

**SEE- Award (name "Herman Potočnik – Noordung Award" proposed by MHEST) for
 Research Infrastructure Donations within the Framework of RTDI Collaboration
 with West Balkan Countries**

**Research Infrastructure needs
 - Application form for Scientific & Research Institutions from West Balkan Countries**

Section A – General information
A.1 Contact details
Name of applicant /(institution) INSTITUTE OF HYDROMETEOROLOGY
Legal status / Type of organisation: RESEARCH INSTITUTE
Address (Street name, ZIP code, town): St. DURRESI, TIRANA ALBANIA
Telephone no.: +355 4 223518 Fax no.: +355 4 223518 e-mail: mitats@yahoo.com web address/url:
represented by (name of person <u>legally responsible</u>) Mitat Sanxhaku
Name of the contact person Molnar Kolaneci
Address (if different from address stated above)
Telephone no.: 355 693048445 Fax no.: e-mail: kol@sanx.net web address/url:
A.2 Applicant (Institution) profile (half page A4)
The Institute of Hydrometeorology carries out its activity in two main fields, Meteorology and Hydrology.
Department of Hydrology
This department is composed of five sections: Section of Hydrometry; Section of Surface Water Hydrology; Section of Maritime Hydrology; Section of Underground Water Hydrology; Section of Water Quality.
The Section of Hydrometry is the main section of the Department and its duty is to construct and maintain the hydrometric network in Albania; to make the observations and to process the hydrometric data; to compute the hydrological bulletin and the hydrological advices and to prepare guides for different hydrometric practices. This section studies the hydrological peculiarities of every year.
Section of Surface Water Hydrology. This section deals with the study on the hydrological elements, their distribution in the small zones or in the whole territory of Albania.
So it may be mentioned the study on the distribution of the flow over the whole territory, of the maximal discharge, of the solid flow, evaporation, etc. At the same time this section has as a duty the complex study of the bases for the utilization of renewable energy (water power utilization) as well the compiling of various monographs.

IHM participates in the projects with studies on the assessment of water resources of Albania, on the water balance evaluation and in the preparing the national strategies of water resources management such as “National water strategies”, financed by EU through PHARE programme, MEDIMONT-PECO, a multinational project on the Mediterranean mountains. IHM has built alternative scenarios related to water sources management and the impact of future economical development.

Section of Maritime Hydrology. The main duties of this section are the maintenance of the coastal network and the processing of the data; the different studies such as physical models of the sea level, the evaluation of the main characteristics of the maximal, minimal and mean level, the tides and their respective parameters, the using of the harmonic analysis for studying the tide levels etc.

Section of Underground Water Hydrology. The duties of this sector are the maintenance of the ground water network, measuring the level of wells and their oscillations, water temperature as well as studies on the distributions of water in the shallow aquifers etc.

Section of Water Quality. This section is dealing with the monitoring and analysing of water quality and pollution. IHM works in the long-term project on “Monitoring of the Mediterranean Sea” [MED POL Phase II, (1992-1999)], within the framework of MAP/UNEP, Athens. The contribution of IHM consists in observation and analysis of pollution sources in coastal water. Another project EQUATE begun in 1995. The duties of IHM in this project consist in evaluation of analytical methods, analytical control of water quality etc.

Section B – Description of the research infrastructure requirements/needs

B.1 Please list your research infrastructure requirements – the most urgent equipment you would need.

1. Water Level Sensor

- | | |
|---------------------------------------|----------|
| • Radar Sensor –Free Cable Instrument | 3 Pieces |
| • Pressure Probe Sensor | 5 Pieces |
| • Floated System | 5 Pieces |

2. Current meter SIAP Model ME 4003 (Full Option) 5 Pieces

B.2 Describe the relevance of the requested research infrastructure for the work of your institution and the potential impact of receiving the items listed above (B.1).

Only with well-founded data we can obtain meaningful research findings and offer reliable and comprehensive advice. For this reason we collect and process systematically data on a wide range of hydrological parameters and store them for our own purposes.

For our work we need vast amounts of individual data that reflect both current and past conditions. Only by monitoring conditions prevailing in the past can we identify changes and be in a position to make forecasts.

For storing and processing figures, texts, and cartographic material we must employ modern information technology. Up-to-date database technologies will enable us to integrate data and information of great variety and complexity in our work

The objectives of these components will be:

1. Water Resources Assessment

2. Reasearche and Development
3. National Flood Warning

B.3 Please indicate the potential users of the requested equipment.

The equipment will be use by the Institute but the data gathered will be used from all the interested parts as ministries, the Agency of Emergency, Electro-power corporate; University, and all other organization who they concerne. This will help us by assessing projects and problems and by answering questions of feasibility against the background of our scientific knowledge. We offer advice in many individual cases. By doing so we help our customers and partners to make sensible decisions and to implement them with appropriate means.

B.4 Please describe the training needs of your institution related to the requested equipment

B.5 Please indicate if there is assistance needed with regard to the transportation and maintenance related to the requested equipment

B.6 Additional Comments

The proposed equipments guarantee the accurate water measurement, data gathering, and especially they posed data transmitting system which is very important for floods protection system in our rivers. Thanks to this technology we can control on-line the water level in real time.

Please fill in and return the form by email to the contact person in your country (see appendix 1)

Place, date: **24.10.2007**

Signature and Stamp of applicant
