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## ECONOMIC AND SOCIAL COMMISSION FOR WESTERN ASIA

#### **WORKSHOP ON**

FORMULATION OF A POLICY FRAMEWORK TO SUPPORT THE ESTABLISHMENT OF MECHANISMS FOR INTER-STATE COOPERATION ON SHARED GROUNDWATER AQUIFERS IN THE MEDITERRANEAN REGION BEIRUT, 24-25 APRIL 2006

#### **Summary**

Within the context of the interregional project on "Capacity building for the sustainable utilization, management and protection of internationally shared groundwater resources in the Mediterranean region", ESCWA organized the second activity within the framework of phase I of the project, which is intended to strengthen the capacity of water management institutions in the Mediterranean region to enable them to implement sustainable forms of utilization, management and protection of internationally shared groundwater aquifers.

In this respect, a workshop on formulation of a policy framework to support the establishment of mechanisms for inter-state cooperation on shared aquifers in the Mediterranean region was held in Beirut from 24 to 25 April 2006. The major aim of the meeting was to formulate a draft policy framework for supporting the establishment of mechanisms for inter-State cooperation on shared aquifers. Nineteen national, regional, and international representatives from the MEDA countries (Albania, Croatia, Jordan, Greece, Italy, Lebanon, Morocco and Palestine) and regional agencies including the United Nations Economic Commission for Africa (ECA), the United Nations Educational, Scientific and Cultural Organization (UNESCO), the Federal Institute for Geosciences and Natural Resources (BGR), and the Food and Agriculture Organization (FAO) attended the meeting.

The workshop provided an opportunity for the participants to share their experience and knowledge on the relevant and applicable policies for the management of shared groundwater resources within the Mediterranean region. The workshop also focused on issues, conflicts, potential disputes, that would assist in selecting criteria, tools, etc. which are most appropriate for alleviating region-specific problems.

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#### INTRODUCTION

- 1. An inter-regional project was formulated on "Capacity building for the sustainable utilization, management and protection of internationally shared groundwater resources in the Mediterranean region" aiming at strengthening the capacity of water management institutions in the Mediterranean region to enable them to implement sustainable forms of utilization, management and protection of internationally shared groundwater resources. ESCWA, ECE, and ECA have forged this inter-regional Mediterranean initiative to address these prevailing issues, which provide a useful mechanism for funding and implementation of joint projects in the MEDA region;
- 2. To support the implementation of the project activities, the second workshop on "Formulation of a Policy Framework to Support the Establishment of Mechanisms for Inter-State Cooperation on Shared Groundwater Aquifers in the Mediterranean Region" was convened in Beirut during the period 24-25 April 2006 to address the first objective of the project aiming to "Increase awareness and application by Euro-Mediterranean Partnership (MEDA) countries of the international norms in the sustainable management of shared aquifers".
- 3. Based on the findings of a previous study (Analysis of Existing Instruments and development of Guidelines for Shared Groundwater Resources Management in the Mediterranean Region) and the outcomes of the first meeting that was held in December 2005, a report suggesting a draft policy framework to support the establishment of mechanisms for inter-state cooperation on shared groundwater aquifers, was prepared with the aim of extracting guidelines for the development of sound management instruments for shared, renewable and non-renewable aquifers under a variety of scenarios and hypotheses. The technical, socio-economical, legal, institutional and environmental components of extracted guidelines were examined and risks associated with the implementation of the extracted guidelines in the region were identified.

#### I. CONCLUSIONS AND RECOMMENDATIONS

The Participants in the workshop, from ECA, ESCWA, UNESCO, FAO, BGR, INWEB-ISARM/MED and MEDA countries (Jordan, Lebanon, Morocco, and Palestine), together with the representatives from Albania, Croatia and Greece;

#### Reviewed:

- The opportunities for the formulation of a policy framework for inter-state cooperation on shared groundwater aquifers;
- The risks and uncertainties, at regional and national level, related to the formulation and implementation of the policy framework; and
- The way forward towards the establishment of a regional cooperative forum for policy, planning and management of shared aquifers in the MEDA region.

