:

1. Convention on Long-range Transboundary Air Pollution ("Air Pollution Convention").
2. Convention on Environmental Impact Assessment in a Transboundary Context ("EIA-Convention").
3. Convention on the Protection and Use of Transboundary Watercourses and International Lakes ("Transboundary Waters Convention").
4. Convention on the Transboundary Effects of Industrial Accidents ("Industrial Accident Convention").
5. Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters ("Aarhus-Convention").

The Conventions are not only the UN-ECE's central environmental policy tool but are directly related to the OSCE's work due to their focus on co-operation and transboundary environmental protection issues.

Air Pollution Convention

The beginning of the negotiations for the first UN-ECE Convention can be traced back directly to the inclusion of the environmental co-operation into the Final Act of Helsinki in 1975. In regards to environmental policy the UN-ECE had served mainly as a discussion forum until then. Now, particularly the Scandinavian states, which were severely affected by acid rain, saw an opportunity to also involve the U.S. and Canada in the negotiation of a supra-regional, legally binding agreement and not only the CEE countries whose participation was indispensable for a comprehensive solution due to their high emission

rates. The Convention is also security relevant because the increasing acidity of water and soil has become a significant threat to the transformation countries' economic vitalisation.

First negotiations began in 1977, which ended in 1979 with the conclusion of the ECE Convention on Long-range Transboundary Air Pollution ("Air Pollution Convention"). Already two years earlier, the "Co-operative Program for the Monitoring and Evaluation of the Long-range Transmission of Air Pollutants in Europe (EMEP)" was adopted, which was transformed into the Air Pollution Convention's first protocol in 1984 – one year after the Air Pollution Convention came into effect.

The various activities for implementing the Convention's instruments constitute an important element for the creation of institutional and political structures on a national level and for the formal and informal international co-operation. Regular conferences, the institutionalised reporting, and regional workshops for solving technical implementation problems are an important instrument for building confidence between countries. In order to e.g. facilitate the ratifications of protocols in the future, the Air Pollution Convention's executive body decided during its 18th conference to begin supporting contract states by providing bilateral contacts or by supporting the ratification process itself – e.g. the translation of documents. This measure alone will, however, hardly suffice to achieve success in the CEE region for the Air Pollution Convention's latest protocols that were passed during the 1998 Aarhus conference. Without a close co-operation in the technical and administrative area, possibly supported by corresponding pilot projects, the implementation and thus ratification of the technically very demanding protocols may hardly be achieved during the foreseeable future.

EIA-Convention

Due to the Soviet Union's approach to the West during the late 1980s, the UN-ECE received significant impulses to develop additional Conventions: after approximately three years of negotiations, the Convention on Environmental Impact Assessment in a Transboundary Context ("EIA-Convention") was adopted on February 25, 1991. The EIA-Convention's immediate security-relevant goal is to recognise, to avoid, and/or reduce harmful environmental effects emanating from certain large projects in general and particularly in a transnational context through environmental impact assessments.

Problems during the implementation in CEE and the NIS exist in particular with respect to the identification of projects that are subject to the EIA, the implementation of transnational procedures, and with respect to forecasting methods for potential environmental effects. This applies in particular with respect to questions of transnational public participation. Problems, however, also exist with respect to the co-ordination of procedures between local authorities and the authorities responsible nationally for the transnational environmental impact assessments. The transnational environmental impact assessment is still not receiving adequate recognition as a planning instrument. To reduce these problems, the Convention already held a workshop for the practical implementation of the Convention. In the CEE countries, environmental impact assessments with transnational participation were carried out only in very few projects. A significant implementation deficit of the Convention can be assumed that is related to the lack of an effective national enforcement. In the future, this implementation deficit is to be reduced by a implementation committee.

Transboundary Waters Convention

On March 17, 1992, the Convention on the Protection and Use of Transboundary Watercourses and International Lakes ("Transboundary Waters Convention") was signed in Helsinki. Therein, the parties commit themselves to take all appropriate measures to prevent, control, and reduce any transboundary environmental impact (Art. 2 para. 1 of the Transboundary Waters Convention). On June 17, 1999, the Protocol on Water and Health to the Convention was signed. Except for the immediate danger to riparian states from upstream contaminations, a look at the drinking water supply situation reveals the security relevance of this Convention: a total of 120 million Europeans (approx. 14 percent), most of

them in CEE countries, have no access to safe drinking water. Problems exist in respect to maintaining and improving the drinking water infrastructure and the creation of a system of efficient sewage purification plants. Necessary investments, however, require cost-covering prices, which simultaneously provide an incentive for saving water. The lack of political enforcement capacity, but also the social consequences for the poorest segment of the population will only permit slow price increases over the medium term. Due to the extent of these problems and the size of the investments required for the necessary infrastructure, the sufficient supply of fresh water was considered the most urgent long-term problem in the CEE region in the UN-ECE "Environmental Action Program" for Central and Eastern Europe.

In the area of transboundary waterway protection, which is closely related to the problem of sewage disposal, a number of additional problems arising for the CEE countries and the NIS in connection with the implementation of the Transboundary Waters Convention should be mentioned. The implementation of the Convention's new elements – particularly the ground water protection and the integrative approach to protecting entire fresh water eco-systems – constitute significant difficulties for these countries due to the problems already existing in connection with monitoring surface water, which was also already done in the past. Economic difficulties and lack of qualified personnel also impair the creation of effective waterway administrations. The creation of transboundary water commissions in CEE and the NIS region is, however, often impeded by historical or usage conflicts. The lacking flexibility of the former planned economy administrations also constitutes a hindrance for establishing informal co-operations.

Industrial Accidents Convention

The Convention on the Transboundary Effects of Industrial Accidents ("Industrial Accident Convention"), which came into effect on April 19, 2000, was signed together with the Transboundary Waters Convention. The Convention's purpose was to help avoid industry accidents due to uncontrolled developments with industrial activities and limit the effects of such accidents. Not only Chernobyl, but also the recent mining accidents in Spain and Romania show that the effect of industrial accidents on natural resources and eco systems place a burden on the political relationships between countries. Even though first steps towards its implementation were taken already after signing the Industrial Accidents Conventions, the localisation of the factories covered by the Convention still causes significant difficulties in Central and Eastern Europe. Since the first Conference of the Parties determined that the Convention applies to all factories located in the catchment area of transboundary waters, using or producing potentially water polluting substances, far more factories are covered than previously assumed by many countries so that a completion of the identification phase is not expected in the near future.

In addition to the generally insufficient national inspections, the Convention's implementation in Central and Eastern Europe and the NIS is limited by lacking know-how and reduced access to modern technology. These obstacles are currently met on the Convention level by developing safety recommendations and promoting the information exchange between the Parties. It would be desirable over the long term if considerations about the discounted transfer of safety technology took place on the Convention level.

The Aarhus-Convention

The "Convention on the Access to Information, Public Participation in Decision-Making and Access to Justice in Environmental Matters" ("Aarhus-Convention") of June 25, 1998, expanded the existing instruments by a procedural component. The Aarhus-Convention aims to provide individuals with access to official information, participation in official decisions, and access to justice in all environmental matters. The security relevance of the Convention lies mainly in its promotion of the creation of transparent and democratic structures and procedures and in supporting the participation of civil society and NGO-networks in the widest sense. The difficult economic situation, problems during the creation

of effective administration structures and of an independent justice system, as well as the lack of technical equipment and know-how will continue to hinder the implementation of appropriate environmental standards and thus the ECE Conventions in Central- and Eastern Europe and the NIS for the foreseeable future. This may also have a negative effect on political relationships. The creation of co-operative conflict resolution mechanisms during the implementation of the Convention and the implementation of the Convention relating to transboundary aspects of the environmental impact assessment will, however, have a positive effect on the reduction of conflict potential and the creation of effective and decentralised administration structures.

Since this Convention is not yet in force, it was not subjected to a detailed analysis in the study. However, we have to mention here that the UN-ECE and the OSCE already promote its implementation in the CEE and NIS region by organising workshops, e.g. in Kazakhstan in June of 2001.

Increased Co-operation between OSCE and UN-ECE

In spite of the overlapping security and environmental policy questions in the CEE and NIS, the OSCE was so far not actively involved in the "Environment for Europe" process or the related activities. However, the UN-ECE's and OSCE's areas of operation overlap increasingly. Due to the EU enlargement process, the regional focus of the UN-ECE's activities is shifting from the CEE countries to the NIS. Due to conflict-prone problems, e.g. in the joint management of scarce water resources in Central Asia, the OSCE finds itself increasingly confronted with environmental policy questions. Activities such as seminars for optimising inter-institutional relationships in the economical and environmental area in Central Asian water management or a report by the UN-ECE on "The Economic and Environmental Policy Dimension within the Framework of OSCE Obligations" during the ninth meeting of the economic OSCE forum in 2001 are the first important steps towards an increased co-operation.

During the OSCE's eighth economic forum in 2000, the UN-ECE's former General Secretary Yves Berthelot provided an overview of the implementation of the economic and environmental policy commitments entered into by OSCE countries within the context of UN-ECE Conventions. He noticed that the unequal economic development contributes to tensions particularly within the countries and that the institutions necessary for creating a balance are inadequately developed so far. The OSCE should therefore push for a ratification and implementation of existing Conventions, including the environmental Conventions. In addition, the OSCE should help creating awareness for environmental policy connections and support the public's participation in relevant decision processes. According to Berthelot's opinion, the OSCE should use the political instruments available to it, e.g. the economic forum, observer missions or field officers in order to support the countries in implementing the UN-ECE Conventions.

An important step would consist of the OSCE formally determining, which kind of environmental problems have security relevance for the region and in deciding, whether it can take any further measures within its mandate. Since the OSCE has no "environmental mandate" as such, all activities in this respect would have to be co-ordinated between the OSCE and the competent and responsible institutions.

In order for this co-operation to be successful in the conflict- and resource management, the UN-ECE and OSCE in particular have to define their mandate, their obligations, and common goals in this context. Here, the OSCE may assume a kind of early warning function in identifying security relevant environmental trends. The UN-ECE would then be able to promote a sustained resource protection within the framework provided by its mandate and the instruments available to it. The OSCE would, for example, be able to support the implementation of the UN-ECE Conventions indirectly by bringing the potential conflict resolution through a mutual obligation to observe and/or implement the Convention goals

and environmental standards to the attention of the respective countries. The UN-ECE and the environment action program in turn provide actual support in creating institutions and technical equipment.

The UN-ECE as a pan-European forum is important, since it can assist those countries in the implementation of European environmental standards that will not join the EU in the foreseeable future. For the UN-ECE's environmental efforts to reach this level of integration, it should concentrate more on the ongoing development and implementation of its legal instruments and co-operate more with organisations such as the OSCE in the future, in order to utilise synergy effects from the overlapping areas of responsibility. One of the largest obstacles for an effective implementation of the UN-ECE Conventions is the fact that in spite of the numerous political participants (UN-ECE member states, environmental participants, non-governmental organisations) political pressure for the implementation of UN-ECE Conventions is lacking.

Focusing on the implementation is also important because the UN-ECE Conventions support the implementation of the European Union's environmental acquis through specific requirements and accompanying workshops. Problems during the implementation of European law are often due to practical aspects such as lacking information about specific requirements and insufficient experience in the implementation of general requirements in the context of the national legal and administrative system, lack of technical training and/or a lack of national experts. Therefore, measures for improving the implementation are necessary and desirable.

Based on the expected synergies, pilot projects for the simultaneous implementation of several Conventions should be initiated in the future, in order to promote integrative policy approaches and reinforce the necessary administrative and technical capacities. Stronger support in training appropriate personnel as well as increased external consulting may lead to an improvement in the implementation of the Conventions. The reasons for the sometimes unsatisfactory participation of Eastern European countries and the NIS in workshops and workgroups should be examined in more detail. Particularly the OSCE framework appears well suited for integrative approaches due to the affinity of the subject areas.

A closer co-operation between the two organisations has other practical benefits as well. From the UN-ECE's point of view, joint workshops that are aimed at certain target groups and the specific problem areas of CEE and NIS countries could take place in these countries and also promote the currently insufficient international co-operation between these countries. The competent officials and/or experts get to know each other and are able to discuss common problems and solution approaches outside of official political consultations.

From the OSCE's point of view, the particular character of the UN-ECE as a negotiation and discussion forum for EU membership candidates and NIS countries, in which all participants are formally on equal terms because of the multilateral discussion level, has proven to be advantageous. The exchange of opinions can proceed more openly there. The effect of this discussion forum on the implementation of international environmental protection treaties must not be underestimated. The UN-ECE includes the NIS countries in the exchange of experiences with the MOE countries and the EU and is often the only forum for many of the participants. The UN-ECE also provides those countries with an opportunity to follow the consultations and negotiations, which have not yet signed the Conventions. In the future, the UN -ECE frame is to be used increasingly for discussion the UN-ECE's implementation and enforcement. The UN-ECE and OSCE should examine, whether they are able to improve implementation and enforcement in close co-operation.

General Approaches

The following specific policy recommendations result from the analysis of the UN-ECE's environmental work and the recommendation to focus its work more on the implementation of the UN-ECE Conventions:

- The UN-ECE is particularly well suited to promote environmental co-operation in the CEE and NIS countries. Here, the emphasis should be placed on solving region-specific environmental problems, e.g. transboundary management of jointly used water resources in Central Asia or transboundary environmental impact assessments. Co-operation with other organisations such as the OSCE could particularly contribute to the development of the weak transboundary co-operation in the MOE and NIS countries.
- OSCE and NATO deal increasingly with security and foreign policy aspects of resource degradation and environmental destruction, particularly in Eastern Europe and Central Asia. In addition to the EU (here mainly the EEA), the task of identifying and assessing the environmental destruction as well as the systematic documentation of international environmental co-operation falls to the UN-ECE before this background. The corresponding environmental policy competences of the UN-ECE would therefore have to be increased.
- An additional advantage of the UN-ECE lies in the promotion of integrated and/or inter-sectoral environmental protection approaches that contributes to an improvement of the problem awareness and institutional prerequisites for more flexible environmental policy approaches within the UN-ECE member states.

Welcome Address

Dr. Ludger Volmer, State Minister, German Federal Foreign Office

Sehr geehrte Frau Altmann, Exzellenzen, meine Damen und Herren,

ich möchte Sie ganz herzlich zu dem internationalen Seminar "Stärkung der Rolle der OSZE im Bereich Umwelt und Sicherheit" im Auswärtigen Amt in Berlin begrüßen.

Das Thema des Seminars setzt etwas als selbstverständlich voraus, was es bis 1989 kaum gab: einen erweiterten Sicherheitsbegriff.

Vor 1989, in den Zeiten des Kalten Krieges, bedeutete Sicherheit in erster Linie: Wahrung der politischen und militärischen Integrität des nationalen Territoriums und die Wahrung der nationalen Souveränität. Sicherheitspolitik wurde überwiegend begriffen als Politik der Abschreckung, der Rüstungskontrolle und Abrüstung. Die alte KSZE fand hier ihre bedeutende Rolle als Instrument blockübergreifender Vertrauensbildung.

Wir haben seither einen langen Weg zurückgelegt. Besonders nach 1989 hat sich der Sicherheitsbegriff aufgrund der rasanten politischen Veränderungen und neuer globaler Herausforderungen erheblich erweitert. Wir denken nicht mehr nur in Kategorien militärischer Sicherheit. Terrorismus, organisierte Kriminalität, wie illegaler Waffenhandel, Drogenhandel und Geldwäsche sowie illegale Migration, Armut und Umweltprobleme sind die neuen Risiken für unsere Sicherheit.

Sicherheit und Stabilität werden heute nicht nur auf nationaler, sondern auch lokaler, regionaler und globaler Ebene begriffen.

Bereits 1975 in der Schlußakte von Helsinki gaben die Teilnehmerstaaten der KSZE ihrer Überzeugung Ausdruck, "dass ihre Bemühungen zur Entwicklung der Zusammenarbeit in den Bereichen des Handels, der Industrie, der Wissenschaft, der Technik, der Umwelt sowie auf anderen Gebieten der Wirtschaft zur Festigung des Friedens und der Sicherheit in Europa und der ganzen Welt beitragen." Ausgelöst hat die Debatte über den Zusammenhang von Umwelt und Sicherheit in den 70er Jahren ein Bericht des "Club of Rome". Die erste internationale Institution, die mit dem Brundtland-Bericht 1987 explizit auf den Zusammenhang von Umweltzerstörung und Konflikt hinwies, war die "World Commission for Environment and Development" der VN. Seitdem haben nationale Regierungen, die Europäische Union und internationale Organisationen wie die VN, die OSZE, die NATO und die OECD dieses Thema in vielfältiger Weise aufgegriffen.

Das Thema "Umwelt und Sicherheit" steht auch im Mittelpunkt des heutigen Seminars. Das Seminar ist handlungsorientiert angelegt. Es baut auf einigen Grundannahmen auf, die ich kurz in Erinnerung rufen möchte:

Ökologische Faktoren, die als Konfliktpotential zu einem Risiko für die Sicherheit werden können, sind vor allem Umweltzerstörung und die Verknappung natürlicher Ressourcen, darunter verstehen wir sowohl die mangelhafte Verfügbarkeit natürlicher Ressourcen, wie Rohstoffe oder Trinkwasser als auch ihre ungleiche Verteilung. Beide Risikofaktoren hängen zusammen: Ressourcenmangel kann zu weiterer Übernutzung und damit zu Zerstörung der Umwelt führen. Umgekehrt kann Umweltzerstörung Ressourcenmangel nach sich ziehen.

Ökologische Faktoren können dann zum Ausbruch gewaltsamer Konflikte beitragen oder ihn beschleunigen, wenn sie mit ungünstigen politischen, wirtschaftlichen oder sozialen Rahmenbedingungen zusammentreffen. Ich denke dabei z.B. an ethnisch-religiöse Rivalitäten, extreme soziale Ungleichheiten oder instabile Volkswirtschaften. Der verantwortungsbewußte Umgang mit knappen natürlichen Ressourcen wie z.B. Wasser und

ihre gerechte Verteilung wird für viele Regionen ein zunehmend wichtiger Faktor für ihre wirtschaftliche und gesellschaftliche Entwicklung. Ohne nachhaltige Entwicklung sind aber Frieden, Sicherheit und Stabilität nach innen und außen gefährdet.

Die politische Erfahrung lehrt auch, dass Umweltprobleme vor Grenzen nicht Halt machen, sie sind selten lokal oder regional begrenzt. Das heißt auch ihre Lösungen bedürfen regionaler oder internationaler Kooperation.

An diesen Punkten setzt Krisenprävention ein: wir müssen potentielle Konflikte identifizieren, bevor sie eine destabilisierende Wirkung entfalten können. Wir brauchen politische Handlungsstrategien, mit denen die Instrumente aus verschiedenen Politikbereichen - der Außen-, der Umwelt- der Wirtschafts- und Entwicklungspolitik – verzahnt werden. Machen wir uns klar: Konflikte können nur durch gemeinsames Handeln gelöst werden. Sie werden deshalb im Rahmen dieses Seminars Gelegenheit haben, über konkrete Erfahrungen regionaler Zusammenarbeit zu sprechen. Ich denke hier an den Stabilitätspakt. Sie werden auch den Versuch unternehmen, diese Erfahrungen für andere Regionen nutzbar zu machen.

Durch Zusammenarbeit im Umweltbereich wird nicht selten auch die Grundlage gelegt für den Abbau von Spannungen, die mit Umweltproblemen eigentlich nichts zu tun haben. Stichwort: Vertrauensbildung durch Umweltkooperation. Auch hier wird das Seminar die Möglichkeit zu einem Erfahrungsaustausch bieten.

Krisenprävention ist nicht allein eine staatliche Aufgabe. Eine wesentliche Rolle spielt das Zusammenwirken von staatlichem und nicht-staatlichem Bereich. Die Aarhus-Konvention von 1998 soll dazu beitragen, die Teilhabe der Zivilgesellschaft an Entscheidungsprozessen in Umweltfragen zu stärken. Eine entwickelte und in die politischen Prozesse eingreifende Zivilgesellschaft trägt dazu bei, eine nachhaltige Entwicklung zu fördern. Eine solide Umweltpolitik ist Teil dieser Entwicklung. Vor dem Hintergrund unserer eigenen deutschen Erfahrungen kann ich voll Stolz sagen, dass die Aktivitäten der ökologischen Bewegung in den 80er und 90er Jahren ganz entscheidend dazu beigetragen haben, dass heute in Deutschland der Umweltschutz ein unverzichtbarer Bestandteil der Politik jeder Bundesregierung geworden ist.

