

Petersberg Process – Phase II and Athens Declaration Process

International Roundtable “Integrated Management of Shared Groundwater in Southeastern Europe”

Brdo Recommendations 2007

Brdo pri Kranju, Slovenia,
14-16 November 2007

Jointly organised by the
Slovenian Ministry of Environment and Spatial Planning
Global Water Partnership-Mediterranean

In cooperation with the German Federal Ministry for the Environment,
Nature Conservation and Nuclear Safety (BMU),
the World Bank and the and the Global Environment Facility (GEF) IW:LEARN

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Petersberg Process Phase II and Athens Declaration Process

The **Petersberg Process** is an initiative jointly coordinated by the German Government and the World Bank, launched in March 1998. Under Phase I of the process a ministerial level roundtable was held at Petersberg, Germany that resulted in the "Petersberg Declaration" which supports "water as a catalyst for cooperation." This was followed by roundtables of senior level experts on transboundary river basin and lake management (Berlin), lessons learned from management of transboundary waters in the Baltic Sea Region (Vilnius), experience in the Rhine River Basin (Bonn); and a special meeting on transboundary water management to support preparation of the World Bank Water Resources Strategy (Berlin).

Phase II of the Petersberg Process focuses on the concrete implementation of transboundary water management in catchment areas in South-Eastern Europe and is intended to merge current developments and to highlight options for future cooperation in transboundary water management (rivers, lakes and groundwater). Phase II was launched with a Roundtable in Berlin in December 2005 that brought together national representatives from the region as well as representatives of international organizations. It was confirmed that actions in Southeastern Europe are needed for:

- institutional strengthening and capacity building as a basic condition for effective cooperation on transboundary water resources management;
- improving the conditions for investments to support cooperative water resources management.

The **Athens Declaration Process**, jointly coordinated by the Government of Greece and the World Bank, was launched during the major International Conference "Sustainable Development for Lasting Peace: Shared Waters, Shared Future, Shared Knowledge", 6-7 May 2003, Athens, Greece. The Conference was an important element of the Hellenic Presidency of the European Union.

The "Athens Declaration concerning Shared Water, Shared Future and Shared Knowledge" provides a framework for a long-term process to support cooperative activities for the management of shared water resources specifically in the SEE and Mediterranean regions. The Athens Declaration Process is intended to assist SEE countries, in cooperation with relevant stakeholders, to prepare IWRM and water efficiency plans for major river basins and lakes, including a range of complementary interventions, with a coordinated mechanism to allow for exchange of information and experience between activities.

The two processes are linked in order to generate synergies and maximize the outcomes for the benefit of the SEE region, rather than duplicate activities and consequently efforts. The **joint Petersberg Process Phase II and Athens Declaration Process** has become a reference for many other processes and activities in the region. The Process would complement European Union (EU) integration processes, the Stabilisation and Association process of the European Union and other ongoing initiatives in the region. It contributes directly to the scope and objectives of the Mediterranean Component of the EU Water Initiative (MED EUWI) and the GEF Strategic Partnership for the Mediterranean Large Marine Ecosystems.

Key Steps in the Process

In addition to the two aforementioned meetings that launched the Petersberg Process and the Athens Declaration Process key events were:

- The Berlin Roundtable, "Protection and Sustainable Use of Transboundary Waters in South-Eastern Europe", Berlin, Germany 5-7 December 2005 that launched the joint Petersberg Process – Phase II and Athens Declaration Process for Southeastern Europe

- The side event “Transboundary water cooperation in Southeastern Europe: a key to development and security” that was organized on the occasion of the Sixth Ministerial Conference "Environment for Europe" in Belgrade, on 11 October 2007, co-organised with UNECE and the Hellenic Ministry for the Environment, Physical Planning and Public Works and co-sponsored by the Swedish Environmental Protection Agency.

Two more International Roundtables were organized during 2005 -2006:

- “Integrated Management of Shared Lake Basins in Southeastern Europe”, Ohrid, FYR Macedonia, 12-14 October 2006, jointly organized by GWP-Med and the Lake Ohrid Watershed Committee, financed by GEF IW:LEARN;
- “Principles for Multipurpose Water Management in the Sava River Basin”, Zagreb, Croatia, 15-17 November 2006, organized by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety with the cooperation of the International Sava River Basin Commission, the World Bank, GEW IW:LEARN and GWP-Med.