#### Recognized:

- The requirements and expected project outcomes under a successive confidence and policy formulation process focused on awareness, exchange of information and the enabling, institutional and human resources capacity for the sustainable utilization, management and protection of internationally shared groundwater in the MEDA region; and
- The need to define capacity requirements under a MEDA vision defining the goals on shared

groundwater management, the approach and outcome of the policy framework related to required and adopted action, with the relevant institutional mechanisms at regional and national level. ESCWA, ECA and UNESCO, together with the MEDA countries and other participants provided the following conclusions and recommendations regarding the formulation of the policy framework:

#### A. CONCLUSIONS

4.

a. On the issue of opportunities:

In defining and establishing a regional mechanism for inter-State cooperation, it is necessary to:

i. Initially adopt a "low ambition" approach towards inter-state cooperation;

ii. Jointly identify and understand issues related to shared aquifers including:

- A common draft risk management policy for shared groundwater management in the MEDA region;

- A joint on-line communication system on shared aquifer management;

- A joint data base, including knowledge mapping on shared aquifer systems;
- A common baseline assessment together with monitoring criteria and schedules on shared groundwater management;
- A common regional policy and technical guidance on a number of key scientific, socio-economic, environmental and legal and institutional issues;

iii. Focus on mutual benefits from implementing the proposed policy framework;

- iv. Take stock of existing fora for the implementation of such mechanism and build on existing experience on inter-state and sub-regional cooperation among some MEDA and EU Countries;
- v. Capitalize on the interest of partners and stakeholders in implementing the policy framework either as observers or advisors;
- vi. Capitalize also on the interest of donors and regional/international and UN agencies in supporting the sustainable management of shared groundwater resources;
- vii. Involve not only politicians and decision makers but also scientists and civil society groups since the implementation of a policy framework is very much linked together at different levels, such as political, socio-economic, environmental and technological;

viii. Select and enable regional focal points;

ix. Establish strategic partnerships with development and cooperation partners:

#### b. On the issue of risks and uncertainties:

The proposed policy framework should be adapted to the realities of water sectors in MEDA countries and regional specificities, particularly cultural, socio-economical, and geo-political conditions that are likely to enhance or jeopardize the implementation of such framework. The following issues were identified as posing risks and uncertainties in implementing the proposed policy framework:

- i. Possible climate change and climate variations, such as droughts and floods;
- ii. Quantitative and qualitative degradation of groundwater resources;
- iii. Prevalence of political and economic instabilities in the region;
- iv. Limited inclusiveness with low level of country participation;
- v. Lack of political commitment and/or good governance:
- vi. Inadequate technical capacity particularly in relation to monitoring networks;
- vii. Inadequate financial resources and water-related investment;

- viii. Inadequate local water governance;
  - ix. Lack of proper and effective institutional set up;
  - x. Inadequate and/or outdated legislations;
- xi. Limited acceptance of principles of customary international law e.g. sharing of information, and equitable use of the common groundwater resources;
- xii. Weak enforcement capacities at both national and regional levels;
- xiii. Lack of sensitivity to aquifer conditions and environmental issues;
- xiv. Lack of sensitivity to impacts of the agricultural trade between EU and MEDA countries on groundwater-irrigated products;
- xv. Deviating objectives of established agricultural and food security policies at the domestic level;
- xvi. Sensitivity of the issue of culturally-rooted concept of water as a non-commercial commodity and resistance to water pricing;
- xvii. Lack of the concept of sharing external costs like environmental degradation from use of shared groundwater aquifer resources;
- xviii. Lack of harmony and/or trust between riparians.

## B. RECOMMENDATIONS

5. The participants in the workshop recommended to jointly develop realistic and regionally accepted policy framework to support the establishment of mechanisms for inter-State cooperation on shared groundwater aquifers as follows:

## Recommendations to benefit from identified opportunities

- Focus on capacity building, increasing trust and confidence through joint activities including data updating, information exchange, and maintaining a common integrated database, as a prerequisite for the effective implementation of a common policy framework;
- b. Emphasize the expected benefits in adopting the proposed framework by all parties and learning about initiatives undertaking by other riparian(s) to enhance partnership among different institutions in the water sector and for the implementation of joint projects;
- c. Review, assess and take stock of the status and experience in inter-state and sub-regional cooperation among some MEDA and EU countries, and select a suitable forum for interstate cooperation after examining relevant lessons learned from the region (e.g. the North-Western Sahara Aquifer (NWSAS) shared between Algeria, Libya, and Tunisia) on the basis of which different scenarios are built and evaluated;
- d. Pay special attention to securing financial sustainability and political endorsement for the effectiveness of the proposed regional policy framework;
- e. Adapt existing policy frameworks to socio-economic and cultural conditions in the MEDA region;
- f. Analyze the real needs of the MEDA region;
- g. Share long and short term benefits;

