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**UN-Water Decade Programme on Capacity Development (UNW-DPC)**  
**United Nations Human Settlements Programme (UN-HABITAT)**  
**Arab Countries Water Utilities Association (ACWUA)**  
**ONEP- International Institute for Water and Sanitation (ONEP-IEA)**

## **CAPACITY DEVELOPMENT FOR IMPROVING WATER EFFICIENCY:**

### **3<sup>rd</sup> Regional Activity on Water Loss Reduction in Water & Sanitation Utilities (Countries in the Arab region)**

**20-21 January 2010  
ONEP, Rabat, Morocco**

## ***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 third regional activity on this topic for Arab Countries was co-organized by UNW-DPC, UN-HABITAT, the Arab Countries Water Utilities Association (ACWUA) and ONEP-International Institute for Water and Sanitation (ONEP-IEA) as the Third ACWUA Best Practice Conference on Non-Revenue Water: Solutions for Drinking Water Loss Reduction. The conference was held in Rabat, Morocco, from 20 to 21 January 2010.

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 second regional workshop for South East Europe Countries was held in Sofia, Bulgaria on 16-18 November 2009, and was jointly co-organized with UN-HABITAT and the Bulgarian Water Association (BWA). The proceedings of these two regional workshops are already available at UNW-DPC.

In the Rabat Conference, more than 300 participants, including decision-makers, 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 ten countries in the Arab region and five other countries presented case studies in the conference:

- Algeria
- Egypt
- Jordan
- Lebanon
- Mauritania
- Morocco
- Palestinian Authority
- Syria
- United Arab Emirates
- Yemen
- Germany, Greece, The Netherlands, United States, Zambia

The main objective of this regional conference was to gather applicable knowledge of existing strategies, techniques and applications for water loss reduction, regional case studies, useful tools as well as clear concepts of the dimensions of integrated water loss reduction management, in order to apply the best available technical and managerial solutions in improving the control of non-revenue water usage and in reducing water losses for utilities in Arab countries. The conference 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 H.E. Mr Abdelkebir Zahoud, Secretary of State for Water & Environment of Morocco, Ms Nadia Abdou, President of ACWUA & CEO of Alexandria Water Company of Egypt, Mr Khaldon Khashman, Secretary General of ACWUA, Mr Samir Bensaid, CEO of ONEP-IEA, Dr Jose Luis Martin-Bordes, Programme Officer of UNW-DPC and Dr Faraj El-Awar, Programme Manager of the Global Water Operators Partnerships Alliance of UN-HABITAT.

The official representatives emphasized in their speeches the importance of addressing the issue of water loss reduction in the Arab region, where regional specificities such as water scarcity makes it even more crucial to tackle this issue and to provide solutions that are adapted to the situation and the needs of water utilities. All the official representatives in the opening session recognized the importance of developing capacities, especially of urban water managers and decision-makers and water supply utilities, as a pragmatic solution to the issue of water losses in distribution systems. They also wished that the exchange of information and experiences during this two-day conference would have an impact in the work of the water utilities that would come back to their countries bringing some examples of good practice.



A statement was read on behalf of Mr Loic Fauchon, President of the World Water Council who could not attend the conference. After the welcoming remarks, Mr Paul Reiter, Executive Director of the International Water Association (IWA) provided an overview about IWA's methods and standards for water loss reduction.

### Conference sessions

The 30 presentations (19 regional and 11 international speakers) made at the different sessions conference documented the situation in different cities in the region and provided up-to-date information and practical examples through numerous case studies on the following topics: rehabilitation methods, company strategies as well as monitoring and financial strategies to reduce water losses and customer relations management. UNW-DPC contributed to the technical content of the session on “monitoring and financial strategies” with a presentation delivered by the coordinator of the UNW-DPC’s Working Group on Capacity Development for Water Efficiency, addressing the economic aspects of drinking water loss reduction within Integrated Urban Water Management (IUWM).



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 administrative issues, ranging from water loss reduction economic and financial tools, technological tools such as GIS and models, proper customer surveys and customer service, pressure management and the role of water regulators in the Arab region. One of the main conclusions of this conference was that a holistic approach is essential for success in water loss reduction. It needs to be further promoted and encouraged within the water utility and with other stakeholders and more awareness rising is needed in the region on this issue.

Dr Jose Luis Martin-Bordes of UNW-DPC made a final presentation during the closing session on lessons-learned from world-wide experiences on water loss reduction. He summarized the findings and recommendations from one international and two regional workshops (LAC & SEE) organized by UNW-DPC and UN-HABITAT in 2008 and 2009.

The closing session remarks were made by Ms Nadia Abdou, President of ACWUA & CEO of Alexandria Water Company of Egypt, Mr Khaldon Khashman, Secretary General of ACWUA, Mr Samir Bensaid, CEO of ONEP-IEA, Dr Jose Luis Martin-Bordes, Programme Officer of UNW-DPC and Dr Faraj El-Awar, Programme Manager of the Global Water Operators Partnerships Alliance of UN-HABITAT.



### **Suggestions for the way forward**

Three main suggestions for the way forward of this conference were proposed at the closing session:

1. The outcomes of this conference should find its way to the decision-makers and politicians who should know more about the potential benefits, but also the potential risks associated to the reduction of water losses. This can be achieved through the proceedings of the conference, presentation of the results in international fora, preparation of policy briefs and training activities aiming policy-makers.
2. Increasing efforts should be made to develop capacities within water utilities at different levels (technical, administrative, institutional management), through training courses, programmes of staff exchange between water utilities and the establishment of incentive programmes.
3. Awareness raising campaigns on NRW and WLR for different target groups (general public, children, middle-managers, policy makers), through the preparation of information packages written in an appropriate language for each audience and disseminated through different channels.

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.

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/>