Objective

The main objective is to build capacity and share experience on Integrated Water Resources Management (IWRM), and to develop IWRM plans for the shared water bodies in SEE as key element of the development process as well as a response to the targets of the Johannesburg Summit, 2002.

Principles of the Process

- ❖ Provides a dialogue forum for identification and discussion of new ideas and challenges in transboundary water management in Southeastern Europe;
- ❖ Supports measures to obtain the political, economic and environmental benefits that may be realized through effective cooperation in the management of transboundary waters;
- ❖ Focuses on a set of key areas and conduct forums at an increasingly local level to facilitate a broader range of participants;
- ❖ The process is not directly supporting investments; however, the exchange of ideas and experience would support the creation of conditions that enable investment activities.

Priority Areas of Focus

The following are the six complementary Areas of Focus of the Process:

- ❖ Integrated waters resources management
- ❖ Transboundary groundwater management
- ❖ Multi-purpose water resources management
- ❖ Water governance, public participation and civil engagement
- ❖ Financial resource mobilization and management
- ❖ Linkage to European integration processes

Geographical Focus

The ‘countries of focus’ are Albania, Bosnia & Herzegovina, Bulgaria, Croatia, FYR Macedonia, Montenegro, Romania and Serbia. Neighbouring countries – Greece, Hungary, Moldova, Slovenia and Turkey will be included where relevant.

Partners in the Process

Activities are primarily supported by the Governments of Germany and Greece and the World Bank. GWP-Med provides technical and administrative assistance. Organizations and Institutions having experience and working in the field of TWRM, such as UNESCO, UNESCO-IHP / International Shared Aquifers Resource Management Programme (ISARM), UNESCO Chair and International Network of Water-Environment Centres for the Balkans (UNESCO Chair/INWEB), and United Nations Economic Commission for Europe (UNECE) as well as key

stakeholders from the countries of focus are collaborating partners. Synergies with active institutions, processes, initiatives and projects supported by GEF, International Financial Institutions (IFIs) and donor countries, in the field of transboundary water management at the international, regional and national level, are being developed.

GEF IW:LEARN is supporting synergy in the Petersberg Process Phase II and Athens Declaration Process, and contributions of practical experience from GEF projects working in transboundary river, lake and groundwater in the SEE region as well as elsewhere in the world.

Background material and information on the the Petersberg Process – Phase II and Athens Declaration Process, GEF IW:LEARN–Activity D2 and transboundary water resources management in Southeastern Europe, are available at the Transboundary Waters Information Exchange Network for Southeastern Europe website (www.watersee.net).

International Roundtable “Integrated Management of Shared Groundwater in Southeastern Europe”

A. Background¹

The International Roundtable “Integrated Management of Shared Groundwater in Southeastern Europe” was jointly organised by the Slovenian Ministry of Environment and Spatial Planning and the Global Water Partnership-Mediterranean, in cooperation with the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU), the World Bank and the Global Environment Facility (GEF) IW:LEARN in Brdo pri Kranju, 14-16 November 2007. GEF IW:LEARN co-sponsored the event.

The Roundtable was part of the Petersberg Process Phase II and Athens Declaration Process. It was the fourth in the series of relevant events that were organized as informal policy dialogues on transboundary water cooperation that convened governmental officials, stakeholders, experts and decision-makers in the water sector from the Southeastern Europe (SEE) providing a forum for exchanging experience and stimulating cooperation in this field.

Groundwater: A critical resource of strategic importance for sustainable social and economic development, improved welfare and public health

In addition to its importance for security and stability, water resources management is one of the key factors for sustainable economic development worldwide. Being an important source of freshwater, groundwater resources cover about 70 per cent of the total water consumption in most countries of SEE region. Drinking water supply, irrigated agriculture and, in some cases, hydro-electric power generation (using discharging of the aquifers, taking advantage of the large altitude drops within the karstic system) are among the main uses. Other smaller uses include industry, livestock production, and tourism / recreation. Growing pressures have resulted in many cases in qualitative deterioration of water, decline of water table, salt water intrusion and subsequently in degradation of ecosystems etc.