## Recommendations to minimize identified risks and uncertainties

- h. Obtain commitment from various stakeholders at different levels in each country (politicians, decision-makers, researchers/scientists, civil society groups, etc.) to adopt and contribute to the implementation of the proposed framework;
- i. Raise awareness on common risks and uncertainties related to shared aquifers and provide guidelines for establishing jointly-defined objectives and mutual responsibilities in risk-based management approach that should be introduced as current practice not only at regional level but also at national level;
- j. Define the risk management measures to be addressed, in terms of technical, economical, and legal aspects of shared aquifers, to be mitigated through the implementation of the policy framework;
- k. Formulate a comprehensive multi-disciplinary and multi-level capacity building programme addressing capacity needs identified in the draft policy framework;
- Address the emerging issue of increased domestic non-social subsistence and economiccommercial use of the limited shared groundwater resources in the region by assessing the impact of the rapidly and significantly rising MEDA-EU agricultural trade related to groundwater-irrigated crops;

#### General recommendations

- m. Define a common vision for shared aquifers management in the region and seek a regional consensus and formal enabling authority for a transient consultation mechanism that can smoothly develop into a permanent mechanism for facilitating the joint management of shared groundwater in the MEDA region;
- n. Identify the main driving forces and mechanisms as the trust for the inter-state cooperation, and problem solving;
- o. Raise awareness and promote a culture of shared aquifers, through training workshops, and participation of the civil society and the general public;
- Adopt a participatory approach with clearly defined mechanisms on how it will be implemented and monitored;
- q. Identify the role of international bodies to safeguard the application of the proposed framework within the international laws and regulations for sharing a common water resource;
- r. Establish networks for permanent contact among participants;
- s. Mobilize the political support for multi-lateral and bi-lateral agreements through visible action, and scientific initiatives, with joint initiation of common project on shared groundwater resources;
- t. Disseminate project outcomes;
- u. Promote regional cooperation and institutional development for the management of shared aquifers as 'common pool resources' for which a common risk management policy is required;
- v. Allow for political and third party intervention, as needed and for an active role for the academia, research, and development institutions in the implementation of the proposed policy;
- w. Promote the concept of benefit sharing or win-win scenarios in a mutually-developed, monitored and implemented policy framework for inter-State cooperation

Finally, the participants suggested that the next meeting be held in ECA in Rabat (or alternatively in ECE - Geneva) in October 2006.

## II. WORKSHOP THEMATIC SESSIONS

Session 1: Opportunities for the formulation of policy framework for inter-state cooperation on shared aquifers in the Mediterranean region.

## A. REVIEW OF PRESENTATIONS

6. The session presented an overview of the proposed draft policy framework and existing frameworks at regional, sub-regional and national levels. The first presentation was devoted to the introductory section of ESCWA's report which was divided into four sections. The introduction provided a summary review of existing instruments for shared groundwater resources (SGWRs) in the MEDA region with a review of the extracted guidelines to assist in the formulation of a policy framework.

7. Issues related to existing regional frameworks and institutions for the protection of transboundary watercourses in the ECE region, were presented with an overview of the Mediterranean joint process, which was established to exchange experiences, share common challenges and develop synergies

between EU and non EU countries of the Mediterranean region.

8. The existence of an international legal framework was flagged as an important issue for transboundary water cooperation as indicated in BGR's presentation. Further information was given on the German contribution through various instruments and activities for shaping international water policy, improving regional cooperation, and improving utilization and protection of water resources.

9. An assessment of the efforts exerted by different MEDA and South Easter European (SEE) countries for formulating policy frameworks for inter-state cooperation on internationally shared aquifers was presented. The main constraints and challenges faced in the process, particularly in relation to database and exchange of information were highlighted. In addition, an overview of the opportunities for the MEDA countries to formulate policy frameworks based on the lessons learned from the Balkan and other regions with similar issues was addressed as well as describing measures for establishing a mechanism to implement policy options.

10. The second section of ESCWA's report described issues and opportunities in policy development covering shared externality costs of resource loss, prospects for cooperation, tri-angular balance in regional development, mechanisms for developing joint vision and harmonizing priorities in groundwater policy issues, defining and establishing regional institutions and strategic partnerships

and emphasizing the need for capacity building programme under the policy framework.

## B. SUMMARY OF DISCUSSIONS

The process for the formulation of policy framework including key aspects with principal drivers for effective establishment and implementation of inter-state cooperation, compiled in the draft background document, was provided as an introduction in three initial presentations. The introduction pointed at priority issues in the different categories of the shared aquifers in the MEDA region, as the targets for common action under the proposed draft policy framework. In relation to the existing instruments on shared aquifer management, the presentations and discussions focused on the need to strengthen the capacity for a regional approach. This approach, which should be supported by relevant references on international water law with examples on regional frameworks and the emerging opportunities under recent initiatives in the Mediterranean and neighboring regions, with emphasis on the EU- Neighborhood Policy and Partnership Instruments.

Session 2: Risks and uncertainties for the formulation of policy framework for inter-state cooperation on shared aquifers in the Mediterranean region: Regional perspectives.