Ein Kernziel deutscher Außenpolitik ist die Verhinderung von Gewaltausübung und Krieg. Die Bundesregierung hat sich deshalb zum Ziel gesetzt, die Instrumente der Krisenprävention und der zivilen Konfliktbeilegung zu stärken. Sie hat konzeptionell und operativ deutliche Akzente gesetzt. Lassen Sie mich nur zwei konkrete Massnahmen herausgreifen:

Sie hat ein Gesamtkonzept zur zivilen Krisenprävention, Konfliktlösung und Friedenskonsolidierung verabschiedet. Es legt auf der Basis des bereits von mir beschriebenen erweiterten Sicherheitsbegriffs eine politische Gesamtstrategie vor, in die auch nichtstaatliche Akteure eng einbezogen werden und

die Bundesregierung hat außerdem erhebliche Mittel sowohl für die Friedens- und Konfliktforschung als auch für die Finanzierung ganz konkreter Projekte bereitgestellt. Allein 20 Mio DM jeweils für die Jahre 2000 und 2001. Aus diesen Mitteln können auch Projekte von Nichtregierungsorganisationen, z.B. im Umweltbereich finanziert werden, wenn sie der zivilgesellschaftlichen Flankierung von Friedensbemühungen der VN und anderer internationaler Organisationen dienen.

Dieser Hinweis bringt mich wieder zurück zu dem heutigen Seminar. Sie sehen, die Förderung dieses Seminars durch die Bundesregierung reiht sich ein in eine deutsche Politik, die der Krisenprävention verpflichtet ist. Die Unterstützung der OSZE hat für uns traditionell einen hohen Stellenwert.

Umweltprobleme gewinnen auch im OSZE-Raum zunehmend an Bedeutung. Das umfassende Sicherheitskonzept der OSZE spiegelt sich seit der Schlußakte von Helsinki in den wichtigsten OSZE-Dokumenten wider. Zuletzt fand es Eingang in die Europäische Sicherheitscharta, die 1999 in Istanbul verabschiedet wurde. Weitere – operative - Akzente im Umweltbereich hat die OSZE durch die Einrichtung eines Koordinators für die wirtschaftlichen und ökologischen Aktivitäten gesetzt. Das Wirtschaftsforum 1999 war ganz dem Thema "Sicherheitsaspekte im Umweltbereich" gewidmet. An dieses Wirtschaftsforum knüpft das heutige Seminar an.

Neben einer Bestandsaufnahme über bisher Geleistetes, werden Sie darüber diskutieren, welche Möglichkeiten die OSZE hat, Konfliktpotentiale im Umweltbereich zu identifizieren und Handlungsstrategien zur Lösung von Konflikten zu entwickeln, bevor diese zu ernststen Krisen werden können. Die OSZE kann sich auf etwas stützen, das andere Organisationen nicht haben: Feldmissionen und –büros. Auch ihre anderen Instrumente: der Hochkommissar für nationale Minderheiten, das Büro für demokratische Institutionen und Menschenrechte, der Medienbeauftragte können Informationen beisteuern und Empfehlungen geben.

Wir wissen: die Prominenz der Thematik Krisenprävention und Krisenmanagement hat auch ihre Tücken. Je mehr Stellen und Institutionen sich des Themas annehmen, umso größer wird die Gefahr von Doppelarbeit, Überlappung und institutionellen Reibungsverlusten. Die nationalen und internationalen Akteure müssen ihre Bemühungen frühzeitig koordinieren. Die Plattform für kooperative Sicherheit bietet hierfür eine gute Grundlage. Die OSZE kann keine großen Finanzprogramme auflegen. Ich denke aber, sie hat ihre Möglichkeiten als Katalysator und Koordinator zu wirken noch nicht voll ausgeschöpft. Ich hoffe, dass das Seminar aufzeigt, was die OSZE mehr tun kann. Dann hat es sein Ziel erreicht und gleichzeitig der wirtschaftlichen und ökologischen Dimension der OSZE einen neuen Impuls gegeben. Erlauben Sie mir zum Abschluß eine Bemerkung: wenn wir alle wollen, daß die wirtschaftliche und ökologische Dimension gestärkt wird, dann müssen wir auch alle bereit sein, darauf hinzuarbeiten.

Ich danke den Mitveranstaltern dieses Seminars, dem Bundesministerium für Umwelt, Naturschutz und nukleare Sicherheit, dem schweizer Aussenministerium und dem Büro des OSZE-Wirtschaftskordinators und wünsche Ihnen in diesem Sinne eine ergebnisreiche Diskussion und einen angenehmen Aufenthalt in Berlin.

Welcome Address

Thomas Borer, Ambassador of Switzerland in Germany

Dear State Minister, Dear State Secretary, Excellencies, Dear Representatives of Ecologic, Ladies and Gentlemen,

It is my great pleasure to welcome you all to this seminar in the lively city of Berlin. Switzerland actively supported the project of a seminar focusing on environment and security since the 7th OSCE Economic Forum in 1999. Since environmental security is an essential part of regional security and is to be seen in the context of human security, the OSCE must play a major role in furthering this environmental dimension.

Today we are very happy to be here to attend the opening of an event, that has been jointly organised with our distinguished hosts and colleagues from Germany as well as with the OSCE Secretariat and Ecologic. I wish to thank the Co-Organisers for their commitment and their support in making this seminar possible.

The topics Environment and Security are in fact directly linked to one another. Take for example regional sharing of water resources, sustainable energy development, nuclear safety, circulation of dangerous goods, pollution and environmental degradation. Their management and mismanagement can lead to either enhanced regional co-operation or contribute – together with other factors - to a climate of violence and lead to open conflicts and hence have a serious impact on the security of OSCE countries.

The OSCE is one of the main contributors to peace and security in the euro-atlantic area and is therefore an ideal forum to tackle these threats. The question is now which concrete steps can be taken to enhance the role of the OSCE in this context.

First, it is of importance to identify and analyse relevant environmental situations that have a major impact on peace, stability and security in the OSCE region. A lot of information is already at hand and the OSCE-missions and the Conflict Prevention Centre could further contribute to it.

The next step is to consider how the OSCE can transform this information into action. Already existing OSCE mechanisms of prevention, crisis management and post conflict rehabilitation should be used and further developed. One could think for example of a political monitoring system providing for early warning. In addition a Code of Conduct fostering dialog, exchange of information and consultations would constitute an appropriate Confidence and Security Building Measure.

I wish to emphasise that the pattern of the relationship between the environment and security bears a promising potential for co-operation with other international organisations, but also with civil society and the business sector. The OSCE should use the platform for co-operative security and serve as a catalyst by focussing the attention of other actors on security issues stemming from environmental problems. Acting in this spirit, we should continue the co-operation with other bodies in implementing international conventions and instruments such as the UN/ECE Aarhus Convention or in developing general principles and rules to apply to transboundary resource situations.

Looking at the list of key note speakers, experts, moderators and participants, I am very happy to note, that the organisers managed to gather a very respectable expertise for this event. I can but invite you to make use of this seminar to have of an open dialog and an interesting exchange of views that might lead to operational conclusions giving further impetus to the Economic and Environmental Dimension of OSCE.

I wish you inspiring ideas in your challenging task to strengthen the OSCE's Role in the Realm of Environment and Security. Thank you.

Welcome Address

Gila Altmann, Parliamentary State Secretary, Federal Ministry for the Environment, Nature Conservation and Nuclear Safety, Germany

Global and regional strategies for the environment and development must be firmly linked to both, the security policy aims of preventing conflicts and building confidence, and to disarmament and a sustainable budget policy. In this context, today's conference intends to give new scope to the OSCE's environmental horizon, which is not only meant to extend to strategies and concepts, but also to include operative aspects. You may ask why I advocate so fervently the active involvement of a security organisation in environmental protection. Let me give you three major reasons.

a) Transboundary pollution and non-sustainable consumption of scarce resources can cause or exacerbate security problems and regional conflicts, as has been shown by the increasing number of environmental refugees, conflicts about the use of water, fisheries issues or environmental disasters.

b) Cross-border or regional environment and development projects are particularly suited for developing "confidence-building measures" between neighbouring states, and, thus, they are helpful to prevent crises and to defuse existing or potential tensions. This is the underlying reason why the environmental component of the stability pact for the Balkans is scheduled to be reinforced, by financing transboundary environmental co-operation projects. I would like to recall the results of the "Summit on Environment and Sustainable Development in the Carpathian and Danube Region", where on 30 April 2001 heads of state and high-ranking government representatives from twelve states agreed to make better use of environmental protection as an instrument to strengthen regional co-operation in the future – something which has at times been strained in the past. For some time now we have undertaken intense efforts in close co-operation with the Federal Agency for Nature Conservation to instigate transboundary nature management in the four-state area of Russia, Kazakhstan, Mongolia and China, which is a region known as the Althai. This region is one of the 200 most important hot spots in the world with natural and cultural wealth, but economic poverty and a considerable potential for conflict. However, a precondition of any project is that the region involved develops a sense of ownership for the project. If this is not present, any financial and organisational efforts will be in vain.

c) High spending on military infrastructures is in direct competition to such projects, because financial resources are being taken away from potential environmental and development projects. Even though military expenditure for equipment has been reduced world-wide from \$950 billion in 1990 to \$740 billion in 1998, the means used for "official development finance" and "official development assistance" have remained at about \$ 100 billion for a number of years now. This means that industrialised nations could step up their development assistance by ten percent if they rechanneled just one percent of their military spending for that purpose. People still do not give enough thought to figures illustrating that armament and defence spending of developing countries and countries in transition is about three times higher than the development aid they receive. In principle, the same applies to the amounts spent on dealing with the consequences of conflicts. The money that has to be used for this purpose should better be spent on crisis prevention and the economic advancement of crisis areas. But this is not what happens, and the reason for it might also be founded in the fact that it is difficult to quantify preventive efforts. It is no easy task to plot the prevention of a conflict that has not even erupted. And still, there is no alternative to this strategy.

With a look at the seminar's agenda I would like to focus your attention on a point that is very important to us at the Federal Environment Ministry, namely the conventions relating to

the environment that have been elaborated by the UN Economic Commission for Europe. We deem these important for the following reasons:

The Conventions address central environmental concerns that can actually lead to conflicts between neighbouring states, such as:

- conflicts about water, which are regulated in the Convention on the Protection and Use of Transboundary Watercourses and International Lakes,
- industrial accidents, dealt with in the Convention on the Transboundary Effects of Industrial Accidents,
- repercussions of infrastructure projects on the environment, laid down in the Convention on Environmental Impact Assessment in a Transboundary Context,
- transboundary transport of air pollution, governed by a convention of the same name and a number of other protocols dealing with a host of pollutants.

Apart from material requirements and goal-setting, the conventions and protocols contain first and foremost important mechanisms for information, consultation and mediation, which are essential for conflict prevention. They are especially important to the countries in East and Southeastern Europe as well as to the New Independent States, most of which have signed and also ratified the conventions. Due to the accession processes, which have already started in some Eastern European states, in the future these conventions will probably play an even stronger role for south-eastern states and New Independent States in order to achieve progress in environmental protection. Another point of significance in this context is the "Environment for Europe" process that will reach its culmination and conclusion in Kiev in 2003 and which attributes a leading role to the UN ECE.

I am emphasising this point, because both organisations are responsible for the same region, stretching from West to Eastern Europe, covering the Balkans and the Black Sea area all the way up to Caucasia and Central Asia. What would be more natural than a strategic alliance between two organisations pursuing the same objectives? I hope that during the course of the seminar you will work further towards this, particularly as within the international legislative framework the conventions already provide a solid foundation which all stakeholders can build on. I know that in early May the OSCE already hosted a workshop in Tashkent (Uzbekistan) on the implementation of the so-called Aarhus Convention of the UN ECE "on the access to information, public participation in decision-making and access to justice in environmental matters".

I wish you best of success for the seminar.

Opening Speech "Strengthening the Economic and Environmental Dimension of the OSCE"

Dr. Daniel Daianu, OSCE Chairmanship in Office, Romania

Your excellencies, ladies and gentlemen,

The relationship between environment and security, under the pressures of globalization, is a big challenge to all of us. Environmental degradation and poor standards in one country can generate trans-boundary effects. Non-intervention and the postponement of preventive measures have increasingly higher costs. Whether we refer to the rehabilitation of the environment in countries where the effects of negligence, accumulated in years, represent a serious problem or in areas affected by armed conflicts, whether we refer to setting and implementing higher standards for the protection of environment in the OSCE region and beyond, we will not find a good answer in the absence of international co-operation.

We see tensions between states caused by their struggle for resources or by the misuse of shared resources, we hear quarrels on who is guilty and we see the environment continuing to degrade because of these quarrels and not only. The living standards, the health and well being of individuals are affected by the state of the environment. Still, in spite of the growing awareness of policy makers, civil society and academic community, environmental issues are often considered of lesser importance compared with other "grand security" concerns, and I dare to say that the OSCE does not have a better record in this respect

In this context, I want to emphasise the importance the Romanian chairmanship assigns to the initiative of the Governments of Germany and Switzerland to organise this seminar. We believe the subject is extremely important as well as topical. We trust that the recommendations that will emerge from our discussion will enhance the role of the OSCE in the realm of environment and security. The Chairmanship in office would welcome the pursuing of these recommendations in the Permanent Council.

Let me also express a warm thanks to the organisers for the excellent "environment" they created for the working of this seminar.

Let me now turn to the role of the OSCE in the economic and environmental dimension and briefly outline the basic principles that should guideline our demarche, as well as the improvements that we should consider.

As stipulated in OSCE documents, challenges for our common security –which we are all facing -- require a comprehensive response, which includes all dimensions of the OSCE: human, economic, environmental, political and military. We do consider that these dimensions are closely inter-linked.

We consider that prolonged economic distress, rising poverty and increasing economic disparities among countries (which entails social strife and can cause massive illegal migration), widespread poor governance, the syndrome of state failure in many transition countries, etc. represent serious threats to security. Environmental damage and negligence, partly due to a difficult inherited situation, lack of resources and poor standards, lingering open or latent conflicts, are serious risks to security. This wide range of security risks and the complex security situation in some OSCE regions require constant attention and adequate response from the OSCE. International co-operation, in the spirit of the Platform for Security Co-operation, is essential in dealing with these risks.

The OSCE is primarily a security organisation and it is commonly agreed that its contribution in the economic and environmental dimension should consist mainly in identifying

threats/risks to security and in acting as a catalyst for co-operation between key international organisations and institutions in the economic and environmental areas.

One of the priorities of the Romanian chairmanship is to strengthen the economic and environmental dimension of the OSCE, to enhance the Organisation's ability to identify and respond to economic and environmental threats. We see this as an instrument for improving the OSCE capability to prevent conflicts and assist in post-conflict rehabilitation.

We are of the view that we should advance simultaneously on two complementary tracks; these tracks refer to substantive and functional issues, respectively. In other words, we need to identify a common denominator of perception of security threats that have economic or environmental origins, and address these issues steadily. We also need to improve the way the OSCE responds, coherently, to security risks and the operational component of its day-to-day activities. In order to enhance the result and improve the efficiency of our activities, clearly defined tasks and responsibilities of the actors involved and a better co-ordination between the participating States, the Co-ordinator's office and the Field Presences are needed. Likewise, the OSCE should strengthen its interaction with other international organisations. The Co-ordinator should continue to foster the co-operation with other international organisations, in the spirit of the Platform

We believe that in the economic and environmental dimension we should not be prisoners of the topic of the annual Economic Forum. Topics such as environmental security, environmental governance, management of nuclear waste, water resources management, should be on the agenda of the OSCE. They should be discussed on a more regular basis in Vienna, even in the PC, when appropriate, and included on the agenda of regional HoM Meetings, as it was the case this year in Bishkek.

We share the view that in the economic and environmental field, the OSCE should strengthen its capacity to follow developments in the area and provide early warning, when necessary, by reporting on instances where economic and environmental matters intersect with security and stability concerns. This should be one of the major tasks of the Co-ordinator of OSCE Economic and Environmental Activities and of his/her office.

To ensure more effectiveness, a stronger involvement of the participating States is needed. Economic and environmental issues should be included regularly on the OSCE agenda and reports from the Co-ordinator's office or field presences should be discussed and followed by concrete actions. When appropriate, decisions by the Permanent Council should be considered.

The existence of the OSCE Field Presences is a valuable asset of our Organisation. The OSCE role in this field consists in stimulating, facilitating and offering a framework for dialogue and co-operation, co-ordination and information exchange including, but not limited to, lessons learned elsewhere. Their activities in the economic and environmental dimension should be given higher visibility within OSCE and their co-operation with representatives of other organisations should be encouraged. Closer co-ordination between the Field Presences should be sought as well. Developing regional and sub-regional activities can foster co-operation between states. In this respect we see a stronger role for the Co-ordinator and his/her office.

The OSCE, through its field activities should stimulate local initiatives and public-private partnership. This is the best way to develop policy ownership and thus provide a framework for lasting and self-sustainable development. The same approach should be adopted regarding trans-border or regional initiatives. The OSCE should also strengthen its interaction with other organisations and contribute to a better co-ordination of international efforts, as the only way to tackle effectively the common challenges we are confronted with.

Ladies and gentlemen, thank you for your attention. I wish you a successful seminar.

Keynote Speech "State of the Environment and Security Debate"

Prof. Laurent Goetschel, Director Swiss Peace Foundation, Berne

The concept of environmental security has been one of the most widely discussed and also contested concepts at the end and aftermath of the Cold War in the field of security studies. This is due to different interpretations of the term security and to an unclear relation between security and environment. I will look at both concepts, report some of the major findings, draw some key lessons, and finally give a quick look at the potential role of the OSCE in regard to this issue.

Security has been defined by the American political scientist Arnold Wolfers as the absence of threats to core values. Two questions are linked to this definition: first, whose security and thereby whose core values are we talking about? Is the security of the individual, the security of the state, or even that of a larger collectivity at a regional or global level? The second question asks where the concept of environment does come in? Are the environment and its preservation a core value to be secured and thereby a security objective? Or are we looking at the environment mainly as a threat to other core values, such as the absence of military violence and conflicts?

Regarding the first question, I think that all three levels of security come in when talking about environmental security: the environment matters to individuals, to states, and to larger collectives - be they regional or global. At the same time, they all have an impact on the environment.

Regarding the second question, it has been argued that incorporating security as such into the realm of security policy is not a constructive approach to either security or the environment problematic. First, talking about environmental, social, or economic security within the realm of security policy overstretches the security policy concept at the risk of stripping it of any specific meaning. Second, including the environment among security interests attributes a special, high profile character to the environment, which exempts the concept at the same time from being widely discussed, including it instead in the sphere of uncontested national interests (Ole Waever, 1998).

Thus, when talking about environmental security, we have to adopt a broad notion of security in respect to its addressees: individuals, states as well as larger entities. But we should concentrate at the same time on environmental problems which threaten to trigger collective violent conflicts directly or indirectly. Thus we do not enlarge the content of the security concept as such. We only focus on the environment as a potential cause of violent conflicts and enhance our awareness.

What is the knowledge we have accumulated in respect to this kind of issues?

First, environmental degradation and the resulting environmental scarcity have never been a sufficient and immediate cause for collective use of violence. Ecological scarcity interacts with a number of other political, economic, social, and cultural factors. Talking about environmental conflicts thus refers to only one aspect of a critical social constellation which may lead to violent conflicts. A good example is the issue of water, which belongs to the most visible and most widely discussed security-related environmental issues. No open wars have been caused by water distribution issues alone. Even in arid zones where states are extremely dependent on external water resources, there has been a balance - albeit a precarious one - between threat and co-operation. There is no automatic spiral toward violence (Baechler, 1998).

Second, the probability of violent conflicts linked to environmental problems rises with the perception of environmental scarcity as a consequence of unjust repartition and

appropriation and thus as discrimination. This is often due to the fact that traditional mechanisms of mediation and conflict resolution no longer work while new ones linked to modern states and judicial systems have not yet been successfully established. Thus, environmental conflicts are a typical problem of developing and transition countries.

Third, the use of violence in the context of environmental degradation is more probable in conflicts inside a specific country than in international conflicts. This is due to the fact that internationalisation of environmental problems enhances the pressure and thereby also the possibility of resolving such conflicts in a co-operative, non-violent way.

Fourth, so-called weak states are not committed to assuming political responsibility for ecological crises. These states' governments tend to count on internationalising responsibility for a crisis and waiting for foreign assistance.

What do we learn from this?

First, with respect to environmental conflicts, the role of legal and civilian institutions cannot be overemphasised. The fact that environmental tensions accumulate to conflicts with potential violent outcomes is most often due to a lack of adequate co-operation structures.

