



Technische
Universität
Braunschweig



EXCELLENCE CENTER FOR
DEVELOPMENT COOPERATION
SUSTAINABLE WATER MANAGEMENT



Regional Expert Workshop on

Water Losses Management in Water Supply Systems

September 25 – 29, 2012 / Antalya, Turkey



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DAAD

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EXCELLENCE CENTER
FOR ECONOMIC AND DEVELOPMENT

Regional Expert Workshop on Water Losses Management in Water Supply Systems

Overview

The problem of excessive water losses from drinking water distribution networks is common in many countries where the annual total water loss reaches around 50% of total water supply. Water losses can be either real (physical) or apparent (commercial) losses. Real losses are mainly due to leakage from joints in water pipes, service connections, pipe bursts, pipe cracks and overflows from storage tanks. Apparent losses are mainly due to illegal water consumption and inaccurate customer metering.

Reducing and controlling water losses is becoming more crucial as demand increases in many parts of the world. Many water utilities have either developed, or are developing strategies to reduce losses. Reducing water losses save the energy required to abstract, transport, treat, and distribute water. Additionally, less water losses reduces the expenses for water supply systems and contributes to sustainable water management.

Objectives

This EXCEED Middle East regional activity aims at showing the various dimensions of regional water losses as well as different approaches to the problem through

- reconsidering methods for evaluating the levels of real and apparent water losses
- discussing recent developments and technologies for reducing water losses
- debating water quality issues in water distribution systems

- expert networking and experience exchange and thus contributing to sustainable water management in the Middle East region

Topics

- Urban water management
- Water balance in distribution systems
- Water losses analyses and auditing
- Role of SCADA system in water losses management
- Importance of District Metered Areas (DMAs) for efficient management
- Water meter inaccuracy & water losses
- Pressure management & water losses
- Acoustic methods for water losses reduction
- Case studies and new technologies for managing water losses
- Water quality aspects in distribution systems
- Modeling as a tool for managing water quantity and quality
- Water saving issues (Domestic, agriculture, industry)
- Public participation for efficient water management strategies
- Economical aspects

Course Organization

The workshop consists of lectures focusing on water losses within Middle East water supply systems. Panel sessions for discussion will take place at the end of each session. Additionally, the workshop will establish and initiate exchange of knowledge and experience between academics, officials and experts.

Schedule			
Tuesday	09/25/2012		Arrival of participants
Wednesday	09/26/2012		Welcome speeches on behalf of Akdeniz University, ASAT, TU Braunschweig and Mutah University
		Session 1 Water Loss Management	Keynote Theory and basics of water losses Recent developments in water loss management
		Session 2 Water Loss Management	Case studies from Turkey, Jordan, Syria and Egypt
		Session 3 Water Quality Issues	Keynote Case studies from Turkey, Jordan, Syria and Egypt
Thursday	09/27/2012	Session 4 Water Saving (Domestic, Agriculture, Industrial)	Case studies from Turkey, Jordan, Syria and Egypt
		Session 5 Urban Water Management	Case studies from Turkey, Jordan, Syria and Egypt
		Session 6 On-site training (ASAT Scada center, water wells, pump stations, waste water treatment plant)	
Friday	09/28/2012		Kemer region cultural visit: Tahtali Mountain (cable car), Phaselis national park, lunch in Ulupinar
Saturday	09/29/2012		Departure of participants

Lecturers

Prof. M. Aydin (Konya University/Turkey);
 Prof. M. Batarseh (Mutah University/Jordan);
 Dr. R. El Ghouhary (NERC Cairo/Egypt);
 Dr. A. Hamaideh (University of Jordan/Jordan);
 Prof. A. Hassan (Ain Shams University/Egypt);
 Prof. M. El Madlajy (Aleppo University/Syria);
 Prof. A. Muhammetoglu (Akdeniz University/Turkey);
 Prof. H. Muhammetoglu (Akdeniz University/Turkey);
 Eng. M. Rawashdeh (Ministry of Water and Irrigation/Jordan);
 Prof. S. Soyupak (Karatay University/Turkey);
 Experts from Mansoura and Alexandria University (Egypt)

Target Audience

Academics, water engineers and experts, technical and administrative personnel of water utilities and relevant ministries in partner countries of EXCEED in the Middle East region.

Number of participants

The number of participants is confined to 25.

Application

Please apply online until July 06, 2012:
<http://www.exceed.tu-braunschweig.de/apply/summerschool>

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