## A. REVIEW OF PRESENTATIONS

11. The third section of ESCWA's report addressing issues related to policy implementation risks and uncertainties were presented in this session. The risks identified were: decline in water security, resource depletion, vulnerability to agricultural groundwater use, in addition to the risks from individual country policies and attitudes. Constraints and uncertainty to addressing scientific findings and socio-economic and development issues into sustainable policy, political economy and institutional governance and cooperation systems at both the regional and national levels were also emphasized.

12. Influence of the Western Mediterranean region specifities on the implementation of proposed policy framework was highlighted in the second presentation made during this session. It covered the main issues that were raised in 2005 North Africa Water Development Report as well as the proposed

recommendations which are of relevance to MEDA policy framework.

13. The presentation highlighted impacts of prevailing specific conditions in the Eastern Mediterranean region on the implementation of proposed policy framework. The presentation also revealed some implications on the proposed policy framework.

### B. SUMMARY OF DISCUSSIONS

Different measures to reduce risk/uncertainty in the implementation of a regional policy framework, were suggested. Among these were: (i) To identify and review the available options and opportunities with assessment of related risk/uncertainty; (ii) To establish common policy guidelines and support mobilization of political pressures for implementation; (iii) To provide feedback to the countries. The need to identify common regional prevailing conditions have been emphasized, including socioeconomic factors such as: high population growth, inadequate water supply and sanitation, political instability, weak economies and growth, low water and food security, and also international and sovereignty issues related to water and territorial rights, subject to international law on equitable use, and environmental integrity with groundwater as part of the environment.

Session 3: Opportunities, constraints and challenges in implementing a policy framework for shared groundwater aquifers in the Mediterranean region: National perspectives.

## A. REVIEW OF PRESENTATIONS

14. Presentations on national perspectives for the implementation of a policy framework for shared aquifers in the Mediterranean region were made during this session. Representatives from Albania, Greece and Croatia from ECE region, Morocco from ECA region, Jordan and Palestine from ESCWA region, presented case studies on policies developed for shared water and groundwater management in their respective countries, in addition to the constraints faced in implementing these policies.

15. The Albanian experience covered existing policies developed for shared water and groundwater management with an overview of the agreements made for shared aquifers between Albania and

neighboring countries.

16. The Greek experience described the EU Water Framework Directive (WFD), which acts as an umbrella incorporating all water related elements. Also highlighted was the management aspect of the WFD for transboundary water resources, including establishing cooperation and developing partnership. For example, the Mediterranean Groundwater Working Group established to exchange experiences, share common challenges and develop synergies between EU and non EU countries, and institutions and stakeholders of the Mediterranean region.

- 17. The **Croatian** experience highlighted the importance of inter-state conventions and agreements signed by the Croatian government with its neighboring countries for the management of groundwater resources. Attention was drawn to the agreement made in 1996 between Croatia, and Bosnia and Herzegovina to regulate aqua-economic aspects whereby an inter-state commission and sub-commission for the Adriatic basin were established.
- 18. The **Moroccan** experience stressed on both the positive and negative aspects of water management applied by the government in addition to existing legislations for the water sector. Problems faced for three shared aquifers in Morocco were also discussed.
- 19. The **Jordanian** presentation pointed out that the responsibility of all water resources within the Kingdom of Jordan resides with the Ministry of Water and Irrigation with its two authorities. It was also indicated that there is a Jordanian-Syrian agreement signed in 1987 to invest Yarmouk River as a shared aquifer between the two countries.
- 20. The **Palestinian**-Israeli management of shared groundwater aquifers was described covering aspects related to inequitable utilization of shared aquifers, such as taking full control over western aquifer basin by Israel, in addition to overexploitation causing exhaustion and pollution. The political process and existing agreements were also discussed highlighting the bilateral agreement signed between the two parties, and the difficulties faced to implement policies and agreements for shared aquifers. The need for guidelines to establish a comprehensive framework for the Palestinian/Israeli management of shared aquifers was also emphasized.

#### B. SUMMARY OF DISCUSSIONS

Several issues were highlighted by the participants including the following: (i) Common action and projects help keep the momentum and provide visible, and tangible evidence of synergies with shared water resources and social and economic benefits; (ii) Common action need to build on common agreed principles and concrete steps including bi-lateral and multilateral agreements with effective institutional development; (iii) Common monitoring requires harmonized terminology on water quality, and access to information without restrictions for field verification; (iv) Issues of size and scale of cross-border aquifers need to be clarified; (v) Pollution control measures need to be linked to agricultural development and land use policy; (vi) There is a call to follow the trends of quality guidelines rather than legal water quality standards, e.g. treated levels of waste water, and water reuse.