Groundwater: a shared resource

Geological formations have no regard to national boundaries. Aquifers are to a large extent shared between two or more countries. The recent UNECE Assessment of transboundary water resources (“Our waters: joining hands across borders” – First Assessment of Transboundary Rivers, Lakes and Groundwater, October 2007) identifies 51 transboundary aquifers in SEE. Other assessments raise this number to more than 60. These provide a share of total water usage in their respective area that ranges from 15 to 90 or even 100 per cent in some of the Dinaric karstic aquifers of Albania, Bosnia and Herzegovina, Croatia and Montenegro.

Transboundary cooperation for the management of shared water bodies including groundwater is important

With 90% of the territory of the countries of SEE falling within shared water basins, cooperation towards integrated transboundary water resources management is a key area for the future development of the region.

Management at national level is, in many cases, not sustainable due to gaps in the legal frameworks of the countries and ineffective application of management measures. Poor knowledge of the characteristics of the aquifer systems and inadequate monitoring exacerbate the situation. Issues are becoming more complex because of the differences in socio-economic conditions, geography and institutions among the countries in the SEE region.

¹ Rapporteur: Stephen F. Lintner, World Bank

While visible progress has been obtained in the cooperation for the management of shared surface waters in many parts of the region, there is lack of transboundary cooperation and relevant arrangements for the management of shared aquifers. This presents an obstacle for the stability and economic development of SEE countries. Solutions need be specific for each case taking into account, among others, of the nature of the aquifer and severity of pressures exerted, the size and importance of the shared resources and the number of the countries involved.

B. Overview

Objectives

Promotion of cooperation for sustainable utilization, management and protection of shared groundwater resources in the SEE region was the main objective of the International Roundtable. Within this framework, the Roundtable aimed at the:

- Identification of the most significant problems, pressing needs and challenges for the SEE region relating to groundwater resources management;
- Promotion of recognition and awareness of the socio-economic and environmental values of shared aquifers as well as the need for integrating shared groundwater management with river basin management;
- Exchange of information and communication of good practices from outside and within the region;
- Identification of key areas of action where the involvement of Petersberg Process Phase II and Athens Declaration Process, would result in synergies with on-going and planned activities in the SEE region;
- Identification of key steps needed to advance a strategy and action programme for the management of shared groundwater in the SEE region;
- Facilitation of the establishment of a peer network between persons working in the shared groundwater management area.

Priority Areas of Focus - Themes for discussion

It is acknowledged that

- i) Groundwater is a “hidden” resource with special characteristics, interlinked with the other components of the physically integrated land - surface water – groundwater – coastal/marine system. This fact has to be taken into account by the related policies, laws and management schemes and instruments at local, national and regional level;
- ii) Integration of policies for groundwater management with policies for economic development and consequently land use management, including designation and functioning of national parks and protected areas, is an imperative for sustainable development;
- iii) Cooperation between the countries of the region and the institutional arrangements at national and transboundary level is crucial for the sound management of groundwater resources;
- iv) Adaptation to climate change needs to be part of the overall approaches to water resources management.

Based on these the Roundtable was built around three themes:

- *Resources assessment and linkages to freshwater and marine systems management* focusing on: monitoring quality and quantity of shared groundwater resources; assessment of risks; information sharing, hydrogeological modelling; etc.

- *Land use and economic development*

focusing on: sectoral policies; agriculture and industrial development that affect groundwater; water pricing; ecosystem support; cost and benefits of improved management; etc.

- *Institutional arrangements*

focusing on: bilateral and regional mechanisms of cooperation; expansion of responsibilities of joint commissions; capacity building and knowledge sharing; legal agreements; role of various stakeholders (private sector; civil society and academia; etc).

