

# European Water Association



Yearbook 2008



# **EWA**

## **Yearbook 2008**



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## Peter Cook

### EWA President 2007 - 2009

Welcome to our latest Yearbook. We have changed the format slightly, eliminating the lists of data which may be obtained more accurately these days on the internet and devoting more space for information about our individual members. This has allowed them to better promote their ideas and to describe the issues which are important to them and to their relevant governmental administrations. Each member has also provided useful contacts within their own water industry sectors.

The European Water Association (EWA) itself is also undergoing change. In response to requests from our membership, whilst maintaining our technical exchange role through high quality conferences, we are seeking to make a significant contribution to the development and implementation of European Community (EC) environmental policy and legislation.

Our aim is to increase the professional support we provide the EC by greater participation in the working groups it uses to gather views and develop policy. We have established international networks of experts from our member associations for the relevant topics and the leaders of those networks will be our representatives at the Commission. Four such networks are already active - Sustainable Flood Management, Groundwater, River Morphology (Hydromorphology), Adapting to the Effects of Climate Change. They are participating in the working groups and our contributions through them are valued by the EC.

The continued success of this initiative relies on member associations supporting their nominees in this programme and on the nominees remaining committed to attending and contributing to the working groups and then, most importantly, reporting back to all members via the Secretariat.

To better serve our members and the Commission, we are currently planning the opening of an office in Brussels.

Two current and important issues for the water industry are: (a) adapting to the effects of climate change and (b) the anticipated redrafting of the Sludge Directive. EWA has been proactive in both. We published a draft opinion paper on dealing with the effects of climate change before the Berlin conference in February 2007, the final edition being published later that year. For April 2008 in Cambridge UK we organised a workshop of international experts on sewage sludge management and disposal. We took care to make sure that the full range of opinion on this emotive subject was represented. The objective of the workshop was to evaluate the latest scientific and operational knowledge and present the findings to the EC.

I was honoured to be elected President in April 2007. Since then Jean Philippe Torterotot, the Vice President and Chair of the European Policy Committee and I have worked closely with the Secretariat helping the Association achieve its objectives. To ensure success much work is necessary between meetings by those who commit to representing the EWA. We offer our sincere thanks to all those who are currently devoting their time and energies to the EWA and urge others of you to come forward and help the EWA reach its full potential.



## **Jean Philippe Torterotot** **EWA Vice-President 2007 - 2009**

It is a great pleasure and honour to serve as Vice-President of the EWA and as Chair of its European Policy Committee. It is a special opportunity to contribute to our strategy as a pan-European association representative of the major part of the water sector and of various water stakeholders; decision makers, operators, specialists, scientists.

EWA has decided to develop its activities and visibility along two lines: increasing its contribution to the development and implementation of water related policies in Europe, and increasing the service offered to its members, national water associations and partner organisations.

The new structure and organisation of the European Policy Committee, in strong coordination with the other bodies of EWA and with the support of the Secretariat, is intended to contribute to this strategy through:

- a permanent core group
- specialists representing EWA in European level working groups, including those contributing to the implementation strategy of the Water Framework Directive where EWA is recognised as a representative NGO; these specialists are backed up where necessary by internal EWA groups
- a network of representatives of national member associations.

This organisation shall allow EWA to develop more its added value amongst the different organisations of the water sector, and in partnership with them, a strong European wide geographical representation with a focus on Europe relevant water issues, and a membership (national member associations and their members, partner members) covering a wide range of expertise and activities within the water sector.

European policy and regulations are challenging for decision makers, for practitioners and for experts. Through exchange of information and of experience as well as through the production of integrated views and synthesis which reflect European diversity on relevant hot topics, EWA wants to contribute more to sustainable water management in Europe.

You are all welcome to join as a national member association from countries not yet represented, as member of the national member associations or as partner member.

## The European Water Association More than 25 Years of Clean Water for Europe

The European Water Association (EWA) is an independent non-governmental and non-profit making organisation promoting the sustainable and improved management of the total water cycle and hence the environment as a whole.

It is one of the major professional associations in Europe that deals with the whole water cycle; wastewater as well as drinking water and their associated treatment wastes. With member associations from nearly all European Countries, EWA includes most of the current European Union Member States as well as Norway and Switzerland. Today, EWA consists of 25 European professional organisations each leading in their respective countries, representing professionals and technicians for wastewater and water utilities, academics, consultants and contractors as well as a growing number of corporate member firms and enterprises. EWA thus represents more than 50,000 professional individuals working in the broad field of water and environmental management. It is recognised by the European Commission as a source of unbiased expertise.

When formed in 1981 its aim was to provide a forum for the discussion of key technical and policy issues affecting the growing European region. This it continues to do through conferences, workshops, meetings and special working groups of experts all organised on an international basis together with regular publications.

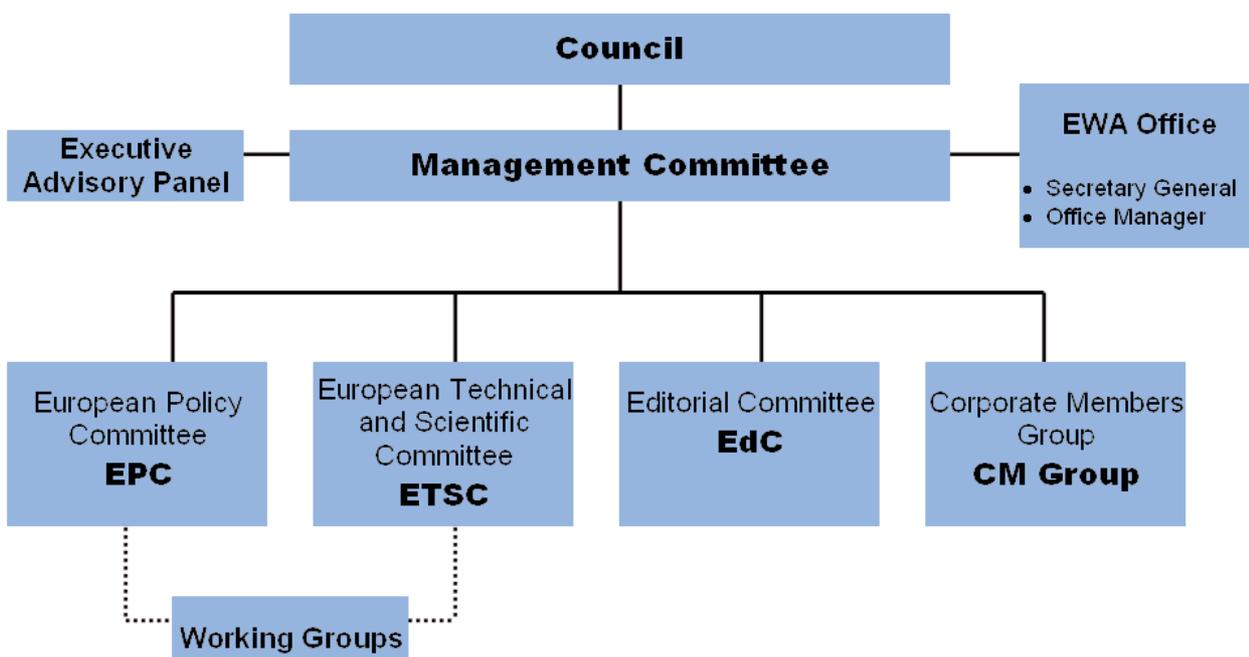
EWA is already a respected consultee on EC committees and, as and when appropriate, publishes opinion papers on topical issues e.g. The Consequences of Climate Change, and The Management of Treated Sewage Sludge.

Now, in addition, it aims to contribute to a much greater extent to the development and implementation of Community environmental policy and legislation.

The EWA is also exporting the European experience more widely. It has cooperation agreements with WEF (Water Environment Federation, USA), JSWA (Japan Sewage Works Association, Japan) and IWA (International Water Association, UK). In addition, in the Middle East, EWA is consultant to the Arab Countries Water Utilities Association (ACWUA).

### Organisation and Structure

The highest authority of the EWA is the Council - it has the executive power of decision. Each member association (25) is represented on the Council and these representatives meet annually to discuss and plan the activities of the association. The smaller Management Committee has responsibility for developing policy and is in charge of the daily work of the association, supported by the Secretariat. The Association is represented by the President, who chairs the Council and the Management Committee. The Secretary General executes the day-to-day operations of the Association. In addition, Standing Committees and Working Groups support the work of the Association.



### Structure of the Management Committee

The following is an overview of the current positions within the EWA Management Committee.

<b>EWA Management Committee, April 2007 - May 2009</b>	
President	Peter Cook, UK
Vice President	Jean Philippe Torterotot, FR
Honorary Treasurer	Johannes Pinnekamp, DE
Past President	Jirí Wanner, CZ
MC member	Werner Floegl, AT
MC member	Gamaliel Martinez, ES
MC member	Pertti Seuna, FIN
<b>Chairpersons of the Committees (without fixed term of office)</b>	
European Technical and Scientific Committee (ETSC)	Bojan Zmaic, HR
Editorial Committee (EdC)	Helena Marecos do Monte, PT
Corporate Members Committee	Peter Matthews, UK
European Policy Committee (EPC)	Jean Philippe Torterotot, FR

### Contact us:

1. Website [www.EWA-online.eu](http://www.EWA-online.eu)
2. E-WAter is the electronic journal of the European Water Association.  
E-WAter is specifically targeted at European practitioners and researchers. It provides a forum where articles presenting and discussing technical views and experiences of European authors in every domain of water management may be published. All topics within water management can be interesting for the wide scope of the EWA audience: design and construction procedures, operation & maintenance, monitoring, legislation, etc. concerning natural waters, drinking water, wastewater and related wastes.
3. The *European Water Management News* (EWMN) compiles news from the European and international water sector. This weekly news service currently reaches over 5,500 readers and is produced by the Netherlands Water Partnership (NWP) for the European Water Association. Interested persons can subscribe for free by sending an e-mail to [ewmn@nwp.nl](mailto:ewmn@nwp.nl) with "Subscribe European Water Management News" in the subject line.

Chairperson of the EWA Editorial Committee is Dr. Maria Helena F. Marecos do Monte at EWA.

## The EWA Code of Ethics - The Role of Professional Ethics in Water Management

Claus Hagebro and Peter Matthews  
The European Water Association (EWA)

### Ethics in society

The legal case between the State of South Africa and 39 international medical companies producing AIDS medicine gave cause for a lot of publicity and discussion on moral and ethics. This suddenly became a problem for many people, as these companies acting within a free market economy would not allow production of cheap copy-medicine. Because it was a question of seriously sick people who could not afford to buy the expensive medicine, the companies were supposed to act according to moral principles and accept an income loss.

The reason for this change in attitude towards companies and institutions may be the result of the situation after the collapse of communism in Europe. Marxism was opposed to the free market economy/capitalism and provided criticism. After its disappearance the market economy was left alone and after some time many people found out that market economy also have some negative side effects. In this way a New Criticism of the market economy has developed. At the same time society has become very complicated. It is difficult to identify or understand all conditions in relation to e.g. a medical production. The public relates to simple messages. Therefore ethical principles are becoming increasingly important. We judge the company by its image and the way it introduces itself and on how it is presented in the press.

Some time ago an article by William Warner discussed the influence of religion on wastewater treatment. The article described by means of examples how religious beliefs can direct behaviour relating to health and hygiene. The author stated that the number of people infected by faecal-related diseases continues to grow and he asked if hygiene is controlled better by the myths of religion than the facts of science. His own answer was: probably not - but he added that if all religions commanded: wash your hands after being in the toilet such a single disciplining taboo would have a major positive impact.

### Trust of experts

Communities at large no longer automatically trust experts as they used to do. Environmental professionals are no exception. There is a general trend that organisations have to become environmentally certified and demonstrate responsible governance, indeed ethical governance. Environmental ethics is not just the subject of academic study, it is the stuff of newspaper editorials as demonstrated above. Most people have an instinctive view that water is a human right and that its supply should probably be free. However, it is recognised that water service charges can be levied for the cost of treatment and carriage of water and wastewater. There is a powerful element of trust, when these policies are provided by utilities. When the service fails or the resources are mis-used, not only do customers suffer, but also they feel that the trust has been broken.

From the above it seems that there is an increasing demand for simple messages or rules to guide our general behaviour in relation to e.g. water management. Such rules could help to make the statement "make water everybody's business" from the World Water Vision come true. It seems that one success factor would be ethical behaviour at corporate and personal level in water management.

### The concept

At the Water Associations Worldwide seminar at the World Water Forum in The Hague, the European Water Association (EWA) introduced the idea of ethical behaviour of water professionals. At the seminar we presented some generally accepted basic principles formulated as "Ten Commandments" which could serve as the foundation on which new water ethics could be developed. Furthermore, it was suggested to introduce an oath to be taken by individual members when they enter the water management profession. Finally EWA offered to take the lead on behalf of the Water Associations Worldwide for the further development of these ethical principles.

Since The Hague, a small task group developed the idea of a Code of Ethics for the European Water Association and its National Member Associations. It worked in conjunction with a similar working group in the Chartered Institution of Water and Environmental Management (CIWEM) which serves UK and Eire. A number of changes have been made:

- The Code is now one which can be adopted by a professional body and its individual members which would be expected to comply with it
- It is less evangelical and more practical

- There is the possibility to broaden the issue to include all environmental activities to allow for the diversity of our organisations and to state the commitment of water professionals to the wider environment. However, the Code is very easily expressible in water terms and that version will be presented here.

There is some merit in adopting the same wording throughout all organisations to ensure harmony across Europe but it is recognised that, in practice, there may be variations. For example, some may wish to express the principles in a paragraph rather than ten bullet points; others may wish to choose a slightly different form of words to aid understanding - for example, the words 'ensure' and 'promote' may replace each other just like some may wish to replace 'water' with 'environment' to emphasise the focus of their organisation. So, the heart of the acceptance of the Code of Ethics by the water associations is acceptance of the principles.

### The national implementation

Since the adoption of the Code by the EWA Council for the Association itself, the National Member Associations have deliberated on its implementation.

The UK member association CIWEM (The Chartered Institution of Water and Environmental Management) has adopted the Code in its original wording. With slight changes the code was translated into French and adopted by ASTEE (Association Scientifique et Technique pour l'Eau et l'Environnement) which recommended its adoption to its members in all their professional activities. The German Association DWA (German Association for Water, Wastewater and Waste) adopted a shorter version together with two other big German water related associations, thus reaching a wider community than only its own members. All three associations expended huge efforts to make the code known to the public and to their individual members, e.g. through press releases, articles in the associations' journals and publication on their homepages.

Other associations have accepted the code as a guideline without formally adopting it, others are still reflecting on a possible adoption.

### The Code of Ethics

Individual Members of the Professional Association will be expected to use their influence to the fullest extent and to behave to the best of their ability to maintain a sustainable environment in the following way:

- Ensure that the use of environmental resources is fair and equitable and sustainable and takes account of the needs of a diverse environment.
- Never knowingly or deliberately over-exploit environmental resources.
- Never knowingly or deliberately cause the environment to be damaged or nuisance to be created by the discharge of unacceptable quantities of any substance or energy in any form.
- Recognise that in contributing to the provision of environmental services they provide an important contribution to human well-being.
- Ensure that the uses of the environment do it no harm or to the life within it and wherever possible enhance it.
- Embrace the needs of the community.
- Promote the concepts of integration of the management of the wider environment.
- Use their wisdom in serving the community and constantly strive to learn more.
- Serve as an example to others for responsible environmental behaviour.
- Never engage in corrupt practice and maintain a high standard of professional behaviour which will serve as an example to others.

The EWA Code of Ethics - National implementation		
Country	EWA National Member Association	Activities to implement the Code of Ethics
A	Österreichischer Wasser- und Abfallwirtschaftsverband (ÖWAV) - Austrian Water and Waste Management Association	Discussion of the Code within the association
CH	Verband Schweizer Abwasser- und Gewässerschutzfachleute (VSA)	Discussion and acknowledgement of the Code within the association
D	DWA Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V. - German Association for Water, Wastewater and Waste	Discussion of the Code, adoption in an own wording, publication in the association's journal
F	Association Scientifique et Technique pour l'Eau et l'Environnement (ASTEE) Discussion of the Code, adoption in an own wording, recommended to the association's members	Discussion of the Code, accepted as guideline for the association.
L	Association luxembourgeoise des services d'eau (ALUSEAU)	Discussed and accepted as guideline for the association
N	Norwegian Water Association (NWA)	Discussion of the Code, adoption in its original wording, publication in the association's journal
NL	Netherlands Association for Water Management (NVA)	Discussed and accepted as guideline for the association
UK	The Chartered Institution of Water and Environmental Management (CIWEM)	Discussion of the Code, adoption in its original wording, publication in the association's journal





## EWA Award - the William Dunbar Medal



This prestigious medal is awarded every three years to an individual of a member country of the EWA and is presented by the President of the EWA on the occasion of the EWA Symposium held in conjunction with the IFAT event. This Award, donated by IFAT, the international trade fair for water, sewage, refuse, and recycling, which is organised by the Messe München International, has been adopted by the European Water Association. The recipient is awarded in recognition of his or her outstanding contribution in applied technical development in the field of sewage and waste treatment and disposal.

The award consists of a gold medal, a certificate plus cash amounting to a total value of € 8,000. The medal bears the portrait of William Dunbar on one side and on the other the logos of the EWA and IFAT.