With complex international conflicts on shared aquifers in the MEDA region, there is a need to call for political interventions at regional-international level, and through regional cooperation fora. The general preference in such difficult cases is for drivers rather than mediators, and allowing only for the intervention of non-political scientific third party.

## Session 4: Towards the establishment of a permanent regional cooperative forum for policy, planning and management of shared aquifers in the MEDA region.

#### A. REVIEW OF PRESENTATIONS

21. The fourth section of ESCWA's report described the way forward in the implementation of the policy framework. It recommended the development of a transitional, preparatory consultation mechanism, a strategic partnership with development partners and international and regional institutions, in addition to the establishment of a permanent consultation mechanism. During this session, an analysis of capacity building needed, and institutional and legislation reforms recommended for the implementation of the extracted guidelines were elaborated.

#### B. SUMMARY OF DISCUSSIONS

During the discussion of the policy framework, it was agreed that a Steering Committee at the political level is required for the permanent consultation mechanisms while the transitional mechanism will be steered by a non-political, professional committee. The immediate capacity and institutional building requirement is to review the need for the MEDA consultation mechanisms on shared aquifer management at the regional and sub-regional levels. This project was recommended to formulate a legal, policy and institutional assistances projects to meet these requirements to be considered for a first phase supported by FAO-TCP together with other development partners.

#### Closing Session: Conclusion and recommendations

22. Draft conclusions and recommendations were discussed to be sent at a later stage to all participants for their suggestions and feedback. It was also agreed that the immediate way forward could focus on a common risk management policy and data bases. In this process there is a need to draw upon successful and unsuccessful - reference cases on shared aquifer management, presented under the UNESCO/ISARM program.

## Organizers meeting: Project coordination and programme for the next work packages

23. A closed meeting was held for the 3 partners present (ECA, ESCWA, and UNESCO) to discuss the planning and implementation of work packages 2 and 3. Discussion of the proposed work plan took place following a presentation by ESCWA in which profiles of all activities within these two packages were given. ECA and UNESCO agreed in principle to undertake some of the activities. Since ECE was absent from this meeting, however, it was suggested that another meeting for all partners (ECA, ECE, ESCWA, UNESCO, and DESA) to be held in UNESCO HQ as soon as possible. ESCWA agreed to organize this meeting.

## III. ATTENDANCE AND ORGANIZATION OF WORK

#### A. ATTENDANCE

24. The meeting was attended by 19 people from seven member countries (Albania, Croatia, Jordan, Greece, Lebanon, Morocco and Palestine) of the three Regional Commissions that serve the Mediterranean Region, and regional commissions and institutions (BGR, ECA, ESCWA, FAO, UNDP and UNESCO), in addition to experts from academic institutions. All had a background in water resources management and most participants were senior personnel in the water sector in their region.

#### B. ORGANIZATION OF WORK

25. The meeting was held from 24 to 25 April 2006 at the United Nations House in Beirut, Lebanon and was officially opened by the Water and Environment Issues team leader and the Director General of the Lebanese Ministry of Energy and Water. The opening ceremony emphasized the aim and expectations from this workshop. The meeting was divided into four sessions, two sessions were held in each day, in addition to a separate session for the organizers at the end of the meeting. The first session was dedicated to provide an overview on the opportunities for the formulation of policy framework for inter-state cooperation on shared groundwater aquifers in the Mediterranean region; the second session gave an overview of the risks and uncertainties for the formulation of such a framework in the Mediterranean region from the regional perspectives. During these two sessions, ESCWA's report on the policy framework for supporting the establishment of mechanisms for inter-

state cooperation on shared groundwater aquifers in the MEDA region was presented and discussed. On the second day, the 3<sup>rd</sup> session highlighted issues related to the challenges faced, and main gaps and constraints associated with the implementation of a policy framework for shared groundwater aquifers in the Mediterranean region at the national level. During the 4<sup>th</sup> session, further components of ESCWA's report were presented focusing on the way ahead after the formulation of the policy framework and its implementation in the region. The closing session was devoted to the wrap up discussions, agreement on conclusions and developing recommendations for future activities and actions. A special session for the project organizers was devoted to discuss project coordination mechanisms and to present the work programme developed for the second phase of the project.