C. Understanding key Challenges - Identifying Opportunities

Important Issues

Progress has occurred in the SEE region in understanding of groundwater resources. Nevertheless, a lot need to be done both in further understanding the functioning of shared groundwater systems and towards sustainable management using widely the knowledge we have about them. In the effort to address this overall challenge, the identification of the appropriate ways to tackle the most important issues presents a challenge by itself. These appropriate ways include:

- Recognition of the complex nature of groundwater aquifers and their spatial difference within the framework of traditional upstream/downstream relationships among users as well as countries regarding surface water;
- Adoption of a holistic approach to groundwater management (i) at the scientific level to understand and explain the nature and importance of the interactions in the land - surface water – groundwater – coastal/marine system, and (ii) at the resource management level in order to appropriately integrate related policies;
- Distinguishing between the level and nature of information that is needed for the scientific explanation of the related phenomena on the one hand and for the management decisions on the other, allowing for the appropriate, balanced and efficient use of human and financial resources;
- Supporting the use of a proactive approach, identifying the relevant issues, rather than waiting for problems to occur;
- Making use and building upon the existing -internationally significant- expertise in the SEE region on karstic aquifers for the enhancement of cooperation between the countries;

Special Management Concerns

Against this background:

- Groundwater requires a holistic approach and integration with land use management;
- It should be taken into account that the confining contamination of groundwater means increase of input to vulnerability and risks for such a water body, which in principle is greater than in surface waters;
- Integration with other sectoral policies (e.g. agriculture, energy, transport etc.) is essential to address the emerging issue of managing the complex, environmentally sensitive and economically important linkages between groundwater and the coastal/marine environment;
- The use of assessments of risks and benefits in decision making may be an approach that will allow for better management;
- Karstic Aquifers is of special importance in the SEE region because of their unique characteristics and the fact that are geographically spread in a large part of the Balkan Peninsula. Nevertheless, there is a need to adopt a balanced focus between Karstic and Alluvial Aquifers in study and management.

Recognition, Awareness, Integration

It was recognized that the need for groundwater management has become a major, though not entirely visible, issue at the regional, national and local level in SEE. Nevertheless, there is a need for increased political and public awareness of the critical role of groundwater resources in environmental, social and economic welfare. There is also a need for expanded integration of current knowledge of groundwater into overall planning and management of water resources at the National and Regional level.

Knowledge of Management Issues

It was made evident that resource management concepts are understood by the community of groundwater specialists in SEE region and some water resources specialists. The issue is particularly recognized among the scientific community in the Karstic Areas where extensive on-going investigations, including Dye Tracing Studies, are being conducted. These concepts are recognized also by basin management organizations, even if these are not included specifically in river basin management plans. Appropriate steps need to be taken for the enhancement of knowledge on the groundwater management issues at all levels. Enhanced communication and cross-fertilization between the scientific community, land and water managers as well as the policy makers, ministries and local authorities may be beneficial.

Legal Frameworks

Legal frameworks are under revision or have been revised in the majority of the countries of the SEE region. The EU Acquis and in particular the EU WFD has become the driving force in the Region in terms of water resources management, not only for the EU Member States but also for the Accession Countries and Candidates for Accession Countries. Moving forward, institutional capacities should be strengthened in order to successfully implement it and translate the relevant legislation into sound management practices.

Basis for Cooperation

The until now cooperation between some of the countries of the region for the management of shared water resources has led or will soon lead to the signing of agreements and the development of regional and bilateral institutional arrangements, in some cases in the form of joint management bodies. These arrangements (that primarily focus on shared surface waters) can be used as a Basis for Cooperation also for the management of shared aquifers. The expansion of their competences should be examined on an ad hoc basis. Especially in the case of joint management bodies, the creation of a working group for shared groundwater resources management should be considered. The existing informal mechanisms of cooperation that are used in parallel to the formal ones have been found to be efficient in many cases. Their flexibility should be used in finding the appropriate solutions. In cases that cooperation for the management of shared water resources is less advanced, consultative methods may be used to gradually enhance informal cooperation to become formal. Cooperation at technical/scientific level has been acknowledged as the first step towards cooperation for the management of shared aquifers. This need to be strengthened where it is in place and be initiated where it is absent.