### William Dunbar Medal - Award Winners

Year	Award Winner	Country
1975	Dr. A.L. Downing	UK
1978	Dr. Ir. Aale Pasveer	NL
1981	Prof. Dr. sc. nat. E.A. Thomas	CH
1984	Herbert A. Hawkes	UK
1987	Prof. Dr.-Ing. Wilhelm von der Emde	AT
1990	em. o. Prof. Dr.-Ing. habil. Franz Pöpel	DE
1993	Geoffrey Ashworth Truesdale	UK
1996	Prof. Dr.-Ing. E.h. Klaus R. Imhoff	DE
1999	Prof. Mogens Henze	DK
2002	Prof. Dr.-Ing. Rolf Kayser	DE
2005	o. Prof. Dipl.-Ing. Dr. techn. Helmut Kroiss	AT
2008	Prof., MSc, PhD, DSc Jiri Wanner	CZ

## The EWA Standing Committees

From the very beginning the Association laid emphasis on the exchange of information and knowledge between professional experts. Through this exchange of knowledge, the EWA contributes to a sustainable water management: safe water supply and the protection of water and the environment. This was achieved by the organisation of numerous conferences and workshops taking place all over Europe and covering a very broad range of water related topics such as European legislation (themed areas such as Water Framework Directive, Groundwater Sewage Sludge Directive etc.), technical questions like for example the significance of small wastewater treatment plants in rural areas, or scientific conferences, like Waters in Protected Areas and other integrated approaches. The European Water Association organizes conferences and symposia at regular intervals, on events like the International Trade Fair for Wastewater and Waste Disposal (IFAT) in Munich, Aquatech in Amsterdam but also its own annual EWA Brussels conference. An increase in the number of members from Central and Eastern Europe (accession countries), has raised the interest for events dealing with water protection issues.

However, not only conferences and the reports thereof were and are the output of the Association's work, but also publications.

All this work is achieved through the different Committees and Working Groups that were established from the very beginning, but are adapting their scope according to the needs. They are based on voluntary work of experts coming from the different National Member Associations and working together on various subjects of current interest in the water and environmental field.

### The Editorial Committee (EdC)

For an interim period this committee was also known as Communication Committee (CC). The Editorial Committee's (EdC) main assignment was the production of the printed journal "European Water Management Online". Its main task is now the coordination of the newly established online journal "E-Water" which is directly accessible via EWA's homepage at [www.EWA-online.eu](http://www.EWA-online.eu) at no extra cost. This online journal is officially registered and has its own International Standard Serial Number (ISSN). The committee also co-ordinates a further means of communication, the weekly newsletter European Water Management News (EWMN) which ensures a coherent communication of both organizational and technical information to members and the public. This EWMN is produced by the Netherlands Water Partnership (NWP), a national member association, for the European Water Association.

### European Policy Committee (EPC)

The committee follows the work of the European Commission and arranges regular meetings with officials in the Commission, responsible for activities of relevance to water management. The committee gives comments and advice to official European institutions on behalf of its members. The EWA is attending meetings of the Strategic Co-ordination Group under the WFD Common Implementation Strategy. Furthermore the EWA is in close contact with other European associations and institutions.

The objectives and responsibilities of the European Policy Committee (EPC), under the guidance of the governing bodies of the European Water Association, and within its rules of procedure, are the following:

- Organise and coordinate relationships of EWA with European level bodies, and especially with bodies of the European Union;
- Facilitate and create the necessary and useful flows of information amongst the persons and groups representing EWA towards European level bodies, as well as between the former and the National Associations (NA), members of EWA;
- Identify emerging issues and important trends in water related European policies and issues, which are of interest to EWA and its members, in order to allow EWA to anticipate future changes and to contribute efficiently to European policy development;
- In consequence, and in conjunction with the European Technical and Scientific Committee (ETSC), propose the evolution of thematic activities and actions of EWA.

### European Technical and Scientific Committee (ETSC)

The ETSC provides a focal point for communication and co-operation between European practitioners and researchers concerned. Under the ETSC several working groups are organised. These working groups are installed according to the needs of the association. Currently there are working groups on: Climate Change, Groundwater, River Morphology, Sewage Sludge and Sustainable Flood Management. The work results in technical and scientific papers and documents.

The committee is also responsible for the organisation and sponsorship of workshops, seminars, conferences and symposia.

### The Network of Experts

Although the working groups already present a focal point for the exchange of information, they only involve a limited number of persons out of the approximately 50,000 members assembled in the EWA National Member Associations. Additionally, the working groups cover mainly specific topics.



## - the EWA Online Journal

E-WATER is the electronic journal of the European Water Association (EWA). E-WATER represents the interests of both European practitioners and researchers by providing them with a forum where experiences in every domain of water management may be published.

E-WATER welcomes articles concerning natural waters, drinking water, wastewater and related wastes, such as sludge and biogas; water quality, water policy, design and construction procedures, O&M, monitoring, legislation etc..

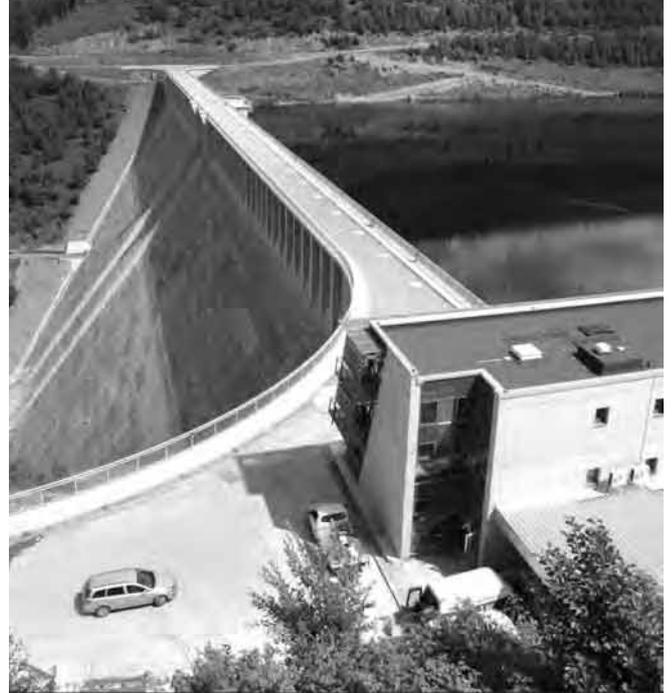
The quality of the published papers is of high priority for the association and thus the journal. This means, prior to publication, proposed articles are reviewed by at least two referees from a network of European experts who form the Editorial Committee of the EWA. The interest of E-WATER was recognized by registration with the International Centre and being assigned the International Standard Serial Number ISSN 1994-8549.

Although English is the adopted language, our journal is prepared to accept a few articles in other languages, provided that an extended abstract in English is supplied and the subject is recognised as being of outstanding European interest.

Due to easy accessibility to an e-journal, articles do not need to be published at regular intervals. However, the annual frequency of publication is about 12 papers per year.

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## Developments in European Union Water Policy

Peter Gammeltoft, Water Unit, DG Environment, European Commission

The past three years since the publication of the last EWA Yearbook saw decisive development in European Water Policy

- the European Water Conference devoted to the first stage of implementation of the EU Water Framework Directive;
- the Groundwater Daughter Directive of 2006;
- the Commission Communication on water scarcity and droughts of July 2007;
- the Floods Directive of October 2007;
- the final agreement of the Marine Strategy Directive in December 2007.

### I European Water Conference: state of implementation of the Water Framework Directive

For achieving its objective, achieving good status for all waters (rivers, lakes, groundwaters and coastal waters), the Water Framework Directive follows a step by step approach

- designation of river basin districts and responsible authorities by 2003;
- environmental analysis of pressures and impacts on waters by 2004;
- monitoring programmes for surface waters and groundwaters to be operational by 2006;
- river basin management plans and programmes of measures by 2009 (all dates to be read as "22 December");
- implementation of measures, aiming to achieve, as a rule by 2015, the environmental objective.

22-23 March 2007 saw a European Water Conference hosted by the European Commission, with opening addresses by Environment Commissioner Stavros Dimas, German Environment Minister Sigmar Gabriel, Portuguese Environment Minister Francisco Nunes Correia and Mr Karl-Heinz Florenz MEP, former chairman of the Environment Committee of the European Parliament. A complete video coverage of the conference, as well as access to all documents and presentations are available on the Internet<sup>1)</sup>.

Inter alia the conference presented the first report by the European Commission on implementation of the steps due under the Water Framework Directive, assessing progress and quality of implementation as well as ranking countries in

a transparent manner. The report is structured into a Communication "Towards Sustainable Water Management in the European Union" and a more detailed Commission Staff Working Document "First report on the implementation of the Water Framework Directive 2000/60/EC". Both documents are available on the Internet<sup>2)</sup>, as are reports on the implementation of two keys other water directives, the Urban Waste Water Treatment Directive and the Directive on Nitrates Pollution from Agriculture.

### Conclusions of the Implementation Report are as follows:

"Reports from the Member States on their initial obligations under the Water Framework Directive show some encouraging results, although there are major shortcomings in some areas. There is still time to remedy the gaps before 2010, when the first river basin management plans have to be adopted.

The poor transposition and the lack of economic analysis are the biggest gaps in Water Framework Directive implementation so far. While international cooperation needs to be enhanced in many cases, significant improvements have been observed in some regions, such as the Danube.

Further progress is needed in areas like integration of water policy into other policies and assessment of the impacts of climate change in the water cycle, including floods and droughts and long-term demand and supply of water, in order to effectively implement a long-term, sustainable water management across EU.

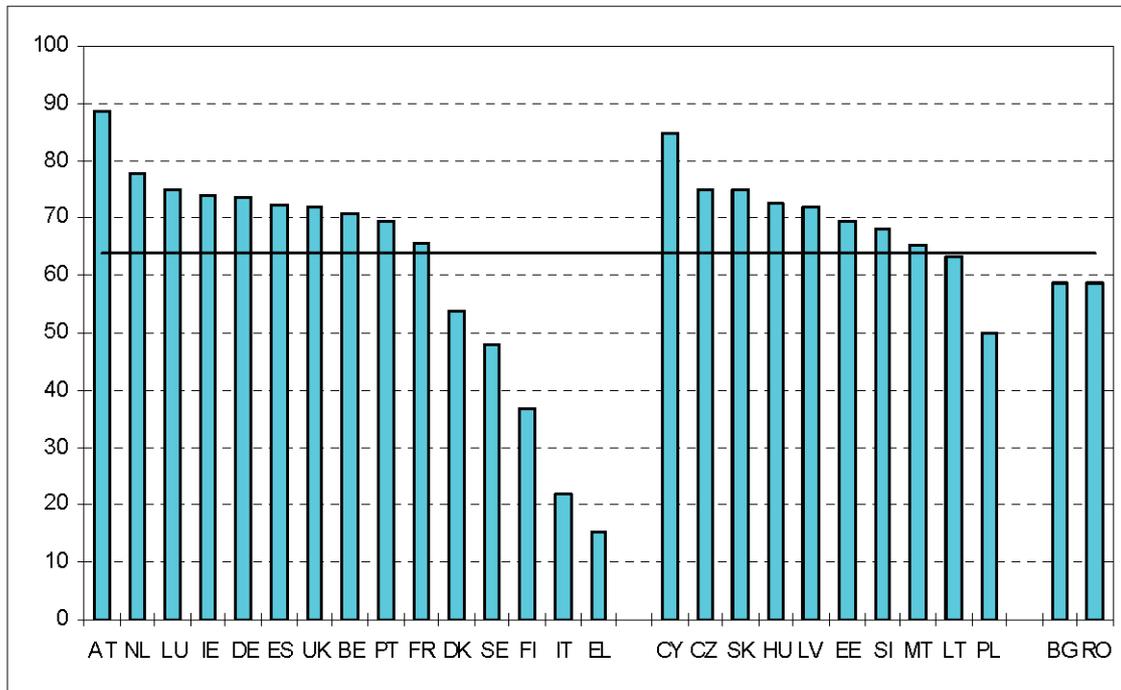
The Commission is committed to renewing its partnership with the Member States under the Common Implementation Strategy in order to jointly address some of these challenges ahead. One important element is the development of the Water Information System for Europe.

In conclusion, this first report on the implementation of the Water Framework Directive illustrates that we have made significant steps forward 'Towards Sustainable Water Management in the European Union'. Together with the water-related directives that are still under negotiation, the Water Framework Directive provides all the tools needed to achieve truly sustainable water management in the EU for years to come. However, there is still a long and challenging road ahead for Member States to implement these tools in the best possible way. Member States have to deploy considerable efforts to achieve this."

The performance of 27 Member States is assessed in detail, with a summary assessment providing the following picture for the analysis under article 5 of the WFD.

1) [http://ec.europa.eu/environment/water/water-framework/2007conference/index\\_en.htm#streaming](http://ec.europa.eu/environment/water/water-framework/2007conference/index_en.htm#streaming)

2) [http://ec.europa.eu/environment/water/water-framework/implprep2007/index\\_en.htm](http://ec.europa.eu/environment/water/water-framework/implprep2007/index_en.htm)



**Performance indicator per Member State regarding the implementation of the environmental and economic analysis- Article 5 WFD- including the EU-27 average (based on Member States' reports). For more detailed information see the Commission Staff Working Document "First report on the implementation of the Water Framework Directive 2000/60/EC"**

\*The scores for BG and RO are based on preliminary assessments.

## 2 The Groundwater Daughter Directive<sup>3)</sup>

Whilst the Water Framework Directive provides for all the major elements for a comprehensive protection of our groundwaters, it left two specific issues to a Daughter Directive,

- parameters and maximum numerical values defining good chemical status for groundwater: here maximum concentrations were defined for nitrates (50 mg/l) and for active substances in pesticides (0,1 µg/l for each individual pesticide, plus 0,5 µg/l for total of all pesticides; list of parameters and numerical values are to reviewed at least every six years;
- criteria for trend reversal (note: The Water Framework Directive provides for groundwaters not only for a non-deterioration clause, but also an obligation for trend reversal ("to reverse any significant and sustained upward trend in the concentration of any pollutant resulting from the impact of human activity in order progressively to reduce pollution of groundwater", article 4(1)b).

Following a conciliation procedure between the European Parliament and the Council, final agreement was achieved and the Groundwater Daughter Directive published in December 2006.

## 3 The Floods Directive<sup>4)</sup>

Following flood disasters in various parts of Europe, it has become increasingly evident to the wider public that the damage potential of floods is enormous, for human life, human health, infrastructure and private property, and not least to the environment.

At the same time, rivers do not respect borders - neither for floods nor for water pollution. Most of Europe's river basins are shared between two or more countries. Citizens across Europe have been experiencing this simple fact, but at the same time have increasingly taken up these challenges in shared river basins across the continent.

Based on a Communication of July 2004, a broad consultation exercise as well as political conclusions by Council, Committee of the Regions and Economic and Social Committee, the European Commission presented the legislative Proposal in early 2006. Political interest prevailing delivered a considerable speed of negotiations, and after only 15 months European Parliament and Council agreed in 2nd reading on the final text.

Guiding objectives and principles of the Floods Directive are

- flood risk management to be implemented by coordinated action at river basin level and in coastal zones, taking account of local and regional characteristics and circumstances,

3) [http://ec.europa.eu/environment/water/water-framework/groundwater/policy/current\\_framework/new\\_directive\\_en.htm#2006118ec](http://ec.europa.eu/environment/water/water-framework/groundwater/policy/current_framework/new_directive_en.htm#2006118ec)

4) [http://ec.europa.eu/environment/water/flood\\_risk/index.htm](http://ec.europa.eu/environment/water/flood_risk/index.htm)

- step by step approach from identifying the problem to arriving at a solution to the problem, looking also at cost-benefit relations,
- flood risk management to address all phases of the flood risk management cycle - prevention, protection, preparedness, emergency response, recovery and review,
- clear link to the Water Framework Directive, both in legislative and in implementation terms, underpinning the principle of integrated river basin management.

#### 4 Communication on water scarcity and droughts<sup>5)</sup>

Currently about 11 % of population are affected, with an increase between 1976 and 2006 of 20 %. During summer 2003, more than 100 million people were affected, and the economic damage amounted to about 100 billion EUR. These problems will be aggravated by the impact of climate change.

The Commission Communication was based on a broad consultation and provides an analysis and first set of policy options.

- More efficient allocation of water and water-related funding (CAP reform 2003 already beginning to deliver);
- Drought risk management plans; WFD providing all the regulatory instrument options; drought observatory and early warning system; use of Solidarity Fund and EU Mechanism on Civil Protection?
- New water supply infrastructure, once all prevention measures have been implemented: storage, transfers, alternative sources of supply;
- Fostering water performance technologies and practices, toward a water-saving culture in Europe;

Following a meeting of the Environment Council devoted to the challenge of water scarcity and droughts, the Council adopted in October 2007 conclusions supporting the Commission analysis and way forward, including the conclusion that existing legislation provided all the necessary instruments. The European Parliament will intensively take up the issue and develop an own-initiative report.

#### 5 The Marine Strategy Directive

Our European marine waters are facing a range of pressures on their environmental status, in terms of biodiversity and ecological status, and from a range of sources, both land-based and sea-based. In December 2007, the European Institutions reached final agreement on the Marine Strategy Directive, mirroring the principles and objectives of the Water Framework Directive and expanding protection of our marine waters beyond the coastal waters. Publication and coming-into-force is foreseen within the months to come.

#### 6 Conclusion and outlook<sup>6)</sup>

Across Europe we have already achieved a lot: Just as one example - the Rhine developed from being nicknamed "the sewer of Europe" in the 1970s to being home again to the salmon, one of the symbols of clean water. The joint vision for 2015, by the end of the first implementation cycle of the Water Framework Directive, is that thinking, planning and action will have changed

- holistic approaches to water management in urban as well as rural areas will prevail;
- all sectors of society will have accepted their responsibility and contribute their share to sustainable water management in terms of quality and quantity;
- experts from within the scientific community, all levels of administration, NGOs and stakeholders will contribute, as will the civic society at all levels;
- major progress towards good ecological status of our rivers will have been achieved, and pollution by untreated or inadequately treated waste water will be a matter of the past; however further efforts will be necessary;
- integration of water management into other policy areas such as transport, construction, tourism or spatial planning will already have delivered benefits;
- our waters will have been re-adopted as part of our local and regional heritage;
- and we will be addressing the challenge of climate change on our waters, by reducing greenhouse gases as well as by adapting - also and in particular in the water sector.