#### V. MEETING EVALUATION

- 26. An evaluation questionnaire was distributed to the attendees in order to assess the relevance, effectiveness and impact of the meeting. The feedback received was positive with nearly most of the attendees rating the quality of the meeting as good while the remainder found it an excellent workshop. The organization was found to be excellent and the presentations and printed material distributed were deemed to be of good quality by most attendees.
- 27. The majority of the participants found that the workshop met its objectives and its expectations. Nearly all the participants found that their expertise was very well suited for the meeting as was the expertise of their colleagues. In addition the participants found that the venue provided them with an excellent opportunity to establish contact and exchange information with other experts from the region. All the participants agreed on the issue that the meeting length is just right. Nearly all the participants found that the meeting provided a good opportunity to establish useful contacts and to exchange experiences among experts in the field. However, nearly all the attendees wanted follow-up activities that included: development of cooperation forums at the regional level with experts in shared aquifers management; dissemination of the results and findings in relation to the proposed regional framework for the groundwater management in the MEDA region; follow-up and implementation of the recommendations developed during the workshop; and development of a road map to overcome the difficulties that may hinder inter-state cooperation on shared groundwater aquifers.
- 28. Some participants did make recommendations for improving the upcoming workshop. These include: creating a website for the development account project; dissemination of the results in the media; involving decision makers and the press; ensuring that all MEDA countries attend; organize working groups in a more interactive style; and requesting that members- countries make useful and active contributions.

#### ANNEX I.

#### LIST OF PARTICIPANTS

#### I. ECA COUNTRIES

#### Morocco

#### MR. MOKHTAR BZIOUI

Treasurer
World Water Council
N°2, RUE D, AVENUE JOHN KENNEDY
RABAT, MAROCCO
Tel: (212) (0) 61 30 83 68
E-mail: bziouimo@yahoo.fr

#### II. ECE COUNTRIES

#### Albania

#### MS. MIRIAM NDINI

Hydrologist Hydrometeorological Institute Durrësi Street, 219 Tirana - Albania Tel (Office): (+355) 4 259359/52

Mobile: 0692135905

Fax: (+355) 4 223 518 or 4 236 416 E-mail: <a href="mailto:ndinimiriam@yahoo.com">ndinimiriam@yahoo.com</a>

#### Croatia

#### MR. BRAJKOVIC ZDRAVKO

Senior Expert Hrvatske Vode Split (Water of Croatia) Split, Street Vukovarsk 35, Croatia Tel: (+385-21) 309 442

Mobile: 098-223-565 Fax: (+385-21) 309 491 E-mail: bzdravko@voda.hr

#### Greece

#### MR. ALEXANDROS KOLLIOPOULOS

Member of the Legal Department Ministry of Foreign Affairs 3, Zalokosta Street Athens 106 71, Greece Tel: (+30-210) 368 3314 Fax: (+30-210) 368 3316

E-mail: kollio@mfa.gr

#### III. ESCWA COUNTRIES

#### Jordan

#### MR. FAYEZ BATAINEH

Assistant-Secretary-General for Planning and Information Technology Jordan Valley Authority (JVA) Ministry of Water and Irrigation P.O. Box: 3837, Irbid

Tel: (962-6) 5689892 Mobile: (962-79) 5515110 Fax: (962-6) 5683046

E-mail: Fayez bataineh@mwi.gov.jo

#### Lebanon

### MR. FADI COMAIR

Director-General of Hydraulic and Electric Resources Ministry of Energy and Water Beirut

Tel.: 961-1-565013 Mobile: 961-3-771710 Fax: 961-1-576666

#### **Palestine**

#### MR. AMJAD ALIEWI

Advisor to the Palestinian Water Authority Director-General House of Water and Environment 41 Khaled Ibn El Walid Street Al Sharefeh - Al-Bireh P.O. Box: 1796 Ramallah

Tel (Fax): (+972-2) or (+970-2) 240 1776

Mobile: 059 222 113

E-mail: amjad.aliewi@hwe.org.ps

# IV. United Nations Organizations and Specialized Agencies

## **Economic Commission for Africa (ECA)**

## Mr. Stephen Maxwell Donkor

Regional Adviser
United Nations – Economic Commission for Africa
(UN-ECA)
P.O. Box 3001

Addis Ababa, Ethiopia Tel: (251-11) 5443422 E-mail: donkor@un.org

# Food and Agriculture Organization of the United Nations (FAO)

#### Mr. Stefano Burchi

Officer-in-Charge Development Law Service/Legal Office FAO

Office: Room A-446

Viale delle Terme di Caracalla – 00100 Rome, Italy

Tel: (+39) 06 5705 3959 Fax: (+39) 06 5705 4408 E-mail: <u>Stefano.Burchi@fao.org</u>

## <u>United Nations Educational, Scientific and</u> <u>Cultural Organization (UNESCO)</u>

## MS. RAYA STEPHAN

Consultant, UNESCO/IHP 1, rue Miollis, Paris, France Tel: (+33-1) 45 68 39 95 E-mail: r.stephan@unesco.org