Frameworks that Facilitate and Promote Transboundary Cooperation are Already in Place – Towards the Establishment of a “Vision” for the Management of Shared Water Bodies

The UNECE Water Convention has been signed and ratified by several of the SEE countries. This along with the EU Acquis, provide the needed legal framework and create the necessary synergies for the enhancement of transboundary cooperation. Furthermore, “soft” International Initiatives such as the Petersberg Phase II / Athens Declaration Process offer elements for building capacities and facilitating the creation of the necessary common “Vision” for the management of shared waters. Acting in synergy, these frameworks can create the enabling

environment for the enhancement of cooperation for the sustainable management of shared water bodies.

Aquifer Mapping and Assessment – An Expanding Knowledge Base

It has been acknowledged that lack of sufficient and comprehensive data or knowledge of the existing information by the policy and decision makers is a barrier to sound groundwater management in the SEE region at local, national and regional level. The work of International Institutions for the listing of Transboundary Aquifers i.e. UNECE/UNESCO Assessment Report and Hydrogeologic Mapping of Europe (in the framework of WHYMAP), are not widely known at country level beyond specialists. The boundaries of the identified transboundary aquifers are not known with accuracy and are not mapped at local scale in most cases. Similarly, potential sources of pollution, supply wells, and land uses are not included in the mapping. Efforts and resources are needed to produce data and information that will allow (i) identifying accurately shared aquifers and (ii) identifying possible transboundary effects of specific sources or activities and their nature. Pilot efforts to selectively map aquifers, for instance within the framework of scientific research projects, and to reach out to local communities would be helpful to advance cooperative management

Broad Participation

Actions need to be taken at all levels, including the sub-regional where actions should primarily be implemented. It is essential that the key actors of each shared aquifer are identified and engaged. The role of civil society and user associations is critical for the management of the groundwater resources. Its representatives should participate in the decision making at the appropriate for each case level. Capacity building on public participation could be used to enhance trust and cooperation between and within countries and stakeholders. Public Participation experiences exist within as well as outside the SEE region. “Champions” for public participation should be identified and relevant experiences and lessons learned should be disseminated.

Building on Experience

Progress in terms of development and implementation of programs for the cooperative management of surface waters (rivers and lakes) in SEE has been made in the recent years. The in-place cooperation for the Danube and Sava Rivers, as well as for Lake Ohrid, Lake Prespa and Lake Skadar, should be evaluated and replicated. The exchange of experience and lessons learned among basins may benefit and catalyze action for transboundary management of groundwater resources. Furthermore experience and lessons learned from outside the SEE region may be useful. In this respect, the proposed GEF assessment of groundwater management should provide valuable input to ongoing and proposed work.

Emerging Issues

❖ Sharing of benefits

Integrated transboundary water resources management involves both quantitative and qualitative dimensions. Most important it involves the sharing of benefits that result from the cooperative or joint management. Identifying these benefits may be a first step providing a major opportunity to facilitate cooperation at the regional, national and local level and allow parties to move beyond issues of water quantity and quality.

❖ More Effectively Using Economic Instruments

Economic instruments may be used as tools for effective management of groundwater including by providing economic incentives for conservation and environmental protection. Their careful design and adoption in order to be integrated with the national developmental and economic policies is necessary. It should be coupled with efficient monitoring and enforcement

mechanisms that would ensure that access to the natural resources is allocated fairly and efficiently among competent uses.

❖ **Managing the interlinked groundwater and coastal/marine systems**

Management of the interlinked groundwater and coastal marine environment is of paramount importance due to the complexity of the systems, their environmental sensitivity and significance as well as their importance for sustainable economic development. Against this background, sectoral policies need to be integrated within and between countries. Cooperation of the countries of the SEE region is essential towards addressing this challenge.

❖ **Adaptation to climate change**

It is widely accepted that climate change will have an effect on water resources availability in space and time. There is a need for identification of the negative and eventually of any positive implications of climate change on the hydrological variable groundwater resources as well as its implications for the integrated management of water resources. Cooperation between the countries is important in order to respond and adapt to these changes and implications.

D. Responding to Challenges – The Way Forward

Selected Actions may involve among others:

- Incorporation of surface-groundwater interactions into plans for scientific assessment and cooperative management;
- Usage of international experience and practices developed in other regions on various aspects of groundwater assessment and management, supporting actions in SEE;
- Regional processes and trust-building are often facilitated through demonstration - Countries should consider a series of Pilot Projects in identified transboundary groundwater aquifers;
- Peer Networks are critical for long-term cooperation and should be supported by workshops and joint site visits;
- The potential use of risk assessment as an element of planning and management should be examined.