Second, to successfully tackle environmental conflicts, we need a constructive partnership involving government, business, NGOs, and the public. Due to the embeddedness of environmental issues in a set of other critical social, economic, and political issues, these problems cannot be dealt with only in selected fields of political exchange such as purely through traditional diplomacy or technical development assistance projects.

Third, the analysis of environmental conflicts needs a conceptual approach which tackles the complex environment in which such conflicts occur. The approach should incorporate the variety of factors which constitute the framework in which environmental conflicts may turn violent. At the same time, it should also allow to focusing on the environmental issues within this complex field.

I will briefly point out a concept which has been developed by a scientific advisory body of the German government (WBGU)* and which is labelled "syndrome of global change": The point of departure is the assumption that there are a multitude of environmental, socio-political, socio-economic, and technical development problems which particularly affect developing and transition countries. These problems occur in many different contexts and have tremendously accelerated during the 20th century. They are closely interrelated and appear in specific combinations depending on the situation. This clustering of problems can be expressed by the term "syndrome of global change". These syndromes, although occurring mainly in developing and transition countries, may be caused or induced by the industrialised world. Many core problems are further aggravated by prevailing poverty as well as economic and institutional weakness. I have the pleasure to inform you that the Swiss Parliament approved funds just a few weeks ago for a large-scale research project based on this approach. The Swiss Peace Foundation will also take part in this endeavour which will look at the region of Central Asia among other trouble spots.

What is the potential for the OSCE?

With its human dimension, the OSCE has been the first European security organisation to take aspects of individual security into account since the 1970s, linking them to international security concerns. But the decalogue, the organisation's first governing principles, was also very much aware of state security concerns. Finally, it may be said that regional security ambitions have been at the core of the organisation's creation, still labelled "conference" at that time. The three addressees of environmental security concerns are thus reflected in the OSCE security concept. Regarding the content of security, since its creation the organisation

* Wissenschaftlicher Beirat der Bundesregierung Globale Umweltveränderung (WBGU).

has been using a broad security concept ranging from military confidence-building measures up to economic and environmental concerns.

Taking into account the lessons we drew from environmental security research, the OSCE's work in counselling and encouraging establishment of functioning legal and political systems, in election observation and in mutual trust and confidence-building in general makes it a very valuable platform for increased activities dealing with environmental problems and challenges. The OSCE has also always stressed integration of NGOs and other non-state actors into its activities. Thus the organisation has broken ground in the field of security and seems predestinated to play a major role regarding increased activities in the specific field of environmental security.

Rapporteur's Report - Working Group A "Confidence Building Through Environmental Co-operation"

John Pearson, Head of Environmental Security Team, UK Foreign & Commonwealth Office

Summary

Bert-Axel Szelinski gave us an overview of co-operation amongst international organisations, and provided suggestions for OSCE interaction with those organisations.

Joachim Bendow explained how environmental co-operation in the Danube river basin has served as a confidence building measure.

Prof. Evan Vachlos gave an overview of the important issues facing hydro-diplomacy, or diplomacy over freshwater, in the current international scenario.

This was followed by a stimulating Question and answer session, and various presentations from the floor. Proposals for action by the OSCE in the Environmental area included:

Facilitator role

- to act as an intermediary in discussions between local Governments and international organisations
- OSCE field missions especially could work with local Governments or NGOs to prepare projects and present these to international funding organisations.

International Co-operation

- could improve its own links with relevant international organisations, such as the UNECE, UNEP or River Basin organisations.
- could also work in the regions to improve links between these organisations and Governments or NGOs.
- could encourage better co-ordination between field missions and Headquarters.

Education and Distribution of Information

- to promote existing international regulations, such as in the area of freshwater, and encourage member states to incorporate these into national legislation.
- could help to encourage public participation. Work with civil society, help them to lobby.
- Governments to implement their international environmental obligations.
- could promote public information or education campaigns in member states, especially on environmental issues. Seminars have a useful role to play in some regions.
- could help to encourage socially responsible investments.
- could help to disseminate best practice on EIA's.
- could collect data on environment and security since nobody else is doing this at the moment.

Role of OSCE

- OSCE should avoid duplicating work of existing organisations. It should choose certain subject areas, where it can make a real difference, and specialise in those.

- OSCE should also decide where it would make sense, geographically, to concentrate its efforts. In some part of the OSCE area lots of organisations are already working on the environment. Where are there gaps: Central Asia might be a possibility.
- It should not impose action on states. Should listen to concerns, follow not lead.

OSCE Projects

- where possible, to begin to implement practical projects in problem areas i.e. not just concentrate on workshops or seminars.
- OSCE could set up early warning or monitoring networks, to help to predict potential problems, for example in the areas of air or water pollution.
- could set up a disaster response mechanism, to co-ordinate international efforts to respond to disasters.
- could encourage co-operation between National Guards in different member countries.
- areas of freshwater and radioactive waste were mentioned as potential areas for work.

Working Group A Presentation "Enhancing the Effective Co-operation Among International Organisations: An Overview"

Bert-Axel Szelinski, German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety

Introduction

In the introductory Statements to this Seminar much has already been said on the purpose and the development of the matter "Environment and Security" and of the role of individual international organisations. This needs not be repeated.

The topic of Environment and Security is on the international agenda for already a substantive amount of time. Many international organisations have discussed this issue, which has again been subject of a NATO CCMS Pilot Study, which was finalised in 1998. The issue had then found its way into the United Nations organisational framework and was put on the agenda of the 1999 UN General Assembly, only to be rejected by a large majority in particular of developing countries. This casts a typical highlight on the treatment of the issue. The Millennium Declaration of the UN might be a new chance, to bring environment protection and conflict prevention issues into a combined approach. The term "sustainable peace" might be considered as a further pillar or sub-pillar of "sustainable development". The central question will be how environmental conflicts may be prevented within a broader peace strategy. It will be also important to build a consensus if and how environmental co-operation can be applied as a tool for sustainable peace in a way that allows to get on board the developing countries in a constructive way.

However, until now no general agreement has been reached on the topic of environment and security and very little progress has been made to develop workable schemes on how to proceed with this issue to make practical progress though everybody seems to agree that it is a highly important question.

All the necessary tools for mediation and/or management of environmental crises are developed to come to workable solutions to avoid that such a crisis reaches a level that it may influence the regional or even global security situation. The tools are there. What is still missing are the rules of the game and of course their general acceptance by the players.

The following presentation will try to:

- Describe a possible role of the OSCE with regard to the subject of "environment and security."
- Discuss what steps have to be taken to practically solve environmental issues with relevance to international security.
- Identify steps that can be taken to make co-operation more effective.

Where do we stand?

The first round of discussions focused on identifying the possible conflicts with an environmental background. There have been a number of workshops on different themes, all with an aim to develop some kind of a catalogue to narrow the discussion. The most positive effect of this exercise was the development of a common opinion that there exists a real problem, which has a potential to end up in security threats in the near future.

Identified environmental problems with a tendency to become a serious security problem so far remained untouched although it can be expected that these problems will gain even more importance with the noticeable changes in global climate.

The discussion generally focuses on the situation in the developing world and tends to forget that the industrialised nations in Central Europe also have this kind of conflict at their doorstep.

When we use the word "environment" we should not use it in a very narrow sense. Wars over natural resources are also conflicts developing from the natural environment of nations. They tend to be less frequent lately due to more or less free markets on the global scale. With regard to this, globalisation has its clear advantages. Limited access to the global markets, regardless for what reason, however, will remain a permanent source of conflict potential. A healthy and prosperous environment is also a resource, which can cause conflict, either with the polluter as neighbour or with someone who is concurrent user of the resource. This is well documented in the water sector.

It may be helpful after some years of open-ended discussion to narrow the field of activities again to come to more concrete steps. To achieve this goal it seems necessary to recall the fact that most conflicts have multiple sources. Looking at possible conflicts, which have environmental problems as the main source narrows the field and may give a higher probability to arrive at positive and transferable results than activities that follow too broad an approach. To focus the debate it can be extremely helpful to concentrate on "environmentally implied conflicts" i.e. conflicts, which are clearly dominated by the environmental aspects.

Even in Europe there may be a conflict potential with regard to the exclusive economic zones with their tendency to be unreasonably extended. Conflicts on water resources already start on the other side of the Mediterranean Sea.

Most environmental conflicts develop with regard to water resources. This is not surprising since water is the only natural resource other than air, which can be captured and is indispensable for human survival, for agriculture and also for industrial development. In many parts of the world the potential for environmental conflicts can quite easily be documented with the water supply situation.

It seems to have been the idea so far that environment and security problems can be solved with a "prêt à porter" or "one size fits all" approach. It is doubtful that such an approach can be successful since not only the environmental issues differ from region to region. The same is true with regard to economies and to the mentalities and the religions of peoples. "One size fits all" may therefore not be a reasonable presumption. In the field of science more research on the typology for possible conflict may be useful.

Environment and Security is not only a political and organisational issue. When taken up seriously it will also be a financial issue. Environmental issues very often have an economic background, particularly in developing countries. It is not enough to identify the environmental problem and to find an organisation that accepts to take the role of a mediator. It is at least as important to get things going to improve the situation by appropriate aid programs, which may require substantial funding. The current ratio of support can be shown by the following figures: The world-wide expenditures for military equipment are assessed at 740 billion US \$ (1998) whereas the expenditure for "official development finance" and "official development assistance" amount to only 100 billion US\$. Only one percent saving within the military sector would allow the industrialised countries to increase their budget for developing countries by 10 percent. However, it has also to be underlined that the military expenditure of the developing and transition countries is three times higher than the budgets received from the industrialized countries as official development finance or assistance. Without a change here it is very unlikely that there will be substantial positive changes in funding.

The role of international Organisations

What is the principal role of international organisations with regard to "environment and security"?

As this workshop shows international organisations quite obviously have taken aboard the role to provide a platform for discussion of this issue with interested partners. There are quite a few international organisations that have taken an active role to further develop the matter of environment and security. As it happens frequently in open-ended discussions the issue became broader and broader and additional aspects were added all the time as well as an extension of the area under discussion. It is true: "Environment and Security" is a global issue and has to be discussed globally. Saying this does not necessarily imply that a global solution of the issue should be aimed at in the majority of cases. This is one lesson learned from the refusal of the UN General Assembly to discuss this issue. As stated before, the work on the Millennium Declaration of the UN may bring a chance to positively conclude this discussion. It has not yet been decided how this important subject will be incorporated in the current preparations for the Johannesburg World Summit on Sustainable Development in 2002. The challenge will be to identify links of conflict prevention and transboundary environmental co-operation with themes such as protecting natural resources, integrating environmental protection and poverty eradication or enhancing good governance and participation. It will be important to organise support from other governments and civil society to promote this discussion.

The bottom-up approach, i.e. the development of tools starting at a low regional level and hopefully ending up global, seems to be much more acceptable and may be much more successful.

The role of international organisations will have to go beyond *discussing* the issue. These organisations are the right addressees to provide a platform to negotiate practical solutions for troublesome zones of the globe. In fact this was one of the reasons why the OSCE was founded in 1990 as an institution.

The Final Act of the Conference of Helsinki in 1975 may be regarded as the starting point, which led to the establishment of the OSCE as an international organisation. It contains 10 principles, which should be the guiding principles for the relation of member states. All these principles are interrelated and have one common goal: To prevent that conflicts between the participating states would lead to armed conflicts. The prevention, mediation and settlement of disputes were the most important task for the CSCE and are the most important duty of the OSCE.

For this purpose OSCE runs a Conflict Prevention Centre in Vienna. OSCE is the only international organisation founded specifically with the aim of preventing armed conflicts through co-operation in a specific region. Other international organisations, in particular those within the framework of the United Nations, within their area of competence do also contribute to maintain peace, but in a much more general manner. The OSCE brings together 55 States, most of them in Europe, including the New Independent States (NIS) plus the United States and Canada. It does not need mentioning that though small the OSCE with this kind of members is a powerful organisation. It is a regional arrangement within the framework of the United Nations and it is not a military organisation. This may give OSCE an easier entry to deal with states, which may not wish to co-operate with organisations like NATO. OSCE with its task to ensure a system of co-operative security seems to be an ideal organisation to – within its area of competence – deal with the question of "environment and security" also. Compared to other international organisations its structure and flexibility may be an additional value.

The second question to be looked at is whether OSCE is equipped sufficiently to deal with environmental matters. This has led to a demand to strengthen the environmental capability

of OSCE. This is not a reasonable demand in times where the cost of overlapping activities of international organisations and a clearer distinction of their responsibilities is requested. Besides, there is a UN organisation available with the same area of coverage, a strong environmental component and with experience in organising environmental agreements. On the other hand it has to be emphasised that through its missions the OSCE has important bases to be present at the point of event .

Co-operation between OSCE and UNECE seems to be the natural solution to bring environmental experience to the task of maintaining security by means of conflict prevention.

Good use could also be made of the Regional Environmental Centres that exist in Russia, Ukraine, Hungary, Moldavia and Georgia. They can be used a medium to get civil society involved with the important question of crisis prevention and with regard to support environmental matters and action plans as well as the development of regional agreements as needed.

Next steps to be taken

After many years of open-ended discussion it is time now to narrow the field of activities again and to come to more concrete steps. To achieve this it seems necessary to recall the fact that most conflicts have multiple sources. Looking at possible conflicts, which have environmental problems as the main source narrows the field. Looking at such a case may give a higher probability to arrive at positive and transferable results.

To focus the debate concentrating on "environmentally implied conflicts" i.e. conflicts, which are clearly dominated by the environmental aspects can be extremely helpful.

The way to proceed shall be the normal procedure to arrive at international or regional agreements or arrangements. Unless the states in question decide to co-operate on the issue, there is a need to have a starting point. This can be the invitation issued by one country to enter negotiations; it may also be an international conference or even a workshop.

To develop a way forward towards practical steps to get negotiations started on issues which may negatively influence international security and have their nucleus in environmental matters it may be helpful to have a quick look on how international agreements and arrangements are developed. Since we are talking of environment and security this should be demonstrated with the example of international agreements on an environmental matter. As the most common source of conflict seems to be water the issue of transboundary watercourses is picked as an example.

International Conventions on rivers are not new and had initially nothing to do with environmental protection but with trade and with using rivers as a medium for transportation. The oldest Convention is the Rhine Treaty, which had its basic importance as an instrument to improve trade and transport. It was only used to also deal with environmental matters in the last third of the 20th century.

UN ECE negotiated a "Framework Convention", the "Convention on the Protection and Use of Transboundary Watercourses and International Lakes" which can be used as a frame to enter in concrete negotiations on very specific water issues in a very specific region. This convention can also be regarded as the "mother" of all river basin conventions in Central Europe. It covers exactly the OSCE region, which makes it particularly attractive for the purpose of conflict prevention within OSCE.

It would be a very interesting test for the practical application of the UNECE water convention to start a joint action of OSCE and UNECE for a regional water convention for a problematic area in Central Asia. Both international organisations should be interested to

participate in such an attempt to prove the value of their work in concrete situations and to check how this kind of co-operation works under difficult conditions.

Conclusions

The area of competence for OSCE has not changed but its duties have changed with the collapse of the Soviet Union and the establishment of the NIS. Involvement with an aim to prevent the development of environmental crises may be more necessary than ever before, particularly in Central Asia. Crises have so far just shown their ethnic background but certainly have economic reasons and may in the end also be severely influenced by environmental shortcomings.

There are serious threats for the security system at our doorstep, from water management in Turkey and the neighbouring States to the habitability of Siberia. Migration also as result of environmental problems may be a challenge for the future.

We have to accept that environment and security is a very complex issue for which no easy straightforward answers exist. It is therefore not reasonable – at least at this moment to strive for global solutions to solve this problem. The approach to be chosen should be a regional and environmentally focused one. OSCE should be a *natural* regional player. World-wide discussion of "Environment and Security" will have to be the goal. It will therefore be important that this theme will be on the agenda for Johannesburg 2002.

Rather than building its own environmental competence OSCE should co-operate with other international organisations, namely with the UNECE, and with the developing regional centres to also get "civil society" involved in this question.

The area of competence of the OSCE and of UNECE is almost identical. The co-operation in the field of Environment and Security, i.e. crisis prevention in the field of environmentally caused or influenced possible conflicts has so far seen almost no practical action of these organisations, unless you count numberless workshops as practical action.

The scientific debate is by no means concluded yet. The development of a set of indicators may be helpful to assess the conflict potential and to give an early warning allowing for conflict prevention, which should be the most important task for relevant international organisations.

Working Group A Presentation The International Commission for the Protection of the Danube River – A Mechanism for Confidence Building

Joachim Bendow, Executive Secretary of the ICPDR

The Danube River Basin is not only the geographical catchment area of the second largest river of Europe, but it has played in the past and still plays today an important role as a cultural and historical centre of political, social and economic development in Europe.

The Danube River is 2780 km long and drains 817000 km² with a mean annual water volume of 6550 m³/s discharged into the Black Sea. The basin area includes all of Hungary; nearly all parts of Austria, Romania, Slovenia, Slovakia and FR Yugoslavia; significant parts of Bosnia – Herzegovina, Bulgaria, Croatia, the Czech Republic, Moldova and small parts of Germany and Ukraine. Areas smaller than 2000 km², where the DRPC similarly does not apply, are left out of consideration.

The present population living in the DRB is about 83 million. Out of which 57% is living in urban areas. The share of population connected to public water supply varies from 29% in Moldova to 98 % in Germany representing an average of 74%. The share of population branched to public sewer system varies from 14% in Moldova to 89% in Germany representing an average of 52%. Based on the national projection figures, it can be anticipated that the population living in the Danube River Basin will by the year 2020 remain at its present level.

The social and economic context in the Danube River Basin:

- Regional social and economic disparities.
- particular countries and the requirements for EU accession **economic context** of the different countries in the Danube River of co-operation and the efforts to be undertaken to achieve common regional and global goals.

The analysis of economic disparities shows a clear trend of a west – east decline of the GDP from the upstream countries like Germany and Austria, with about 25,000 US \$ per capita and year (in 1997), to the downstream countries of which the Ukraine accounts for less than 1,000 \$ per capita and year.

The middle and downstream Danube countries in transition are facing serious economic and financial problems to respond to the objectives of the Danube River Protection Convention and to implement measures for pollution reduction and for environmental protection as required for the accession to the European Union.

This analysis shows also the need to assist countries in transition and makes evident the responsibilities of the international community to respond to regional and global concerns of environmental protection.

The particular situation of the Transitions Countries and requirements for EU Accessions:

- Restructuring and modernising the legal and institutional framework and administrative systems;
- Establishing development policies and programmes as well as funding mechanisms in compliance with international standards of modern marked economies;
- Initiating privatisation and establishing new links for international economic co-operation;

- Further harmonising of national legislation with EU Directives and standards.

Problem Analysis: Hot Spots and Pollution Loads

Root causes for inadequate water resources management in the Danube River Basin:

- Socio-political transition and economic recession
- War and displacement of population;
- Incomplete legislation, regulations and standards;
- Low public ecological awareness, education and training;
- Lack of financing mechanisms;
- Inadequate national strategies for water management, enforcement and compliance.

The ICPDR Emission Inventory (1999) identified important point sources of pollution for municipal, industrial and agricultural sectors. The UNDP/GEF Pollution Reduction Programme identified in 1998 a total of 535 priority hot spots out of which are:

- 244 in the municipal sector;
- 228 in the industrial sector;
- 63 in the agricultural sector.

Pollution loads of COD from the Municipal and Industrial point sources are most significant from central and downstream countries which do not yet have established adequate waste water treatment facilities. Yugoslavia is outstanding in the central part of the Danube River Basin because of large cities (Belgrade and Novi Sad) situated directly at the Danube River.

Applying the Danube Water Quality Model, nutrient transport to the Black Sea was analysed, indicating a total of 551 kilotons of Nitrogen and 48,9 kilotons of Phosphorus reaching annually the Black Sea from the Danube River Basin. Significant is the Phosphorus absorption in the Iron Gate Reservoirs.

The Danube River Protection Convention and its Mechanisms for Co-operation

The Danube River Protection Convention is the legal frame for co-operation of the contracting parties to assure environmental protection of ground and surface waters and ecological resources in the Danube River Basin. Out of 13 countries in the Danube River Basin, eleven states and the European Commission have signed, and most of them have ratified the Danube River Protection Convention (DRPC) which came into force in October 1998.