In these efforts, those responsible at a local, regional, national and European level can count on broad support not only from experts or environmentalists, but by the majority of citizens: In the EU-wide opinion survey "Eurobarometer Environment"<sup>7)</sup>, citizens in 25 EU Member States ranked 'water' amongst their top environmental concerns. And even more encouraging, an overwhelming majority of citizens agree that policy-makers should consider the environment to be just as important as economic and social policies. Majorities in the participating countries ranged between 76 % and 95 %, with EU average of 85 %.

Against this background, the first sentence of the Water Framework Directive can be regarded not only as a simple recital, but as a vision for Europe and its waters:

Water is not a commercial product like any other but, rather, a heritage which must be protected, defended and treated as such.

5) <http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=OJ:L:2007:288:0027:0034:EN:PDF>

6) [http://ec.europa.eu/environment/water/marine/index\\_en.htm](http://ec.europa.eu/environment/water/marine/index_en.htm)

7) Eurobarometer Environment: [http://ec.europa.eu/environment/barometer/pdf/report\\_ebenv\\_2005\\_04\\_22\\_en.pdf](http://ec.europa.eu/environment/barometer/pdf/report_ebenv_2005_04_22_en.pdf)

## EWA - River Morphology Working Group

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### I Introduction

Many rivers all over the world have seen severe anthropogenic modifications. Amongst other things numerous barriers, such as dams, weirs, hydropower plants and locks have been built for different kinds of water utilizations. An inventory in the German State of North Rhine-Westphalia for example showed that there exist more than 13,000 obstacles with a head of more than 30 centimetres. These measures are unavoidably related to hydromorphological alterations of the water bodies. The following key impacts of hydromorphological alterations include primarily:

- impoundment and diversion of the water course associated with disruption of the aquatic habitat, sometimes leading to a change of water body category and type;
- delay, impediment or blockage of the upstream migration of fish and invertebrates;
- disruption of the downstream migration of fish as well as damaging of fish through screening systems and mechanical installations, e.g. of hydropower plants or intake structures;
- other regional impacts on the watershed and hydromorphology due to storage effects, retention of bed load, hydro-peaking etc..

Many of these impacts can be mitigated by different measures (restoration and/ or mitigation measures). River continuity, minimum flow, debris management, hydro-peaking and habitat improvement usually are the main aspects to be considered in restoration / mitigation measures to reduce local impacts from impounding, hydropower etc.. This contribution focuses on the interruption of the continuity of rivers and their tributaries and describes the state-of-the-art of fish passage restoration as well as EWA's work in this field.

Evolution has produced migration behaviours in numerous aquatic species that enable them to make optimal use of various habitats. For example, reproduction may require different flow conditions, temperatures and substrates. Thus, numerous native aquatic species such as salmon and eel undertake migrations of varying lengths - even between fresh and salt water - to find the optimal conditions for their current biological phase. This makes the survival of diadromous and potamodromous species dependent on continuity within rivers as well as accessibility to tributaries. Hence up- and downstream fish passage has to be provided at water management structures in order to mitigate their impacts.

In Germany during the last 15 years upstream fish passage has predominantly been restored by retrofitting impassable barriers with fish passes. Not only in Germany but throughout Europe this trend is likely to continue due to require-

ments resulting from the European Water Framework Directive (WFD) that has highlighted the protection, enhancement and sustainable management of aquatic ecosystems. In compliance with these new European provisions, surface waters are now assessed by biological and hydromorphological quality elements, such as the diversity and abundance of fish fauna and river continuity.

### 2 Restoration of upstream fish passage

Experience has shown that many old river barriers have no more function today. A study in the Ruhr River basin in Western Germany revealed for example that out of almost 1,300 barriers in the whole catchment at least 293 were out of service. In fish passage restoration efforts it is therefore always essential to check initially whether a migration obstacle can be removed completely or at least partially (see chap. 2.1). At sites where the water management structures are still required, i.e. where their decommissioning is impossible, upstream fish passes can facilitate passage over or around the obstacles (see chap. 2.2).

#### 2.1 Barrier removal and rock ramps

From a hydromorphological and ecological point of view the removal of useless dams should always be the first option in fish passage restoration efforts. In several European countries, e.g. Germany, Austria, Switzerland and Ireland, a great number of barriers have been removed completely or partially in the last century. In those cases where partial removals were carried out so-called rock-ramp fishways (figure 1) were built to enable fish passage over the structure.



**Figure 1: Rock-ramp fishway in Hüsten/Ruhr River (Germany)**

In the middle of the last century ramp constructions were originally developed and applied with the (hydraulic) task of stabilizing river bottoms, to prevent erosion or to secure bed drops. From a hydraulic engineering point of view they were meant to dissipate the energy on the rough surface rather than to build stilling basins beneath weirs or bed drops. However fish passage was not the focus of attention. Older constructions are therefore often steep ( $> 1:20$ ) with characteristic high flow velocities and turbulences and therefore in the majority of cases not passable for aquatic organisms.

Nowadays rock ramps are usually designed to enable fish passage. Two basic prerequisites have to be met in order to enable fish passage over rock ramps:

- Sufficient water depths ( $> 30 - 40$  cm) in the migration corridor and space (between rock boulders) for the fish to manoeuvre.
- The flow velocities in the migration corridor should lie within the region of the sustained swimming speeds of the fish.

According to their hydraulic working principle there exist three different types of rock-ramp fishways:

- rockfill or embedded boulder constructions (loose or dressed constructions)
- rock ramps with perturbation boulders
- pool & boulder-type constructions (cascade constructions)

Unlike bed drops, where the energy of the hydraulic head is dissipated in a hydraulic jump below the drop, the energy dissipation on ramp constructions takes place on the ramp surface and at the ramps toe by means of turbulences created by large-scale roughness (figure 1). On pool & boulder-type rock-ramps the energy is also dissipated in the pools. Depending on the height of the bed drop, slope gradient and discharges respectively hydraulic loads, different flow conditions develop on the ramp constructions which again determine the stability of the construction, material sizes and ramp geometry.

The hydraulic and structural design of rock-ramps is probably the most demanding of all fish pass designs. Different flow conditions depending on the respective discharge and slope gradient need to be assessed. According to the variety of construction types whose design criteria often is not clearly established, there exists a number of different calculation approaches and formula. Due to their derivation from laboratory tests and / or in-situ examinations these again are often only valid for a certain range of slope gradients or material sizes. Future research & development projects will be required to concentrate on special areas, for instance velocity distribution in flow layers or turbulence characteristics, and to transfer the findings to rock-ramp designs.

Despite the remaining uncertainties a few practically oriented design guideline for rock-ramp fish passes have been published so far which incorporate and integrate a number of calculation formula and design recommendations.

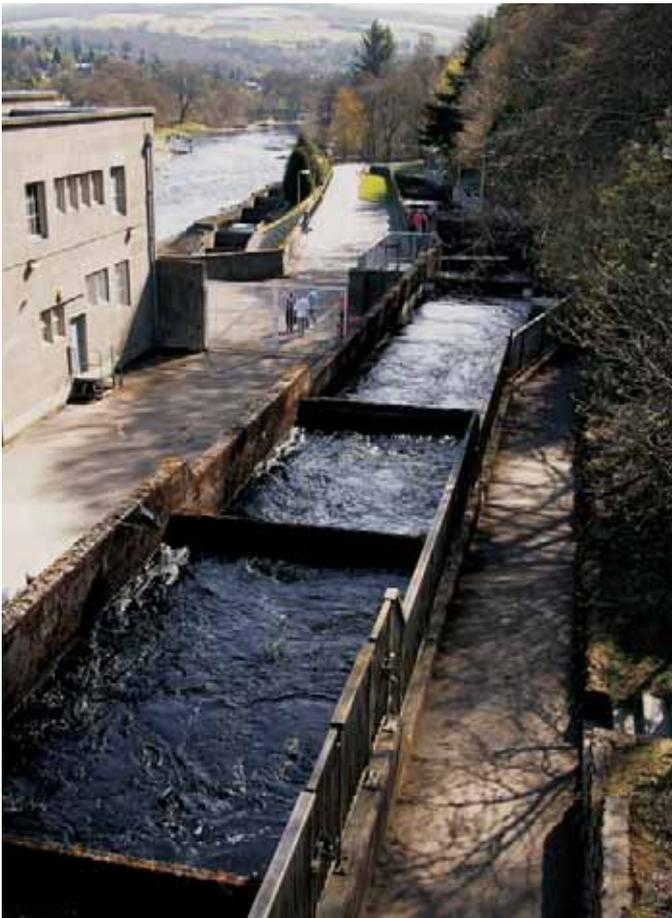
In principle rock ramps are suitable for both upstream and downstream fish passage in different river zones. The construction type is convenient especially for retrofitting existing low head weirs or bed drops either over the full width (full-width rock-ramp) or just part of the river width (partial-width rock ramp). Due to their substantial width and attraction flow the fishway traceability is almost always excellent. Given their nature-like appearance rock-ramp fish passes blend well into the landscape and therefore represent a popular construction type in river restoration projects. At sites with high bedload rates, distinct upstream water level fluctuations or sustained low-water flow periods, the hydraulic and structural design requires particular attention and may call for special solutions, e.g. combined constructions. As far as their operation and maintenance is concerned, rock ramps are more maintenance-friendly than other nature-like fish passes.

## 2.2 Fish passes

The design concept of fish passes is not new at all. They have been constructed for centuries already (figure 2).



**Figure 2: Pool-type fish pass Mülheim-Raffelberg/ Ruhr River (Germany) in 1920 (reference: Ruhrfischereigenossenschaft)**

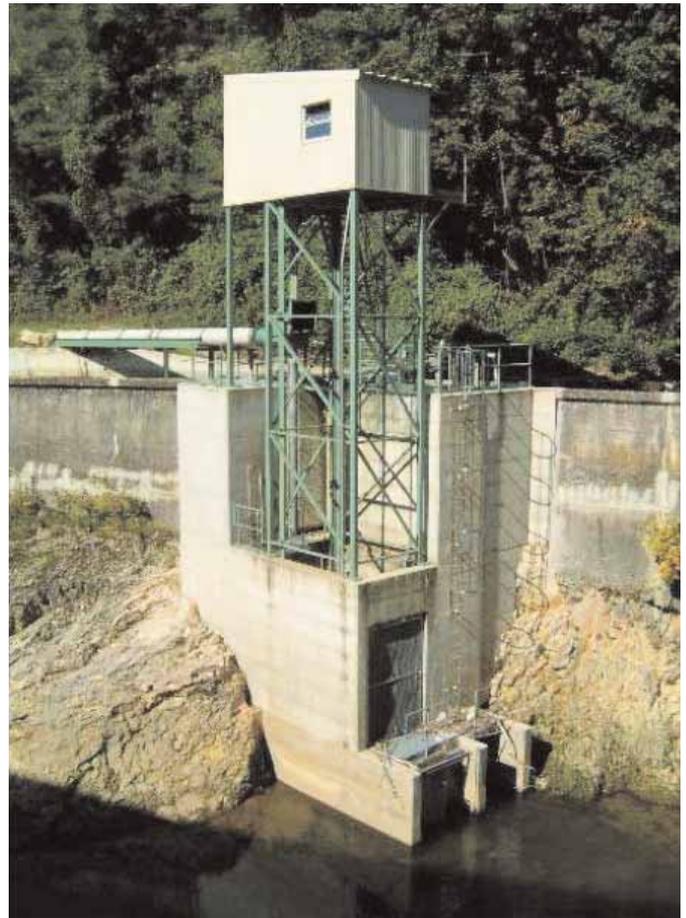


**Figure 3: Technical pool-type fish pass Pitlochry Dam/River Tummel (Scotland)**

Today the different types of fish pass constructions to ensure upstream fish passage comprise

- technical and nature-like pool-type constructions e. g. vertical slot passes, pool & weir-type passes, pool & orifice-type passes (figure 3), boulder-type passes,
- channel-type constructions e. g. Denil passes, eel passes and bristle-type passes,
- special technical constructions, e. g. fish locks and fish lifts (figure 4),
- bypass channels (nature-like respectively stream-like bypass channels) and
- bottom structures and river crossings passable for aquatic organisms, e. g. rock ramps and culvert fish passes.

These fish pass constructions are internationally considered to be well-developed for a wide range of diadromous and potamodromous species. Recommendations for state-of-the-art designs of different types of fish passes are compiled for example in Clay (1995) or Larinier et al. (2002). In Germany there exists a federal design guideline (DVWK, 2002) and several State design guidelines. Other countries, such as Great Britain, France or the Netherlands have also published similar recommendations.



**Figure 4: Fish lift Büntenen/Birs River (Switzerland) (photo: M. Hintermann)**

However in European countries there exists a great difference in the approach to the design of fish pass facilities. In France or Scotland for example fish passes were formerly designed for certain target species, e.g. diadromous species such as salmon, sea trout or sea lamprey. Accordingly flow velocities, drops or turbulences in fish passes can be too high for fish with weak performance, resulting in the facilities being species- or size-selective. Fish passes in other countries, e.g. Germany or Australia are never designed only for certain target species but for the entire (potentially natural) fish fauna in a water body, i.e. for various species, life stages and respective sizes. The design of fish passes and other fish facilities therefore always requires knowledge of the swimming ability as well as the behaviour of the species concerned so that the fish pass does not present an impediment for example to juveniles, weak swimmers or large fish.

In principle two prerequisites are decisive for the effectiveness and efficiency of fish passes:

1. traceability, i. e. the fish pass location, entrance position, hydraulic conditions at the entrance and attraction flow
2. passability, i. e. the fish pass design e. g. design discharge, flow velocities and patterns, water depths, pool dimensions (with respects to manoeuvrability), slot spacings etc.

Whereas the passability of fish passes depends on the actual construction type and the respective hydraulic and geometric conditions prevailing within the pass, the requirements of the fish passes traceability refer to their general layout. The various aspects that apply to all types of fish pass constructions are illustrated in numerous publications. The reader may refer to these fish pass design guidelines for further information.

Until now fish passes have mainly been constructed at bed drops and low or medium-head weirs and dams. Due to their comparatively small slope the building lengths - especially of channel-type constructions that are usually the first option when retrofitting impounding structures - are substantial, therefore requiring a great amount of space near the barrages. For example the total length of the nature-like bypass channel at the 7,8 m head Harkortsee Power Station on the Ruhr River in Western Germany amounts to 370 m (figure 5). The realization of these constructions is therefore not always possible and may call for other construction types. Solutions such as fish locks or lifts (figure 4) have only rarely been realized at high barriers until now, for example in Scotland, France and Ireland.

The emphasis of so-called nature-like fish passes (figure 5) in the German fish pass recommendation published in 1996 by the DVWK (today: German Association for Water, Wastewater and Waste DWA) and co-published in 2002 in English by the FAO of the UN has led to their widespread

distribution in Germany and neighbouring countries. The publication highlighted the employment of nature-like fish passes because of several advantages, such as good landscape embedment, creation of new habitat in degraded river reaches, provision of appropriate natural riverine structures and comparatively lower costs. Many water authorities gave preference to their construction instead of the more technical solutions, often regardless of specific disadvantages related to various aspects, such as design, practicability, operation and maintenance.

The design philosophy of nature-like fish passes is ecologically minded, aiming to achieve compatibility with the specific riverine environment as well as the landscape they are constructed in. The idea being to observe and apply some of the features of a natural riverine system when designing the structures, i. e. to simulate natural channel characteristics. They resemble natural formations, e.g. pool-riffle, step-pool, cascade channel and rapids. Predominantly natural materials, such as boulders, crushed stones and cobbles are used for their construction. The toes and banks of the fish passes are usually protected using bioengineering techniques, such as dead or live wood, fascines, geotextile constructions and planted riprap. The key to passage in all of the designs however is the diversity of hydraulic conditions. The natural materials create variable hydraulic conditions, i. e. areas with low as well as high flow velocities, that may alter over the range of flow.



**Figure 5: Harkortsee Power Station and bypass channel/Ruhr River (Germany) (photo: Ruhrverband)**

The feasibility of fish pass constructions has proven to be distinctly site-specific. It depends on the respective general conditions, e. g. local infrastructure, land properties, availability of area adjacent to the barrier, local geological conditions, water & impoundment licences, river bank & flood protection structures, accessibility for construction as well as the specific fish pass characteristics, such as construction type, channel course, dimensions, design flow etc.

Nonetheless an appropriate fish pass solution - no matter if nature-like or technical - always takes into account the ecology and the site-specific boundary conditions. In combination with other aspects, such as practicability, operation, maintenance and costs these determine the applicability of fish pass designs rather than subjective preferences for certain construction types.

Experts in several European countries such as Germany and France are currently revising their fish pass design guidelines to integrate findings of national and international investigations, new approaches and novel fish pass designs as well as to comply with the goals of the WFD. Another important task is to incorporate the latest knowledge of nature-like constructions, hydraulics and costs of fish passes. The German fish pass committee will also employ a "new" river zone-oriented design philosophy for hydraulic and geometric design criteria.

### 3 Restoration of downstream fish passage

Fish passage through water management structures (e.g. hydraulic turbines and over spillways) can cause damage to downstream migrating fish. Experience has shown that problems associated with downstream migration can be major factors affecting especially diadromous fish stocks.

Downstream migration involves diadromous species: juveniles of anadromous species and adults of catadromous species. For potamodromous species, downstream fish passage at barriers is generally considered less essential in Europe and North America. However, certain potamodromous species can migrate over very long distances, so the need for mitigation to provide passage for potadromous fish needs to be considered species- and site-specific.

