The Global WOPs Alliance

Organized jointly by:
UN-Water Decade Programme on Capacity Development (UNW-DPC)
United Nations Human Settlements Programme (UN-HABITAT)
Bulgarian Water Association

In collaboration with: European Water Association (EWA) and German Association for Water, Wastewater and Waste (DWA)

CAPACITY DEVELOPMENT FOR IMPROVING WATER EFFICIENCY:

2nd Regional Workshop on
Water Loss Reduction in Water & Sanitation Utilities
(Countries in the South East Europe region)

16-18 November 2009
Rodina Hotel, Sofia, Bulgaria

SUMMARY REPORT

As a follow-up of the recommendations of the International Workshop on “Drinking Water Loss Reduction: Developing Capacity for Applying Solutions”, held on 3-5 September 2008 in Bonn, Germany, and in order to address the issue of water loss reduction at the regional level, UNW-DPC is organizing in cooperation with UN-HABITAT a series of regional workshops on Capacity Development for Improving Water Efficiency: “Water Loss Reduction in Water & Sanitation Utilities”.

The second regional workshop on this topic for South East European Countries was co-organized by UNW-DPC, UN-HABITAT and the Bulgarian Water Association (BWA), in collaboration with the European Water Association (EWA) and the German Association for Water, Wastewater and Waste (DWA). The workshop was held in Sofia, Bulgaria, from 16 to 18 November 2009.

The first regional workshop for Latin American Countries was co-organized by UNW-DPC and UN-HABITAT on 2-4 November 2009 on the occasion of the XXIII Annual Convention of ANEAS in Leon, Mexico, in collaboration with ANEAS and the Inter-American Development Bank (IDB). The third regional workshop for Arab Countries will be held in Rabat, Morocco on 20-21 January 2010, which is jointly co-organized with UN-HABITAT, ACWUA and ONEP-IEA.
In the Sofia workshop, more than 130 participants, including top and mid-level managers and professionals from water utilities, met to share their experiences and best practices regarding their water loss reduction programmes. Representatives from water operators from the following nine countries in the SEE region participated in the workshop:

- **Albania:**
  - Advisor to the Albanian Prime Minister on Water Policy and Issues
  - Water Supply and Sewerage Association of Albania
  - Korca Water Supply and Sewerage Company
- **Bosnia & Herzegovina:** Hydro-Engineering Institute Sarajevo
- **Bulgaria:**
  - Bulgarian Water Association (BWA)
  - Stroitelna Mehanizatsia AD
  - University of Architecture, Civil Engineering and Geodesy
  - Studio Fantozzi
- **Greece:**
  - Athens Water Supply and Sewage Company S.A
- **FYR Macedonia:** P.E. Water Supply and Sewerage of Skopje
- **Montenegro:** experience presented by Hydro-Engineering Institute Sarajevo
- **Romania:**
  - Water Supply Utility Timisoara, S.C. AQUATIM S.A
  - Water Supply Utility Satu Mares, WWTP-PIU, S.C.APASERV SATU MARE SA
- **Serbia:** Faculty of Civil Engineering University of Belgrade
- **Turkey:**
  - Antalya Metropolitan Municipality, Antalya Water and Wastewater Administration (ASAT)
  - University of Akdeniz, Faculty of Engineering, Department of Environmental Engineering, Antalya

In addition to the countries of the SEE region, institutions and experts from other European countries also participated in the workshop and contributed with presentations on their case studies, research programmes and water loss reduction initiatives:

- **Austria/Belgium:** CEOCOR Association
- **Czech Republic:**
  - Danish Hydraulic Institute, DHI a.s.
  - Veolia Czech Republic
- **Germany:** WVER, German Water Association of Water, Wastewater and Waste (DWA)
- **Hungary:** on behalf of the European Water Association (EWA)
- **Malta:** Water Services Corporation of Malta
- **United Kingdom:** i2O Ltd.