Objectives of the Danube River Protection Convention:

- Sustainable and equitable water management;
- Conservation, improvement and the rational use of surface waters and ground water;
- Control discharge of waste waters, inputs of nutrients and hazardous substances from point and non-point sources of emissions;
- Control floods and ice hazard;
- Control hazards originating from accidents (warning and preventive measures);
- Reduce pollution loads of the Black Sea from sources in the Danube catchment area.

Recognising individually and responding in common to the obligations of the DRPC, the Danube countries have established the **International Commission for the Protection of the Danube River (ICPDR)** to strengthen regional co-operation. It is the institutional frame not only for pollution control and the protection of water bodies but it sets also a common platform for sustainable use of ecological resources and coherent and integrated river basin management.

Organisational Structure of the ICPDR:

ICPDR:

- Implementation of the Danube River Protection Convention
- Decision making, management and co-ordination of regional co-operation
- Approval of annual work program and budget
- Follow up of activities and evaluation of results from Expert Groups

ICPDR Permanent Secretariat:

- Supporting ICPDR sessions
- Supporting Expert Groups, PMTF
- Co-ordinating Work Program
- Supporting project development and implementation
- Maintenance of Information System

The Emission Expert Group (EMIS/EG) is responsible for developing action to control pollution from point and diffuse sources. It establishes action programmes to reduce pollution, e.g., from municipalities, industry and agriculture. It facilitates the exchange of information among the Contracting Parties.

The Monitoring, Laboratory and Information Management Expert Group (MLIM/EG) is responsible for steering and evaluating the Trans-National Monitoring Network for water quality in the Danube River Basin. It is responsible for setting up programmes aimed at improving the laboratory analytical quality assurance. It facilitates the exchange of water quality and quantity information among the Contracting Parties.

The Accidental Emergency Prevention and Warning System Expert Group (AEPWS/EG) is responsible for steering and evaluating the effectiveness of the Accident Emergency Warning System for the Danube River Basin. The system communicates messages among Contracting Parties about the emergency situations that may have a transboundary effect. Accident emergency prevention and control is the second main set of tasks this Group is responsible, in particular, for developing tools and measures.

The work of the Strategic Expert Group (S/EG) aims at assisting ICPDR with specific advice on legal and strategic issues.

The work of the River Basin Management Expert Group (RBM/EG) focuses on facilitating the implementation of the EC Water Framework Directive, in particular on the conceptualisation and preparation of the River Danube Basin Management Plan. Upon agreement by the European Commission the measures foreseen in this Plan will become legally binding for all EU Members States. From the States in the Danube Basin six (BG; CZ; HU; RO; SK; SLO) are in an accession process to become EU Member States.

The Ad hoc Ecological Expert Group (Ad hoc ECO/EG) supports the activities of the ICPDR related to the conservation, restoration and sustainable management of the aquatic ecosystems and wetlands.

Joint Actions and Investments - ICPDR policies and activities for water management and pollution reduction.

The ICPDR Joint Action Programme reflects the general strategy for the implementation of the DRPC in the forthcoming five years. Particular attention is given to:

- Co-ordinating and developing the River Basin Management Plan for the Danube River Basin in implementing the EU Water Framework Directive;
- Maintaining and improving emission inventories and implementing proposed measures for pollution reduction from point sources and non point sources;
- Restoring wetlands and flood plains to improve flood control, to increase nutrient absorption capacities and to rehabilitate habitats and ecosystems;
- Improving the operation of the Transnational Monitoring Network (TNMN) to assess the ecological and chemical quality status of rivers, including establishing respective water quality standards;
- Establishing lists of priority substances and revising recommendations on BAT and BEP to assure prevention or reduction of those substances;
- Operating and improving the accidental emergency warning system (AEWS), considering its use also for flood warnings, establishing classified inventories of accidental risk spots and developing preventive measures;
- Minimising the impact of floods through applying the UN-ECE Guidelines on "Sustainable flood Prevention" and developing action programs for sustainable flood prevention;
- Developing methodologies and establishing domestic and a basin wide water balance (Danube River and its main tributaries) taking into account surface- and groundwater.

In the frame of the ICPDR Joint Action Programme (Five - Year Nutrient Reduction Action Plan), 243 committed investment projects have been identified out of which 156 are in the municipal sector and only 44 in the industrial sector. This reflects the situation in most transition countries that industries are not operational or using mostly outdated technologies. Most of these projects, responding generally to "**hot spots**" or **point sources of emission**, are representing national priorities and taking equally into account the obligation to mitigate transboundary effects. Particular attention was also given to the identification of sites for **wetland** restoration, which play an important role not only as natural habitats but also as nutrient sinks.

The total investment foreseen in the five year period 2001-2005 to respond to priority needs is estimated to be about 4.404 billion €, covering the following sectors:

- Municipal waste water collection and treatment plants: 3.702 billion €
- Industrial waste water treatment: 0.267 billion €
- Agricultural projects and land use: 0.113 billion €
- Rehabilitation of wetlands: 0.323 billion €

For the downstream countries in transition, the investment needs in relation to the per capita income represent an enormous burden. Countries affected by the Balkan crisis have highest

investment needs. Romania, Bulgaria and Bosnia & Herzegovina are presently lacking the financial capacities to respond to investment needs. These countries will have to define their investment programs for the period from 2005 to 2015 to respond to international and EU environmental standards.

Perspectives for international co-operation and financial support for program implementation

Considering the economic and financial situation of transition countries and conflicting interest for the allocation of scarce resources and taking into account the regional and global responsibilities, it is evident that the international community has the obligation to provide necessary support to develop appropriate financing mechanisms taking into account transboundary and global interest of protection of international waters.

Financing mechanisms (2001 – 2005):

- GEF Danube Regional Project : 15 million USD
- ICPDR : 16.5 million USD
- ICPDR Joint Action Programme : 3.2 billion USD
- World Bank - GEF Partnership : 280 million USD
- EBRD - Project Support *to be defined*
- European Union : 4 billion USD
- Bilateral Support : 163 million USD

TOTAL : 13.1 billion USD

UNDP/GEF Assistance to the ICPDR - Danube Regional Project: Strengthening the Implementation Capacities for Nutrient Reduction and Transboundary Co-operation in the Danube River Basin. The UNDP/GEF will further support the ICPDR through the forthcoming Danube Regional Project: Strengthening the Implementation Capacities for the Nutrient Reduction and the Transboundary Co-operation.

Overall Objective of the Danube Regional Project is to complement the activities of the ICPDR required to provide a regional approach to the development of national policies and legislation and the definition of priority actions for pollution control with particular attention to achieving sustainable ecological effects within the DRB and the Black Sea Area.

THE ACTIONS:

1. Creation of sustainable ecological conditions for land use and water management
2. Capacity building and reinforcement of transboundary co-operation for the improvement of water quality and environmental standards in the DRB
3. Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems
4. Reinforcement of monitoring, evaluation and information systems for transboundary pollution control and nutrient reduction

ACTION 1: Creation of sustainable ecological conditions for land use and water management

- Development and implementation of policy guidelines for river basin and water resources management
- Development of pilot projects on reduction of nutrients and other harmful substances from agricultural activities
- Policy development for wetlands rehabilitation under the aspect of appropriate land use
- Industrial reform and development of policies and legislation for application of BAT
- Policy reform and legislation measures for the development of cost-covering concepts for water and waste water including pollution charges, fines and incentives
- Recommendations for the reduction of phosphorus in detergents

ACTION 2: Capacity building and reinforcement of transboundary co-operation for the improvement of water quality and environmental standards

- Development of operational tools for monitoring, laboratory and information management and for emission control;
- Improvement of procedures and tools for accidental emergency response;
- Support for reinforcement of ICPDR Information and Monitoring System (DANUBIS);
- Implementation of the "Memorandum of Understanding" between the ICPDR and the ICPBS relating to discharges of nutrients and hazardous substances to the Black Sea;
- Training and consultation workshops for resource management and pollution control.

ACTION 3: Strengthening of public involvement in environmental decision making and reinforcement of community actions for pollution reduction and protection of ecosystems

- Support for institutional development of NGOs and community involvement;
- Applied awareness raising through community based "Small Grant Program";
- Organisation of public awareness raising campaigns on nutrient reduction and control of toxic substances.

ACTION 4: Reinforcement of monitoring, evaluation and information systems for transboundary pollution control and nutrient reduction

- Development of indicators for project monitoring and impact evaluation;
- Analysis of sediments in the Iron Gate reservoir and impact assessment of heavy metals and other toxic substances;
- Monitoring and assessment of nutrient removal capacities of riverine wetlands;
- Danube Basin study on pollution trading and corresponding economic instruments.

International co-operation and donor commitment reinforces Confidence Building in the Danube Region.

... and that is how you catch the big fish

Working Group A Presentation "Hydrodiplomacy in Western Europe"

Prof. Evan Vlachos, Sociology & Civil Engineering Colorado State University

The last half of the 20th century was characterised by significant changes in the planning, design, and management of water resources all over the planet. Mounting concerns about the environmental impacts of human activities, potential climatic shifts, expanding populations and demands as well as new knowledge are all expressions of the pressing need to develop also alternative institutional schemes for managing in an integrated manner scarce natural resources. At the same time, with the end of the Cold War and the rise of environmental awareness, attention in the field of environmental security has been shifting to regional conflicts, ethnic "wars", and to the ramifications of water scarcities and environmental degradation.

There is no need to repeat the context of competing and conflicting demands all over the planet. What is particularly noticeable in many examples of transboundary water dependencies is that countries can come close to severe conflicts over water schemes as e.g. between Hungary and Slovakia regarding the Gabčíkovo/Nagymaros dams, around the Jordan and the Litani in the Middle East, the Ganges in the Indian subcontinent, in the Balkans, the Iberian Peninsula and so on. Increasing utilisation of surface and underground water resources has raised awareness of their finite nature. Only continuous communication between the states concerned can be the central mechanism to peaceful solutions of festering disputes over shared waters.

Water conflicts in particular, are caused by many factors, including ideological disputes, religious beliefs, historical animosities, arguments over borders, or economic competition. Indeed, in many regions, water is part of multiple factors contributing to regional conflicts. The centrality of water for both survival and socio-economic development implies also that changes in the natural water cycle have serious political consequences. Furthermore, the transboundary quality of rivers plays a crucial role as a potential catalyst for inter-state conflict.

Experts disagree about how much water is available in given regions. However, awareness is growing that nations must co-operatively manage, engineer, and conserve available water resources. No region of the world with shared international water is exempt from water-related controversies, though the most serious problems occur in water-scarce regions. Without co-operative management a zero-sum competition will emerge over water. Seasonal and regional water shortages may exacerbate social tensions and precipitate violence. Sharing and co-operation can provide benefits that exceed those achieved by attempts to maximise individual and national self-interest. Ideally, such co-operation requires new forms of "diplomacy", alternative institutional arrangements, larger financial resources, and effective adjudication or conflict management mechanisms.

The geopolitical nature of water rests on a combination of geography and technology and results not only in variegated historical and cultural paths for various nations, but also in intricate ecological adaptations and capabilities marking manifestations of power and command over resources. The depletion of national water resources, recurring droughts, and expanding socio-economic demands have fuelled confrontations and have forced international exchanges and co-operation. Since the 805 AD deed of Charlemagne to a monastery for the navigation of the Rhine, more than 3800 unilateral, bilateral, or multilateral declarations or conventions on water have been identified. Currently, there are 261 major international basins covering about 40 per cent of the global population. Europe has 71 international river basins covering 54 per cent of the Continent's area. Given recent political

developments and the continuous creation of new states the number of international river basins is expected to increase.

Recent history, rapid socio-economic changes, socio-political upheavals and the transitions necessitated by the turbulent decades of the 80s and 90s underscore the increasing emphasis on the variety of environmental challenges, the search for sustainable development, the promotion of integrated planning and management, and the attempt to combine structural and non-structural solutions to persistent water resources problems, and transnational interdependencies. In this setting of increasing complexity, interdependence and vulnerability, there is an urgent need for intergovernmental integration (through co-ordination, co-operation and consolidation) of: a) hydrological interdependencies in terms of both uses (rural, urban, industrial, recreational, etc.) and water regimes (i.e., surface and ground water, quality and quantity); b) political interdependencies both in terms of horizontal co-ordination in space and vertical co-operation between levels of government units; c) transboundary interdependencies, representing both social and hydrological trans-state interdependencies; and d) exogenous interdependencies, most notable the potentially dramatic impacts and consequences of climatic shifts and emerging hydrological alterations.

The mismatch between political boundaries and natural river basins, becomes, a focal point for the variety of difficulties reported in the literature vis-a-vis joint planning, allocation of costs, advantages of scale, exercise of power and co-ordination, and the whole range of issues associated with integrated, holistic management. Co-operation and conflict are, then, expressions of the same quest for improving effective planning and management, for promoting new ways for sustainable development, and for accommodating the realities of geography to the complex context of shared water resources. Such international responsibilities tend to fall into three general categories. First, the "downstream responsibilities" of the water of one state which flows into another. Second, the "upstream responsibilities" of states whose activities may extend upstream and affect another state. And, finally, "cross-stream responsibilities" of countries whose common border is formed by a river, or even when they share underground water reserves.

The Balkans provide an interesting backdrop for water interdependencies. For example, in the case of Evros there are no major water supply problems as there are no other water uses besides irrigation. However, in the summer of 1993 Turkey strongly protested diminished water supplies due to hydroelectric power plants in Bulgaria. New tensions are expected to rise in the near future, due to low groundwater levels in the region and sea water intrusion in the coastline as a result of high irrigation demands. Another challenge in the region is the Nestos River between Greece and Bulgaria. Despite earlier agreements, Bulgaria has been withholding supplies for its increased agricultural and industrial needs. From 1975 on the Nestos flow declined from 1500 million CM to 600 million CM resulting to repeated Greek protests. A series of negotiations since 1965 have resulted in a new agreement between the two countries, suffering however from essential weaknesses. According to the agreement, Bulgaria is obliged to allow downstream 28 percent of the river discharge, without specifying, however, the seasonal variation of this amount of water.

In order to address such water interdependencies, there are currently a variety of multi-institutional approaches. There are principles of conduct from international law, bilateral and multilateral treaties, binding acts of international organisations, rules of customary international law, and, judgements of international courts and tribunals that shape rules and procedures of transboundary water relations. Such principles and rules include sovereignty over natural resources, good neighbourliness and international co-operation, the precautionary principle (especially when there is scientific uncertainty), the polluter pays principle, and, the common but differentiated responsibility. Three international legal organisations of high repute have conducted empirical studies of State practices, on the basis of which they have drafted sets of draft rules for the non-navigational uses of international water resources. The Institut de Droit (Institute of International Law, IIL); the

International Law Association (ILA) which drafted and approved the 1966 Helsinki Rules on the Uses of International Rivers; and finally, the International Law Commission, an independent United Nations legal organisation, was commissioned in 1970 to prepare an authoritative set of rules to be adopted by the United Nations General Assembly. In July, 1994 the ILC completed its draft articles on The Non-Navigational Uses of International Watercourses and recommended that the articles be elaborated into a convention by the UN General Assembly or an international Conference of plenipotentiaries.

It is instructive, to summarise five major legal principles that are shaping and will further affect the "hydrodiplomacy" practice. These are (1) the Principle of international water and the concept of an international "watercourse;" (2) the Principle of reasonable and equitable utilisation, a principle that has generated interminable debates and interpretations as to "reasonableness" and "equity;" (3) Obligation not to cause significant harm and the exercise of due diligence in the utilisation of an international watercourse; (4) the Principle of notification and negotiations on planned measures; and (5) the Duty to co-operate, including regular exchanges of data.

Thus, existing legal approaches, have now been expanded, especially in Western Europe, to include additional mechanisms for conduct and conflict resolution in transboundary river basins, including "second track" diplomacy (environmental diplomacy or hydrodiplomacy); Alternative Dispute Resolution (ADR) through international bodies or in the spirit of the Rio Agenda 21; increasing input of technical/professional or independent panels of experts or what have been called "epistemic communities;" and, the promotion of systematic utilisation of public awareness, participation and mobilisation.

In essence, international relations have become so complex that alternative dispute resolution approaches are emerging as important mechanisms in managing or resolving inter-societal conflicts. The search for alternatives to legal institutions to arbitrate disputes has been prompted not only by a saturation of legal mandates, but also by increasing litigation and confrontation. Mediation, as a compromised discussion between disputants aided by a neutral third party whose judgement is respected, has become a viable alternative to adversarial processes. The gamut of adjudication, arbitration, mediation, conciliation and even "principled negotiation", expresses various alternative processes of dispute resolution that have wide applications in transboundary regimes all over Europe. But criticisms have also risen as to whether such process can compensate for inequitable power relations or can provide incentives for compliance or acknowledgement of a third party decision when there is no recourse to legal sanctions.

As the international scene turns to questions of sustainable development, to the restoration and rehabilitation of degraded environments, and to the creation of new co-operative arrangements centring around shared water resources, it becomes apparent that institution building, comprehensive management and alternative dispute resolution efforts will be central quests in the years to come. Diminishing or degraded water resources and their potential impacts on international security, provide unique opportunities for co-operative institutions and for co-operative transnational behaviour. The common thread in any discussion of transboundary water conflicts in Europe as well as in the rest of the planet emphasises how new strategies are needed because water (and for that matter natural) resources problems are becoming both highly complex and globalised. Thus, there is a need for utilising an environmental approach that requires drastic measures of ecological rehabilitation, innovative institutional mechanisms, and a balance between autonomy and co-operation. Such global approaches entail also improvement of environmental monitoring and information by expanding the factual basis of comprehensive river basin models. In addition, they also imply a framework for negotiations which stresses the importance of comprehensive institutional formats and clarity in national and international decision making processes.

A whole host of various "Declarations," the various "drafts" of international law organisations, the creation of the World Water Council and similar international efforts all aim at expanding the spatial envelope and in accentuating global perspectives. The transition to the 21st century will require also an institutional order of co-operation, of comprehensive management principles, and of sharing of experiences gained in the practice of ecosystemic principles in water resources projects. Paths to effectiveness for some authors imply the boosting of governmental concern; the enhancement of a contractual and bargaining environment, and, finally, the building of national capacity. Others discuss larger educational and epistemological goals in ADR and in the existing legal system including the building of decentralised alliances, provision of pre-negotiation assistance to individual countries, new approaches to treaty drafting, expansion of the role for non-governmental interests, balancing science and politics, or encouraging issues' linkages. The question that should worry us, though, is to what extent sovereign states, multinational corporations, NGOs, or existing international bodies can respond in sharing long acquired power and in implementing action that promotes ecological interdependence and globality of increasing environmental challenges. At the same time, rapid population increases and expansion of economic activities are creating unprecedented situations requiring new economic paradigms of planning and action. The main problem, then, in Europe will be how to achieve integrated planning and management within institutional frameworks which have evolved under different historical and socio-economic conditions and for needs which are incongruous with the present and certainly will differ from projected or desired futures.

Given such considerations and strong socio-political divisions (even centrifugal forces and fragmentations in many nations) there are three responses that we should consider. First improve efforts towards the utilisation of "hydrodiplomacy" in terms of understanding alternative dispute resolution and conflict management efforts to transboundary water resources. Second, recognise again the river basin approach as a co-operative mechanism and authority, and as being much more sensitive to ecosystemic interdependencies. And, third, place particular emphasis on integrated water resources management (including the building of more robust water resources institutions).

An interesting recent development for improving knowledge and expanding experience is the 1998 "Convention On Co-operation for the Protection and Sustainable Use of the Waters of the Luso-Spanish River Basins." The Agreement between Portugal and Spain as partners in the shared river basins of the Iberian Peninsula, is an important (and the latest such document) addressing contemporary ecological, economic social, legal and political questions of transboundary systems. National hydrological Master Plans, Conventions, Treaties, Agreements, the EU just approved Water Framework Directive, and a vast scientific effort to manage in a sustainable manner water resources, all point out to opportunities for more comprehensive management of transboundary water resources. Thus, there should be encouragement for systematic collection of data and analytical studies; training of professionals who will be called upon to negotiate and manage complex resource systems; and, finally, the promotion of meaningful dialogue and negotiations between countries who share common environmental challenges and opportunities.

Rapporteur's Report - Working Group B "Civil Society and International Community: Preventing and Rehabilitating Conflicts"

George Strongylis, Principal Administrator, DG Environment, European Commission

Working Group B found that the OSCE can increase the effectiveness of its operations and implement its founding charter better through the greater integration of environment in its key conflict prevention and conflict rehabilitation missions. Today environmental protection means promotion of the sustainable development of the OSCE partner countries. The adoption of a virtuous cycle instead of a vicious cycle of development will have multiple economic, social and environmental benefits for partner countries with consequent regional beneficial influence on conflict prevention and conflict resolution and rehabilitation.