Fish passing through hydraulic turbines are subject to various forms of stress likely to cause injury or mortality: probability of shocks from moving or stationary parts of the turbine (guide vanes or runner blades), sudden acceleration or deceleration, very sudden variations in pressure and cavitation. Numerous experiments have been conducted in various countries such as USA, Canada, Sweden, Netherlands, Germany and France, mainly on juvenile salmonids and less frequently on clupeids and eels, to determine the injury and mortality rate due to their passage through the main types of turbine. The mortality rate has been found to vary greatly, depending on the properties of the turbine runner (diameter, speed of rotation etc.), the condition of operation, the head, and the species and size of the fish concerned.

Passage through spillways may cause direct or indirect injury or mortality. The injury rate also varies greatly from one location to another. Damages have several causes: shearing effects, abrasion against spillway surfaces, turbulence in the stilling basin at the base of the dam, sudden variations in velocity and pressure as the fish hits the water as well as physical impact against energy dissipators.

A large number of systems exist to protect fish from being entrained into dangerous areas. These are physical barriers, which physically exclude fish from intakes (e.g. bar or wedge-wire screens), or behavioural barriers that attract or repel fish (e.g. bubble screens, sound screens, attractive or repellent light screens and electrical screens). Physical barriers designed with a specific flow velocity, flow angle and fish-friendly bar spacing have proven to be most effective for the aquatic fauna (figure 6). Behavioural barriers on the other hand have proven to be species-selective owing to the excessive flow velocities involved and the fact that various species show widely divergent behaviours.



**Figure 6: Mesh intake screen at Foyers Pumped Storage Facility / Loch Ness (Scotland)**  
(photo: Scottish and Southern Energy)

Bypasses are essential elements of downstream fishways. In combination with physical and/ or behavioural fish protection systems they enable the downstream passage past the barrier.

According to current technical standards, effective protection of fish species during downstream migration is possible only at small- and middle-sized hydropower facilities and dams. At large facilities, physical protection barriers with small bar spacings are not realistic due to technical and financial reasons.

At large facilities, migrating fish can alternatively be protected by means of appropriate management practices, e.g. eel-friendly operation of turbines in the migration period. Another way to improve downstream migration is by employing fish-friendly turbines. The mortality rates of fish in hydroelectric turbines can also be decreased by modifying the

runner diameter, the number of blades, turbine rotation and runner angle. In chains of impoundments, fish can be captured in the highest impoundment and released below the lowest obstacle; this technique is referred to as trap & truck.

Altogether downstream fish passage technologies are much less advanced than upstream fish pass facilities and are the areas most in need of research. This is due to the fact that efforts to re-establish free movement for migrating fish began with the construction of upstream fish passes and that downstream migration problems have only more recently been addressed. This is also because the development of effective facilities for downstream migration is much more difficult and complex. As yet, no country has found a satisfactory solution to downstream migration problems, especially where large installations are involved. In principle problems concerning downstream migration have been thoroughly examined in North America and Europe with regard to anadromous species, and more particularly to salmonids. Comparatively little information is available on other migratory species.

#### 4 EWA's working group on river morphology

In view of the importance of river continuity, i.e. fish passage in the context of the WFD and the number of ongoing activities throughout Europe in this field an EWA working group was constituted in October 2006. The interdisciplinary group of seven engineers and biologists as well as two international cooperation partners from the USA and New Zealand strive to:

- act as European competency centre for all river continuity and fish passage issues,
- improve and facilitate European and international exchange of know-how,
- harmonize terminology and definitions,
- develop Best Practise Guidelines on up- and downstream fish passage and
- identify knowledge gaps as well as research & development needs.

Another important task of the group is to liaise with other national and international expert groups. So far contacts have been established and will be maintained in future with the fish pass committee of the German Water Association (DWA) and the Working Party on Fish Passage Best Practices of the European Inland Fisheries Advisory Commission (EIFAC).

Short-term activity will comprise

- collection and dissemination of information such as legislation in European countries, literature, publications etc. in form of a database,
- assessment of the current distribution and employment of up- and downstream fish passage technologies in the different European countries and

- establish common terminology & definition of fish passage facilities.

On a political level the Working Group is involved and actively participating in the European CIS-activities "WFD & Hydropower" and "WFD & Navigation".

Apart from the WFD the EWA working group will also work on other EU fisheries and water management issues. The new EC Council Regulation No. 1100/2007 of 18th September 2007 for example requires the establishment of measures for the recovery of the stock of European eel (*Anguilla anguilla*). This regulation which is not directly linked to the WFD will probably also imply measures in the water management area to reach its goals, e.g. temporary switching-off hydro-electric turbines or the installation of fish protection facilities at intake structures. Therefore it is essential that experts like the EWA working group provide comprehensive and sound expertise on a European level in order to meet the multiple supranational targets for a sustainable use of our waters.

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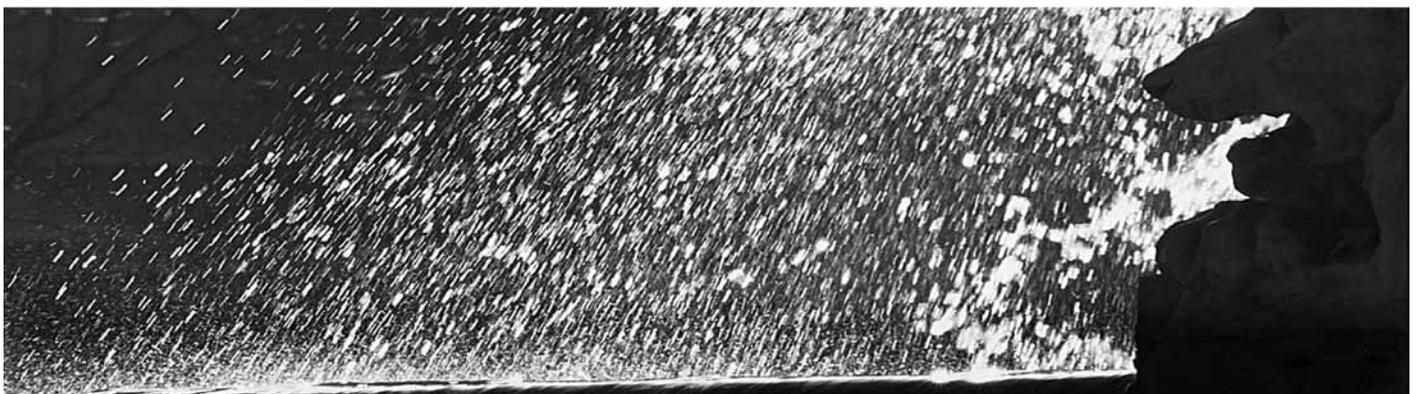
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## EWA - Climate Change Working Group

Paul Horton, Chairman, CIWEM

It is a busy time in Europe as governments, officials, The European Commission and ordinary people all try to understand the implications of climate change. The past few years have seen the hottest temperatures on records, high volumes of rain, droughts, floods, warm winters and cool summers. Weather patterns are changing and historical records no longer provide a reliable indicator to future. Against this background policy makers have been introducing legislation, such as the water framework directive, developing national adaptation strategies and introducing climate change legislation.

The European Commission has begun consultation on an EU wide policy framework for adapting to climate change and is undertaking a number of key research projects on the issue. With a lot of activity happening at the political level, it is the role of organisations such as the European Water Association (EWA) to ensure that the voice of the expert, the professional is heard. With a membership base stretching across 25 European countries and including some 55,000 individual professionals, the EWA has a range of expertise that is second to none.

In September 2006, the EWA became a stakeholder in a steering committee that developed proposals for a conference, held in Berlin under the German Presidency in February

2007. The event looked at all the current thinking on climate change and examined how it impacted on various key sectors which used water, such as hydropower, agriculture, water resources, navigation etc. The conference led to a series of actions including establishing a strategic steering group to look at the implications of climate change for the Water Framework Directive implementation, particularly the production of the River Basin Management Plans (RBMPs) due in 2009. The strategic steering group was formed in September 2007 and also includes representation from the EWA.

The strategic group held a workshop in November 2007 to examine the impact of climate change for the Water Framework Directive and a number of recommendations were produced, including a requirement for all member states to include a climate change chapter with the first set of RBMPs. The chapter should summarise the existing knowledge on climate change trends, identify the main impacts for a given river basin and present future steps for incorporating climate change impacts into the planning process, particularly for the second and third cycles of RBMPs. The workshop also put forward the idea that there should be a 20 to 25 year water vision for Europe that acts as a roadmap for member states.

Linked to all this ongoing work, the EWA has established its own Climate Change Working Group and produced an Opinion on Climate Change which calls for

- The European Union to review its funding support for research as well as capital projects, ensuring that climate change is a factor in project evaluation and is a core component of the relevant research projects and technology platforms
- Future EU funding to be geared towards supporting the National Adaptation Strategies being developed by EU member states
- The preparation of an overarching European Water Vision as part of an overall long term plan for water management in Europe for the next 20 to 25 years
- The EU to review, and keep under review, all existing and planned legislation to ensure that climate factors have been taken into account and future climate changes are not exacerbated by current and future directives
- Greater integration between R&D programmes and the technology platforms, such as the Water Supply and Sanitation Technology Platform (WSSTP), under the Environment Technology Platform (ETAP)
- The European Commission to adopt a set of common climate change scenarios against which mitigation and adaptation strategies can be developed
- Europe wide risk maps to be developed which help identify the areas that are most vulnerable to climatic changes

Linked to all this ongoing work, in July 2007 the European Commission issued for consultation a Green Paper on Adapting to Climate Change in Europe. This document set out the issues that Europe as a whole will face over the coming years due to climatic changes, the possible policy options and asked for responses to a number of key questions. The EWA joined the launch in Brussels, attended the regional workshops set up to examine the paper in more detail and produced a detailed response.

What next for the EWA Climate Change Working Group? The group will continue to input into the relevant EU stakeholder groups, review and update the EWA Opinion on Climate Change and respond to EU legislation. The European Commission plans to produce proposals for concerted EU action on adaptation through a White Paper to be issued in 2008, and the EWA intends to play a key part in the development of these proposals. The next few years promises to be a period of even greater activity for the EWA working group.



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# Directory of Members



## Albania Water Supply and Sewerage Association of Albania (WSSAA)

### President

Engjell GJONDREKAJ, Director  
Shkoder Water Supply and  
Sewerage Company

### EWA Council Representative

Petrit TARE, Director  
Korca Water Supply and Sewerage  
Company

### Secretariat of the association

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Web: www.shukalb.com



Children's Water Awareness Art  
Competition



University Student Internship Awards  
Program

### Description and Core Mission of the Association

The Water Supply and Sewerage Association of Albania is a professional, not-for-profit association of water supply and sewerage professionals. The Association's Mission Statement consist of two key objectives:

- To improve the capacity of the people, who work to deliver water supply and sewerage services in Albania, so that they can perform their duties in a professional, reliable and cost-effective manner.
- To represent the interests of water supply and sewerage utilities and other professionals in the water sector in Albania regarding laws, degrees and regulations that may be proposed for action by the Parliament or by the Government.

### Core Association Activities:

- Continuously increase the number of training courses offered to its members, which include:
  - Water Loss Management
  - Asset Management
  - Business Plan Preparation
- Young Albanians Water Awareness Education Program and Art Contest, which impacted 4,700 3rd Grade students in 2007
- Annual University Summer Internship Program with 35 4th and 5th year students working in water utilities for the Summer 2007 Program.

### Challenges Facing the Sector

The water supply and sewerage sector in Albania is in major transition as the Government implements its decentralization programs. These challenges include:

- Regionalization of water supply and sewerage services to improve upon economies of scale.
- Increase focus on corporatization and commercialization of utility management to achieve full cost recovery from revenues.
- Develop and implement a sustainable, national training program to improve the capacity of the sector, leading to certification as a qualification for employment in the sector.

### Vision on Water Resources

Protection and effective utilization of Albania's abundant, high quality groundwater and natural springs to minimize the need for the use and treatment of surface water sources as primary supplies of fresh water.

### Publications

The Association publishes the new journal "BURIMI" 4 times per year, in Albanian and English, and distributes it electronically via the Internet.

### Regular Conferences

The Association conducts an Annual Conference and Exhibitian in October of each year.

## Helpful contacts in Albania

### Governmental Departments/Ministries

Ministry of Public Affairs, Transport and Telecommunication  
<http://www.mpptt.gov.al/>

Ministry of Environment, Forest and Water Administration  
[http://www.moe.gov.al/cms\\_en/](http://www.moe.gov.al/cms_en/)

### Agencies/Regulators

Water Regulatory Entity

### Other Stakeholders of the Water Sector

Tirana University Engineering & Construction Faculty  
<http://www.unitir.edu.al/>



**Austria**  
**Österreichischer Wasser- und Abfallwirtschaftsverband**  
**(ÖWAV)**  
**Austrian Water and Waste Management Association**



**President**

Baurat h.c. DI Dr. Werner Flögl

**Executive Director**

DI Manfred Assmann

**EWA Council Representative**

Baurat h.c. DI Dr. Werner Flögl

**Secretariat of the association**

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 Austria

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Fax: +43 | 535 40 64

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Web: www.oewav.at



**Description and core activities of the association**

The Austrian Water and Waste Management Association (ÖWAV) is a voluntary collective of all parties interested in water and waste management in Austria, which leads to the exchange of experience in economy, administration and science.

It is considered as an "independent counsellor" with the goal of achieving sustainable objectives of the water, wastewater and waste management in Austria.

The ÖWAV has seven main sections with about 50 expert working groups. These working groups elaborate and compile recommendations, guidelines, rule sheets, working instructions and studies for specific fields of water and waste management.

**Benefits for members**

- The ÖWAV provides first-hand contacts to decision makers and key players in the fields of water, wastewater and waste management.

- The ÖWAV provides advisory services for members and publishes information papers and guidelines.
- Members have a preferred and more favourable access to the ÖWAV seminars and trainings.
- ÖWAV members have the opportunity to influence technical regulations and constitutions of laws by collaborating in working groups.
- Every member receives the bimonthly professional interest magazine (Austrian Water and Waste Management), the ÖWAV newsletter and further sufficient information considering the legal, technical and economical development in the fields of water, wastewater and waste management.

**Special competences of the association**

The ÖWAV is an independent platform for all interests of water, wastewater and waste management, and was founded in 1909! Since then the ÖWAV has developed to a professional communication-platform used for the reconciliation of interests.

The ÖWAV uniquely provides information to members and the public and operates as an advisory service for the environmental legislation. The ÖWAV features an effective and efficient organisational structure to quickly achieve its objectives. Expertise is provided through the involvement of proficient experts in the fields of science, economics and administration

The ÖWAV offers a great variety of highly qualified education and training programs. Besides conferences, seminars and workshops, special courses for the operational staff of waste water treatment plants and waste management facilities and executives are provided, with the objective to push the exchange of experience.



### Challenging topics for the future

1. Climate change: New working group to examine the consequences and effects of climate change on the water and waste management sector in Austria.
2. Preservation of safety and value of water treatment plants and waste management facilities.
3. Courses and advanced training for the personnel of water treatment plants and waste management facilities.

### Vision on water resources

Development and preservation of the water and waste management sector at a high quality standard.

### Publications

Professional interest journal "Österreichische Wasser- und Abfallwirtschaft" (Austrian Water and Waste Management) published bimonthly as printed version. Furthermore, the ÖWAV newsletter (monthly by email), ÖWAV guidelines and ÖWAV papers.

### Regular conferences

- ÖWAV waste management conference
- ÖWAV water management conference

Facts: The ÖWAV organises approximately 35 conferences, seminars and workshops and about 60 courses respectively trainings per year with more than 6,000 participants.

The ÖWAV participates on the IFAT in cooperation with DWA and VSA.

### National awards

- PHÖNIX: annually waste management award (in cooperation with the Austrian ministry of environment)
- NEPTUN: water award - every two years (in cooperation with the Austrian ministry of environment)



## Helpful contacts in Austria

### Governmental Departments/Ministries

BMLFUW (Austrian Ministry of Environment)  
Stubenring 1, 1010 Wien  
<http://www.lebensministerium.at/>

### Other Stakeholders of the Water Sector

ÖVGW - Austrian Association for Gas and Water  
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Fax: +43 / 1 / 513 15 88-25  
E-Mail: [office@ovgw.at](mailto:office@ovgw.at)

IWA national committee  
Schubertring 14  
1010 Wien  
[www.a-iwa.at](http://www.a-iwa.at)

ATCOLD  
(Austrian National Committee on Large Dams)  
[www.atcold.at/](http://www.atcold.at/)

BAIK (Architects Engineers Chamber)  
[www.arching.at/](http://www.arching.at/)

**President**

Michel VERBANCK

**EWA Council Representative**

Michel VERBANCK

**Secretariat of the association**

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E-mail: [nvaneylen@belgaqua.be](mailto:nvaneylen@belgaqua.be)Web: [www.b-iwa.be](http://www.b-iwa.be)**Belgium****Belgian Committee of the International Water Association (B-IWA)****Description and core activities of the association**

B-IWA is a platform at national level for all matters of water management. Its aim is to be a forum for all stakeholders interested in water issues in Belgium and to establish contacts through the organization of Happy Hours (information sessions) and to encourage scientific research and development and the practical application of this know-how by organising Poster Awards.

**Benefits for members**

Free participation in the committee's Happy Hours with possibilities to establish a network and to have contacts with people from the water sector.

**Special competences of the association**

The national character of B-IWA allows an exchange of information and offers possibilities to meet people from the three Regions, which is felt to be very valuable in our country where water issues are now a regional matter and the Flemish, Walloon and Brussels Region are no longer informed of each other's activities.

Also the direct link to IWA and EWA is an asset.