## <u>United Nations Development Programme</u> (UNDP)

## MR. GEORGE JOSEPH AKL

National Officer – UNDP UN-House, Beirut – Lebanon E-mail: <u>george-akl@undp.org</u>

## V. REGIONAL AND NTERNATIONAL ORGANIZATIONS

# Federal Institute for Geosciences and Natural Resources (BGR)

## MR. ANDREAS RENCK

Project Coordinator, BGR Hannover, Germany Tel: (+49-511) 643 2750 Fax: (+49-511) 643 3689 E-mail: Andreas.Renck@bgr.de

## MR. RALF KLINGBEIL

Policy Advice Groundwater – Resources and Management
Federal Institute for Geosciences and Natural Resources (BGR)
Stilleweg 2, D-30655, Hannover, Germany
Tel: (+49) 511 643 3301, (+49) 228 535-3705
Fax: (+49) 511 643 3689

E-mail: r.klingbeil@bgr.de

## MS. KATHARINA ISABELL FOELDI

Research Assistant BMZ/BGR

Am Hohlloch 22, 42799, Leichlingen, Hannover,

Germany

Tel: 02125 - 72953

E-mail: katharinafoeldi@hotmail.com

## MS. MAYA HAMMOUD

Research Assistant Consultant to BGR

Tel: c/o UN-ESCWA: (961-1) 981301/1532

Mobile: (961-3) 469739 E-Mail: <u>Hammoudm@un.org</u>

## VI. RESOURCE PERSONS AND EXPERTS

## MR. BO APPELGREN

Senior Consultant
Division of Water Sciences
International Hydrological Programme
United Nations Educational, Scientific and Cultural
Organization (UNESCO)
1, rue Miollis, 75732 Paris Cedex 15, France
Home: Colesanti 13, 01023 Bolesena, Italy

Tel: (+33-1) 45 68 39 95 Fax: (+33-1) 45 68 58 11 Tel/Fax: (+39) 0761 797 112 E-mail: <u>bo.appelinvpl@flashnet.it</u>

#### MR. JACQUES GANOULIS

Professor

Coordinator of UNESCO Chair and Network

INWEB for Water Resources

School of Engineering - Department of Civil

Engineering

Division of Hydraulics and Environment

Engineering

Aristotle University of Thessaloniki

GR-54 124 Thessaloniki - Macedonia, Greece

Tel: (+30) 2310/99-5682 Fax: (+30) 2310/99-5681 E-mail: iganouli@civil.auth.gr

#### MR. KAMAL SAID KHAIR

Research Expert

Hasbaya - Nabatiyeh Mohafaza

South Lebanon, Lebanon Mobile: (961-3) 264089

E-mail: kamal\_khair@hotmail.com

#### VII. ACADEMIC INSTITUTIONS

#### MR. AHMAD BASBOUS

Chairman President

**CETE Consultant Engineers** 

Mardini Bldg., 3<sup>rd</sup> Floor, Mazraa blvd.

Beirut, Lebanon

Tel: (961-1) 818295

Mobile: (961-3) 818295

Fax: (961-1) 818294

E-mail: abasbous@ul.edu.lb

#### VIII. ESCWA Secretariat Mr. Hosny Khordagui

Team Leader

Water and Environment Team (WET)

WET/SDPD

E-Mail: Khordagui@un.org

#### Ms. Roula Majdalani

First Economic Affairs Officer (FEAO)

WET/SDPD

E-Mail: Majdalani@un.org

#### Mr. Youssef Al-Mooji

First Economic Affairs Officer (FEAO)

WET/SDPD

E-Mail: Al-Mooji@un.org

#### Ms. Hanan Atallah

Research Assistant

WET/SDPD

E-Mail: Atallahh@un.org

#### Ms. Julie Abouarab

Research Assistant

WET/SDPD

E-mail: abouarab@un.org

## Ms. Maya Ramadan

Research Assistant

WET/SDPD

E-mail: Ramadan@un.org

#### Mr. Moneem Murrah

Administrative Assistant

**SDPD** 

E-Mail: Murrahm@un.org

#### Mr. Adnan Kaddoura

Staff Assistant

WET/SDPD

E-Mail: Kaddouraa@un.org

#### Mr. Ahmad Kader

Individual Contractor

WET/SDPD

E-Mail: Aghaa@un.org

#### **ESCWA MAILING ADDRESS**

United Nations Economic and Social

Commission for Western Asia (UN-ESCWA)