The adoption of such sustainable policies by the OSCE will have operational implications for the OSCE itself as well as for the way it operates in partner countries, and it will result in the improvement of the image of the OSCE in the international community.

The operational recommendations made by the Group are the following:

Recommendations for the OSCE itself:

- Increase the awareness of OSCE political bodies to security related environmental developments in the OSCE region.
- Request the Co-ordinator for the Economic and Environment Area to assess environmental problems related to security concerns.
- Identify areas of environmental co-operation for security related problems.
- Invite the Co-ordinator to provide annual assessments to the Permanent Council on the above themes using reports by field missions, OSCE – institutions and partner organisations.
- As need arises, draw the attention of the Permanent Council to topical environmental developments relevant to the OSCE (spot reports).
- Discuss results of these assessments at the annual Economic Forum.

Recommendations for the way the OSCE operates in partner countries:

- Increase the understanding and level of OSCE acceptability by civil society in partner countries through the promotion of environmental awareness of the population at large, linking this to the purposes of sustainable development and prosperity. Promote the establishment of ministerial level Councils of Sustainable Development where this is feasible.
- Continue and if possible expand the work of the OSCE field offices on the implementation of international environmental conventions as tools for creating legal frameworks in partner countries.
- Assist in the co-ordination of national government and NGO work on the implementation of government ratified conventions.
- Apply political pressure on governments for the ratification of conventions they have not ratified. Give priority in this connection to assisting Russia to develop further its environmental policies and legislation, and in particular help organise an Aarhus Convention seminar in that country.

- Act as facilitator of environmental co-operation in countries where it has field offices by collecting and disseminating information on actors and issues that would be of value to International Organisations and international donors acting in these countries.
- Seek to achieve the above through the achievement of partnerships with local civil society, NGOs as well as international organisations and donors, in particular in the areas of education, local capacity building and raising of public awareness of relevant issues.
- Seek complementarity of activities with such organisations as UNECE, UNEP, UNDP and EU.
- Use the upcoming Rio+10 World Summit to be held in Johannesburg in September 2002 as an opportunity to increase the international profile of the OSCE in the area of Environment and Security.

Working Group B Presentation "OSCE Environmental Co-operation with NGOs: The Case of Central Asia"

Riccardo Lepri, Economic and Environmental Officer, OSCE Centre in Ashgabat

Introductory remarks

The object of this report is the existing co-operation between the OSCE presences in Central Asia and domestic NGOs of this region in the field of environment since January 1999, i.e. since the opening of permanent OSCE presences in all the Central Asian countries. The report will first introduce the general framework of co-operation between the OSCE and NGOs both within and outside the Economic and Environmental Dimension. It will then focus on what has been done or planned to date rather than attempt to propose what the OSCE could or should do. For reporting purposes, activities will be described from a "geographical" point of view, i.e. divided between regional and national. A broad description by type of activity will also be provided, together with a number of concrete examples. Concluding remarks will attempt to depict the general characteristics of this co-operation work.

NGOs in the OSCE

Introduction

The basis of co-operation and interaction between the OSCE and NGOs is to be found in CSCE / OSCE commitments, agreed by all the OSCE participating states.

On the basis of these commitments, NGOs are involved in several OSCE activities organised by the central institutions of the OSCE. It is therefore appropriate that these commitments and activities, together with the institutional framework of the OSCE Economic and Environmental Dimension, be shortly reminded before reporting on the actual environmental co-operation between the OSCE and NGOs in Central Asia.

The institutional framework

The OSCE attaches great importance to its contacts with NGOs. Fostering the development of a strong NGO movement is an essential component of the process of creation of a democratic, open and transparent society. Moreover, NGOs can be an important source of information on developments in the OSCE area, particularly on the human rights situation, but also on environment, economy and security matters.

The then CSCE participating States decided in the 1992 Helsinki Summit Document that they supported "...the active involvement of our publics in the CSCE" and wished to "...expand the opportunities for contributions by and co-operation with NGOs". Consequently, it was decided that all plenary meetings of a number of CSCE events would have been made open to NGOs, leaving it to each meeting the possibility to open other sessions to NGOs. The participating States also decided to promote contacts and exchange of views between NGOs and relevant national authorities, to facilitate informal discussions between governmental representatives and NGOs during CSCE meetings, to encourage written presentations by NGOs to CSCE institutions and meetings, and to encourage NGOs organising seminars on CSCE-related issues.

This was the first "institutionalisation" of a practice that not long before then had been introduced in the CSCE. After that, and with the evolution of the CSCE into the OSCE and its expansion, the involvement of NGOs increased. Nowadays, the main focal point of OSCE contacts with NGOs is the ODIHR and especially its NGO unit. Its activities include civil society assistance carried out in co-operation with national and international NGOs. Furthermore, the annual Human Dimension implementation meetings are characterised by increasing involvement of NGOs.

The Economic and Environmental Dimension

Apart from the ODIHR, several other OSCE institutions have developed close relationships with the NGO community. Those working in the Economic Dimension are no exception.

The two main directions of OSCE activities in this dimension are:

- To monitor economic and environmental developments among participating states, with the aim of alerting them to any threat of conflict; and
- To facilitate the formulation of economic and environmental policies and initiatives to promote security in the OSCE area, particularly in participating States that are involved in the process of transition.

Developing and intensifying contacts with the civil society is one of the means that the OSCE uses in order to carry out such tasks. Consequently, the mandate of the Economic Forum, as agreed in 1992, states amongst the rest that "...meetings (of the Economic Forum)...can bring together economic policy makers, parliamentary leaders and representatives of NGOs and the private sector in a positive dialogue on co-operation and the transition to market economies". This mandate was reproduced in the Helsinki Summit Document. Therefore, representatives of national participated in the 1st meeting of the Economic Forum in March 1993. The following year, in the occasion of the Summit Meeting in Budapest, the participating States acknowledged that "...the Economic Forum remains the main venue for discussion of economic and environmental issues" and that its success "...is dependent upon the ... participation of ... representatives from government, international institutions, the private sector, business associations, labour unions, academic communities and NGOs with relevant experience". This applies also to the follow-up and preparatory seminars to the Economic Forum, some of which have been organised in Central Asia.

Broadening contacts with NGOs is one of the regular priorities of the position:

- of Co-ordinator of Economic and Environmental Activities, which was established in 1997. This and other tasks of the Co-ordinator aim at strengthening the ability of the Permanent Council and the OSCE institutions to address economic, social and environmental aspects of security.
- Eventually, positions dealing specifically with the Economic and Environmental issues have been established in almost all the OSCE missions and presences in the field.

The Central Asian context

The OSCE institutional framework in Central Asia

The first permanent presence of the OSCE in central Asia was the Mission to Tajikistan, opened in 1994 to deal with the conflict that broke shortly after independence. Nowadays this mission includes several Field Offices. Following to that, a Central Asian Liaison Office (CALO) was opened in Tashkent. In January 1999, three OSCE Centres were opened in Almaty, Ashgabad and Bishkek. The following year, a Field Office was opened in Osh.

The mandate of the CALO (now renamed Centre in Tashkent) reads amongst the rest that the Office is to "...establish and maintain contacts with local universities, research institutions and NGOs" as part of its work of "promoting OSCE principles and commitments" within all the OSCE dimensions. This wording has been reproduced in the mandates of the OSCE Centres in Ashgabad, Almaty and Bishkek. The mandate of the Mission to Tajikistan is worded differently, as it is related to the management of the conflict; moreover, the Mission did not deal specifically and continuously with economic and environmental issues until quite recently. However, the general principle on co-operation with NGOs is present in its mandate.

The position of Economic and Environmental Officer has been created in all the aforementioned presences, with, amongst others, the task to implement the NGO-related part of the presence's mandate in the fields of economy and environment.

The activities: general characteristics

Although the aforementioned mandates do not indicate that activities must be developed, work on "promoting the implementation of OSCE principles and commitments" obviously implies activities. The lack of specific guidelines on the type of activities to develop has not been and is not an obstacle. It is necessary to remind that the OSCE is not a "project organisation" and that activities are only one of the tools that the OSCE uses in order to achieve its objectives.

This does not mean, however, that the OSCE could undertake any kind of activity. Its mandate and objectives, its institutional structures and capacities, together with the necessity to avoid duplication of work carried out by other international agencies draw the limits of what the OSCE could and should do, particularly in the economic and environmental fields. In addition to that, the Helsinki Summit Document gives a general indication on the type of activity to be organised by the OSCE in co-operation with NGOs by mentioning "seminars on OSCE related issues". Therefore there are some sort of guidelines, although not rigidly set as in more technical and specialised organisations.

Within this framework, the work of the OSCE presences in Central Asia can be analysed from the point of view of its "geographical" scope -regional or national. In this case, one has to take into account that generally, the OSCE aims at promoting regional co-operation between its participating states. Therefore, regional activities need follow-ups at the national level in order to be more effective. As regards the nature of the activities, on the basis of what has been done to date it is possible to propose the following classification:

1. Activities promoting public participation in policy making (at the regional and national levels);
2. Activities promoting access to information;
3. Training workshops on international and national legislation relevant for certain environmental issues;
4. Activities focusing on environmental education.

Although useful for reporting purposes, such a rigid classification by type of activity is not always appropriate, as often more than one of those categories is present as different components of a single activity.

Regional activities

Promoting regional co-operation is one of the cornerstones of the OSCE. The OSCE aims at bringing together governmental and non-governmental stakeholders on regional issues, in order to achieve a basic consensus on the basis of which co-operative regional policies could be developed. Participation of NGOs to such initiatives and activities stem from the principle of **public participation in decision-making** that the OSCE committed itself to support.

The following two examples reflect those concerns. One is the Regional Workshop for Central Asia on the UNECE Convention on Access to Information, Public Participation in Decision-making and Access to Justice in Environmental Matters (Aarhus Convention) organised by the OSCE in co-operation with of UNECE and UNEP on 4-7 May 2000 in Ashgabat. Participants were government officials and NGOs from the five Central Asian republics.

A first regional workshop on this subject organised by the UNECE and the OSCE Centre in Almaty in June 1999 showed a general lack of understanding of the Aarhus Convention. Therefore, it was decided to organise a second regional workshop aiming specifically at providing governmental and non-governmental players with an opportunity to share experiences, and to discuss the most optimal approach to implement the Convention. On the basis of its recommendation, national activities were organised in Turkmenistan and Uzbekistan and are being planned in Tajikistan. In Kazakhstan, such activities began before the 2000 regional workshop, but were eventually connected with it and provided an interesting model of national follow-up. Such national follow-ups will be shortly described in the next paragraph.

Another example is the Regional NGO Conference in the occasion of the conference of European and NIS environmental Ministries within the framework of the process "Environment for Europe", which was held in Almaty on 16-17 October 2000. The goal of this event, organised by the OSCE Centre in Almaty on 2-3 October 2000, was to allow Central Asian NGOs to discuss issues related to the process "Environment for Europe", with reference to the agendas of the two ministerial meetings "Almaty 2000" and "Kiev 2002". The final resolutions were presented by a NGO representative at the opening plenary session of the Ministries Conference.

The OSCE Centre in Almaty also organised **regional training workshops** on international environmental law and legal drafting. The workshop on **Global Environmental Law: Interpretation, Integration and Implementation** organised in September 2000 aimed at providing the participants -both NGOs and government representatives- with a global view on background and current state of international environmental law. More specific was the workshop on **"Translating Policy into Effective Environmental Law - Case Study: Water Pollution legislation"** organised in December 2000. This workshop addressed the issue of implementation of legislative provisions, which is often inadequate in Central Asia. Its primary objective was to enhance the capacity of members of parliaments and government officials to draft laws that can be effectively implemented, and to increase the public's understanding on legislative processes. An important aspect of the training focused on connecting legislation with scientific reports on environmental problems and on their social and economic impact.

Although parliamentarians and government officials were the primary target of the training, NGOs were also invited to participate.

National activities: the case of the implementation of the Aarhus Convention

Several OSCE presences in Central Asia have been and are working on the implementation of the Aarhus Convention. This set of activities provides an example of coherent national follow-ups to a regional initiative characterised by a very active NGO involvement. In other words, the OSCE was involved in initiating and is involved in supporting what appears to be a process of implementation of an international legal instrument in Central Asia, and NGOs are playing an active role within this process.

The OSCE Centre in Ashgabad organised a series of roundtables throughout the country, aiming on the one hand at informing government officials and NGOs at the central and local levels about the Convention and to facilitate discussion on proposing ways to implement it in Turkmenistan. This project has been developed with the active involvement of a Turkmen NGO. Its final result should be a set of proposal to submit to the national authorities tasked to draft and propose legislative and other measures to implement the Convention.

As a follow-up to this project the Centre is planning to support the creation of a website on "The Aarhus process in Turkmenistan", that has been proposed by a Turkmen NGO.

A similar initiative of seminars on the Aarhus Convention is underway in Uzbekistan, where besides the implementation of the Aarhus Convention the Centre is also working on long-term sustainability of environmental NGOs.

The Mission to Tajikistan is currently planning activities related to the Aarhus Convention, i.e. a series of roundtables and a national seminar on the role of civil society in nature protection.

The Centre in Almaty started working on the Aarhus Convention before the aforementioned regional workshop. Its first activity, a series of local seminars organised in co-operation with a Kazach NGO, was connected with the regional initiative and provided an interesting model of national follow-up to it. As a result of the local seminars on implementation of the Aarhus Convention, the government, the parliament and NGOs signed a Memorandum of Understanding in order to co-operate and co-ordinate efforts on ratification of the convention and implementation of its provisions. The Memorandum could be a model for the local level as well, where similar documents could be signed.

Moreover, a Special Working Group and a Bureau, which is going to co-ordinate activities of environmental NGOs, the government and the Parliament, has been established.

In this context, the Centre developed a project on follow up to the seminars, i.e. a seminar to monitor and evaluate the implementation of the Memorandum.

Other activities at the national level

In order to give a more complete picture of OSCE co-operation with NGOs in central Asia, some examples of activities will be exposed in this paragraph. It is however necessary to underline that this list is not exhaustive.

The CALO / Centre in Tashkent organised a country-wide series of local workshops on "Promoting Community-level Co-operation for Sustainable Economic and Environmental Development in Uzbekistan" throughout the years 1999 and 2000. Objective of these workshops was to promote co-operation between national and local stakeholders on addressing business development issues and environmental concerns in Uzbekistan. Participants included government officials, NGOs, local communities, and private business. The workshops served as a forum for discussion on issues of business, particularly small and medium size, and environment in the country. They also covered a broad range of legal and technical inputs for improving business and environmental conditions in the country. After the workshops, follow-up missions by the Centre in Tashkent were foreseen in order to generate a sense of accountability.

The Mission to Tajikistan organised a conference on energy saving with participation of government officials and NGOs in November 1999. Currently the Mission is planning the following activities:

1. To stimulate action-oriented debate at the grass-roots level on environmental issues;
2. To increase awareness of the public on environmental issues;
3. To support specialised media;
4. To adjust national legislation to comply to international standards;
5. To encourage and support regional co-operation on environmental issues.

The Mission is also planning a workshop on community level co-operation for sustainable economic development.

The Centre in Bishkek organised projects on environmental education for youth and children with the involvement of NGOs, and a roundtable on formal information mechanisms for

NGOs and citizens regarding environmental matters. This project had been developed in consultation with NGOs. It was meant as a follow up to the discussions at the 7th Economic Forum and is related to the principles of the Aarhus Convention.

The Centre also supported the creation of an environmental journal called "Ecology and Human Rights".

The Centre in Almaty organised informal meetings with the representatives of environmental NGOs, business community, institutes and universities. The objective of the meeting was to consult and exchange views and information on respective activities and project proposals for 2001.

The Centre also assisted an ecological NGO in preparing and opening an environmental web-site on "Environmental Problems of the Caspian Sea".

The Centre in Ashgabad assisted a Turkmen NGO in organising a seminar on environmental education, one of the goal of which was to draft guidelines for a comprehensive programme of environmental education at all levels.

Concluding remarks

Since 1992 the extent of the involvement of NGOs in CSCE / OSCE events at the central level, both within and outside the Economic and Environmental Dimension, increased from simple attendance to the opening and closing plenary to participation to the entire event with possibility to present reports and to make statements. Since last year, NGOs are also invited to work as moderators or co-moderators. Such involvement and co-operation aims at bringing the "voice" of the civil society into the process of dialogue that takes place within **the OSCE. In other words, the OSCE is implementing the principle of public participation within its own decision-making process.**

It is important to remind that the ultimate aim of this process is that OSCE participating States formulate policies that would build a secure and co-operative political, economic, social and environmental framework throughout its region. Therefore, the involvement of NGOs into the OSCE process should lead to their **involvement into national policy-making processes**. This applies to both domestic and international policies of the participating states, and this is where OSCE field presences rather than central institutions can play a decisive role.

The example of the **Aarhus Convention process** is probably the most evident.

The decision to organise a second regional workshop had been agreed by the participants of the first one, which included NGOs. However, the whole organisation, including the agenda and the selection of participants, has been undertaken entirely by the organisers, i.e. the OSCE, the UNECE and the UNEP. Although NGO participation to the event was indeed very active and thus influenced the contents of the final document, they were not involved in actually designing the workshop. However, the extent of their involvement in the national follow-up activities has been generally larger and began in the phase of development of these activities, like e.g. in the cases of the roundtables and local seminars in Turkmenistan and Kazakhstan. In other words, **the NGO ownership of the regional workshop**, i.e. the beginning of the process, was mostly limited to the results, while the extent of **NGO ownership of the national follow-up activities** is much larger.

National activities are underway or being developed, therefore we cannot speak about their long-term results yet. However, whatever results will be achieved, NGOs will have played a rather active role in it. Therefore, it is possible to conclude **that the regional workshop and the national follow-ups** (in other words, the **Aarhus process**) **have achieved the aforementioned objective of involving NGOs into a process of policy-making within some of the OSCE participating states.**

In the case of the regional NGO meeting in Almaty in October 2000, the extent of NGO ownership here is similar to the Aarhus Convention regional workshop, and the extent of their participation in the Ministries conference has also been quite limited. However, by means of this initiative the OSCE facilitated a limited form of public participation into an international political process.

The series of workshops on small business and environment in Uzbekistan provide another example. The OSCE did not provide a model of development of small business and of integration of environmental concerns into the economic policy of the country. On the contrary, the OSCE organised events that had a training component, a discussion / debate component and a public participation component **the object of which was the existing legal framework on the issues covered by the workshops**. The advantage of this approach is that implementation of at least part of the results can be immediate, provided of course the will of the stakeholders and the further monitoring by the OSCE and by the interested public that these results be actually implemented. The more the NGOs are involved in such activities the more they can have a real influence on the making and implementing of relevant policies by their governments.

If we analyse the aforementioned activities from the point of view of NGO ownership / involvement, we will notice that some activities were the direct result of NGO initiatives, which the OSCE supported, while others have seen a more proactive role of the OSCE in their development. The extent of NGO involvement may depend on various factors, including the type of activity, the political situation in the country, the capacities of individual NGOs, etc.

However, whatever the extent of NGO involvement, the basic principle remains that the OSCE is committed to ensure **the maximum possible involvement of NGOs in OSCE activities, particularly those facilitating policy formulation** -and consequently, in the policy results that must be expected from them.

Working Group B Presentation "Utilising International Environmental Law for OSCE Security Building. Good Experience in Armenia"

Dr. Frank Evers , Economic and Environmental Adviser, OSCE Office in Yerevan

Introduction

Within its environmental mandate, the OSCE Office in Yerevan focuses on security-related aspects of national and regional environmental affairs. It sees protection of the natural environment as a means of efficiently using limited natural resources and contributing to economic recovery. From our point of view, environmental balance is a main basis for comprehensive and sustainable development. Balanced environmental and economic development is a vital precondition for social welfare. In their turn, social welfare and economic prosperity are key components in public confidence-building and national security. In the same way, environmental protection is a means of preventing social tensions and avoiding conflicts.

The OSCE Office in Yerevan sees public participation in environmental decision-making as an indispensable tool of democracy building. Last but not least, the settlement of environmental issues – first of all the rational and co-ordinated use of natural resources – opens up prospects for bilateral and regional rapprochement within the South Caucasus.

The OSCE Office in Yerevan has sought to raise national and international awareness about the dimension of security-relevance of environmental issues in Armenia. It has focussed on the leading role of the environmental protection movement in Armenia in identifying public interest in and individual capabilities for social and economic recovery. The OSCE Office in Yerevan gives special support to governmental and non-governmental endeavours that are aimed at making environmental issues more transparent and public.