**Regular conferences**

There are three Happy Hours held each year. These are information (evening) sessions and consist of either visits to installations or of flash presentations at the B-IWA headquarters by speakers from the industrial sector, government institutions and the academic world dealing with water issues. Afterwards drinks and sandwiches are offered and people can make contacts and cast their votes for the Poster Award organised at each Happy Hour.

**National awards**

Poster award 3 times a year.



## Helpful contacts in Belgium

### Governmental Departments/Ministries

Federal Ministry of Health and Environment:  
[www.health.fgov.be](http://www.health.fgov.be)

Flemish Ministry for the Environment:  
[www.leefmilieu.infrastructuur@lin.vlaanderen.be](mailto:www.leefmilieu.infrastructuur@lin.vlaanderen.be)

Walloon Ministry for the Environment:  
[dgrne@mrw.wallonie.be](mailto:dgrne@mrw.wallonie.be)

Brussels Ministry:  
[www.brussel.irisnet.be](http://www.brussel.irisnet.be)

### Agencies/Regulators

Vlaamse Milieumaatschappij (VMM):  
[www.vmm.be](http://www.vmm.be)

Société publique de gestion de l'eau:  
[www.spge.be](http://www.spge.be)

Brussels Environment:  
[www.ibgebim.be](http://www.ibgebim.be)

### Other Stakeholders of the Water Sector

Belgaqua:  
[www.belgaqua.be](http://www.belgaqua.be)

Aquawal: [www.aquawal.be](http://www.aquawal.be)

SVW:  
[www.svw.be](http://www.svw.be)

Aquabru:  
[www.aquabru.be](http://www.aquabru.be)





## Bulgaria

### Bulgarian Water Association (BWA)

#### President

Assoc.Prof. Dr.Valeri Nikolov

#### BWA Secretary General

Prof. Dr. Eng.Teniu Peitchev

#### EWA Council Representative

Prof. Dr. Eng. Teniu Peitchev

#### Secretariat of the association

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Web: www.bawk-bg.com

#### Description and core activities of the association

BWA is a non-profit organization whose main fields of interest are water supply and wastewater disposal, as well as management, preservation and utilization of water resources. It takes part in discussions related to new regulations and develops expert appraisals, standpoints, strategies and technologies in its field.

#### Benefits for members

Members of Association receive the latest news about conferences, publications, business proposals, training courses in the country and abroad. Their subscription to BULAQUA journal is included in the membership fee, and their registration fees for the BULAQUA conferences are reduced.

#### Challenging topics for the future

1. New policy - Water Supply and Sewerage Act
2. Establishment of National Water Centre
3. Launching training courses for national water operators

#### Vision on water resources

We think that it is expedient to establish a National Agency (or Ministry) of Water in order to provide a centralised management of this natural resource.

#### Publications

The quarterly BULAQUA journal.

#### Regular conferences

BULAQUA regular conference and exhibition.

## Helpful contacts in Bulgaria

#### Governmental Departments/Ministries

Ministry of Environment and Water  
[http://www.moew.government.bg/index\\_e.html](http://www.moew.government.bg/index_e.html)

Ministry of Regional Development and Public Works  
<http://www.mrrb.government.bg/>

#### Agencies/Regulators

State Energy and Water Regulatory Commission  
[http://www.dker.bg/index\\_en.htm](http://www.dker.bg/index_en.htm)

#### Other Stakeholders of the Water Sector

Union of Employers in the Water Supply and Sewerage Field



## Croatia Croatian Water Pollution Control Society (CWPCS)

### President

Zoran Nakic, Sc. D.

### Executive Director

Bojan Zmaic, M. Sc.

### EWA Council Representative

Siniša Širac, Sc. D.

### Secretariat of the association

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Ulica grada Vukovara 220  
10000 Zagreb  
CROATIA

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Fax: +385 1 6118 570

E-mail: [hdzv@voda.hr](mailto:hdzv@voda.hr)

Web: [www.hdzv.hr](http://www.hdzv.hr)

### Description and core activities of the association

CWPCS is promoting water protection and sustainable use of water. It has a key role in practical education of young experts in a different field of water related issues, e.g. through the organisation of practical seminars on different technical aspects of water management. CWPCS organises lectures of national and international experts in Croatia, as well as scientific conferences, like the Waters in Protected Areas conference, held in Dubrovnik in 2007. Members of CWPCS are actively involved in preparing national and international projects related to water protection and water management. They are also actively involved in the work of EWA and participate in the work of EU working groups of CIS of the WFD.

### Benefits for members

In CWPCS we differentiate individual members and collective members, and the difference is the membership fee. Individual members are engineers and experts in different fields, university professors, students and citizens connected to water management or just interested in water issues; collective members are different institutions, working organisations, almost all Croatian utility services and water companies, as well as a certain number of big Croatian companies. Members of our Society are regularly informed about the most important events related to water management and water protection in Croatia and abroad. They also receive our quarterly bulletin (Glasnik - in Croatian). Also, retired and unemployed persons and students do not pay the membership fee.

### Special competences of the association

- Successful cooperation with important international organisations (EWA, IWA, WEF, EUREAU...)
- Experience in organisation of international conferences
- Partnership with Croatian institutions in developing regulations and laws for the water sector.
- The biggest and oldest non-governmental and non-profit association of professionals and citizens in Croatia united in the cause of promoting water protection in Croatia.

### Challenging topics for the future

1. Encouraging young experts and scientist to be more actively involved in the work of CWPCS.
2. Establishment of ad hoc working groups consisting of highly motivated experts whose work on a specific water related issue would be very intensive and of limited duration.
3. Transformation of CWPCS into a professional institution capable of spreading the information, knowledge and competence gained in relation to water policy, implementation of new technologies.
4. Organizing practical courses for WWTP and sewage maintenance personnel



**Vision on water resources**

Water resources, particularly those in very sensitive areas like karst areas, have to be protected in accordance with the principles of integrated water resource management, which takes into account a set of necessary measures to be implemented at the local and global scale, aiming to minimize negative consequences of human developments and

interventions that cause a distortion of the hydrological cycle and climate change. EU directives, particularly WFD, set up objectives to be met using water management measures that could contribute to prevention of pollution of water resources.

**Publications**

Bulletin (GLASNIK - in Croatian)

Frequency - Quarterly

**Regular conferences**

International EWA conference Waters in Protected Areas

**Helpful contacts in Croatia**

**Governmental Departments/Ministries**

Ministry of Agriculture, Forestry and Water Management,  
Department for Water Management  
[www.duv.hr](http://www.duv.hr)

Ministry of Environmental Protection, Physical Planning and  
Construction  
[www.mzopu.hr](http://www.mzopu.hr)

Ministry of Culture, Protection of Nature  
[www.min-kulture.hr](http://www.min-kulture.hr)

**Agencies/Regulators**

Hrvatske vode - Legal entity for water management  
[www.voda.hr](http://www.voda.hr)

Croatian Environment Agency  
[www.azo.hr](http://www.azo.hr)

**Trade Associations**

Croatian Chamber of Economy  
[www.hgk.hr](http://www.hgk.hr)

**Other Stakeholders of the Water Sector**

Croatian Water & Wastewater Association  
[www.gvik.hr](http://www.gvik.hr)





**Czech Republic**  
**Asociace Čistírenských expertů České republiky**  
**Association of Wastewater Treatment Experts of the**  
**Czech Republic (ACE ČR)**

**President**

Bretislav Krnávek, MSc., Ph.D.

**EWA Council Representative**

Prof. Jirí Wanner, MSc., Ph.D., DrSc.

**Secretariat of the association**

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**Description and core activities of the association**

The ACE CR is the association representing Czech specialists and companies working in the fields of wastewater, waste and water management and quality control of surface waters. The main activities of the association cover both technical-scientific subjects and the economic and legal aspects of water environment protection. The association provides consultancy to the state and local authorities and to private subjects. The ACE CR organizes professional seminars and conferences on both national and international level and provides training courses on different levels.

**Special competences of the association**

The Association has signed contracts on cooperation with two major authorities in water sector in the Czech Republic, namely with the Ministry of Environment and the Ministry of Agriculture. This cooperation enables the Association to be involved in legislation process in water, evaluation of large projects subsidized by the state and in training programmes for the regional and local water authorities. The Association cooperates also with other national institutions in water sector like The Czech Environmental Inspectorate, State Environmental Fund as well as with research institutions and universities, especially with the Institute of Chemical Technology of Prague or with the Technical University of Brno.



**Participants of a seminar of Municipal Wastewater Treatment Group**

**Benefits for members**

- Better and more efficient involvement in the system of information exchange, both on national and international level.
- Free subscription of the Water Management journal.
- Reduced registration fee at ACE CR seminars and conferences.
- Active involvement in the production of ACE CR expert opinions, statements and other written reports and materials for ACE CR customers/partners.
- Easy access to the information from abroad, help in preparing papers or presentations of Czech members abroad.
- Selective seminars on most up-to-date topics for corporate members.

The Association provides efficient conditions for cooperation of members in the so-called specialist groups. The system of specialist groups is evaluated by ACE CR members as one of the most beneficial features of the Association. At present the following groups are active:

- Small wastewater treatment plants and oil/grease separators
- Drainage of urbanized areas
- Sludge and waste management
- Industrial wastewaters
- Mechanical, physical-chemical and chemical processes in water and wastewater treatment
- Analytical methods and measurements in water
- Municipal wastewater treatment plants

The groups organize their own specialized seminars and produce papers and recommendations specific of their topics.



**ACE CR stand at the Environmental trade fair Brno, 2007**



**Members of the ACE CR board at the occasion of the 7th biennial conference WASTEWATER 2007**

### Challenging topics for the future

Since 2007 ACE CR has become the national member of IWA and the Association will have to improve its organization and management to represent the Czech Republic in both international water associations IWA and EWA.

In connection with the involvement in IWA and EWA, and also in respect to the latest developments in water industry and complex approach to water quality control, the Association will start the negotiations with the Czech drinking water association with the goal to prepare the merge of both two associations with the aim to form a unified water association with the expected name Czech Water Association CzWA.

To continue or to improve the cooperation with water associations in neighbouring countries. The ACE CR has contract on cooperation with ACE in Slovak Republic, ÖWAV in Austria and DWA in Germany. ACE CR has also established good working contacts to MaSzeSz in Hungary. In spite of very good personal contacts between individual experts in the Czech Republic and Poland, the cooperation between national associations ACE CR and PZITS is

still missing. The cooperation with neighbouring associations helps to keep the standard of ACE CR biennial conferences on high scientific and technical international level.

### Vision on water resources

- Improved management and use of water from atmospheric precipitations, adaptation of urban drainage systems to this task
- Modification of wastewater treatment technologies for possible water reuse, more common application of tertiary treatment
- Alternatives to land application of municipal sludge in order to protect the ground water resources
- Complex approach to water management in towns and industry, coordination of drinking water supply and wastewater collection and treatment

### Publications

- Vodní hospodárství (Water Management) published monthly with a bimonthly section "Wastewater letters"
- Proceedings of ACE CR biennial conferences "WASTEWATER"
- Proceedings from seminars and conferences of specialist groups

### Regular conferences

- Biennial conference "WASTEWATER" and regular conferences of specialist groups, e.g. "Sludge and Waste", Hydro-analytics, Urbane drainage
- Parallel to biennial conferences, there is also a biennial exhibition "WASTEWATER"

### National awards

Honorary membership in ACE CR

## Helpful contacts in the Czech Republic

### Governmental Departments/Ministries

Ministry of the Environment of the Czech republic  
Vršovická 1442/65  
CZ-100 10 Praha 10  
[www.env.cz](http://www.env.cz)

Ministry of Agriculture of the Czech Republic  
Tešnov 17  
CZ-117 05 Praha 1  
[www.mze.cz](http://www.mze.cz)

### Agencies/Regulators

The Czech Environmental Inspectorate  
Na Brehu 267  
CZ-190 00 Praha 9  
[www.cizp.cz](http://www.cizp.cz)

State Environmental Fund of Czech Republic  
Kaplanova 1931/1  
CZ-148 00 Praha 11-Chodov  
[www.sfzp.cz](http://www.sfzp.cz)

### Trade Associations

Water Management Association  
Novotného lávka 5  
CZ-116 68 Praha 1  
[www.svh.cz](http://www.svh.cz)

### Other Stakeholders of the Water Sector

SOVAK  
(Water Supply and Sewerage Association of the Czech Republic)  
Novotného lávka 5  
CZ-116 68 Praha  
[www.sovak.cz](http://www.sovak.cz)



## Denmark Danish Water Forum (DWF)

### President

Torkil Jønch Clausen

### EWA Council Representative

Jesper Goodley Dannisøe

### Secretariat of the association

Jesper Goodley Dannisøe  
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E-mail: [dwf@danishwaterforum.dk](mailto:dwf@danishwaterforum.dk)

Web: [www.danishwaterforum.dk](http://www.danishwaterforum.dk)

### Description and core activities of the association

Danish Water Forum (DWF) is a network of Danish water organisations aimed at highlighting expertise and knowledge and facilitating concerted actions. The competences and high standards of its members make DWF an excellent entry point to the Danish water sector and its services and expertise within virtually all aspects of water industry, technology, science and management. DWF represents:

- Contractors and manufacturers
- Water companies and Consultants
- Research institutions
- Government authorities and NGOs

The unique member blend of researchers, consultants, contractors, manufacturers and users gives DWF an integrated knowledge about all aspects of the entire water sector, including issues relating to the environment, agriculture and health.

Danish Water Forum has its main area of interest in the developing world and is a North-South focussed association.

### Benefits for members

Joint marketing of Danish water know-how and expertise through meetings, market initiatives and knowledge sharing

### Special competences of the association

- Direct links to Danish ministries and authorities
- Joint knowledge sharing and market access
- Offering a network of experts within all areas of water related services
- Joint marketing during international events like World Water Forum, Stockholm Water etc.

### Challenging topics for the future

1. The global climate changes will have a tremendous impact on specific regions in the world, especially in the poor countries. DWF will work for ensuring that donor organisations draw the climate change into their planning of donor funded projects to ensure "climate-safe" project results.
2. Danish water expertise is world famous especially within both technology and policy. Marketing of these areas will be main areas for DWF during the next couple of years

### Vision on water resources

With a vision towards the South, DWF has its whole focus on how to support and develop sustainable water solutions, incorporating state-of-the-art technology into the scope. We are closely associated with the Danish and international donor-organisations and can thus promote a very wide range of water services and products to the world water market.

### Publications

DWF has its own email newsletter.



From the DWF workshop on  
"School sanitation and Health" September 2007



**Estonia**  
**Eesti Veeühing**  
**Estonian Water Association**

**President**

Andres Marandi

**EWA Council Representative**

Andres Marandi

**Secretariat of the association**

Andres Marandi

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Web: www.veeyhing.ee

**Description and core activities of the association**

The Estonian Water Association promotes and facilitates evolution of legislation, terminology, education, science and engineering of water management.

It offers opinions on Estonian water management problems.

Arranges meetings, events and conferences related to water usage, surface and groundwater protection and others water management sectors.

**Benefits for members**

Members of the Estonian Water Association gain and share professional information and experience.

**Special competences of the association**

The institution assembles people from different water management sectors and people with economic and legal interests in water management.

**Publications**

Implementation of Principles of Integrated Water Resources Management in Estonian Water Policy, Estonian Water Association, 2007.

**Regular conferences**

Annual conference "Water Day"

**National awards**

The Estonian Water Association is awarding a Oras' titled award to a company achieving noteworthy water conservation measures or an individual making significant contributions either in water knowledge, technology or accomplishment.

**Helpful contacts in Estonia**

**Governmental Departments/Ministries**

Ministry of the Environment  
<http://www.envir.ee/>



## Finland Suomen Vesiyhdistys ry Water Association Finland

**President**  
Heikki Kiuru

**EWA Council Representative**  
Pertti Seuna

### Secretariat of the association

Jari Koskiaho  
PO Box 721  
FIN-00101 Helsinki  
Finland

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E-mail: jari.koskiaho@ymparisto.fi  
Web: www.vesiyhdistys.fi

### Description and core activities of the association

The Water Association Finland is a non-governmental body with some 500 individual members and 15 corporate members, founded in 1969. The purpose of this body is to improve and distribute knowledge and promote professional networking in Finland and abroad.

The core issues are mostly dealt with through standing committees for hydrology, limnology, water supply and wastewater treatment, water legislation, river basin management, water ecology and water pollution control, fisheries, and hydraulic engineering.

### Benefits for members

Access to and networking with key players in Finland's water sector. Interesting seminars and excursions. For members there are discounts granted on some publications.

### Special competences of the association

- Access to key players in the country's water sector.
- Offering a network of experts.

### Challenging topics for the future

1. The renewed Finnish water legislation.
2. Implementation of the EU Water Framework Directive.
3. Climate change effects on water management and water environment.

### Vision on water resources

In global view Finnish water resources are - at least in terms of quantity - at good state. However, we have to carefully protect our groundwater resources and continue the efforts to improve the state of our lakes and rivers.

### Regular conferences

World Water Day seminar annually on 22 March. Lectures on topical issues of water branch. Award presentations of national Junior Water Prize and water branch literature prize.

Seminar at a large environmental fair that is arranged in Helsinki every other year.

### National awards

Junior Water Prize and water branch literature prize.