Riad El-Solh Square

P.O. Box: 11 8575

Tel: (961-1) 981301

Fax: (961-1) 981510

UN-House, Beirut - Lebanon

## ANNEX II.

## PROGRAMME OF WORK

## DAY 1: MONDAY 24 APRIL 2006

09:30 - 10:00

Registration

10:00 - 10:30

Welcome and Opening statements

Ms. Anhar Hegazi, Chief, Sustainable Development and Productivity Division (SDPD) -Welcoming note of ESCWA

Mr. Fadi Comair, Director General of Hydraulic and Electric Resources, Ministry of Energy and Water, Lebanon, Welcoming note of host country

Mr. Hosny Khordagui, Team Leader, Water and Environment Issues Team - Aim and expectations from this workshop

10:30 - 11:00

Coffee Break

11:00 - 13:30

Session 1: Opportunities for the formulation of policy framework for inter-state cooperation on shared groundwater aquifers in the Mediterranean region

Chairperson:

Ms. Anhar Hegazi, Chief SDPD -

**ESCWA** 

Rapporteur:

Mr. Stefano Burchi, FAO

- Draft policy framework to support the establishment of mechanisms for inter-state cooperation on shared groundwater aquifers in the Mediterranean region – Mr. Bo Appelgren, ESCWA Consultant
- Regional frameworks for inter-state cooperation on transboundary waters Raya Stephan, **UNESCO IHP**
- Lessons learned from BGR programmes in developing policy framework for shared groundwater systems - Mr. Ralph Klingbeil, BGR Germany
- Assessment of efforts exerted by different MEDA and SEE countries for formulating policy frameworks for inter-state cooperation on internationally shared waters. Mr. Iakovos Gkanoulis, Professor, Aristotle University - Greece
- Policy reform and strategic intervention: the issues and opportunities in policy framework development for shared aquifers management: Mr. Bo Appelgren, ESCWA Consultant.

13: 30 - 15:00

Lunch break

Session 2: Risks and uncertainties for the formulation of policy framework for inter-state 15:00 - 16:30cooperation on shared groundwater aquifers in the Mediterranean region: Regional <u>perspectives</u>

Chairperson:

Mr. Ralf Klingbeil, BGR - Germany

Rapporteur:

Mr. Iakovos Gkanoulis, Professor, Aristotle University -Greece

Overview of risks and uncertainties associated with the implementation of proposed policy framework and how to address them, with a focus on the EU-MEDA agriculture trade and its impact on groundwater management in MEDA countries Mr. Bo Appelgren - ESCWA Consultant

Influence of the Western Mediterranean region specifities on the implementation of proposed policy framework, Mr. Stephen Donkor, Regional Advisor - ECA

Influence of the Eastern Mediterranean region specifities on the implementation of proposed policy framework, Mr. Yusuf Al-Mooji, First Economic Affairs Officer - ESCWA

16:30 – 17:30 Open Discussion

## DAY 2, TUESDAY 25 APRIL 2006

09:00 – 11:00 <u>Session 3: Opportunities, constraints and challenges in implementing a policy framework for shared groundwater aquifers in the Mediterranean region: National perspectives</u>

- Chairperson:

Mr. Stephen Maxwell Donkor, Regional

Advisor - ECA

- Rapporteur:

Ms. Roula Majdalani, First Economic Affairs Officer - ESCWA

- ECE countries:
  - Presentation by Albania
  - o Presentation by Greece
  - Presentation by Croatia
- ECA countries
  - Presentation by Morocco
- ESCWA countries
  - o Presentation by Jordan
  - Presentation by Palestine

11:00 - 11:30

Coffee break

11:30 - 12:30

Discussion on the constraints and challenges for the formulation

of policy framework for inter-state cooperation on shared

groundwater aquifers in the MEDA countries

12:30-14:00

Lunch Break

# 14:00-15:00 <u>Session 4: Towards the establishment of a permanent regional cooperative forum for policy, planning and management of shared aquifers in the MEDA</u>

- Chairperson:

Mr. Fadi Comair, Director General, MEW – Lebanon

- Rapporteur:

Mr. Yusuf Al-Mooji, First Economic Affairs Officer -

**ESCWA** 

- Formulation of policy framework: The way ahead Mr. Bo Appelgren ESCWA Consultant
- Open discussion

14:00 - 15:00

Closing Session " Conclusion and recommendations"

- Chairperson:

Mr. Bo Appelgren - ESCWA Consultant

- Rapporteur:

Mr. Andreas Renck, Project Coordinator -

**BGR** - Germany

15:00-15:30

Coffee Break

## 15:30-16:30 Organizers meeting: Project coordination and programme for the next work package

- Chairperson:

Mr. Hosny Khordagui, Water & Environment Issues Team

Leader - ESCWA

- Details of WP-2 work programme ESCWA
- Open discussion