In environmental affairs, we see one of our main tasks in campaigning for the transformation of international environmental legislation into national law and its subsequent implementation. In our understanding, this is a way of fulfilling our mandate to provide political support to security building.

Utilising international environmental legislation for OSCE security building activities

More than before, the transformation of international legislation into national law and its subsequent implementation can serve as instruments of promoting national and regional stabilisation as well as conflict prevention and conflict resolution. There are weighty arguments for OSCE field operations to focus on these matters since the national implementation of international legislation in general is a tool of:

1. *Peculiar "legal stability import"* - i.e., a tool of sharing international legal stability and herewith sustaining national legal consolidation;
2. *Democratisation support* - i.e., a tool of sustaining legalisation, transparency and public participation as key components of general democratisation;
3. *International integration* - i.e., a tool of accelerating the host country's integration into international legal frameworks and structures of international organisations;
4. *Mutual rapprochement* - i.e., a tool of involving conflict parties into non-conflict related public dialogues by using the infrastructures of international legislation implementation;
5. *Resource building* - i.e., a tool of applying international legal know-how.

A special paragraph of OSCE field activities is campaigning for the transformation and implementation of international legislation on *ENVIRONMENTAL* matters. Traditionally, environment-related issues are subject to great public attention and institutionalised non-governmental actions. Often, environmental NGOs are strongly influencing public dialogues in OSCE host countries and are proficient multipliers of OSCE values. Beyond that, environmental issues as such are of universal security significance. Somehow or other, they are directly or indirectly influencing global, regional and local stability.

Having this in mind, it seems to be recommendable to the economic and environmental dimension of the OSCE, to think about focussing more consistently than before on implementing international environmental legislation. The promotion of the following international conventions on environmental matters – to give some most obvious examples – could be put on the OSCE agenda:

1. UN ECE Convention on Long-Range Transboundary Air Pollution of 1979;
2. UN EP Convention on the Protection of Ozone Layer of 1985;
3. UN EP Montreal Protocol on Ozone Depleting Substances of 1987;
4. UN EP Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal of 1989;
5. UN ECE Convention on Environmental Impact Assessment in a Transboundary Context of 1991;
6. UN ECE Convention on Transboundary Effects of Industrial Accidents of 1992;
7. UNEP Rio Declaration on Environment and Development of 1992;
8. UN ECE Århus Convention on Access to Information, Public Participation in Decision Making and Access to Justice in Environmental Matters of 1992;
9. UN ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes of 1994;
10. UN EP Kyoto Protocol to the Convention on Climate Change of 1997;
11. UN EP Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade of 1998.

These conventions are legal acts of wide political connotation. In our understanding, they could be used for the sake of (a) direct OSCE conflict management and (b) involving other international organisations into co-ordinated national security building. There are first good experiences in promoting the ratification and implementation of the UN ECE Århus Convention of 1992.

Environmental activities of the OSCE field representation in Armenia

In its environmental activities, the OSCE Office in Yerevan has the following objectives:

- a) *Promotion of political stabilisation and national confidence-building* by encouraging public participation in governmental decision-making in environmental affairs; campaigning for more transparency in environmental affairs and their consolidation on legal grounds;
- b) *Promotion of economic stabilisation and recovery* by advocating efficient protection, use and recycling of limited natural resources;
- c) *Promoting social stabilisation and welfare* by campaigning for sustainability, i.e., for a balanced environmental, social and economic development;

d) *Promoting regional stabilisation and rapprochement* within the South Caucasus by campaigning for resolving cross-border environmental issues;

e) *Promoting international security involvement* in Armenia and the South Caucasus region by encouraging international organisations and interested foreign governments in supporting environmental implementing work.

The OSCE Office in Yerevan implements its environmental endeavours by publicly highlighting most urgent and high-profile environmental topics, campaigning for the translation of international environmental legislation into national law, giving assistance in implementing national environmental regulations, and supporting main environmental actors and activities.

For the time being, our main activities include:

a) *Promoting the Århus Convention's ratification*. At the initiative of Armenian environmental groups, the OSCE Office in Yerevan took the lead in campaigning for ratification of the UN ECE Convention on Access to Information, Public Participation in Decision-Making, and Access to Justice in Environmental Matters (Århus Convention, 1998). To Armenia's environmental family, the convention is both a highly needed political landmark and a legal precedent for the authorities' obligation to guarantee general transparency in public affairs.

As a result of this campaign, which included series of round tables and bilateral meetings with Armenian Ministry of Nature Protection, various Standing Parliamentary Committees and international organisations, the process of the Århus Convention's ratification was formally initiated in September 2000. On May 14, 2001 the Århus Convention was ratified by the National Assembly of Armenia. It is noteworthy, that we had put our campaigning activities again under the general headline of our public-debate format "*Armenian Dialogues on Security and Co-operation*".

b) *Promoting the Århus Convention's forthcoming implementation*. It is now common task to campaign for some first awareness-raising projects. The OSCE Office in Yerevan is currently on a way of launching the following projects that will be implemented by Ministry of Nature Protection in co-operation with and Armenian environmental NGOs.

1. *The Public Environmental Information Room*. Equipping a public environmental information room – a library room with two or three PC working stations plus internet access at the Ministry of Nature Protection. This will a rather small but nevertheless resonant activity to which we would like to invite other international organisations and governments that are interested in co-funding specific steps on the Århus Convention's implementation.

2. *Workshops on implementing the Århus Convention*. Conducting regional South Caucasus and national workshops in co-operation with the UN ECE Headquarters. A second regional workshop is preliminary scheduled for November 2001.

3. *South Caucasus Environmental Information Exchange Website*. Trilateral NGO-run website – electronic magazine highlighting Armenian, Azeri and Georgian environmental issues.

4. *Environmental TV slots*. Production of a series of short TV slots with environment-friendly attitudes.

c) *Supporting REC Caucasus activities*. In order to encourage regional conflict-resolution, post-conflict rehabilitation and general mutual rapprochement, we think it is advisable to promote regional co-operation in environmental affairs too. The OSCE Office in Yerevan politically supports cross-border initiatives, particularly in environmental affairs.

In this respect, the *Caucasus Regional Environmental Centre (REC Caucasus)* is seen as our main counterpart for forthcoming OSCE activities in the field of regional environmental co-operation. Our Office took the lead in coming to a common understanding of how Armenian sides could contribute to and benefit from REC Caucasus activities. Within our "*Armenian Dialogues on Security and Co-operation*" we have organised a working meeting on "*Armenian Participation in REC Caucasus Activities. Expectations and Achievements. Prospects of national contributions and international engagement*".

In future, the implementation of international environmental legislation will be one of the subjects to be highlighted in our co-operation with the REC Caucasus. Corresponding co-operation with governments, NGOs and international organisations is required.

d) *Supporting South Caucasus cross-border activities.* The support of local border-near activities within the triangle of Armenia, Azerbaijan and Georgia is seen as an instrument of grass-roots conflict settlement complementing parallel top-level political dialogues.

The OSCE Office in Yerevan pays special attention to the reconstruction of cross-border water supply systems, urging the necessity of regional co-operation in this context. The Office sees similar initiatives as a measure of both post-conflict rehabilitation and conflict-prevention. In this field, international environmental legislation shall be utilised as a vehicles of mutual rapprochement. The implementation of the *UN ECE Convention on the Protection and Use of Transboundary Watercourses and International Lakes* of 1994 would be a case in point.

Recommendations

1. In the dialogue between OSCE headquarters, OSCE field activities and our host countries' governments, emphasis is to be put on a clear understanding of the solution of security-related environmental issues as prerequisite to successful conflict management, national confidence building and stabilisation.
2. Also in environmental affairs, there should be established channels of regularly transferring OSCE advice to the headquarters of other international organisations. For better co-ordination, existing direct links between the OSCE CEEA and our international partners will have to be extended and used for highlighting the political topics of OSCE field representations. On a more direct basis, OSCE CEEA will have to connect OSCE on-site operations with international decision-making institutions. In particular, this is imperative in terms of supporting the solution of environmental issues including the transformation of international environmental legislation into national law and its subsequent implementation.
3. A recommended place for making OSCE advice more visible to national governments is in the conditionalities of financing and development support provided by the governments of our participating countries and by international organisations. Based on the good experience of the OSCE Office in Yerevan, it is recommended to enhance and encourage the role of OSCE in co-ordinating international endeavours. This also affects the transformation and implementation of international environmental legislation.
4. Concrete topic-related co-operation between OSCE field missions in promoting regional co-operation and rapprochement is needed. The transformation and implementation of international environmental legislation is one out of a multitude of subjects worth being included into the cross-border agenda of OSCE field activities. Like it is the case with other political spheres, the four offices of the OSCE South Caucasus network could serve as a platform for environmental co-operation between the regional networks of other international, governmental and non-governmental organisations.
5. It is recommended to place OSCE operations in the field of environmental protection within a strict security-related context. Especially within the international community, the conflict and security frame of OSCE activities as well as our security-building instruments

should be made clear to our partners. For reasons of division of competencies and labour, this is an essential prerequisite for mutual understanding and strategic co-operation.

6. Selected cases of environmental project implementation work should serve as an illustration of general OSCE intentions to the public and our partners. Beyond the frame of security-building political work, project work should be left to implementing organisations.

7. With the aim of supporting the implementation of the UN ECE Århus Convention in Armenia, the OSCE Office in Yerevan would like to invite interested governments and organisations to take part in the shared funding of selected projects as mentioned above. Right now, these would be, first of all, the establishment of the Armenian Public Environmental Information Room as well as the maintenance of the South Caucasus Environmental Information Exchange Website.

Working Group B Presentation "Enhancing Effective Co-operation among International Organisations: Case Study of the Aral Sea Region"

Susan Milner, Programme Leader, Natural Resource Institute UK

In April 2000 a UK-initiated OSCE mission visited the region prompted by growing international awareness of the potential tensions in the region over increasing scarcity of water. At that time donor programmes were not well co-ordinated. Rather than easing the region tensions over water this may have re-enforced them. This paper documents the water tensions in the region and the turn-around in donor co-operation over the last year. It then goes on to indicate where future efforts might be directed to encourage increased co-operation.

Background

The five Central Asia states are developing their nation identity and status. They have increasingly divergent economies and increasingly divergent water needs. The result is increasing tensions over water use and allocations. The water infrastructure is decaying and there are no resources to repair it., leading to an increasing threat of infrastructure failure to deliver the required water. Co-operation between upstream and downstream states is decreasing.

The downstream states are heavily dependent on water mainly for irrigation. However they have relatively little storage capacity. In contrast, the upstream states, Kyrgyzstan and Tajikistan, which give rise to 80% of the available water in the region have the infrastructure/facilities to store water and to generate hydroelectricity, but they have no fossil fuels and need water for hydropower generation during the winter. These competing water use needs generate a potential source of tension between the upstream and downstream states, particularly over the operation of the large Toktogul Dam on the Syr Darya river.

This is further exacerbated because Kyrgyzstan, which now owns the Toktogul Dam, has to pay for its operation and maintenance even though the dam also serves the water needs of the downstream water users. Kyrgyzstan now demands contributions toward these costs from the other riparian states and compensation for foregoing its opportunity to generate hydro-electricity during the winter months.

Tensions over the operation of the Toktogul Dam have become more acute in the last two summers. In 2000 Kyrgyzstan released water during the winter leaving insufficient for downstream summer irrigation. Combined with an exceptionally dry summer Uzbekistan suffered reduced crop yields resulting in large economic losses, anticipated to be in the order of \$100 million. At present allocations are negotiated annually, mainly bilaterally and are used as bargaining chips.

The need for sustainable, regional water management solutions has become even more pressing. This partly due to the drought and partly due to concerns that otherwise small and/or manageable tensions could be accentuated if drought reoccurs in the future. Some experts believe this to be a high probability.

To prevent further escalation of tensions there is clearly an urgent need for new interstate framework agreements for water sharing within the Aral Sea Basin. However progress toward developing regional framework agreements has been slow. And at the moment at least two of the five states, Uzbekistan and Turkmenistan, choose to negotiate on a bilateral basis, as needed.

The need for an integrated approach to water resource management and appropriate institutions

Water management issues need to be addressed through a multi-sectoral approach. This is essential if an acceptable balance between water use for upstream hydropower generation and for downstream irrigation is to be achieved. This multi-sectoral approach must be adopted at the donor level, the regional level, and the national level and must be reflected in the respective institutions at each level.

At the moment, however, regional co-operation for sustainable regional water resource management is hampered at present by the lack of institutional arrangements that integrate the interests of all sectors of both the upstream and downstream countries. Existing institutional arrangements represent for the most part single sector interests, at both the national and regional level, and therefore cannot deal with the broad range of interlinked multi-sectoral water-related problems, in particular the need to balance water use for upstream hydropower generation versus downstream irrigation. The existing regional institution, the Interstate Commission for Water Co-ordination (ICWC), is mandated to cover all aspects of water use but it has competence only in the water sector. It cannot therefore deal with multi-sectoral issues. To deliver its mandate it must develop the staffing and competence to deal with the range of multi-sectoral issues associated with regional water management.

Progress in reaching agreement on water related issues is also hampered by the lack of a clear and effective decision-making route. Currently the board of Interstate Fund for the Aral Sea (IFAS) is the highest decision-making body on water management issues in the region. However the Central Asia Economic Community (CAEC) has responsibilities for co-ordinating interstate activities such as environmental protection, energy supply, transport, communications and unified efforts on natural disasters, which are outside IFAS' control.

Both the ICWC and the CAEC therefore have roles and responsibilities regarding the management of the Basin's water resources for energy and environmental protection. What the best institutional arrangement within a legal framework would be has yet to be resolved. The result is jurisdictional disputes.

Clarification of the decision-making route will strengthen the negotiation and decision-making process and subsequent implementation.

Donor involvement

The situation is not helped by the earlier history of poor donor communication and co-ordination. Indeed donor programmes working in the respective host countries tended to re-enforce the host country's priorities without sufficient regard to the water use needs of their riparian neighbours.

The main Aral Sea Basin Programme (ASBP), focussed on water management for irrigation throughout the basin without addressing the energy sector and the associated problems of competing irrigation and hydropower interests. Yet the inclusion of the hydropower issue is crucial for the development of a workable regional water management strategy. Indeed finding a balance between these competing interests is central to the vexed issue of the operation of the many of the reservoirs in the region and in particular the much disputed operation of the Toktogul dam.

Another programme led by USAID took a multi-sectoral approach but focussed on developing water for irrigation versus water for hydropower generation trade-off agreements in the Syr Darya basin only, in relative isolation from other wider interdependent regional water management issues.

In effect the different donors had established two parallel, independent and not necessarily complementary approaches to developing interstate agreements, each working with different counterpart institutions – the ICWC and the CAEC respectively.

At that time this two-track approach created difficulties and perhaps complicated the international water sharing negotiations. Overall, the effect may have been to re-enforce tensions rather than to ease them.

It was at this point that the UK-initiated OSCE mission visited the region. Its main objective was to gain agreement from the heads of state of the five Central Asia republics to come to a meeting later in the year. It was thought that this could act as a stimulus to efforts among the five CA states to increase co-operation in sustainable regional water management. However this was declined by Turkmenistan and Uzbekistan.

A second objective was to try to catalyse improved donor co-ordination.

Although the main objective of the mission was not achieved, the mission did bring together the key donor agencies and certainly helped to trigger a change in the way the key donor agencies now work together in the region. It also raised the political profile of the water scarcity problems in the region and the need for urgent action. This political effort was re-enforced by follow-up OSCE visits to the region led by the Secretary General and the then Austrian Chairperson in Office.

The result has been a clear shift in donor policy, communication and collaboration. The donors are now working together well. USAID has actively sought to work with and enhance other donor initiatives where appropriate and to provide financial support to collaborative efforts.

There is also now a greater recognition of the need to address water management as a complex multi-sectoral web of interdependent issues. The next phase of ASBP will incorporate more substantially the essential energy component.

The result is clear. The World Bank and USAID have now developed a coherent strategy of complementary activities together with other agencies such as UNDP and the EU and with bilateral donors such as CIDA, Swiss Development Corporation and MASHEV. To support this further, donor representatives agreed at a meeting convened by the UN-ECE in September 2000 that donor co-ordination could be enhanced through the development of a website designed to facilitate information sharing on existing and pipeline programme activities. This is now to be developed.

Equally importantly, the donors have learnt to acknowledge co-operation between the five Central Asia states where it exists and the need to build on this to generate the necessary conditions for making progress in more contentious issues.

The current situation

For the moment there appears to be little enthusiasm for the development of regional co-operation frameworks for water management among the five Central Asia states. This is perhaps understandable in the short-term when there is much work to be done before agreement at the regional level is possible and there is a pressing need to secure bilateral agreement on issues requiring immediate resolution, such as the operation mode of the Toktogul Dam.

Reaching agreement on interstate co-operation is essentially a political process. Indeed, resolving international watercourse and water use problems anywhere in the world is a political process. Central Asia is no exception. The process is always difficult and long but with political commitment and support it can progress to achieving commonly agreed regional co-operation frameworks for integrated water use and management and so to

successful outcomes. At least for the moment however, this political support from all of the five Central Asia presidents is not clear.

Effective institutional arrangements still have to be developed in order to facilitate the decision-making process and to have the necessary implementation capacity in terms of authority, competence, resources and operable infrastructure. As yet, both of these prerequisites are missing.

Next steps

Based on the lessons learnt from experience in the region we can define a number of changes which will facilitate regional co-operation. These include:

- the need for an institutional arrangement at the regional level with the mandate, staffing and competence to deal with the range of multi-sectoral issues associated with regional water management.
- the need to rationalise institutional roles and responsibilities and to establish a clear decision-making route to support the decision-making process

However, these are neither easy nor quick to achieve. To gain political confidence and support, effort must also be concentrated on activities that can be seen to deliver benefits for the five Central Asia states quickly.

Donors have therefore recognised that, at present, efforts may best be directed toward tangible actions and support such as the upgrading of regional water monitoring infrastructure and capacity. This will encourage co-operation at the technical level and from this co-operative basis, progress may then be made in more contentious issues.

Although there are differences between the five states, there is a history of co-operation between them from Soviet times, and this continues in various forms of co-operation water management issues. The need now is to build on existing efforts to co-operate, and to seek new ones, thereby building the confidence between the five states that they can work successfully toward achieving the objective of consensus on a series of framework agreements for multi-sectoral water use and management in the region.

Perhaps now therefore the most effective approach is to identify practical ways forward that meet immediate needs and priorities, that link together as a coherent programme of individual activities and that also contribute to a longer-term, more comprehensive approach to integrated water resource management. This will encourage **a shared approach which all key actors own and a harmonisation of understanding** among the multitude of different resource managers in the basin.

Such harmonised understanding is a matter of persuasion and information, so that different actors see it is to their long-term benefit to modify the management of water resources within the basin. Obviously an essential prerequisite to this is **effective communication and information sharing between all the various stakeholders**, but this is not yet a reality.

An important factor is the **development of the capacities needed to analyse the problems and apply the necessary technical solutions that are essential to underpin the decision-making dynamic needed at the highest political level.**

Awareness-raising should be based on a minimum of the right information, combined with active dialogues between the different interests to **establish the best possible consensus.**

Civil society should also engage in this process. Public participation so far has been limited perhaps in part because of the history of the region. There is therefore a need to develop the capacity of civil society so that they can effectively engage in the decision-making processes

that affect them. **Public awareness raising and education and access to information** must therefore be actively supported.

The international community, and donor financial assistance in particular, have a key role to play in actively supporting the development of regional co-operation and must ensure that they act in harmony. With this in mind, the various agencies should aim to:

- look for mutually re-enforcing activities which add value and develop synergies between each other's projects
- work with the Central Asian states to develop projects which respond to the recipient's priorities and which meet the objectives of both donor and recipient
- agree a common objective of striving toward being more inclusive and multi-sectoral in project design.
- make information about activities, ongoing and anticipated, available and accessible to a wide range of stakeholders
- ensure lessons are learnt from the recent donor activities and to communicate and co-ordinate more effectively.

Opportunities for OSCE action

OSCE needs to be clear about its role in addressing Central Asia water management issues. This needs to be communicated to its partners especially those within the region to ensure it is understood what types of activities are appropriate for OSCE and to avoid false expectations. OSCE should engage itself in situations where there is security relevance, to avoid overlap with other organisations.

The recommendation to adopt a multi-sectoral approach at all levels requires a change in the decision-making framework that determines water usage. It is therefore a political process and one where OSCE can play a catalytic role.

