

# Water Loss Management Strategies

Workshops and Conferences are supported by the "Water Loss Task Force" of the IWA "Efficient Operation and Maintenance" Specialist Group

**Italy, May 2006**  
**Draft Programme 191205**

**Ferrara – 17, 18, 19 May 2006**

*H2O Fair - Ferrara International Fair ([www.accadueo.com](http://www.accadueo.com))*

## International Conference and Workshops Efficient Management of Water Systems

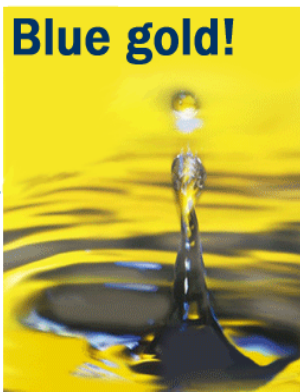
**H<sub>2</sub>O**  
ACCADUEO

International exhibition of technologies for the treatment and distribution of drinking water and wastewater treatment

Ferrara  
17 - 19 May 2006

VIII edition

Opening hours:  
9.30am. - 6pm



May 17th - Workshop 1- *HYDROPLAN-EU: EC funded Project on Rehabilitation of Water and Wastewater Networks*

May 17th - Workshop 2- *TILDE: EC funded Project on Efficient Leak Detection*

May 17th - Conference- *CSSA: Efficient Management of Water Networks. Design and Rehabilitation Techniques*

May 18th - IWA Water Loss Task Force and FederUtility Water Loss Group Conference – *International Experiences in Efficient Water Loss Management*

May 19th - Workshop 3 - *Introduction to IWA Water Loss Task Force Practical Approach to Water Loss Management*

Key Speakers will be Eminent International Experts,  
Members of the IWA Water Loss Task Force

### Who should attend:

Water Engineers, Leakage Specialists, Managers, Academics and Senior Decision Makers from water companies internationally who wish to apply efficient management strategies to reduce water loss from distribution networks and to network with world leaders in the water loss management field are encouraged to participate in this premier event.

### Main Benefits of attending:

- Hear about 'best practice' in water loss management from world leaders
- Be informed about latest technologies in leak detection
- Learn from latest Italian and International case studies

The events are organised in conjunction with:

TILDE



## **Hydroplan-EU: EC Funded Project on Rehabilitation of Water and Wastewater Networks**

**(Language: Italian and English – with simultaneous translation)**

- 10.00 Introduction to the Hydroplan-EU methodology and the associated products - Wim Van den Broeck (Aquaplus)
- 10.30 HADES and STYX, tools to support network managers - Ivo Boonen (Aquaplus)
- 11.00 Coffee Break
- 11.15 Real Life Cases (15 min each).
- Italy – AMAT Imperia: Results of a drinking water network – Angelo Gallea (AMAT Imperia)
  - Greece: EYATH Thessaloniki & EYDAP Athens: Results of sewerage networks - Panos Antonaropoulos (Z&A)
  - Belgium: Aquafin and Leuven - Results of 2nd Phase implementations - Wim Van den Broeck (Aquaplus)
- 12.00 What will the future bring - Wim Van den Broeck (Aquaplus)
- 12.20 Introduction to the CareS project and cluster activities with Hydroplan-EU – Rita Ugarelli (Sintef)
- 12.40 Panel discussion (20 mins)
- 13.00 Lunch Time

## **TILDE : EC Funded Project on Efficient Leak Detection**

**(Language: Italian and English – with simultaneous translation)**

- 14.00 Introduction to the TILDE (Tool for Integrated Leakage Detection) methodology and the associated products – SGI , Augusto Pretner
- 14.20 Product 1: TILDE Leakage Check-Up and TILDE DST (Decision Support Tool) – WRc, Dene Marshallsay
- 14.50 Product 3: TILDE DMS (Data Management System) – Sintef, Axel Konig
- 15.10 Coffee Break
- 15.30 International Snap Shots – 3 short papers from partners of the TILDE Project to give an overview of activities in their pilot project (15 min each).
- Italy: AQP Santèramo & SIINOS Sassari Pilot Project – SGI, Alessandro Bettin
  - Cyprus: Nicosia Pilot Project – Z&A, Panos Antonaropoulos
  - Norway: Bergen Pilot Project – Bergen Kommune, Sandy Mc Carly
- 16.20 Panel Q&A (20 mins)  
➤ Where are the gaps in knowledge and can TILDE contribute?
- 16.40 Introduction to the CareW project and cluster activities with TILDE – Vittorio di Federico (University of Bologna)
- 17.00 **EC Water Policy: programs and directions** – European Commission Officer – speaker to be defined
- 17.20 Close

