## INSURED -- INFORMATION SYSTEM FOR AN INTEGRATED AND SUSTAINABLE USE OF WATER RESOURCES OF DRINI-DRIM RIVER

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The Basin of Drini (Drim) is situated at the southwestern part of Balkan Peninsula and concerns to the Adriatic Sea Catchment. It is the third biggest European river, which discharges its water in the Mediterranean Sea after Rhone (France) and Po (Italy).

Drini is a transboundary river shared between Albania, R Macedonia, Kosovo and Greece. In the Drini Basin are situated Ohrid Lake and Prespa Lake (both under the patrimony of UNESCO) and Shkodra (Skadarski) Lake, the biggest lake in Balkan Peninsula.

Until now Drini River is used mainly for the production of hydroenergy. Thus, in this river 5 dams are constructed, 3 in Albania (mainly used for hydroenergy production) and 2 in Macedonia and 1 is planed to be constructed in Albania (hydropower plant of Bushati).

 One of the most interesting and important problems in this river is the modeling of non-uniform flow conditions in the hydraulic noodle Shkodra Lake-Buna River-Drini River. The solution of this problem will help the decision-makers to prepare the different alternatives of an integrated management of water resources of this river.

The main objective of the project is to offer to the scientific community and to the decision makers knowledge database and associated tools for decision support.

The knowledge database must be available on Web for the partner teams of researchers involved in the project as well as a part of this data and information and products must be in free access to be used by large public for awareness and pedagogical purposes.

The fact that Albania, R Macedonia, Greece, Montenegro and Kosovo, share this complex water needs good collaboration between researchers of countries

and exchange of scientific information in order to create a Unique Database of this system.

Until now, data and information are dispersed between various institutions of each country.

Four main actions are proposed:

- establishment of an information system (IS) bringing together all geomorphological, hydrological, meteorological and ecological data and related information (papers, maps, etc.) of Drini (Drim) region
- implementation of a monitoring program (MP) on water quantity and quality parameters which will provide in real time or near real time the Information System
- modelling of the ecosystem including all hydrological and climatological processes (precipitation, temperature, evaporation, runoff, infiltration, etc), hydrological regimes of tributaries, water balances of lakes, water quality parameters, limnological aspects, and anthropogenic impacts.
- implementation of a web site and end-users interfaces

End users products will be implemented according to their specific needs: awareness and education of large public, decision support for decision makers, etc.

# CONFERENCE ON WATER OBSERVATION AND INFORMATION SYSTEM FOR DECISION SUPPORT



**ABSTRACTS** 

25-29 May 2004 Ohrid, Republic of Macedonia







# Conference on Water Observation and Information System for Decision Support



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25 - 29 May 2004 Ohrid, Republic of Macedonia

#### Conference on Water Observation and Information System for Decision Support

#### Under the auspices of EUROPEAN COMMISSION

### patronized by MINISTRY OF ENVIRONMENT AND PHYSICAL PLANNING REPUBLIC OF MACEDONIA

#### Scientific Editors:

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Design and Technical Support: OLIVIJA TODOROVIK, BILJANA KRCKOVSKA and JULIJANA MINEVSKA

Publisher:

Ministry of Environment and Physical Planning of Republic of Macedonia

Web Site: www.balwois.net

CIP - Каталогизација во публикација

Народна и универзитетска библиотека "Св. Климент Охридски", Скопје

556:551.58 (063) 626/628 (063) 502.51 (063)

CONFERENCE on Water observation and information systems for decision support (2004; Ohrid)

BALWOIS: abstracts / Conference on Water observation and information systems for decision support, 25-29 May 2004 Ohrid.

Republic of Macedonia; edited by M. [Marc] Morell... [и др.]. — Skopje: Ministry of environment and phisical planning, 2004. — 482 стр.: илустр.: 30 см

ISBN 9989-110-26-3

- 1.Gl.stv.nasl. 2. Morell, Marc
- а) Хидрологија Собири б) Водни еко-системи Собири
- в) Водостопанство Собири г) Животна средина Собири COBISS.MK-ID 57111050

#### ISBN 9989-110-26-3

NOTE: This volume contains original authors' abstracts reviewed and accepted by the Conference Scientific Committee.