Various options for OSCE involvement have been identified in previous OSCE seminars on the subject. These options include:

- support to develop a forum and/or process for information exchange between donors to facilitate co-ordination of their programmes and activities in the region,
- support to develop a process/mechanism to ensure information is made available in a form accessible to the various stakeholders/users
- support to development of local competencies in negotiating skills and consensus-building through capacity building
- analysis of the economic, social and environmental consequences of the various possible options for revised water resource allocation and management as a basis for informed decision-making,
- support to develop public awareness raising of the issues including their appreciation of the difficult trade-offs involved,
- support to development of education programmes in water conservation and efficient water use aimed at a range of users, and including specifically the wider public,
- high-level political support to the negotiations process.

A review of these various options should be undertaken in consultation with the other organisations active in the region to identify priority activities. These activities should provide

added value, be practically feasible within OSCE's resources and should make use of OSCE's comparative advantage in the political sphere and in strengthening civil society.

Rapporteur's Report of the Plenary Session

Sorin Tanasescu, Counsellor, Romanian Permanent Mission to the OSCE

Participants in the Seminar met on 4th of July in plenary session and discussed the "Development of an OSCE Strategy and elaboration on operational steps on environment and security".

In the spirit of consensus that guides the OSCE proceedings, participants brought in their interventions arguments in supporting the idea of such a strategy. The strategy was considered not as a goal by itself but a tool to enhance the efforts aiming at assuring increased co-operation and security in OSCE region.

The keynote speaker and each lead-speaker presented specific arguments supporting the idea that time has come to increase OSCE capacity to deal with environmental aspects of security. OSCE should have the capacity to prevent potential conflicts or tensions between States having environmental causes. OSCE should also to increase its capability to react promptly when crises having environmental roots come up.

At the end of the debate five ideas and six recommendations could be considered:

1. OSCE participating States have a special situation and advantage compared to the States in other regions and continents. Due to UN-ECE's constant efforts a coherent system of international conventions addressing specific issues of the environmental protection and co-operation has been developed in the last two decades. This unique and comprehensive legal framework is a response to environmental challenges and offers a tool to promote conflict prevention and settlement of disputes in trans-boundary environmental issues.

Recommendation: OSCE, through its competent structures (OCEEA and CPC) in the headquarters, should strengthen the dialogue and co-operation with UN-ECE. A structured and continuous discussion could be established on themes like status of ratification/accession/implementation of various conventions; problems appeared in the implementation of a convention in specific regions, etc.

2. Human resources and their management are crucial to the action of OSCE in all economic, social and environmental aspects of security. OSCE participating States decided in 1999 to establish REACT (Rapid Expert Assistance and Co-operation Teams) as a "tool which assures the OSCE ability to address problems before they become crises and to deploy quickly an operation when needed". The first three month of REACT implementation offer us reasons for optimism.

Recommendation: In accordance with the staffing matrix developed by the OSCE Secretariat, economic and environmental affairs is among the fields of expertise followed by REACT. OSCE participating States should be encouraged to propose as seconded personnel experts on environmental matters. On this basis, a separate group of highly recognised experts with competence for the relation environment-security could be established.

3. Coherence of OSCE activities in the realm of security and environment is a prerequisite for the success of the organisation in addressing this relationship. These activities are complex and include: information on environmental issues; dialogue and consultation; bringing issues to the attention of the Permanent Council; support for participating States to implementing relevant international conventions; and peaceful settlement of disputes and regional co-operation.

A Code of Conduct encompassing all these areas has been suggested as an adequate tool to ensure coherence and continuity of OSCE activities and to build partnership.

Recommendation: participating States should further explore and discuss the opportunity to adopt a Code of Conduct for OSCE activities in the realm of environment and security. This issue should be included on the agenda of the ongoing debate on the economic and environmental dimension.

4. OSCE has an important role to play in awareness raising, early warning and as a catalyst in the economic and environmental areas. Its field missions are instrumental in this respect due to their direct contact with the day to day reality in the host country. By periodic reports they have the possibility to identify early stages of sensitive economic and environmental problems, thus preventing conflicts and tensions that might appear.

Recommendations: 1. The capacity of all OSCE field presences to analyse, facilitate dialogue and present periodic reports on environmental aspects of security should be enhanced. Reports could become a starting point for preventive action. In post conflict areas, reports should highlight the economic and environmental damages and necessary actions to be taken in the recovery process. The active presence in each OSCE field mission of an officer dealing with economic and environmental issue is highly recommended. Adequate allocation of resources is also necessary.

2. In following-up early warning with early action, OSCE missions should develop adequate measures to address these environmental security threats. Missions should be given capacity to initiate and conduct small programs in the environmental field that could function as "door openers". At the same time, they should be on the look out for local and international partners who would eventually take over and further develop these projects.

5. Our Portuguese colleague announced us about the theme of the next Economic Forum, devoted to "The co-operation for the sustainable use and protection of quality of water in the OSCE context". This is a good opportunity for OSCE to focus its attention on environmental issues within the ongoing debate on the economic and environmental dimension. The announcement confirms not only the timeliness of our seminar but also one of the lessons learned from Professor Vlachos: there is a need for hydro-diplomacy in OSCE region.

Recommendation: Participants in this seminar should use the momentum created by our debates in the last two days to increase awareness of participating States, OSCE Institutions and field missions about the relationship between environment and security, in the entire process of the tenth Economic Forum.

General Debate Introductory Statements "Rapid Expert Assistance and Co-operation Team (REACT)"

Barrie Meyers, Senior Adviser to the Director of Human Resources on REACT, OSCE Secretariat

The core objective of the REACT initiative adopted by OSCE heads of State and Government at the November 1999 Istanbul summit was set out succinctly in the Charter for European Security. Above all, the Charter states, the initiative should result in:

"A capacity within the participating States and the OSCE to set up Rapid Expert Assistance and Co-operation Teams" that will give the States and Organisation "the ability to address problems before they become crises and to deploy quickly the civilian component of a peacekeeping operation when needed".

In January 2000, a task force was established in the Secretariat to develop a programme for making the REACT initiative fully operational. It immediately undertook consultations with the participating States, as well as in the Secretariat, with field missions, and OSCE Institutions. Major International partners, including the United Nations Secretariat and UNHCR, the European Union and European Commission, the Council of Europe and the International Committee for the Red Cross, were also brought into the dialogue. These consultations were aimed at developing the parameters of the REACT programme.

Based on the information acquired in the consultation process, and drawing on the experience of, and lessons learned by, the OSCE itself and its partner organisations, the REACT Task Force concluded that three factors could be brought to bear in realising the objectives articulated in the charter for European Security:

- Standards based on precisely defined qualifications for the work carried out in OSCE field activities that could be applied to better focus the recruitment and selection process;
- Efficient management of the documentation used in the recruitment and selection process that could help overcome impediments to rapid selection of personnel for field assignments; and
- Pre-selection/pre-deployment training that could ensure that those selected would be operationally prepared to carry out their duties upon arrival in the field.

The concept for making REACT operational has been based on these three pillars. Documents designed to assist participating States and the Organisation in the process of recruitment and selection of international seconded staff for OSCE field activities were developed. These include a staffing matrix, which is based on an analysis of work done in existing OSCE field activities which divides that work into twelve fields of expertise at four levels of functional responsibility. These fields are: Human Rights; Rule of Law; Democratisation; Elections; Press and Public Information; Media Development; Political Affairs; Administration and Support; General Staff/Monitoring Functions; Military Affairs; Civilian Police and last, but not least, Economic and Environmental Affairs.

The matrix – and accompanying descriptions of the various kinds of work and the minimum qualifications required to do it – codify the standards against which recruitment and selection of candidates for OSCE field assignments can be carried out. It enables States and the Organisation to evaluate precisely the qualifications of candidates by making clear distinctions in the kind of work to be performed. The same kinds of distinctions can be drawn with regard to the professional skills and education or training required in each speciality for satisfactory job performance at each level of professional competence.

In addition, the matrix and its associated materials are also the basis for a standardised combined application/*curriculum vitae* form. This document captures candidate information in a format that can be easily moved into an electronic environment, thereby providing the means for overcoming a major impediment to rapid identification, selection and deployment of qualified candidates. That impediment is the time-consuming, labour intensive manual processes that were used in the past for handling candidate documentation.

Another aspect of the REACT concept designed to support efficient management of documentation is the web-based extranet which links geographically disbursed elements involved in the recruitment and selection process. These include participating States, the Secretariat and field missions. In addition, because of the system's web-based features, vacancy notices and the formatted application/*curriculum vitae* form are now posted on the OSCE web site and candidates are able to complete the form online and submit it directly, via the internet, to their national authorities responsible for recruitment.

The final pillar of the REACT concept is that of pre-selection/pre-deployment training. A set of generic pre-mission training standards were developed that can be used by participating States and cover the skills and knowledge that those assigned to OSCE field activities will need in order to be operationally prepared and effective.

Implementation of the REACT programme commenced on Monday 2nd April 2001 with the posting of new Vacancy Notices for seconded positions on the OSCE Web site. After 13 weeks we are now in a position where eight participating States have developed their own national recruitment web sites and 21 are receiving applications via the OSCE web site. In the month of May, 118,000 individual visitors entered the OSCE web site and over 300 applications were received by the 21 participating States accepting applications over the OSCE system. This figure rose to 350 in June.

As part of the implementation process, delegations have been asked to provide numbers of personnel they would be willing to propose in response to a REACT requirement. Such resources are being proposed in accordance to the twelve fields of expertise and four levels of professional competence delineated in the Staffing Matrix and cover three deployment response times – within two weeks, within four weeks and within eight weeks of issuance of a vacancy notice. The responses give an indication to the Secretariat of the apparent availability of REACT resources.

Realising the objectives set out in Istanbul poses a formidable, complex challenge to the Organization as well as the Secretariat. Fully implementing the REACT programme will take time and effort and the system will only be as good as the support and participation it receives from all the parties involved. Additional work will need to be done but with the system's full functionality being available to all participating States, field missions and Secretariat staff, the Organisation has at its disposal a powerful device for realising the objectives set out in the Charter for European Security. It is a device that takes full advantage of sound business practices and modern information technology alike.

General Debate Introductory Statements "OSCE Activities in Enhancing Co-operation and Early Warning"

João Sabido Costa, 1st Secretary, Political Section, Embassy of Portugal

Mr./s Chair, Ladies and Gentlemen, I would like to thank the organisers for the kind invitation extended to Portugal to participate in this seminar. I shall focus my intervention on a few general ideas regarding enhancement of co-operation and early warning in the OSCE Economic and Environmental Dimension (EED).

Although the OSCE is not an economic organisation, it is concerned, as a part of its comprehensive approach to security, with the economic and environmental issues and their impact on peace, prosperity and stability. Economic and environmental issues are often at the forefront of conflicts and we believe that by discussing and analysing these matters, the OSCE can generate greater awareness as to what the crucial conflict points are and needs to be done in attempts to resolve them.

The Lisbon Document of 1996 defines the general mandate of OSCE Economic and Environmental Dimension: *and I quote* "the OSCE should focus on identifying the risks to security arising from economic, social and environmental problems, discussing their causes and potential consequences, and draw the attention of relevant international institutions to the need to take appropriate measures to alleviate the difficulties stemming from those risks", *unquote*. In other words, the OSCE has an important role to play in awareness raising, early warning and as a catalyst in the economic and environmental areas.

In this connection, OSCE field missions play an instrumental role. As a matter of fact they allow the Organization to be in constant touch with the day to day reality and to report at an early stage on sensitive economic and environmental aspects. OSCE missions therefore contribute to a better understanding of the problems and to prevent conflicts and disputes which might erupt. We are convinced that this role of OSCE missions will continue to be enhanced as the REACT program fosters a better identification and selection of national experts in the EED field.

On the other hand, we believe that the EED is an area where the EU and the OSCE can co-operate closely, in the light of the Platform for Co-operative Security, adopted in the Istanbul Summit, hence fostering synergies and creating added value.

We also consider that civil society has an active role to play in EED related issues as enshrined in the Aarhus Convention on Access to Information Public Participation in Decision-making and Access to Justice in Environmental matters. In this sense, the OSCE should continue to promote awareness on this Convention.

Against this background, we are confident that the OSCE Participating States can help contribute to the reduction of the detrimental effects on the environment and on natural resources by enhancing co-operation for technology transfer, dissemination of good environmental practices and early warning of environmental degradation effects. All this through information sharing on monitoring of environmental variables.

These aspects I have just shared with you, will be reflected in the general approach we intend to follow during next year's OSCE Economic and Environmental Forum through the theme of "The Co-operation for the sustainable use and the protection of quality of water in the OSCE context". We will aim at a horizontal issue of direct concern for all OSCE Participating States, which will thus be able to exchange ideas and perspectives on such an important aspect of the XXI Century.

General Debate Introductory Statements "The Value Added of an Environmental Code of Conduct"

Josef Aregger, Deputy Head of Delegation, Permanent Delegation of Switzerland to the OSCE

The OSCE and its Participating States have subscribed to a whole number of rules and commitments which not only are substantive norms but which also have to do with the way the Participating States should be dealing with each other or with the way they are dealing with their own citizens.

Environmental issues might be of such a character that they constitute a challenge or risk to security and stability within one participating state or between two or more such states. In such a case the question must be raised if there is or if there should be a set of rules that might serve as a behavioural guideline helping to ensure -possibly in a preventive manner- that the situation is kept under control and the issue is settled peacefully. It was during the 7th OSCE Economic Forum in Prague that the idea of a Code of conduct was for the first time introduced into the debate.

My task here and today is to sketch out some ideas on what such a set of rules could look like in order to trigger a discussion. What I am going to present to you is neither complete nor does it correspond to a position of my government on this issue.

Conflicts with regard to environmental issues develop because the use of natural resources in one country often has negative impacts for another or a group of other countries. Furthermore differing perceptions as to what constitutes an acceptable level of resource utilisation lead to difficult international disputes. Also there are differing needs of parties involved which are either of economic nature or sometimes are marked by strategic interests too. These underlying conflicts of interests must be taken into account when thinking about a code of conduct.⁷

My short introduction to the following debate will deal with 6 areas that might be subject of behavioural rules to be laid down in a Code of Conduct.

1. Information on environmental issues
2. Dialogue and Consultation
3. Right to bring the issue in the Permanent Council
4. Invitation of Participating States to follow the procedures of relevant international Conventions and Instruments
5. Peaceful settlement of disputes
6. Regional co-operation

Let me start with what has been discussed during this Seminar up to now. There was a lot of talk on the Assessment of Environmental Issues posing a threat to security. In a given case it is therefore extremely important that parties being affected by the problem have a possibility to get the necessary information and hence access to the information in order to have a full picture of the situation and the dangers inherent to it. In an intrastate context the rules of the Aarhus Convention should be sufficient to guarantee enough transparency and provide for a participatory framework to allow the citizens to be informed and have an

⁷ International Environmental Conflict Resolution, the Role of the United Nations by Jon Martin Trolldalen.

influence on the decision making. More complicated it is in an international situation. One could think of a Code of Conduct provision that enables a Participating State to ask for an Inspection of the site of an environmental problem similar to what the OSCE foreseen with regard to military inspections. It should also be examined whether Participating States should commit themselves to provide the Office of the Co-ordinator for Economic and Environmental Activities with relevant information. The Code of Conduct should contain rules on how the inspection should be organised and the time limit within which it has to be granted as well as provisions on the information that has to be available.

Once the information on the table there should be a forum that allows for the necessary dialogue between the parties concerned. Again we have to distinguish between an internal affair where the rules of the respective country have to be adjusted to guarantee for participatory democracy. As to an international context the OSCE or any other relevant international Organisation according to the Platform for co-operative Security could act as facilitator for talks between the parties. The code of conduct should contain rules for such talks. We will have to examine if there is a role for the Chairmanship or for the Secretariat.

Very often there seems to be an unclear situation with regard to issues that should be discussed in the Permanent Council or in a subordinated Committee of the PC which is to be created for the purpose. It might be wishful to state in the Code of Conduct very clearly that environmental issues of concern to one or more states under the point of view of security and stability in the region are to be or can be brought to the attention of the Permanent Council.

Since the adoption of the Platform of co-operative Security at the Summit in Istanbul the OSCE is increasingly seeking synergies between its own activities and those of other Organisations. In this context it is of course logical to make use where available of rules developed in other Fora. The Code of Conduct could therefor in particular refer to rules and procedures of Conventions as appropriate. As an example I mention again for internal situation the Aarhus Convention but reference has to be made also to the numerous legally binding and non-binding instruments of UNEP and other Agencies.

OSCE has already an ideal instrument for the resolution of disputes. It is the Court of Conciliation and Arbitration of the OSCE in Geneva. This institution should be mentioned in the Code of Conduct inviting Participating States to make use of the Court in order to resolve issues of concern to one or several States. Given the special character of environmental issues it could be further argued that a case could be referred to a specialised Ombuds Institution already existing or to be created for this purpose. Taking into account the existing practise of OSCE I consider the nomination of a personal Representative of the Chairman in Office to be an instrument to be worth using.

Not only in the OSCE area but also in the world at large the unilateral and bilateral approach to issues of interest is giving way to the quest for regional solutions to problems of some magnitude. We have heard about the necessity of this approach in the course of this Seminar and we know it from the experience in South Eastern Europe and the situation in Central Asia or in the Caucasus. In all these regions the countries concerned need to find common solutions to common problems be it with regard to scarce water resources be it in the field of energy or transportation. This leads me to include in the Code of conduct some specific provisions on the sort of regional procedures desirable for environmental issues.

General Debate Introductory Statements "The Further Development of OSCE Activities in the Realm of Environment and Security"

Claus Neukirch, Research Fellow, Centre for OSCE Research (CORE)

If one is to deal with the further development of OSCE activities in the realm of environment and security, it should be remembered that the main function of the OSCE is to increase security in the area between Vancouver and Vladivostock. The threats to security stemming from environmental issues are just one factor in this wide and diverse space, albeit one of growing importance. In combination with social, economic and other issues environmental damages can lead to violent conflict. It is therefore important to address them in the framework of a concept of comprehensive security. The OSCE is not an environmental agency and should not develop an environmental capacity as such. In the realm of environment and security it should not assume functions, which could be better filled by specialised agencies and NGOs. In Kosovo, for example, a wide range of international organisations tackle the tasks of environmental rehabilitation. The OSCE should endeavour not to duplicate work being done in this area. On the other hand, in areas like Central Asia, the OSCE might find itself in the position of being the only international actor on the ground with the capacity to deal with security concerns arising from environmental issues. In these cases, it is imperative that they take action. Thus, the OSCE would be wise to concentrate on environmental issues, which pose a threat to security and stability and at the same time keep a regional focus.

In particular, the OSCE should make use of its field operations when developing its activities in the realm of environment and security. Through its Missions the OSCE can identify and monitor environmental issues which might have security implications and can fulfil a comprehensive early warning function, covering all possible threats to security. The Missions should report on environmental issues which have security implications and should inform the participating states, especially on the interaction of environmental and other security related issues. To fulfil this function more effectively, the OSCE should strive to further develop the Mission's and the Secretariat's capacity to provide more precise information on the probability that a certain environmental issue will become a security threat and to identify possible factors which would accelerate the risk that a violent conflict might emerge. Thus, it is important to emphasise strengthening the capacity of the OSCE in issuing this kind of qualified early warning.

In following up early warning with early action, the missions - with the active support of the Office of the Co-ordinator of OSCE Economic and Environmental Activities - should develop adequate measures to address these environmental security threats. Missions should be given the capability to initiate and conduct small programs in the environmental field which could function as "door-openers". At the same time, they should be on the look out for local and international partners who would eventually take over these projects. Reflecting its comprehensive concept of security, the OSCE should make a point of engaging in projects which combine its ecological and human dimension. Fostering access to information, public participation in decision-making and access to justice in environmental matters represent one important area of activity in this regard. Mediating in conflict situations related to the environment, promoting free media, fair justice and NGOs or enhancing sub-regional co-operation in the environmental field are other possible areas of activity. The OCEEA should concentrate on catalysing specific actions by key partners and should draw their attention to potential problems. In addition to these activities, lobbying and raising public consciousness on the link between environmental issues and security threats should be continued. Public awareness on international agreements on the field level and lobbying for the signing of and compliance with such agreements in the OSCE framework of negotiating bodies and seminars should be made a permanent task.