## **CSSA (Centro Studi Sistemi Acquedottistici) Conference on Efficient Management of Water Networks. Design and Rehabilitation Techniques**

**Presentations will be made in Italian. Simultaneous translation will not be provided.**

- 14.20 Bertola P., Nicolini M. - Reliability assessment and optimal pressure management in water distribution network
- Darvini G., Salandin P. - Reliability based maintenance criteria for water distribution systems
- Alvisi S., Franchini M. - Multi-objective rehabilitation scheduling for water distribution systems
- Carravetta A., Giugni M. - Functionality factors in the management and rehabilitation of water networks.
- Liberatore S., Sechi G.M. - Scatter Search Metaheuristic Optimization Approach for Water Distribution Systems Design and Rehabilitation
- De Marinis G., Gargano R., Tricarico C. e Savic D. - Reliability thresholds for the rehabilitation of hydraulic networks
- 15.50 Coffe – Break
- 16.20 Cannarozzo M., Criminisi A., Gagliardi M. e Mazzola M.R. - Maintenance and rehabilitation strategy of Palermo city water network
- Ermini R., Ingeduld. P. - A case study of water distribution network reliability assessment with Mike-Net
- Rejtano B., Boccafoschi A. - Entropy and equivocation concepts in assessment of water network reliability
- De Marinis G., Gargano R., Tricarico C. e Savic D. - Models of daily water demand for small towns
- Orsi E. - Some topics in water demand reduction and control
- Brunone B., Ferrante M., Meniconi S. e Almadori C. – Pipe system diagnosis. Effects of singularities on pressure signal
- Guercio R., Magini R. e Pallavicini I. - Dynamic control of WDS for leakages reduction
- 17.50 Discussion
- 18.20 Close

**IWA Water Loss Task Force and FederUtility Water Loss Group :**  
**International Experiences in Efficient**  
**Management of Water Losses**

**(Language: Italian and English – with simultaneous translation)**

- 9.30            Opening by Andrea Cirelli (Regional Authority for Water Services)
- 9.40            IWA Italy: programs and directions – Renato Drusiani (IWA Italy)
- 10.00           IWA Water Loss Task Force: its achievements and directions – Ken Brothers (IWA Water Loss Task Force Chair)
- 10.20           The activities of the FederUtility GOA (Gruppo Ottimizzazione Acquedotti - Italian Water Loss Group) – Rosario Mazzola (GOA Chair)
- 10.40           Coffee Break
- 11.00           Pressure Management Session
- IWA Speaker – Best Practice Pressure Management – Julian Thornton (USA) (20 mins)
  - GOA Speaker – Italian experiences in Pressure Management: Case Studies (to be defined) (20 mins) – speakers to be defined
  - Panel Q&A (10 mins)
- 11.50           Leak Detection Session
- IWA Speaker – Leak detection technology internationally – Malcolm Farley (UK) (20 mins)
  - GOA Speaker – Innovative Leak Detection Technologies - Bruno Brunone, Marco Ferrante, Silvia Meniconi, C. Almadori (University of Perugia) (20 mins)
  - Panel Q&A (10 mins)
- 12.40           Lunch Time

- 14.00 Active Leakage Control Session
- IWA Speaker – Getting started, the basic approach: Regular Survey and Economic Intervention - Allan Lambert – United Kingdom, Marco Fantozzi – Italy (20 mins)
  - GOA Speaker – Benefits of Sectorisation in an Italian Utility – speaker to be defined - Italy (20 mins)
  - GOA Speakers – Italian Case Studies (to be defined) (40 mins) – speakers to be defined
  - IWA Speaker – International case study: The Malta experience – Alex Rizzo – Malta (20 mins)
- 15.40 Coffee Break
- 16.00 Economic level of leakage ELL
- IWA Speaker – Approaches to estimating and achieving ELL – Stuart Trow (United Kingdom) (20 mins)
- 16.20 Discussion
- 16.40 **Sponsors Session**
- 1 Major Sponsor – Topic to be defined (20 min)
  - 4 Minor Sponsor – Topic to be defined (10 min)
- 17.40 Close

## **Introduction to IWA Water Loss Task Force Practical Approach to Water Loss Management**

**Presentations will be made in English. Simultaneous translation will not be provided.**

Engineers and specialists have the possibility to participate in a session in which the Water 21 Articles will be presented for discussion and updating.

