TURKEY - NATIONAL REPORT ON IHP RELATED ACTIVITIES September 2004 – June 2006

1. ACTIVITIES UNDERTAKEN IN THE PERIOD SEPTEMBER 2004 - JUNE 2006

1.1 Meetings of the IHP National Committee

During the related period, two meetings were organized on the dates of October 4th, 2005, and June 5th, 2006. It was decided that at least two meetings each year, with a 6-month period, should be organized.

1.1.1 Decisions regarding the composition of the IHP National Committee

Being the focal point for the IHP, The Office of International Hydrological Affairs in DSI has been upgraded by institutional status.

The National Committee IAHS-related Turkish National Hydrological Commission (TNHC) has been combined with the missions of Turkish Committee for the International Hydrological Program of UNESCO and the Operational Hydrological Program of WMO. In this respect, the IHP National Committee is consisting of the members who are responsible for the working groups in the IAHS system.

The composition of the Turkish IHP National Committee has been designed with a more nation-wide character through active membership of the other national organizations and NGO's.

1.1.2 Status of IHP-VI activities

The involvement in IHP-VI activities has been rather limited.

1.1.3 Decisions regarding contribution to / participation in IHP-VII

It has been decided that Turkish contribution to the seventh phase of the IHP should be improved. In this context, it is an idea that the preparatory process for the 5th World Water Forum would be included in the process of IHP-VII.

It is also concluded that, the next World Water Forum would better reflect the United Nations Millennium Development Goals and the priorities of the IHP-VII.

1.2 Activities at national level in the framework of the IHP

1.2.1 National / local scientific and technical meetings

The activities that would be considered as a part of the hydrological program carried out by different institutions in Turkey, in the period of 2004-2006, are:

INTERNATIONAL SYMPOSIUM ON "WATER FOR DEVELOPMENT" DSI 7-11 September 2005, Istanbul

A WORLD WATER DAY PANEL ON "THE EFFECT OF CLIMATE CHANGE ON WATER RESOURCES"

Water Foundation

22 Mart 2005

"INTERNATIONAL WORKSHOP ON APPLICATIONS OF WAVELETS TO REAL WORLD PROBLEMS"

17-18 July 2005

Istanbul Commercial University

SEMINAR ENTITLED "WHY CLIMATE CHANGE?"

Turkish Chamber of Engineers

SEMINAR ON "WATERSHED MODEL ON EUPHRATES AND TIGRIS AND ITS APPLICATIONS"

SYMPOSIUM ON "LEGISTRATIVE AND INSTITUTIONAL ASPECTS OF NATIONAL WATER MANAGEMENT" $\,$

21 Mart 2005

NATIONAL CONGRESS ON "WATER POLITICS"

21-22 Mart 2006

SECOND NATIONAL SYMPOSIUM ON "WATER ENGINEERING" 21-24.09.2005

SECOND NATIONAL SYMPOSUIM ON ISOTOP TECHNICS IN HYDROLOGY" 20-23.09.2005

SEMINAR ON HYDROMETRY 05-09.09.2005

SEMINAR ON ENGINEERING HYDROLOGY

12-21.09.2005, DSİ, Aydın

$3^{\rm rd}$ INTERNATIONAL ADVANCED COURSE ON "WATER RESOURCES DATA ANALYSIS - Data Processing, Interpreting and Design" 11-20.07.2005

HYDROLOGY SEMINAR, 12-16.09.2005

INTERNATIONAL SYMPOSIUM ON WATER AND LAND MANAGEMENT FOR SUSTAINABLE IRRIGATED AGRICULTURE 4-8.04.2006

SEMINAR ON "WATER INFORMATION SYSTEM" 15.12.2005

1.2.2 Participation in IHP Steering Committees / Working groups

No information

1.2.3 Research/applied projects supported or sponsored

• Turkish National Programme On "Hydrometeorologic Disters"

1.2.4 Collaboration with other national and international organizations/programs

As for the international collaboration, Turkish National Hydrology Committee, over the past two years, has focused on the improvement of good relations between the neighboring countries in the framework various projects which are conducted at the regional level.

- EMWIS Network
- WOISYDES Project

1.2.5 Other initiatives

The celebration of World Day of Water: The celebration of World Day of Water, 22 March, is realized in Turkey with a series of activities carried out to increase public awareness of water in the country. In order to promote extensive public awareness in water use and the role of water for development, the day was a great opportunity to raise the discussion on this matter and make it known as much as possible.

Some brief information giving on the manner in which World Day of Water, 2006, with the theme of "Water and Culture" was celebrated by DSI is given in the following:

For this purpose, General Directorate of State Hydraulic Works (DSI) arranged a number of activities such as competition of composition, picture, Photo and placard, celebration of the day and exhibition display. Competition of picture and composition were arranged in national basis among the 8th grade students of primary schools where as competition of placard was arranged in national basis and open for all. For the photo competition, there was restriction and only DSI staff competed.

1.3 Educational and training courses

1.3.1 Contribution to IHP courses

Except from UNESCO sponsored International Post-Graduate Course on "the sediment technology", in which both the lectures on theory and experiments are given to the participators, there is no any other course organized in Turkey.