2007 Finnish Junior Water Prize winner Heidi Heinonen receiving the national prize from Heikki Kiuru, the Executive Director of the Finnish Water Association

## Helpful contacts in Finland

### Governmental Departments/Ministries

Ministry of environment:  
<http://www.environment.fi>

Ministry of agriculture and forestry:  
[www.mmm.fi/en](http://www.mmm.fi/en)

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### Agencies/Regulators

Finnish Environment Institute:  
[www.environment.fi/syke](http://www.environment.fi/syke)

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### Other Stakeholders of the Water Sector

Finnish Water and Wastewater Works Association:  
[www.vvy.fi/eng](http://www.vvy.fi/eng)

Finnish Hydrological Association:  
[www.water.tkk.fi/wr/nhfif/index.en.html](http://www.water.tkk.fi/wr/nhfif/index.en.html)

WaterFinns (NGO in the water sector)  
<http://www.waterfinns.fi/siteEN/intro.html>



Heidi shaking hands with Her Royal Highness Princess Victoria of Sweden at the final competition in Stockholm

**President**

Pierre ROUSSEL

**Executive Director**

François MAUVAIS

**EWA Council Representative**

Jean-Philippe TORTEROTOT

**Secretariat of the association**

Gérard TOUZE

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75016 Paris

France

Phone: +33-1 53 70 13 53

Fax: +33-1 53 70 13 40

E-mail: [astee@astee.org](mailto:astee@astee.org)Web: [www.astee.org](http://www.astee.org)**France****Association Scientifique et Technique pour l'Eau et l'Environnement association (ASTEE)****Description and core activities of the association**

Since its founding in 1905, the "Association Scientifique et Technique pour l'Eau et l'Environnement (ASTEE)" has been a privileged centre point for the exchange of technical, scientific and administrative information between the various persons involved in the design, production and operation of everything concerning urban and rural engineering. The association is open to everybody: the elect, industrialists, university staff, administrators, scientists, contractors, technicians, members of various trades and local communities, hygiene specialists, doctors, legislators, design office members, government and local community engineers, managers.

The ASTEE handles all the different aspects of urban engineering and rural engineering: individual or collective equipment, local or industrial communities. Water, drainage, waste, hygiene, disinfection, urban planning, habitat, traffic, viability, transportation, lighting, urban amenities, cleanliness of public places, atmospheric pollution, noise, hydrology, water supply, corrosion, urban networks, development plan, surface management, etc...

ASTEE's areas of activity are to promote studies and research work for the environment, public hygiene, urban development, rural development; to favour the exchange of ideas and information between: technicians, scientists, public managers, private managers; to participate in developing regulations and advisory services to public authorities; to update, communicate and release knowledge in France and abroad.

**Benefits for members**

Members of ASTEE can take part in meetings to contribute to the progress of knowledge and to build a doctrine shared by all the stakeholders of the sector.

**Special competences of the association**

- Elaboration of guidelines in the field of environment, shared by many stakeholders
- Common work and exchange within networks of experts
- Regional technical meetings for local solutions

**Challenging topics for the future**

1. Creation of a workgroup across technical committees for working on the consequences of climate changes in the fields of design and management of water assets and systems
2. Analysis of the delay of France concerning the implementation of the directive concerning urban waste water treatment (May 1991) to find measures to catch it up and simultaneously introduce WFD

ASTEE hosts the Executive Secretary of French Water Coordination which is composed with French water stakeholders working on projects at international level.

**Vision on water resources**

Accelerate the implementation of sanitation while acting on a protection of the resources at the territorial level, negotiated with all the stakeholders, first of all the agricultural world.

### Publications

The Technical and Scientific Journal: TSM-Techniques, Sciences et Méthodes - 11 issues a year. Furthermore ASTEE publishes books and technical guides and well as congress proceedings.

### Regular conferences

There is an annual congress and about twenty technical conferences. ASTEE furthermore participates in the Pollutec.

### National awards

ASTEE Research Price (annual) as a reward for a thesis on an environmental topic in the fields of ASTEE.

## Helpful contacts in France

### Governmental Departments/Ministries

Ministère de l'écologie, du développement et de l'aménagement durables  
<http://www.ecologie.gouv.fr/-English-.html>

### Agencies/Regulators

Agences de l'Eau  
<http://www.lesagencesdeleau.fr/>

### Other Stakeholders of the Water Sector

French Coordination for Water  
<http://www.eau-international-france.fr/pfe/sommaire-en.php3>

Centre d'Information sur l'Eau  
<http://www.cieau.com/accueil.htm>

Fédération professionnelle des entreprises de l'eau  
 83, avenue Foch - 75116 Paris  
<http://www.fp2e.org/>





## Germany

### Deutsche Vereinigung für Wasserwirtschaft, Abwasser und Abfall e.V.

### German Association for Water, Wastewater and Waste (DWA)

#### President

Bauass. Dipl.-Ing. Otto Schaaf

#### EWA Council Representative

Prof. Dr.-Ing. Johannes Pinnekamp

#### Secretariat of the association

Theodor-Heuss-Allee 17  
53773 Hennef  
Germany

Phone: +49-2242-872-0

Fax: +49-2242-872-135

E-mail: [info@dwa.de](mailto:info@dwa.de)

Web: [www.dwa.de](http://www.dwa.de)



#### Description and core activities of the association

The DWA - German Association for Water, Wastewater and Waste - is in Germany spokesman for all water related issues and is intensively committed to the development and distribution of a secure and sustainable water management. It acts as a politically and economically independent professional organisation in the field of water management, sewage, waste and soil protection.

In Europe, DWA is the biggest association with respect to number of members within this field and therefore takes up a leading position. This is because it provides professional competence regarding standardisation, professional training and information towards the public. The institution has approximately 14,000 members representing

experts and executives from local authorities, universities, engineering offices, municipalities and enterprises.

Main emphasis of its activities is placed on the acquirement and update of a consistent technical set of rules and standards as well as cooperation in the formulation of technical norms on national and international level. Furthermore, DWA also offers professional training as well as further vocational training. There are not only technical scientific topics involved, but also economic and legal interests of the environment and water protection are concerned.

#### Benefits for members

For individual and corporate members, the following benefits are included in the membership fee:

- The monthly journals:
  - KA-Abwasser, Abfall, including the regular supplement KA-Betriebs-Info
  - KW-Wasserwirtschaft, including the regular supplement Gewässer-Info
- The DWA Yearbook
- The DWA industrial guide



- Reduced prices for all programmes of continuing education of the DWA's
- Free information on issues of wastewater an waste management water management and soil conservation, legal advice, literature rese-arch
- Internet members area with additional exclusive information

In addition for corporate members

- Reduces prices for the DWA standards and numerous publications
- 20 % reduction from the subscrip-tion price for additional copies of the KA and KW
- 50 % reduction from the members-hip fee for the registration of bran-ches when the head office is a member
- Permission to use the DWA-mem-ber badge in the letterhead
- Favourable conditions for an insu-rance covering legal charges in envi-ronmental criminal matters for municipalities, district administration and wastewater administration unions

### Special competences of the association

- Preparing and update of the DWA rules and standards
- Professional training
- Counselling of politics, economy and science

### Challenging topics for the future

1. Climate change
2. Demographic change
3. Renewable energies
4. Energy reduction potentials on sewage plants Vision on water resources

It is a basic task of the DWA the technical development document in the water sector and deliver to the experts at the disposal by the permanent update of the DWA set of rules. Equally important is the training building on it



for everyone who works in the area of water supply and distribution. The DWA offers its members a comprehensive set of all requirements of a modern water supply and distribution.

### Publications

Two monthly publications: KA and KW. Quarterly the KA-Betriebs-Info (operations) and the Gewässer-Info.

DWA set of rules and standards.

### Regular conferences

DWA Bundestagung

### National awards

DWA-Ehrennadel,  
DWA-Ehrenmitgliedschaft,  
Karl-Imhoff-Preis,  
Ernst-Runke-Preis,  
Theodor-Rehbock-Medaille,  
Max-Prüss-Medaille,  
William-Lindley-Ring,  
DWA-Gewässerentwicklungspreis

## Helpful contacts in Germany

### Governmental Departments/Ministries

Bundesumweltministerium  
11055 Berlin  
Phone: +49-30-18305-0  
Fax: +49-30-18305-2044  
service@bmu.bund.de

### Agencies/Regulators

Umweltbundesamt  
Postfach 1406  
06813 Dessau-Roßlau  
Phone : +49-340-2103-0  
Fax: +49-340-2103-2285  
Mail: info@umweltbundesamt.de  
<http://www.umweltbundesamt.de/index-e.htm>

**President**

Dr. László Somlyódy

**Executive Director**

Dr. Dezso Dulovics

**EWA Council Representative**

Dr. Kovács Károly

**Secretariat of the association**

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 H-1111 Budapest  
 Hungary

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Fax: +3614633753

E-mail: [maszesz@sis.hu](mailto:maszesz@sis.hu)Web: [www.maszesz.hu](http://www.maszesz.hu)**Hungary****Magyar Szennyvíztechnikai Szövetség (MaSzeSz)  
Hungarian Wastewater Association****Description and core activities of the association**

The organisation, which is a civilian association, has the following main objectives:

- Support technical and scientific cooperation between members
- Provide practical, technical and scientific information towards members, municipalities and authorities
- Support young scientists
- Cooperate with the government on development of regulations
- Cooperate with other civil organisations in water related questions

**Benefits for members**

- Receiving information concerning water issues
- Having the possibility to participate in different water related programmes
- Having the possibility to express opinion on different water related questions

**Challenging topics for the future**

1. Strengthen the cooperation with municipalities as decision makers on the public water sector
2. Strengthen the communication towards civil players on the water sector
3. Strengthen the exchange of experiences between regions

**Vision on water resources**

We consider our land and waters as being on a sensitive area. We do efforts to fulfil the EU Water Framework Directive.

**Publications**

Hírcsatorna ("Sewer News") bimonthly

Jubilee Hírcsatorna, for the 10-years-anniversary of MaSzeSz.

Summary of presentations of Round table discussions

**Regular conferences**

Annually in May a 2-3 days'-professional conference. Furthermore we offer round table discussions and smaller conferences.



**President**  
Andis Dejus

**Vice-President**  
Mr. Varis Adamsons

**Executive Director**  
Edgars Taurins

**EWA Council Representative**  
Andis Dejus

**Secretariat of the association**  
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## Latvia

### Latvian Water and Waste Water Works Association

#### Description and core activities of the association

The Latvia Water and Waste Water Works Association venture cooperates with related organizations. Suggestions and changes may be implemented into legislation and elaboration of normative documentation through The Ministry of Environmental of the republic of Latvia.

24 enterprises are currently members of the Latvia Water and Waste Water Works Association.

The target program of the Association is to ensure provision of stable high quality water supply and wastewater services to the residents.

General tasks and methods: Co-operating with government and administrative institutions working on elaboration and improvement of laws and regulative enactments in the field of water supply and wastewater. Co-operation with municipalities in the fields related to the operation of water supply and wastewater companies, improvement of the structure of such companies and the problems that in all cities and towns of Latvia shall be solved jointly;

organising systematic and purposeful training of employees working in the water supply and wastewater sector by using existing and establishing new training centres, meet contemporary requirements etc.

Both, surface and groundwater is used for centralized water supply in Latvia.



## Lithuania

### Clean Water Association (CWA)

#### President

Mr. Edmundas Levitas

#### EWA Council Representative

Dr. Edmundas Levitas

#### Secretariat of the association

Vandziogalos g. 94

47674 Kaunas

Lithuania

Phone: +370 7 29 18 28

Fax: +370 7 29 18 28

E-mail: ediventa@yahoo.com

#### Description and core activities of the association

The Clean Water Association (CWA) is a non-governmental environmental organization and was founded on May 31, 1996.

The CWA's mission is the reduction of pollution of surface and ground water.

The main goals of Association's activities are:

- Environmental education aimed at the formation of an understanding by the population of the problems regarding water resources.
- The improvement of the design, construction, operation, and maintenance of facilities for the prevention of pollution of water bodies, primarily, of the plants for the treatment of the wastewater.
- The rise of professional qualification of specialists and organizations working in the field of water pollution control.
- The quest for and support of the right and effective governmental strategies and policy in the sphere of protection of water bodies.
- The assistance in the creation and development of the production of technological equipment for the treatment of wastewater in Lithuania.
- The build up and strengthening of the ties of Lithuania's environmentalists with the counterpart organizations, associations, and specialists of other countries.
- The support for the global efforts aimed at the protection of water against pollution.

Members of CWA are: Lithuanian municipalities, universities, water supply enterprises, design bureaus.

#### Benefits for members

Sharing of information about achievements in wastewater management operational and maintenance experience, technologies and equipment in the world and their implementation of perspective solutions in Lithuania.

#### Special competences of the association

Increase of the potential of Lithuanian scientific, engineering, state and municipal institutions for the effective solution of problems of clean water environment.

#### Challenging topics for the future

The Clean Water Association is of the opinion that it is expedient to create a Venta River Basin Region as the Demonstration and Verification Area for the innovative, efficient and economical, environmentally-friendly wastewater management technologies would be of significant ecological, social and economical value for the development of The Venta River Basin in two neighbor Baltic States - Lithuania and Latvia.

By the end of 2007 CWA finished the preparation of the Feasibility Study of the Project "The Clean Venta".

1. Implementation in Lithuania of new technical and organizational innovative solutions for improvement of quality of surface and underground water bodies.
2. Increase of Lithuania's attractiveness as tourist area by maintaining and improving water environment.
3. Provision of better social and economical conditions in Lithuania due to maintaining a good quality of nature.

**Vision on water resources**

Provision of the clean water environment by using the potential of scientific progress and better cooperation between the European countries.

**Regular conferences**

Lithuanian specialized conferences on "Small wastewater treatment plants". There are also exhibitions: "Wastewater treatment technologies and plants".

**Helpful contacts in Lithuania****Governmental Departments/Ministries**

Ministry of Environment of the Republic of Lithuania  
4/9 A. Jakšto,  
LT-01105 Vilnius  
<http://www.am.lt/VI/en/VI/index.php>

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**Agencies/Regulators**

Environment Protection Agency of the Republic of LithuaniaA.  
Juozapaviciaus St. 9  
LT-09311 Vilnius  
Phone (+370 5) 266 28 08  
Fax. (+370 5) 266 28 00  
E-mail: [aaa@aaa.am.lt](mailto:aaa@aaa.am.lt)  
Web: <http://aaa.am.lt>

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**Other Stakeholders of the Water Sector**

Lithuanian Water Suppliers Association (LWSA)  
Laisves Av. 117A  
Vilnius, LT-06118  
Lithuania  
[http://www.lvta.lt/apie\\_en.php](http://www.lvta.lt/apie_en.php)

Association of Ecology Engineering  
<http://www.iea.lt/>





## Luxembourg Association Luxembourgeoise des Services d'Eau (ALUSEAU)

### President

Raymond Erpelding

### EWA Council Representative

Raymond Erpelding



### Secretariat of the association

Nico Pundel  
Rue de Rollingergrund, 338  
L-2442 Luxembourg  
Luxembourg

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Fax: +352 4676 67  
E-mail: npundel@vdl.lu  
Web: www.aluseau.lu

### Description and core activities of the association

ALUSEAU is the national association of water services in the Grand-Duchy of Luxembourg, regrouping members of the drinking-water sector and of the wastewater area.

ALUSEAU is a politically independent and non-profit making association. The main objectives of the association are to promote the common interests of all authorities and public services dealing with water management. To that effect ALUSEAU aims at advocating the study of all scientific, technical, economic and administrative problems relating to drinking-water supply and sewage collection and treatment, promoting a suitable management of the water resources of the country. ALUSEAU is also representing its members in international associations dealing with the same objectives just described.

Our core business is to:

- Keep contact between the different water services
- Keep contact with the national authorities
- Being involved in the outworking of national directives

### Benefits for members

ALUSEAU offers the following benefits to its members:

- Being member of the Eureau-group
- Being member in international associations
- Keep contact between the different water services
- Keep contact with the national authorities
- Being involved in the elaboration of national directives

### Special competences of the association

- If you are member of the ALUSEAU you are a key player in the country's water sector
- Nearly all the experts of the water sector are member in the ALUSEAU

### Challenging topics for the future

1. National publicity campaign for drinking water
2. The European water directive has to be transposed in national legislation. ALUSEAU tries to have some important influence in this transposition and implementation.



**President**

Mr. Sybe Schaap

**Executive Director**

Mr. Rein van der Kluit

**EWA Council Representative**

Mrs. Monique de Vries

**Secretariat of the association**

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 The Netherlands

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 40 88 80

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Web: [www.uvw.nl](http://www.uvw.nl)

**Description and core activities of the association**

The Unie van Waterschappen represents the interests of the Dutch Waterschappen. Waterschappen are decentralised functional governments, responsible for regional water management (quantitative and qualitative), flood defence and waste water treatment.

**Benefits for members**

The association is providing unified representation towards national government and European institutions. It fosters cooperation and discussion with other stakeholders like provincial and local government, the agricultural sector and on a national level. The association plays an active role in representing the interests of its members.

The association is aiming to lead in the strategic discussion with regard to regional water management in the national and international context with the objective of sustainable water management.

**Special competences of the association**

The association has established a very good network and an highly appreciated position among all parties involved in or with regional water management.

The association can build on extensive internal expertise and experience and has the ability to combine this with expertise and practical experience available within its members.

The association is taking an active position in keeping itself in development to be able to deal with its surroundings in the most effective and efficient way.

**Challenging topics for the future**

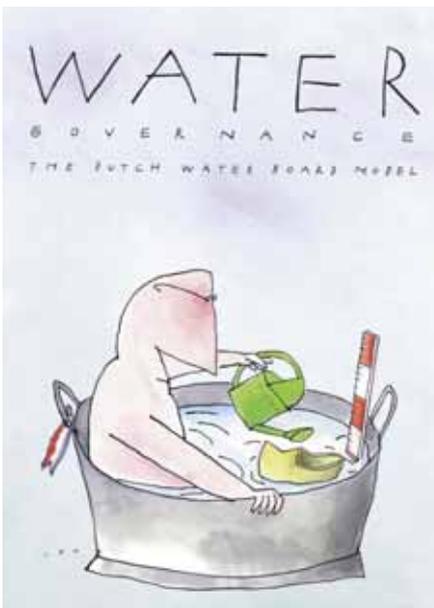
1. Facing the challenges of climate change with regard to regional water management.
2. Financing Integrated Water Resource Management (see further under vision - water resources).
3. Further strengthening the position of the Unie van Waterschappen in Influencing relevant European legislation.