9.30 Introducing the IWA Water Loss Management methodology to Italy. How can you become involved - Marco Fantozzi (10 min)

9.40 Presenting the IWA Water 21 Articles (10 min each).

- Each expert will briefly present an overview of the key points of their articles and identify progress since the articles were written. This will be followed by open discussion on the topic of the article
- Practical approach initiatives to water loss reduction - Ken Brothers
  - Assessing Non Revenue Water and its components: a practical approach – Allan Lambert
  - Managing leakage by managing pressure - Julian Thornton
  - Managing leakage by district metered areas – Bambos Charalambous

10.20 Presenting the IWA Water 21 Articles (10 min each).

- Leak detection practices and techniques: a practical approach – Stuart Hamilton
- Assessing Real Losses, including Component Analysis and Economic Considerations: A Practical Approach – Paul Fanner
- Apparent Water Loss Control – Alex Rizzo
- Best Practice Performance Indicators for Non-Revenue Water and Water Loss Components: A Practical Approach - Ronnie McKenzie & Allan Lambert
- Recent highlights and future events - Roland Liemberger & Malcolm Farley

### **Specialist Session: Network Modelling & Water Losses**

11.10 Presenting International experiences in network modelling (15 min each)

- Network modelling: the state of the art - Dragan Savic (Exeter University - UK) & Orazio Giustolisi (Politechnic of Bari - Italy)
- Network modelling in Italy: current experiences and future developments - Marco Franchini (Centro Studi Sistemi Acquedottistici)

11.40 Concluding session: What can leakage specialists and network modellers learn from each others (30 min). Panel Q&A - Rosario Mazzola, Ken Brothers, Dragan Savic, Allan Lambert, Paolo Bertola, Marco Franchini etc.

12.10 Close

## Location

The Workshops and the Conference will take place in the grounds of the H2O Ferrara International Fair. More information is available at: [www.accadueo.com](http://www.accadueo.com)

## General Information

<p>For further Information about the <b>H2O Ferrara International Fair</b>, please contact the Operating Secretariat:</p> <p><b>Fairsystem</b></p>	<p>For further Information about <b>the technical programme of the Workshops and the Conference</b> and for <b>assistance in booking your travel and accommodation</b>, please contact Alberta Garrone or Enrico Zoni</p> <p><b>Asap Srl</b></p>
<p><b>Fairsystem</b> International Exhibition Services SpA Via Calzoni, 6/d 40128 Bologna ☎ Tel: +39 051 4156811 ☎ Fax: +39 051 6310034</p>	<p><b>Asap Srl</b> Via Luccoli, 29/9 - 16123 Genoa (Italy) ☎ Tel +39.010.255800 or +39.010.2462777 ☎ Fax: +39.010.2479743 e-mail: <a href="mailto:congressi@asapnet.it">congressi@asapnet.it</a></p>

## How to reach the Ferrara Trade Fair District



### How to reach the Ferrara Trade Fair District

**By train** Ferrara is at the centre of a number of railway routes including Bologna-Venice, which is the most important. It is also linked with Ravenna and Mantua. Bus route F links the Trade Fair District with the railway station in the city centre.

**By plane** The nearest airport is G. Marconi airport in Bologna, at about 40 Km.

**By car** The Trade Fair District is on trunk road no. 64 and easily reached from the A13 Bologna-Padua motorway: take the Ferrara Sud exit and drive towards the city centre.



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## **Fees**

No Fees will be charged for attending the Workshops and Conference  
Coffee breaks are included.  
Participants will have to register onsite for attending the Workshop.

## **Gala Dinner**

On Wednesday 17<sup>th</sup> May a Gala dinner in the Este Castle is foreseen.  
Dinner will include a spectacular show of typical flag-flyers and Renaissance dances during the appetizer.  
After the show a typical dinner will be served in the magnificent halls of the Castle and music and dances will continue.

*Ferrara finally rediscovers its spectacular castle. Built in 1385 by Niccolò II d'Este it took on its present-day form after several modifications. The qualities that make it so special are its elegance and the harmony of its forms, the towers and the drawbridges that recall the original fortress.*

*Ferrara and its guests regain possession of the space and the charm of a masterpiece of Renaissance architecture, the undisputed icon of the entire territory and testimony to the portentous cultural project that the great Este family had planned for its lands.*

## **Travel Assistance**

For assistance in booking your travel and accommodation, please contact

**Alberta Garrone/Enrico Zoni**

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