Actions at sub-Regional Level

Dinaric Karst Aquifer Project

The proposed Dinaric Karst Transboundary Aquifer System (DIKTAS) Project presents an opportunity for expanded regional cooperation with the support of GEF and other international, regional and national organizations. It may build upon the existing important expertise on karstic aquifers also disseminating it among the countries of focus. Among others the initiative may enhance public awareness of the vulnerability of shared groundwater resources and provide information on anticipated effects of climate change. The existing bilateral mechanisms and international project activities in different basins of the SEE region can serve as a basis for broadening regional cooperation through the proposed project.

Sava River Basin

The representatives of the Governments of the Parties² to the Framework Agreement on the Sava River Basin took the opportunity of the International Roundtable to declare their support for the "...further development of cooperation in the field of shared groundwater in the SEE region and especially in the sustainable management of groundwater in the Sava River Basin where

² Bosnia and Herzegovina, Croatia, Serbia and Slovenia

the institutional mechanism of cooperation³ is already established...”. The support of the countries for the “expanding” of cooperation in the Sava River Basin to include groundwater management will be translated into action through the International Sava River Basin Commission. The example of the Countries – Parties to the Framework Agreement on the Sava River Basin may be replicated in other parts of the basin as well.

Joint Action

The partners in the Petersberg Process Phase II / Athens Declaration Process confirmed their commitment to work in synergy with GEF, UNESCO, UNDP, through soft and flexible action, in bringing together in joint action the Countries and key Actors in SEE to address the transboundary surface water and groundwater issues.

³ the International Sava River Basin Commission

ANNEX I

AGENDA

Day 1 – Wednesday, 14 November 2007

09.00 Registration

09.30 Welcome Address

Mr. Mitja Bricelj, State Secretary, Slovenian Ministry of Environment and Spatial Planning

09.40 Introductory Remarks

German Ministry for the Environment Nature Conservation and Nuclear Safety
World Bank
GEF
GEF IW:LEARN

10.00 Setting the stage – Is groundwater management the “forgotten child” in the Integrated Water Resources Management family?

(Conversation table dialogues - Groups of 5-6 people will discuss the framing question and will identify key roadblocks to integrating groundwater resources management. Each table will report key points made by the group. Facilitated plenary discussion will follow.)

10.00 Introductory presentation

10.15 Discussion in groups

10.45 Presentation of the outcomes of the group discussions - Discussion in plenary.

Introduction made by / Facilitator: *Mr. Ron Hoffer, World Bank*

11.45 Coffee break

Presentation of the Global Experience, Understanding the Issues in the SEE Region

Shared groundwater management - Initiatives / Experiences

12.00 Shared Groundwater Management in Southeastern Europe

Current situation, challenges, trends - Institutional, legal, socio-economic, assessment and monitoring aspects.

Mr. Jacques Ganoulis UNESCO Chair / INWEB

12.15 Experiences of shared groundwater management from Europe and Northern Africa

(Facilitated panel discussion on key topics. The panel will interact with the participants)

Case studies:

- Groundwater resources of Karavne Mountains (Slovenia, Austria), *Mr Mitja Bricelj, Slovenian Ministry of Environment and Spatial Planning and, Mr. Mihael Brenčič, Geological Survey of Slovenia*

- Groundwater resources of upper Rhine valley (Germany, France), *Mr. Thomas Gudera, Institute for the Environment, Measurements and Nature Protection, Baden-Wuerttemberg*

- Nubian Sandstone Aquifer (Chad, Egypt, Libya, Sudan), *Mr. Sameh Afifi, UNDP/RBAS Regional Water Governance Project for Arab Countries*

- IAEA/ UNDP/ GEF Mainstreaming Groundwater Considerations into Nile River Basin Management, *Mr. Andy Garner, IAEA*

Mr. Andrea Merla, UNDP Consultant will comment on issues that the panel will raise in the context of experience from South America and Middle East respectively.