**Vision on water resources**

The Unie van Waterschappen has the vision that water governance should be executed efficiently. Decentralized water management is the best solution for the Netherlands, but perhaps interesting food for thought for other countries as well. Water governance is best served at a local level wherever possible and with all interests involved.

There are success-factors in self-financing local water management, presented in a model:

- legislation which gives local water authorities the authority to carry out their duties, to raise money and to enforce their rights
- taxation of the people in the jurisdiction area of the water authority for generating income to carry out its duties
- representation of stakeholders in the water authorities, to create stakeholder commitment and to ensure democratic decision-making
- funding of large capital for major investments, which is mainly found within the private sector
- institutional developments, addressing trained staff and tools such as accurate cadastral and financial administrations, needed to allow for effective and efficient operation.



**Water Governance:**  
 the Dutch Water Board Model  
 available through UvW

**Publications**

Het Waterschap (monthly)

Digital newsletter (monthly)

Water Governance, the Dutch waterboard model.

**Regular conferences**

Attendance of the Stockholm World Water Week.

UvW organises a conference regarding Water Framework Directive, organised with Dutch Ministry of Transport Public Works and Water Management, German, Belgium and British partners.

**Helpful contacts in The Netherlands**

**Governmental Departments/Ministries**

The Ministry of Transport, Public Works and Water Management  
[www.minvenw.nl](http://www.minvenw.nl)

Netherlands Ministry of Housing, Spatial Planning and the Environment  
[www.minvrom.nl](http://www.minvrom.nl)

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**Agencies/Regulators**

Rijkswaterstaat  
[www.rws.nl](http://www.rws.nl)

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**Trade Associations**

Deltares  
[www.deltares.nl](http://www.deltares.nl)  
Vewin  
[www.vewin.nl](http://www.vewin.nl)





## Norway

### Norsk Vannforening

### Norwegian Water Association (NWA)

**President**  
Lars Enander

**Executive Director**  
John M. Raaheim

**EWA Council Representative**  
Haakon Thaulow

**Secretariat of the association**  
Bente Pedersen  
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Phone: +47 22 94 75 75  
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Web: [www.vannforeningen.no](http://www.vannforeningen.no)

#### Description and core activities of the association

The Norwegian Water Association (NWA) is an independent non-governmental and non-profit organisation dealing with the management and improvement of the water environment. The NWA provides a forum for discussion of key technical, scientific and policy issues on water covering both water resources and water quality. Through this exchange of knowledge, the NWA significantly contributes to sustainable water management in Norway.

The NWA has about 900 individual and 450 corporate members.

The implementation of the Water Framework Directive in Norway belongs to the core activities. Furthermore, Water Quality Issues, Watercourses and Coastal Areas, Aquatic Ecosystems and Biodiversity, Water Quality Monitoring, Water Supply and Health Effects, Sanitation, Impacts of Hydropower Development, Effects of Long-transported Airborne Pollutants, Effects and Adaptation of Climate Changes.

#### Benefits for members

NWA's journal VANN. Personal Information on NWA's seminars and workshops and reduced fees.

#### Special competences of the association

We have an extensive seminar and workshop program covering the whole water sector.

NWA provides the key platform for water professionals in Norway.

Our journal VANN is well recognized and provides opportunities for publishing of practical as well as scientific articles enabling young professionals to present their first publications.

#### Challenging topics for the future

1. Continuing the development of the administrative and organisational capacity of the association.
2. Establish new regional committees in order to spread the activities of the association in the major regions of Norway.
3. Recruiting new members by information and more visibility of the association.

#### Vision on water resources

NWA works for the protection and balanced use of water resources through information, knowledge dissemination and debate on water issues.





**Publications**

NWA publishes its own journal VANN ("WATER") 4-6 issues per year

**Regular conferences**

20-24 seminars/workshops per year on water issues covering the whole water sector; Water Quality and Water Resources Management, Water Supply and Wastewater Technology etc.

**National awards**

"Vannprisen" - the Norwegian Water Prize

**Helpful contacts in Norway**

**Governmental Departments/Ministries**

Ministry of Environment  
[www.ministryofenvironment.no](http://www.ministryofenvironment.no)

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**Agencies/Regulators**

Norwegian Pollution Control Authority (SFT)  
[www.sft.no](http://www.sft.no)

Directorate of Nature Management (DN)  
[www.dirnat.no](http://www.dirnat.no)

Norwegian Water Resources and Energy Directorate  
[www.nve.no](http://www.nve.no)

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**Other Stakeholders of the Water Sector**

Norwegian Water and Wastewater BA. (NORVAR)  
[www.norwar.no](http://www.norwar.no)



## Portugal

### Associação Portuguesa de Engenharia Sanitária e Ambiental association (APESB)

#### President

Prof. José Saldanha MATOS

#### Executive Director

João Delgado FEIJÓEWA

#### EWA Council Representative

Prof. José Saldanha MATOS

#### Secretariat of the association

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Web: [www.apesb.pt](http://www.apesb.pt)



#### Description and core activities of the Association

The Associação Portuguesa de Engenharia Sanitária e Ambiental - Portuguese Association for Sanitary and Environmental Engineering (APESB) is a Portuguese non-profit, scientific and technical association, founded in 1980, for an indeterminate period of time, recognised as a corporate body of public interest since March 1990.

APESB has the following objectives:

- To be a national body especially oriented to the study, analysis and discussion of aspects related with water supply, drainage, treatment and final disposal of wastewater and final disposal of solid waste, in order to contribute to the implementation of better, feasible and sustainable solutions.
- To foster technical and scientific exchange, including technology transfer and training, in the fields of water supply, drainage and treatment of wastewater as well as solid waste management, especially at national level and in the Portuguese-speaking countries.

APESB develops activities in the following core areas:

- Water Treatment and Supply
- Wastewater Systems
- Water quality and pollution control
- Solid wastes (collection, treatment and disposal)
- Health and environmental related subjects

#### Benefits for members

Members of APESB receive publications free of charge. They benefit of a network of contacts and receive discounts in APESB promoted events.

#### Challenging topics for the future

- Health related topics
- Water reuse
- Climate changes and water and wastewater systems

#### Publications

Águas e Resíduos (Water and solid wastes journal) four times per year

#### Regular conferences

Encontro Nacional de Saneamento básico (Sanitary engineering national meeting)

Jornadas Técnicas Internacionais de Resíduos (technical international meeting of solid wastes)





## Serbia Serbian Water Pollution Control Society (SWPCS)

### President

Dr Milan Dimkic

### Executive Secretary

Mr. Aleksandar Djukic

### EWA Council Representative

Mr. Aleksandar Djukic

### Secretariat of the association

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11000 Belgrade  
Serbia

Phone: +381 11 3241 656

Fax: +381 11 3241 656

E-mail: [djukic@grf.bg.ac.yu](mailto:djukic@grf.bg.ac.yu)

Web: [www.sdzv.org.yu](http://www.sdzv.org.yu)

### Description and core activities of the association

Serbian Water Pollution Control Society (SWPCS) is non-profit independent organisation of experts in water sector established 1966. Main objective of the Society is to create and foster the network of leading water professionals through the provision of services and products to members, including conferences, publications and support for member groups. In addition, to represent the views of members in national and international forums aimed at advancing best practice in sustainable water management.

### Benefits for members

- Exchange knowledge with other water experts
- Receive discounts on all SWPCS events and publications
- Receive timely water related information

### Special competences of the association

- Access to key players in the Serbia's water sector
- Offering a network of experts
- Connection to leading regional and international professional associations

### Challenging topics for the future

1. Provide expert's opinion on new legislation and policies.
2. Provide specific training on critical issues in the water sector (implementation of WFD, water resource management, wastewater and sludge management, diffuse pollution, etc.).
3. Strengthening of cooperation of water related NGOs in Serbia and in the region.

### Vision on water resources

Serbia's water section is facing a need of both substantial investments and legislation change. Control of pollution emissions and increase of efficiency of water use are the primary objectives of the water resources protection. Since the major watercourses are transboundary ones, the efficient water and environment protection will require strengthening of international cooperation in this field.

### Publications

The association publishes a newsletter/bulletin, two issues per year. Furthermore, there are conference proceedings from Annual Conference "Water"

### Regular conferences

"WATER" - Annual Conference on Protection of Water Resources and Water Management.

In addition, a seminar or workshop on an actual topic is organised once a year.

### National awards

Honorary Member of SDZV (for individuals).



## Helpful contacts in Serbia

### Governmental Departments/Ministries

Serbian Government:  
[www.srbija.sr.gov.yu](http://www.srbija.sr.gov.yu)

Ministry of Agriculture, Forestry and Water Management:  
[www.minpolj.sr.gov.yu](http://www.minpolj.sr.gov.yu)

Ministry of Environmental Protection:  
[www.ekoserb.sr.gov.yu](http://www.ekoserb.sr.gov.yu)

Ministry of Mining and Energy:  
[www.mem.sr.gov.yu](http://www.mem.sr.gov.yu)

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### Agencies/Regulators

Serbian Environmental Protection Agency:  
[www.sepa.sr.gov.yu](http://www.sepa.sr.gov.yu)

Republic Hydro-Meteorological Service of Serbia:  
[www.hidmet.sr.gov.yu/index\\_eng.php](http://www.hidmet.sr.gov.yu/index_eng.php)

PWMC Srbijavode:  
[www.srbijavode.co.yu/eng/index.htm](http://www.srbijavode.co.yu/eng/index.htm)

PWMC Vode Vojvodine:  
[www.vodevojvodine.com](http://www.vodevojvodine.com)

Inland Waterways Maintenance and Development Agency:  
[www.plovput.co.yu/english/indexe.htm](http://www.plovput.co.yu/english/indexe.htm)

Energy Agency of Republic of Serbia:  
[www.aers.org.yu](http://www.aers.org.yu)

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### Trade Associations

Chamber of Commerce:  
[pks.komora.net](http://pks.komora.net)

Waterworks Association:  
[www.vodovod.co.yu](http://www.vodovod.co.yu)

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### Other Stakeholders of the Water Sector

Institute for the Development of Water Resources  
 "Jaroslav Cerni", Belgrade  
[www.jcerni.co.yu/english/cernieng.htm](http://www.jcerni.co.yu/english/cernieng.htm)

Regional Environmental Centre for Central and Eastern Europe,  
 Country office Serbia:  
[www.recyu.org/indexe.asp](http://www.recyu.org/indexe.asp)

Pilot River Basin Plan for Sava River:  
[www.savariver.net](http://www.savariver.net)

Union of Engineers and Technicians of Serbia:  
[www.sits.org.yu/?lang=en](http://www.sits.org.yu/?lang=en)

\*Note: During 2008 internet country domain "yu" will be changed to "rs"



## Slovak Republic Association of Wastewater Treatment Experts of the Slovak Republic ACE SR (AWWTE SR)

### President

Assoc. Prof. Miloslav Drtil, PhD.

### EWA Council Representative

Assoc. Prof. Ján Dercó, PhD.

### Secretariat of the association

Dr. Elena Rajczyková

P.O. Box 140

820 05 Bratislava 25

Slovak Republic

Phone: +421 903557438

Fax: +421 0252495243

E-mail: rajczykova.elena@gmail.com

Web: www.acesr.sk



Participants of the 4th Biennial conference WASTEWATER 2006



Awards for the best presentations of young authors in the section Forum 33 at Wastewater 2006



### Description and core activities of the association

ACE SR is the association, which represents professionals in the fields of wastewater management and water protection. ACE SR covers all aspects of wastewater pollution control, collection, treatment and disposal, promotes exchange of the latest skills, techniques and knowledge in all aspects of wastewater, water and sludge management. The mission is to facilitate improvement of groundwater and surface water quality in an environmentally sustainable way. ACE SR disseminates knowledge by means of conferences, workshops, specialised meetings, publications, electronic media and expert services.

### Benefits for members

Members of the ACE SR are entitled to:

- Involvement in the system of information exchange
- Reduced registration fee at ACE SR conferences and seminars
- Free use of the ACE SR library
- Free subscription of the Water Management journal.
- Involvement in ad hoc expert groups to solve actual problems of wastewater management and water protection

### Special competences of the association

- Expert services for water companies, municipalities, ministry, water boards, industrial companies
- Organisation of prestigious conferences and seminars
- Provision of special trainings and education courses
- Involvement in national legislation process and standards preparation in water sector
- Development of a network of experts
- Access to key players in water sector
- Cooperation of corporate and individual members
- Contacts with foreign associations in water sector, particularly with Czech ACE CR (AWWTE CR), dual membership in both associations for Slovak and Czech members

### Challenging topics for the future

1. Wastewater and water management, water protection
2. Sludge management
3. Establishment of a new working group

### Vision on water resources

Support and acceleration of wastewater collecting and treatment in SR according to EU legislation, protection of water resources. Water reuse in industrial sector. Sludge production, treatment and management in environmentally sustainable way.

### Publications

Proceedings from ACE SR conferences and seminars.

ACE SR 4th Biennial conference WASTEWATER 2006

**Regular conferences**

- Odpadové vody (Wastewater)
- Kaly a odpady (Sludges and Wastes)
- AQUA fair seminars

**National awards**

Honorary membership of ACE SR

**Helpful contacts in the Slovak Republic****Governmental Departments/Ministries**

Ministry of the Environment of the Slovak Republic  
<http://www.enviro.gov.sk/servlets/page/778>

**Agencies/Regulators**

Slovak Environmental Agency  
[http://www.sazp.sk/index\\_en.html](http://www.sazp.sk/index_en.html)

Water Research Institute  
[www.vuvh.sk](http://www.vuvh.sk)

Slovak Hydrometeorological Institute  
[www.shmu.sk](http://www.shmu.sk)

**Other Stakeholders of the Water Sector**

Association of Industrial Ecology  
[www.aspek.sk](http://www.aspek.sk)

Association of Employers in Water Management  
[www.svp.sk](http://www.svp.sk)

National Committee of IWA  
[www.iwa.sk](http://www.iwa.sk)

Global Water Partnership  
[www.gwpforum.org](http://www.gwpforum.org)



Excursion at the WWTP  
 in Envirál Leopoldov - part of  
 the 10th General Assembly of  
 ACE SR



## Slovenia

### Slovenian Water Pollution Control Association (SDZV)

#### President

Prof. Dr. Milenko Roš

#### EWA Council Representative

Prof. Dr. Jana Zagorc-Koncan

#### Secretariat of the association

Prof. Dr. Milenko Roš

Hajdrihova ulica 19

SI-1000

Ljubljana

Slovenia

Phone: +386 1 476-02-00

Fax: +386 1 476-03-00

E-mail: Milenko.ros@ki.si

<http://www.sdzv-drustvo.si/>

#### Description and core activities of the association

The purpose of the Association is to associate societies and individuals working in water control; to develop consciousness of the importance of water preservation; to follow, study and work on water preservation and its uses, supplies of potable water, and dealing with used and waste waters; to inform and educate: professional, scientific and other public institutions by publications, lectures, meetings, sharing of experiences, excursions, by courses and similar activities and achievements in the field of water control: cooperation with similar local, foreign and international societies and organisations.

#### Benefits for members

Members of the Association can vote and be elected into society organs, to cooperate in the work and determinations of the society; use their joint achievements and the results of the society work in their fields; cooperate in the work and decisions of the Association's organs in their work; fulfil their personal interests in the Association's field of work; to be acquainted with the programmes and the Association management.

#### Special competences of the association

- Cooperation at professional discussions with administrative bodies
- Cooperation and preparing of technical literature
- Organizing special trainings
- Discussions and opinion changing during the Slovenian "Water Days"

#### Challenging topics for the future

1. The establishment of new Working Groups
2. Cooperation with administrative bodies on drinking water and excess sludge treatment
3. Attendance and participation at Slovenian "Water Days"

#### Vision on water resources

The main topic about water resources will be groundwater protection and treatment of groundwater - specially denitri-fication of nitrates and micropollutants.

#### Publications

Proceedings of Slovenian "Water Days" (in Slovenian with English abstract).

#### Regular conferences

Slovenian "Water Days" - annually since 1995 together with the Slovenian "Water Days" Exhibition.

## Helpful contacts in Slovenia

#### Governmental Departments/Ministries

Ministry of the Environment and Spatial Planning  
Dunajska cesta 48  
SI-1000 Ljubljana, Slovenia  
<http://www.mop.gov.si/en/>

#### Agencies/Regulators

Environmental Agency of the Republic of Slovenia  
Vojkova 1  
SI-1000 Ljubljana, Slovenia  
<http://www.arso.gov.si/en/>

#### Trade Associations

Chamber of Commerce and Industry of Slovenia  
Dimiceva 13  
1504 Ljubljana, Slovenia  
<http://www.gzs.si/eng/>



## Spain Asociación para la defensa de la calidad de las aguas (ADECAGUA)



**Managing Director and EWA  
Council Representative**  
Gamaliel Martínez de Basarán  
Dr. Ingeniero Industrial  
C/ Río Rosas,44 - 5ºB  
28003 MADRID

### President

Angel Cajigas  
Dirección General de Obras  
Hidráulicas y Calidad de las Aguas  
Ministerio de Medio Ambiente  
Plaza San Juan de la Cruz  
28003 MADRID

### Secretariat of the association

ADECAGUA  
Vía Laietana, 39  
08008 BARCELONA

Phone: +34 93.319.23.00  
Fax: +34 93.310.06.81  
E-mail: [gamamtnez@ya.com](mailto:gamamtnez@ya.com)  
Web: [www.adecagua.org](http://www.adecagua.org)

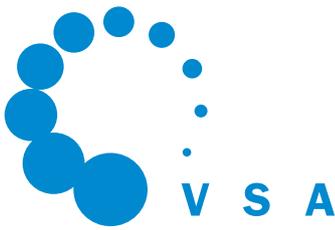
### Description and core activities of the association

ADECAGUA is non profit educational and technical association independent politically and economically of water quality experts. It is the Spanish member of the Water Environment Federation.