The main objectives of this regional workshop were to exchange experiences and information on successful examples on water loss reduction and to concentrate on the most promising approaches for the development of institutional capacity. The workshop also had as goals to collect facts and figures and good case stories to increase awareness and attention by decision-makers and water managers on the issue of water loss reduction; and to support the development of the countries potential in the problem definition and the search of applicable solutions. Finally, the outcomes of this activity will also provide the necessary feedback to the
UN-Water members and partners to direct their efforts to further develop initiatives and programs on water efficiency, strengthening their mandates and workplans.

**Opening Session**

The welcoming addresses were made by Dr Valeri Nikolov, President of the Bulgarian Water Association (BWA), Dr Reza Ardakanian, Director of UN-Water Decade Programme on Capacity Development (UNW-DPC), Ms Anne Bousquet of the Global Water Operators Partnerships Alliance, United Nations Human Settlement Programme (UN-HABITAT), Mr Vladimir Stratiev, Chief of the Cabinet of the Ministry of Environment and Water of Bulgaria and Mr Yordan Tatarski, Chief of Cabinet of the Ministry of Regional Development and Public Works of Bulgaria.

The official representatives emphasized in their speeches the importance of addressing the issue of water loss reduction as a way to increase water efficiency in the management of water supply and sanitation. The representatives from the ministries also expressed their willingness to pay more attention to this particular problem and to explore ways to support the water managers in their endeavors. There was a consensus among the official representatives in the opening session about the need to develop capacities, especially of urban water managers and decision-makers and water supply utilities, to learn from each other’s approaches to tackle water losses in distribution systems.

The introductory remarks about the scope and purpose of the workshop and expected outcomes were made by Dr J.L. Martin-Bordes (UNW-DPC) and the introduction of the structure of the sessions and the chairpersons was made by Dr Atanas Paskalev (BWA).

**Workshop sessions**

The workshop was introduced by two keynote presentations. The first keynote, delivered by a regional expert of EWA, provided an overview of the status and challenges of water loss reduction in South East Europe. The second keynote, delivered by the coordinator of the UNW-DPC’s Working Group on Capacity Development for Water Efficiency, addressed the economic aspects of drinking water loss reduction within Integrated Urban Water Management (IUWM). The structure of the workshop included three sessions with case study
presentations and panel discussions addressing (I) technical solutions, (II) administrative solutions and (III) capacity development experiences and tools.

The presentations of the case studies in each session were followed by panel discussions between the speakers and the audience, facilitated by a chairperson. The discussions addressed very specific technical and technological issues, ranging from modelling and sectorization to pressure management and reparation techniques, but also covered some important aspects of an integrated approach to water loss reduction, i.e. the need for cost-benefit analysis in the problem definition, the need for more interaction and communication between the water operators and the decision-makers and regulators, the need for institutional reforms and the setting-up of sustainable water efficiency programmes that are not time-binding by political changes.

The closing session remarks were made by Dr Atanas Paskalev, Vice-president of BWA, Dr Faraj El-Awar, Programme Manager of the Global Water Operators Partnerships Alliance of UN-HABITAT and Dr Reza Ardakanian, Director of UNW-DPC.

A special session for exploring opportunities for establishing a regional SEE “Water Operators Partnerships” (WOPs) platform, was organized by UN-HABITAT on the third day of the workshop. UN-HABITAT made an introduction of the concept of WOPs and the water operators and water associations present on this session were invited to identify the needs and opportunities for establishing a regional WOPs SEE platform.

**Technical Exhibition**

Providers of innovative technical solutions for detection and control of unaccounted flow, leakage control and water metering presented their products and approaches in a technical exhibition that was held during the workshop. Representatives of companies from Bulgaria, Germany and United Kingdom exchanged technological advances with the participants of the workshop.
Suggestions for follow-up activities

Based on the lessons learnt from this workshop, the participants made specific suggestions for possible follow-up activities and initiatives with the support of UN-Water and other regional actors. Some of the water utilities and water associations present in this workshop proposed to host and organize similar capacity development workshops and training courses in their respective countries on the issue of water efficiency and water loss reduction. A strong request was the establishment of a platform to exchange further information and expertise on this issue.

The final proceedings and the presentations made during this workshop will be soon disseminated through and available in UNW-DPC’s web-site: http://www.unwater.unu.edu/