Facilitator: Mr Stephen Lintner, World Bank

13.30 Field Trip

13.30 Departure from Brdo
14.45 Arrival to Planina - Visit at the entrance of Planina Cave
15.45 Arrival to Karst Research Institute in Postojna
16.00 Welcome by Dr. Tadej Slabe, Head of the Institute
16.05 Presentation: "Karstological research of groundwater resources"
17.00 Departure from Postojna
18.00 Arrival to Kranj, hotel Creina

End of Day 1

Day 2 – Thursday, 15 November 2007

Moving from Issues to Actions

09.30 Development of hydrogeological mapping in Europe as a cornerstone for WHYMAP
Mr. Wilhelm Struckmeier, German Federal Institute for Geosciences and Natural Resources

09.50 Shared Groundwater management under the UNECE Water Convention
Mr. John Chilton, British Geological Survey, UNECE Consultant

10.10 Groundwater management under the EU *acquis*. (EU Water Framework Directive and EU Groundwater Directive)
Mr. Philippe Quevauviller, European Commission

10.30 Coffee break

11.00 Topical Parallel Working Sessions

These will address issues such as assessment and monitoring, socio-economic aspects, linkages with ecosystem support, institutional and legal frameworks, capacity building and training, public participation etc.

Each of the working sessions will start with a presentation on the subject by the facilitator. The presentations will provide the framework of the discussions.

Group 1 - Resources assessment and linkages to freshwater and marine systems management
(e.g. monitoring quality and quantity of shared groundwater resources, assessment of risks, sharing of information, hydrogeological modelling etc.)
Facilitator: *Mr. Joerg Prestor, Geological Survey of Slovenia*
Rapporteur: *Mr. Tarik Kupusovic, Hydro-engineering Institute, Sarajevo, Bosnia and Herzegovina*

Group 2 - Land use and economic development.
(e.g. sectoral policies, agriculture and industrial development that affect groundwater, water pricing, ecosystem support, cost and benefits of improved management, etc.)
Facilitator: *Mr. Jaroslav Vrba, UNESCO Consultant*
Rapporteur: *Mr. Neno Kukuric, IGRAC*

Group 3 - Institutional arrangements
(e.g. bilateral and regional mechanisms of cooperation, expansion of responsibilities of joint commissions, capacity building and knowledge sharing, legal agreements, role of private sector, civil society and academia, etc.)
Facilitator: *Mr. Dejan Panovski, Ministry of Environment and Physical Planning, FYR Macedonia*
Rapporteur: *Mr. Dejan Komatina, Secretariat of International Sava River Basin Commission*

13.30 Lunch break

15.00 Plenary session

Question: What are the key steps needed to advance a strategy and action programme for the management of shared groundwater in the SEE region?

Facilitator: *Thomas Stratenwerth, German Ministry for the Environment Nature Conservation and Nuclear Safety*

Rapporteur: *Mr. Mish Hamid, GEF IW:LEARN*

16.30 Coffee break

The role of GEF in fostering groundwater management

17.00 GEF strategic priorities with regard to groundwater management in Southeastern Europe - The case of the Dinaric Karst Transboundary Aquifer

Mr. Andrea Merla, UNDP consultant

17.30 Afternoon event: Water tasting

Three glasses of water from around the world - Libyan Arab Jamahiriya, Australia and Vienna – will seat on a table waiting for a taste test. They all look identical. They all smell alike. They all originate from local rain. The big difference is, some of it fell recently and some thousands of years ago. So how will the water taste?

A water-tasting serves to demonstrate the use of certain isotopic investigations to determine the age of water, information often needed by water resource managers. Knowing the age of water reveals how long it has been underground. The younger it is the more communities can pump with the confidence that rainfall is replenishing their water supply. And that constitutes a basic element of groundwater management.