To achieve these goals, adequate resources must be made available. If the OSCE broadens its range of activities it should make sure that it also has the resources on hand to fulfil its new commitments. To hold discussions on possible projects and conferences without implementing at least some of them, could have an adversary effect. The OSCE, especially in the field, might then be regarded as a huge talk-shop which is not able to take concrete action. This is especially true for small missions where a single officer has to deal with a wide range of tasks.

In order to keep the costs of dealing with environment and security within the limits acceptable for the participating States, the OSCE should consider its security function in determining this. If it decides to take action, it should do so rapidly and effectively. If it does not envisage itself in an active role, a co-ordinating and supporting role would be another option.

Seminar's Conclusions "Next Steps for the OSCE"

Sorin Tanasescu, Counsellor, Romanian Permanent Mission to the OSCE

Your excellencies, ladies and gentlemen,

We have heard over these two days a lot of interesting contributions and meaningful discussions. Many speakers addressed the existing ties between security and environment. Causality can run in manifold ways and this is why we need a comprehensive approach. As representative of the Chair in Office, I am confident that the success of this meeting and the recommendations that have emerged will be reflected in the future activity of the OSCE and it will give a new impetus to our work in the field of environment and security. As Chair in Office, Romania will continue to bring its contribution to this aim.

I would like to thank once again the Governments of Germany and Switzerland for organising this Seminar. Let me congratulate all the participants for their dedication and contribution to the outcome of this event. Allow me to use this opportunity to thank the Office of the Co-ordinator for the effort of summarising the recommendations made at previous events and for identifying future activities. We encourage the Office to continue the process of follow-up, in co-operation with the field presences, and we call on the participating States to support its activity.

I do not intend to repeat the arguments for the need to strengthen the OSCE economic and environmental dimension. I would just like to highlight some aspects of particular relevance:

FIRST: The OSCE has a role in developing a shared and broadly based understanding on various aspects of environmental issues and in highlighting the benefits of proper policies. The OSCE should implement programs aimed at raising public awareness, developing civil society and encouraging the local and international NGO community to address environmental issues. Education and training as well as sharing best practices and emphasising success stories are essential.

The Organisation developed a series of activities related to promoting the Aarhus Convention on public participation in decision-making on environmental matters. The OSCE field presences in Central Asia and the Caucasus, in co-operation with the Office of the Co-ordinator for Economic and Environmental Activities, organised a number of workshops on this topic. From the OSCE standpoint, this Convention is an important instrument, since it embodies the Organisation's values concerning the relationship between Governments and citizens, being closely linked to our goals for developing and supporting civil society, particularly the NGOs community. Our Organisation could also assist in adapting national legislation and in developing effective mechanisms able to implement existing laws and regulations, while monitoring their effectiveness and impact at the local level.

As Chair in Office, Romania will support the OSCE to continue this kind of activity and to engage more actively in raising awareness on the existing international legislation, for its implementation and enforcement.

SECOND: The OSCE has an important role to play in helping to build up institutional capacity. Often, co-operation and implementation are negatively affected by the weakness of institutions. Their functioning could be enhanced by improving information flows and greater public participation, getting in turn a more enhanced bilateral and regional co-operation.

THIRD: Trans-border co-operation regarding environmental issues could strengthen civil society and economic development in the region. Therefore, joint initiatives regarding environmental security make up important confidence-building measures. The OSCE field

presences should strengthen their co-ordination, providing thus a framework for enhanced regional co-operation between governments, NGOs and other organisations. This holds true whether we refer to OSCE activities aimed at promoting transparency and good governance, to management of transborder water resources or hazardous wastes in Central Asia or Caucasus, to the issue of the Danube river or to the environmental rehabilitation after the wars in the Balkans. The Office of the Co-ordinator has a crucial role to play in this process. I would mention as a positive example the co-operation with and the support offered to the Regional Environmental Centres.

FOURTH: This seminar, together with previous meetings, showed that international organisations need to improve their co-ordination in order to take stock of their comparative advantages and to avoid unnecessary overlapping. The OSCE could bring its contribution in this respect by resorting to the knowledge and experience of its missions, and by assisting in channelling international assistance and resources.

Before concluding, I would like to make a last remark. Two main concepts are tailoring the OSCE activity: "*solidarity*" and "*responsibility*" and that is what this seminar was all about. For this reason, I want to reassure you once again that the Chairmanship in Office would welcome thorough discussions in the Permanent Council on particular aspects and recommendations emerging from the Berlin seminar.

Thank you very much for your attention.

Final Operational Conclusions

At the Berlin Seminar on "Strengthening the OSCE's Role in the Realm of Environment and Security" a common understanding was reached among the participants that environmental considerations should continue to be an integral part of the OSCE's comprehensive concept of security and its role as a key instrument for early warning, conflict prevention, crisis management and post-conflict rehabilitation.

This understanding is based upon the recognition that domestic and cross-border environmental problems and unsustainable natural resource management are increasingly impacting on security and stability in the OSCE region. While constituting potential sources of conflict, environmental challenges also provide opportunities for intensified co-operation for confidence-building within, between and among states and civil society.

In this spirit, the participants of the seminar concluded that the OSCE has to strengthen its capacity in dealing with environmental issues affecting security and stability in the OSCE area and thus contribute to the overall strengthening of the economic and environmental dimension.

To address environment and security challenges, the OSCE should:

- give increased attention to environmental issues and further develop its activities in this field and invite OSCE Participating States to allocate sufficient resources;
- continue its long-term contribution to environmental policy, the rule of law and promoting implementation of multilateral environmental agreements;
- build on the multitude of co-operation between the OSCE and other international and regional institutions on environmental policy and law, especially between the UN-ECE and the OSCE;
- encourage OSCE Participating States to implement international conventions and instruments that concern general principles and rules to be applied to transboundary resource management; and
- take into account relevant recommendations of previous Economic Forums.

In order to achieve these objectives, the seminar's participants invite the OSCE Chairman-in-Office and OSCE Participating States to move towards concrete action in the following areas of the OSCE framework:

1. Systematic analysis of security related environmental problems in the OSCE region
 - Improve the analytical and strategic capacity of the OSCE to systematically evaluate reports and relevant information of field missions and other OSCE institutions as well as partner organisations, and enable the OSCE to draw concrete recommendations for action;
 - Request the Co-ordinator of OSCE Economic and Environmental Activities to systematically review security related environmental problems, identify areas of environmental co-operation that provide tools for confidence building and peace promotion, and, if need arises, to draw the attention of the OSCE Permanent Council to key indicators of potential conflicts;
 - Request the Co-ordinator of OSCE Economic and Environmental Activities to present to the OSCE Permanent Council annual reviews of security related environmental issues and environmental co-operation in the OSCE region and relevant OSCE-activities. They

should build in particular on reports by field missions, OSCE-institutions and partner organisations;

- As part of annual reports by the Co-ordinator of OSCE Economic and Environmental Activities, these reviews should also be regularly discussed at the annual Economic Forum and in the continuing dialogue within the planned informal and open ended working group on economic and environmental issues.

2. Exploiting the full potential of OSCE's instruments and institutions

- Ensure closer co-operation between the Co-ordinator of OSCE Economic and Environmental Activities and OSCE institutions on security related environmental issues and transboundary environmental co-operation;
- Enhance interaction among field missions and between field missions and the OSCE Secretariat. Information provided by field missions and other OSCE institutions need to be included in comprehensive regional approaches and relevant thematic strategies;
- Request field missions to enhance the analysis of security related environmental issues and relevant activities in their reporting;
- Continue to provide the necessary training and develop guidelines for reporting and mission activities;
- Support awareness, public information and education campaigns for environmental concerns and public participation in order to strengthen civil society, promote good governance, contribute to sustainable development, and in particular promote the Aarhus Convention;
- Initiate and assist in implementing pilot projects in sensitive areas.

3. Regional and trans-border co-operation

- Identify and systematically document success stories on transboundary co-operation on environmental matters recognising the specific and unique cultural and regional differences of states and interests of civil society and their approaches to environmental problems;
- Promote the role of OSCE missions and institutions in contributing to transboundary, regional and local co-operation among governmental and non-governmental institutions;
- Improve the systematic exchange of information on transboundary subjects of resource management and environmental co-operation, e.g. on shared river basins and nature conservation;
- Include environmental concerns into the OSCE's regional approaches.

4. Co-operation with other relevant institutions

- Promote interaction between the Co-ordinator of OSCE Economic and Environmental Activities and other relevant international institutions on security related environmental problems and transboundary environmental co-operation;
- Strengthen OSCE's role in assisting the UN-ECE to foster implementation of conventions on transboundary aspects of environmental policy, such as sustainable water management, transboundary air pollution as well as helping to encourage OSCE Participating States to sign and ratify UN-ECE environmental conventions;

- Intensify co-operation between OSCE and other international organisations in order to enhance environmental co-operation as an effective tool for confidence building, conflict prevention and post conflict rehabilitation;
- Use the momentum of the upcoming World Summit for Sustainable Development in Johannesburg in 2002 to introduce the subject of confidence building through environmental co-operation into the preparatory process and to gain a profile for the OSCE in this subject area.

5. Develop a Code of Conduct and Action Plan on security related environmental issues

OSCE Panellists' Curriculum Vitae

Gila Altmann has served as the Parliamentary State Secretary for the German Federal Ministry for Environment, Nature Conservation and Nuclear Safety since October 1998. She is a member of the party "Alliance 90/The Greens" and since 1994 represents this party in the German Parliament.

Marc Baltes is presently holding the position as Acting Co-ordinator of OSCE Economic and Environmental Activities. In March 2000, Mr. Baltes was appointed Senior Economic Adviser at the OSCE Secretariat in Vienna. Mr. Baltes was born in Luxembourg in 1963 and graduated from the University of Lausanne, Switzerland, with a Master's Degree in Political Science. He has held various positions over the years and work in several international organisations representing Luxembourg which include the following: the United Nations in New York; the United Nations Conference on Trade and Development (UNCTAD) in Geneva; member of the European Electoral Observer Team in Palestine; and the Luxembourg Representation to the Western European Union (WEU).

Ambassador Jutta Stefan-Bastl since January 1995 is the Head of the Permanent Mission of Austria to the OSCE within the Austrian Ministry for Foreign Affairs in Vienna. She also served from January - December 2000 as the Chairperson of the Permanent Council of the OSCE during the Austrian Chairmanship 2000. From 1992-1994, she held the post as Ambassador of Austria to the Republic of Slovenia. Previously she served from 1991-1992 in Consul General of Austria to the Republic of Slovenia in Ljubljana, Socialist Federal Republic of Yugoslavia. Other official duty stations include working from 1985-1990 as Minister-Counsellor, Deputy Head of Mission at the Austrian Embassy to the People's Republic of China.

Joachim Bendow since August 1999, has been assigned as the Executive Secretary of the International Commission for the Protection of the Danube River (ICPDR). Prior to this appointment, from July 1997 to July 1999 he was Project Manager of the UNDP/GEF Pollution Reduction Programme. In this position he was responsible, in co-operation with the Interim Commission and the participating countries, to develop a comprehensive programme including policies, strategies and actions for the protection and the sustainable management of water resources in the Danube River Basin. In 1972 he joined the United Nations and worked as Senior Consultant and Project Manager in various international projects. These encompassed natural resource assessment, regional and land use planning, water management and the development of Environmental Action Plans in Asia, South America and Africa.

Thomas Borer-Fielding was born and raised in Basel, Switzerland. He received his law degree in 1981 and his doctorate in law (*summa cum laude*) from the University of Basel in 1985. After working in the private sector for several years, Mr. Borer-Fielding began his diplomatic career at the Swiss Federal Department of Foreign Affairs in January 1987. He was initially assigned to the Division of International Law, then worked as economic attaché at the Swiss Embassy in Lagos, Nigeria. After a training period at the Graduate Institute of International Studies in Geneva in 1989, he was posted to Bern as the deputy head of the Section of International Law. Here he dealt with a variety of matters including issues related to Swiss neutrality, and participated in dozens of bilateral and multilateral negotiations. In 1993, Dr. Borer-Fielding was assigned as legal counselor to the Embassy of Switzerland in Washington, D.C. Then, in December 1994, he returned to Bern as the Deputy Secretary General of the Department of Foreign Affairs. He was in charge of management within the Department with special emphasis on human resources, finance, telecommunications and logistics. On October 25, 1996, the Swiss Government appointed him Ambassador and head of the Task Force responsible for co-ordinating action on the part of the Swiss federal authorities in all questions pertaining to the complex issue of assets transferred to

Switzerland during and after World War II. On March 31, 1999, this Task Force was dissolved and Mr. Borer-Fielding was appointed Swiss Ambassador to Germany. He took office in Berlin on August 1, 1999.

Dr. Branko Bosnjakovic serves as a Regional Adviser on Environment with the UN Economic Commission for Europe (UNECE) in Geneva, Switzerland. His present work focuses on advising governments on environmental and water issues, often in the transboundary context, with emphasis on the geographic areas in South East Europe, Central Asia and Transcaucasia. He has over 25 years of experience in the environmental field, the last 10 being devoted to countries in transition to a market economy.

Alexander Carius is the Director of Ecologic, Centre for International and European Environmental Research in Berlin. His work focuses on issue of European and international environmental policy, particularly on the links between environmental policy and development, foreign and security policy. He acts as a consultant and adviser to government institutions and international organisations.

João Sabido Costa since 1998 has been working as 1st Secretary in the Political Section at the Embassy of Portugal in Bonn/Berlin. From 1994-1998, he served as First Secretary of the Portuguese Embassy in Beijing, China. Since he entered the Portuguese Foreign Service in 1989, he has been following the Sino-Portuguese Negotiations on the Transition of Macau. He was born in Portugal on 9 October 1960 and studied law at the Portuguese Catholic University in Lisbon.

Daniel Daianu was the Romanian national co-ordinator for the Ninth OSCE Economic Forum and is serving under the Romanian OSCE Chairmanship in Office. He is a Professor of Economics at the Academy of Economic Studies in Bucharest and Visiting Professor at the Anderson School of Management in UCLA, California. Former positions include serving as a Minister of Finance of Romania from 12/97-9/98 and as Chief Economist of the National Bank of Romania from 1992-1997. He is currently the Chairman of the Romanian Economic Society (SOREC).

Laurent Goetschel is currently a Associated Professor at the European Institute of the University of Basle and Director of the Swiss Peace Foundation in Berne. Mr. Goetschel (1965) was born in Berne (Switzerland) and studied Political Science and International Relations at the University of Geneva and the Graduate Institute of International Studies (IUHEI). Among other activities he has been a journalist with the Associated Press (1990-1992), a Visiting Scholar at the Center for European Studies of Harvard University (1995-1996) and Director of a national research programme on Swiss Foreign Policy (1997-2000).

Riccardo Lepri is the Economic and Environmental Officer of the OSCE Centre in Ashgabat. In this capacity of Italian national, he has been working on Tacis projects in the fields of economy and environment between 1995 and 1997. He also took part to missions of election monitoring in Bosnia with the OSCE between 1996 and 1998. He graduated in Political Sciences, International Relations at the University of Rome and in Conflict Analysis at the University of Louvain-la-Neuve (Belgium).

Barrie Meyers is employed within the OSCE Secretariat in Vienna as the Senior Advisor to the Director for Human Resources on the implementation of the Rapid Expert Assistance and Co-operation Teams (REACT) concept. He has worked on the programme since January 2000 when the REACT Task Force was established. His previous experience included 33 years of police service, in London and abroad, with over 17 years in senior leadership and management roles. In addition, he served as the Special Assistant to the Commissioner, United Nations International Police Task Force, in Bosnia and Herzegovina, between March 1998 and April 1999.

Susan Milner is an ecologist with experience in a diverse range of environment and development issues from grassroots project level technical evaluation to environmental

research management to international policy development and negotiations. More recently she has focussed on policy development related to the hydropolitics of transboundary water resource management. She has worked with a wide variety of organisations including the Freshwater Biological Association, the Institute of Terrestrial Ecology, Oxfam, Greenpeace International, ODA/DFID, UK FCO and the Austrian chair of the Organisation for Security and Cooperation in Europe. From 1997-2000 she was a member of the Steering Committee of the Global Water Partnership. She is currently programme leader at the Natural Resources Institute working on environmental security and the integration of environmental services into decision-making.

Claus Neukirch is political scientist and is a research fellow at the Centre for OSCE Research in Hamburg. His current focus is on OSCE Field Activities in the realm of conflict prevention and conflict management. Mr. Neukirch was a Member of the OSCE Mission to Moldova in 1996/97 and later participated in several OSCE/ODIHR Election Observation Missions.

Petro G. Pavlychenko has worked for and managed the variety of national and international environmental protection and agricultural policy projects in Ukraine. Having academia background and Ph.D. in field of soil zoology and ecology he specialises in the fields of nature protection, biodiversity, land use, biotechnology as well as privatisation issues. Current position is Executive Director of the Regional Environmental Center REC-Kyiv (established in 2000 on the basis of US-Ukraine Agreement).

John Pearson has been working for the Foreign and Commonwealth Office of the British Government since 1990. From 1992-94 he served as Second Secretary at the British Embassy in Madrid, and from 1996-99 he was Second Secretary at the British Embassy in Brasilia, where he worked on human rights, environmental issues and technical assistance projects. He is currently the Environmental Security Team Leader in the FCO's Environment Policy Department, and works mainly on radioactive waste, freshwater issues and the link between military activity and the environment.

Thomas L. Price is the Co-ordinator of OSCE Economic and Environmental Activities in Vienna. In this capacity, he has organised various regional workshops on relevant environment and security themes and has published a number of speeches and articles relating to the "economic dimension" of the OSCE. His former experience includes serving as a US diplomat for 21 years in various regions of the world.

Ivo Sieber currently holds the post of head of the International Environmental Affairs Division of the Swiss Federal Department of Foreign Affairs, which is in charge of co-ordinating and representing the Swiss positions in international environmental negotiations, with a special focus on global environmental processes. Prior to joining the Swiss Ministry of Foreign Affairs in 1988, he was active in the legal field, with a special focus on international commercial and trade law. Over the course of his work as a diplomat, he served in Zimbabwe, Thailand and at the permanent Swiss mission to the UN in New York, where he was actively involved in the preparatory process for the 1992 Rio Conference on Environment and Development (UNCED) and the work of the UN Commission on Sustainable Development (CSD). Prior to assuming his current position, namely from 1998 to 2000, he was seconded to a large Swiss industrial corporation, focusing in particular the market developments in the energy sector in Central Europe and the Middle East. Mr. Sieber holds a law degree from the University of Zurich and a masters degree in law from the University of Sydney.

George Strongylis has been working for the Directorate-General for the Environment of the European Commission since 1981. He has been working in the area of international environmental co-operation for most of this time. In particular, he participated in the negotiations for the Vienna Convention for the protection of the Ozone layer and its Montreal Protocol on behalf of the European Community. He is currently working in the area of the

enlargement of the European Union to the accession countries as well as in environmental co-operation with the NIS. He represents the European Union in the Helsinki Commission for the protection of the Baltic Sea.

Bert-Axel Szelinski works at the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety as a Head of Division. He is responsible for the relation with OECD Member States, the Co-ordination of German Participation in the work of the OECD, the UNECE and NATO-CCMS. Lawyer by training he has broad experience in environmental law and in waste, water and soil issues.

Sorin Tanasescu is a diplomat with the Permanent Mission of Romania to the OSCE in Vienna. His current responsibilities are related to the economic and environmental dimension of the OSCE. He is also Chairman of the Informal Financial Committee of the Permanent Council. As researcher of the Institute of National Economy in Bucharest (1984-1990) he was member of the team which prepared several studies on the economics of the environment. After joining the Ministry of Foreign Affairs in 1990, he was in charge with activities of international organisations dealing with economic, environment and human settlements issues. He participated in the preparatory process of UNCED and its follow-up activities. He participated also in multilateral negotiations on environmental matters.

Dr. Evan Vlachos has worked on a variety of projects nationally and abroad on aspects of water resources planning and management, urban planning, forecasting and futurism, technology assessment and environment and security. Between 1979-1984, Dr. Vlachos served as Director of the Environmental Resources Center at Colorado State University, Fort Collins, Colorado where he is also Professor of Sociology and Civil Engineering and Associate Director of the International School for Water Resources. Between 1993 and 2000 he also served as member and chairman of the Advisory Panel on Environmental and Earth S&T in NATO, Brussels focusing on problems of long term environmental impacts in Eastern Europe and Russia. Currently he is working on aspects of hydrodiplomacy in the Iberian Peninsula and the Balkans.

Dr. Ludger Volmer is the State Minister for the German Foreign Office since October 1998. He is also a member and cofounder of the party "Alliance 90/The Greens". Since 1985, he has served as a member of the German Parliament.

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Appendix