1.3.2 Organization of specific courses / seminars

The members of the hydrologic community in Turkey have organised some local cources the subject of operational hydrology. Most of them are related to the various hydrology-related practices including snow measurement, gauging of water level, project hydrology and hydrological evaluation of the major basins.

- COURSE ON DAM PLANNING AND DESIGN 6-10.03.2006
- SEMINAR ON "DATA PROCESSING AND DESING IN HYDROLOGY"

3-7.04.2006

• FLOOD ESTIMATION AND PLANNING COURSE

8-12.05.2006

1.3.3 Participation in IHP courses

No information

1.3.4 Cooperation with the UNESCO-IHE Institute for Water Education and / or international / regional water centers under the auspices of UNESCO

A good relation has been established between the Turkish National Committee and UNESCO-IHE. With respect to the national contributions to IHE, official letters have been exchanged via the Turkish Ministry of Foreign Relations.

1.4 Publications

As for the official publications related to the observations and assessment of the data, DSI has published the yearbooks of the observed discharge data at the project sites. On the other hand, EIE has published the yearbooks of the observed data for water flows, water levels in the lakes and sedimentation.

- The role of Water Quality in Wetlands: two different wetlands sudy from western part of Turkey: Izmir Bird paradise and Kucuk Menderes River Wetland
- Monitoring of Performance a Hydrological Model to estimate annual water yield in a small watershed in Meric River Basin
- Future of the Integrated Water Supply System of İstanbul
- Benefits Obtained From Renovation of Ömerli Dam
- Reservoir Management Using Artificial Neural Networks

- A Comparison of Three Methods For The Prediction Of Future Stream Flow Data
- Improvement of Operation of Istanbul Water Supply System during 1989-1994 Dry Period
- Comparison of bed load formulae in hydraulic geometry using similarity principle
- Current level of water erosion problem and sediment control measures in Turkey
- The Causes of Floods in the Western Blacksea Region, Turkey
- Turkish Emergency Flood and Eartquake Recovery Project (TEFER)
- Southeastern Anatolia Project (GAP) in Turkey as a water resources management
- Seasonal rainfall Intensity and Frequency in Turkey
- Effects of North Atlantic Oscillation on precipitation and stream flow at Buyuk Menderes Basin
- Producing climate indices and climate change monitoring in the Middle East
- Hydrological Impacts of Thinning in a Deciduous Forest Ecosystem
- Soil Buffering System Against Acid Deposition in Belgrad Forest Ecosystems
- Variations of pH values of stream water in mature Oak-Beech forest ecosystems in Belgrad Forest near Istanbul Turkey
- Groundwater Pollution Originating From Geological Formation And an Example of Konya-Cumra-Karapınar Plain With GIS Application
- Probabilistic Assessment of Overtopping reliability of a dam Analysis of Dry Periods of Coruh River Basin
- Current level of surface and ground water observation network of Turkey
- Synthetic data-based meteorological drought modeling
- The effect of dense maritime traffic on the Bosphorus strait and Marmara sea pollution
- The effect of the Koprubasi mine on the groundwater contamination in Manisa, Turkey
- Analysis mediterranean precipitation associated with the North Atlantic Oscillation (NAO) Index via Hilbert-Huang Transformation
- Polution of the drinking water sources of istanbul City and the preventive measures: Buyuk Cekmece Lake Case Study

1.5 Participation in international scientific meetings

Various international scientific meetings were attended or organized by the related organizations and Universities.

1.5.1 Meetings hosted by the country

INTERNATIONAL SYMPOSIUM ON "WATER FOR DEVELOPMENT" DSI

7-11 September 2005, Istanbul

• EMWIS PROMOTION SEMINAR ON "WATER INFORMATION SYSTEM"

15.12.2005

1.5.2 Participation in meetings abroad

• IHP Meeting of European Group, Wallingford, 5-6.07.2005, UK

1.6 Other activities at a regional level

1.6.1 Institutional relations / co-operation

The members of the Turkish hydrologic community are cooperated with many other institutions listed as following:

- IAEA, International Atomic Energy Agency
- IAH, International Association of Hydro-geologists
- IAHS, International Association of Hydrological Sciences
- TUBITAK, Scientific and Technical Research Council of Turkey
- UNESCO, Division of Water Sciences
- UNESCO, FRIEND

1.6.2 Completed and ongoing scientific projects

2 FUTURE ACTIVITIES

2.1 Activities planned until December 2006

- Improvement of functional capabilities of the Bureau of UNESCO/WMO related issues, established in Investigation and Planning Department of DSI in order to serve as focal point also for various international hydrological activities,
- Establishment of a regional training center (to be affiliated to DSI Research Department in Ankara) on "sediment technology, isotope and erosion", using the existing facilities available in DSI,

2.2 Activities foreseen for 2006-2007

- Organization of 5th National Congress of Hydrology, planned by Civil Engineering Department, METU (Middle East Technical University)
- Development of DSI's Water Information System
- Further involvement in FRIEND activities
- Course on hydrological modeling, by Istanbul Technical University, in collaboration with DSI and EIE,
- **2.3** Activities envisaged in the long term: In the long term, it is proposed to be more effective in finding a way that the national community, under the leadership of DSI, has a real impact on all hydrologic and water related activities in the country