18.30 Dinner

End of Day 2

Day 3 – Friday, 16 November 2007

09.30 Presentation of the summary reports of the working groups (plenary) - Discussion

10.45 Break

High-level segment

11.15 – 12.45 Conclusions of the Roundtable

Chaired by Mr. Janez Podobnik, Slovenian Minister of Environment and Spatial Planning

11.15 Presentation of the conclusions of the International Roundtable on Integrated Management of Shared Groundwater in the Southeastern Europe – Next steps

Mr. Fritz Holzwarth, German Ministry for the Environment Nature Conservation and Nuclear Safety

Mr. Stephen Lintner, World Bank

Mr. Michael Scoullios, Global Water Partnership - Mediterranean

12.00 Conclusive remarks - Joint Statement of representatives of Bosnia and Herzegovina, Croatia, Serbia and Slovenia, parties of the Sava Framework Agreement for the management of the shared groundwater resources in the Sava River Basin

- *Mr. Janez Podobnik, Minister, Ministry of the Environment and Spatial Planning, Slovenia*

- *Mr. Sasa Dragin, Minister, Ministry of Environmental Protection, Serbia*

- *Ms. Ruzica Drmic, Assistant Minister, Ministry of Agriculture, Forestry and Water Management, Croatia*

- *Mr. Nikola Ruzinski, State Secretary, Ministry of Environmental Protection Physical Planning and Construction, Croatia*

- *Mr. Senad Oprasic, Head of environmental protection department, Ministry of Foreign Trade and Economic Relations, Bosnia & Herzegovina*

Joint Statement presented by *Mr. Dejan Komatina, Secretary, Secretariat of International Sava River Basin Commission*

End of the International Roundtable

13.00 Lunch for the participants of the Roundtable in Brdo Castel

ANNEX II

**International Roundtable on
“Integrated Management of Shared Groundwater in Southeastern Europe”**

Brdo pri Kranju, Slovenia, 14-16 November 2007

List of Participants

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ANNEX III

**International Roundtable on
“Integrated Management of Shared Groundwater in Southeastern Europe“
Slovenia, 14-16 November 2007**

Joint Statement

of the representatives of the Governments of the Parties to the Framework Agreement on the Sava River Basin

- *Mr. Janez Podobnik, Minister, Ministry of the Environment and Spatial Planning, Slovenia*
- *Mr. Sasa Dragin, Minister, Ministry of Environmental Protection, Serbia*
- *Ms. Ruzica Drmic, Assistant Minister, Ministry of Agriculture, Forestry and Water Management, Croatia*
- *Mr. Nikola Ruzinski, State Secretary, Ministry of Environmental Protection Physical Planning and Construction, Croatia*
- *Mr. Senad Oprasic, Head of environmental protection department, Ministry of Foreign Trade and Economic Relations, Bosnia & Herzegovina*

The Joint Statement was presented by *Mr. Dejan Komatina, Secretary, Secretariat of International Sava River Basin Commission*

Recognizing the importance of protection of groundwater for human lives, social welfare, and economic prosperity, as well as for preservation of environmental values,

We, the representatives of the Governments of the Parties to the Framework Agreement on the Sava River Basin,

In the frame of the International Roundtable on „Integrated Management of Shared Groundwater in Southeastern Europe“ and following the concept of joint action in the field of shared groundwaters in Southeastern Europe, as well as principles of cooperation in the region stipulated in the Framework Agreement on the Sava River Basin, agreed in this context as follows:

1. The Parties support further development of cooperation in the field of shared groundwaters in Southeastern Europe, especially sustainable management of groundwater in the Sava River Basin where the institutional mechanism of cooperation is already established and being progressively improved.
2. Therefore, the Parties further encourage all efforts and actions aimed to the implementation of development oriented projects and to enhance the implementation of the principles of the Water Framework Directive, taking into account measures for flood protection, mitigation of droughts and water scarcity, and use of renewable energy.
3. Comprehensive scientific research is welcomed to establish a set of hydrogeological, bio-chemical and socio-economic criteria for sustainable management of groundwater resources in the Sava River Basin and to present these criteria as guidelines to practitioners for their effective application, taking into account the importance of karst groundwater bodies.

4. The Parties reaffirm advantages of taking coordinated steps to implement the joint actions under the umbrella of the International Sava River Basin Commission.
5. Appreciating the efforts and work undertaken in the framework of the Petersberg Process Phase II/Athens Declaration Process, the Parties agreed to explore ways and means for further promoting cooperation in the field of shared groundwater management.