It is formed by some 300 members working with the administration or private water companies, engineering firms, universities, consulting etc. Mostly are active private members.

We developed and disseminate information concerning the nature, collection and treatment of domestic and industrial water. ADECAGUA organises regularly technical seminars and meetings and hold a webpage [www.adecagua.org](http://www.adecagua.org). We collaborate regularly with two specialised journals in Spain.





**Switzerland**  
**Verband Schweizer Abwasser- und Gewässerschutzfachleute (VSA)**  
**Association Suisse des professionnels de la protection des eaux**  
**Associazione svizzera dei professionisti della protezione delle acque**  
**Swiss Water Pollution Control Association**

**President**

Martin Würsten

**Executive Director**

Dr. Urs Kupper

**EWA Council Representative**

Martin Würsten

**Secretariat of the association**

Dr. Urs Kupper  
 Strassburgstrasse 10  
 Postfach 2443  
 8026 Zürich  
 Switzerland

Phone: +41 43 343 70 70  
 Fax: +41 43 343 70 71  
 E-mail: sekretariat@vsa.ch  
 Web: www.vsa.ch

**Description and core activities of the association**

The VSA is the association representing Swiss specialists working in the fields of wastewater and water pollution control management. The main activities of the association cover technical, scientific, economic and legal aspects of water pollution control. The politically and economically independent association operates on a national level.

Central tasks of the association are the preparation and updating of technical standards and guidelines and professional training of members and staffs of sewage treatment plants.

**Benefits for members**

Regular post-mail information about meetings, trainings and publications.

Favourable conditions for all VSA "products" (i.e. trainings, courses, technical standards ...)

**Special competences of the association**

VSA is responsible for the advanced professional education for experts in waste water engineering in Switzerland.

**Challenging topics for the future**

- River basin management
- Management of infrastructure
- Water agenda 21
- Micro pollutants

**Vision on water resources**

River basin management.

**Publications**

The association publishes a monthly journal GWA Gas, Wasser, Abwasser (Gaz, Eaux, Eaux usées). 6 times per year they also publish a Newsletter.

**Regular conferences**

The VSA-Hauptmitgliederversammlung is organised annually (meeting of members).

Every two years there is an exhibition called Kanalisationsforum.

**National awards**

Gewässerpreis (every two years)

## Helpful contacts in Switzerland

### Governmental Departments/Ministries

Bundesamt für Umwelt BAFU  
(Federal Office for the Environment FOEN)  
CH-3003 Bern  
[www.bafu.admin.ch/](http://www.bafu.admin.ch/)

Eawag (Swiss Federal Institute of Aquatic Science and Technology)  
Überlandstrasse 133  
P.O. Box 611  
CH-8600 Dübendorf  
[http://www.eawag.ch/index\\_EN](http://www.eawag.ch/index_EN)

KVU Konferenz der Vorsteher der Umweltschutzämter der Schweiz  
[www.kvu.ch](http://www.kvu.ch)

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### Other Stakeholders of the Water Sector

SVGW Zürich  
Grütlistrasse 44  
CH-8002 Zürich  
<http://www.svgw.ch/>

SWV Schweizerischer Wasserwirtschaftsverband  
Rütistrasse 3A  
Postfach  
CH-5401 Baden  
[www.swv.ch/](http://www.swv.ch/)



## Ukraine Ukrainian Water Association (UWA)

### President

Dr. Leonid L. Dobryansky

### Executive Director

Yaroslav V. Druchenko

### EWA Council Representative

Valeriy G. Malyarenko

### Secretariat of the association

P.box #103

03142 Kiev

Ukraine

Phone: +380-44-229-05-55

Fax: +380-44-229-05-55

E-mail: [info@cleanwater.org.ua](mailto:info@cleanwater.org.ua)

Web: [www.cleanwater.org.ua](http://www.cleanwater.org.ua)

### Description and core activities of the association

The Ukrainian Water Association is a non-governmental organization, which was founded in 1999 in order to improve the mechanisms used for the supply of high quality drinking water to people, and render organizational and methodological support to companies and organizations producing water purifying equipment and drinking water.

The Ukrainian Water Association consolidates 54 companies, organizations and about 5000 professionals who works in the fields of water and wastewater treatment, water management etc.

For its members the UWA provides on a regular basis methodological and specific material for specialists of relevant institutions and organizations.

The UWA participates in drafting regulations to meet the demands of today

### Publications

The UWA publishes a Ukrainian scientific-and-practical Journal "Water and Water Purification Technologies", on a regular basis, 6 times per year.

Informational-statistical directory "Water treatment municipal plants and utilities in Ukraine", on a regular annual basis.

### Regular conferences

Biannual scientific and practical conferences on pressing problems related to water treatment, purification, supply and quality control;

Serving the needs of its members, the Ukrainian Water Association is organizing and carrying out of International Water Forum "Aqua Ukraine", annually.





## United Kingdom Chartered Institution of Water and Environmental Management (CIWEM)

### President

David Rooke, MBE

### Executive Director

Nick Reeves

### EWA Council Representative

Paul Horton

### Secretariat of the association

Paul Horton

15 John Street

WC1N 2EB London

UK

Phone: +44-20 7831 3110

Fax: +44-20 7405 4967

E-mail: paul@ciwem.org

Web: www.ciwem.org

### Description and core activities of the association

The institution produces a number of events each year where CIWEM acts as an 'honest broker' to bring diverse sectors together to make progress on key environment sector issues. A good example is Integrated Urban Drainage Management, where we bring together flood management, planning, water resources, wastewater, water quality, conservation and sustainability professionals together to knowledge-share and make progress on policy and technical 'logjams'. This approach is also taken for other themed areas such as Water Framework Directive, land use and water, wetlands and environmental management.

We are active in global climate change organisations and have nominated NGO status at the UN Framework Convention on Climate Change.

CIWEM is a truly independent professional body, and so is able to provide independent advice to governments, academic institutions, the media and the general public. We have thousands of members in nearly 100 countries, working within local authorities, water companies, regulatory bodies, governments, universities, the private sector, international organisations and NGOs, such as the EU, the UN and Water Aid.

We enable businesses and academic institutions to show their commitment to the environment through our Business and Academic Affiliates.

CIWEM supports local professionals throughout the world, represents members in international forums and has established international branches.

CIWEM provides a wide range of training and professional development qualifications.

CIWEM provides a forum for debate through conferences, technical meetings, networking opportunities, policy statements, magazines and journals.

The institution has a global membership with expertise throughout the water and environment sector.

### Benefits for members

CIWEM enables members to:

- Promote innovation and excellence through regional, national and international networks
- Interact through local Branch events
- Become involved in multi-regional programmes through special interest Groups
- Contribute expertise to policy statements, government consultations, conferences, publications and media enquiries
- Receive CIWEM's publications, including our peer-reviewed Journal, WEM, The Global Environment and E-News
- Achieve professional development through conferences, short courses and other training options
- Receive a preferential rate for CIWEM events and discounts to CIWEM supported events Special competences of the association

### Challenging topics for the future

1. Climate change - impacts on water management
2. Training, Research and Development
3. Truly integrated environmental management
4. Bringing together diverse sectors to take forward policy in a joined-up manner



**Vision on water resources**

CIWEM develops its vision through technical panels which produce Policy Position Statements - PPS see <http://www.ciwem.org/policy/policies/index.asp>

These include statements on 'Climate Change and Water Resources', 'Drought in the UK' and 'Planning Water Resources in England and Wales'. All these documents can be downloaded from the CIWEM web-site.

**Publications**

CIWEM publishes WEM (Water and Environment Magazine) - 10 times per year. The Water and Environment Journal, the Journal of Flood Risk Management - both quarterly publications.

CIWEM Business Briefing is issued 10 times per year.

CIWEM also publishes annually The Global Environment and informs members and contacts monthly through its E-news.

**Regular conferences**

A wide range of events, including monthly national and international conferences, local branch and group technical site visits, and socialising opportunities - please see [www.ciwem.org/events](http://www.ciwem.org/events)

CIWEM's annual conference - The Global Environment, is every October.

**National awards**

- Living Wetlands Awards;
- World of Difference Award;
- Young Members Award;
- Stockholm Junior Water Prize (UK entry)

**Helpful contacts in the UK****Governmental Departments/Ministries**

defra (Department for Environment, Food and Rural Affairs)  
[www.defra.gov.uk](http://www.defra.gov.uk)

Communities and Local Government  
[www.communities.gov.uk](http://www.communities.gov.uk)

Water Services Regulation Authority (Ofwat)  
[www.ofwat.gov.uk](http://www.ofwat.gov.uk)

**Agencies/Regulators**

Environment Agency  
[www.environment-agency.gov.uk](http://www.environment-agency.gov.uk)

SEPA - Scottish Environment Protection Agency  
[www.sepa.org.uk](http://www.sepa.org.uk)

Drinking Water Inspectorate (DWI)  
[www.dwi.gov.uk](http://www.dwi.gov.uk)

**Trade Associations**

British Water  
[www.britishwater.co.uk](http://www.britishwater.co.uk)

Society of British Water and Wastewater Industries (SBWWI)  
[www.sbwwi.co.uk](http://www.sbwwi.co.uk)

Water UK  
[www.water.org.uk](http://www.water.org.uk)

**Other Stakeholders of the Water Sector**

Royal Society for the Protection of Birds  
[www.rspb.org.uk](http://www.rspb.org.uk)

WWF  
[www.wwf.org.uk](http://www.wwf.org.uk)

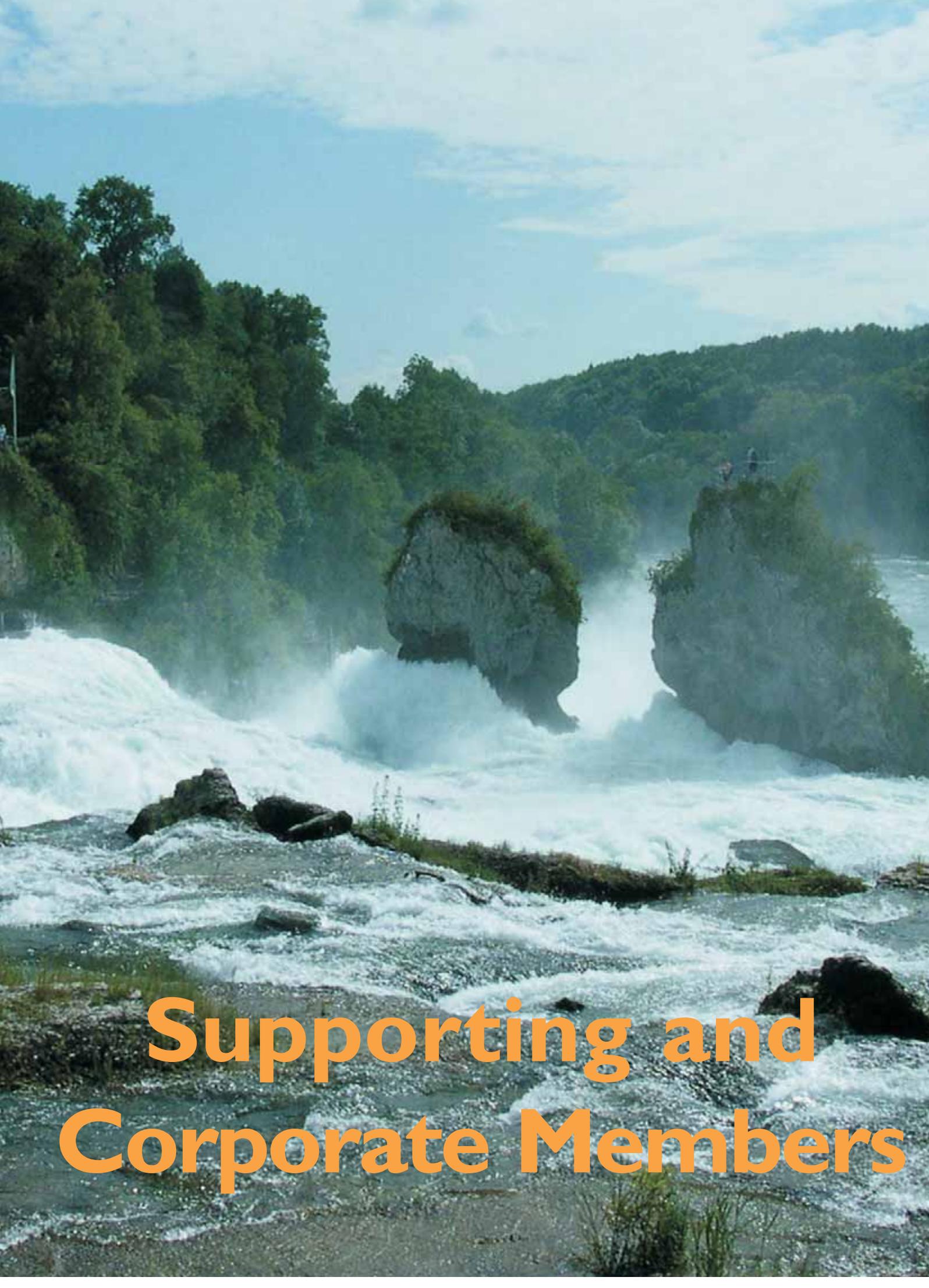
The Wildlife Trusts (TWT)  
[www.wildlifetrusts.org](http://www.wildlifetrusts.org)

Groundwork  
[www.groundwork.org.uk](http://www.groundwork.org.uk)

Partners for Water and Sanitation  
[www.partnersforwater.org](http://www.partnersforwater.org)

RedR  
[www.redr.org.uk](http://www.redr.org.uk)

WaterAid UK  
[www.wateraid.org/uk](http://www.wateraid.org/uk)



# Supporting and Corporate Members



## **WASSER BERLIN/ Messe Berlin GmbH**

Messedamm 22, D-14055 Berlin  
Telefon: +49 (0)30 / 3038-2148  
Telefax: +49 (0)30 / 3038-2079  
E-Mail: wasser@messe-berlin.de

### **Description**

Messe Berlin is a service company specialized in the organization international and national trade shows, exhibitions and conventions. With a program of nearly 80 international trade events taking place at the Berlin Exhibition Grounds each year Messe Berlin ranks as one of the world's top ten exhibition companies. WASSER BERLIN is one of the international meeting places for water and waste water industry organized by Messe Berlin GmbH. WASSER BERLIN offers its numerous international trade visitors the ideal platform for establishing new business contacts. Berlin's central European location, especially its proximity to the growing eastern European market, offers exhibitors and trade visitors an effective and potentially very successful perspective. The next international trade fair and congress WASSER BERLIN will be taking place on March 30 - April 3, 2009, in Berlin, and will focus among others on new product groups as water desalination, trenchless and geothermic technologies.

### **Product Groups of WASSER BERLIN**

Procurement of water; Water and wastewater treatment; Water distribution and wastewater discharge; Service providers, water supply and sewage, multi utilities; Measuring, regulating, analysis technology; Valves, pumps, suction systems, driving apparatus technology; Surface water protection, ground water protection, soil protection; Industrial equipment; Excavating machinery; Science, research, technology transfer; Information and communication technologies. New Product Groups: Trenchless technologies; Desalination; Geothermic technologies.

## **Messe Berlin**

Last Event Figures: Exhibitors - 546;  
Trade visitors - over 26,000;  
Conference participants - 5,498; Gross  
exhibition area - 38,854 sqm.

### **Congress WASSER BERLIN**

The first WASSER BERLIN Congress hold in 1963 focused on the water industry and all aspects of intelligent water management. That event brought together all relevant players from the political, scientific and technological communities, provided information to the general public, reported on the current status of scientific research, and presented potential solutions to modern-day problems. Over the past forty years, the WASSER BERLIN Congress has continued to gain importance and internationality. Numerous ties with partner associations and the active involvement of European and international organizations have given the event a much higher profile and made it more attractive to the water industry.

### **International activities of WASSER BERLIN**

#### **Bulgaria - WATER SOFIA**

WATER SOFIA is a specialized international trade fair and congress on water and wastewater technologies for the Balkan region. The organizers of the event are Bulgarreklama Agency, Bulgarian Water Association and WASSER BERLIN/ Messe Berlin. After a successful start in 2007, the organizer are preparing the next edition of WATER SOFIA, which will be taking place on May 27 - 30, 2008, in Sofia. The conference at WATER SOFIA 2008 will be dealing particularly with the current situation of water management in Bulgaria, PPP-business models in communal sector and EU funds application strategies. Product Groups of WATER SOFIA are similar to those of WASSER BERLIN.

#### **Ukraine - AQUA UKRAINE**

AQUA UKRAINE is the international trade fair and conference on water and wastewater industry. The organizers of the event are: Ministry for Environmental Protection of Ukraine, Ministry on Housing and Communal Services matters of Ukraine, State Committee for Water Saving of Ukraine, International Exhibition Centre and WASSER BERLIN/ Messe Berlin. The next VI. AQUA UKRAINE will be taking place on October 7-10, 2008, in Kiev. Product Groups of AQUA UKRAINE are similar to those of WASSER BERLIN.





## Messe München

# IFAT 2008

### MESE MÜNCHEN GmbH

Messegeleände  
81823 München  
Phone: +49 (89) 949 - 11358  
Email: [info@ifat.de](mailto:info@ifat.de)  
Web: [www.ifat.de](http://www.ifat.de)

### Messe München GmbH

Messe München is one of the world's leading trade-fair organisations. It organises around 40 trade fairs for capital and consumer goods, and new technology. Over 30,000 exhibitors from more than 100 countries, and over two million visitors from more than 200 countries take part each year in the trade fairs in Munich. In addition, MMI organises trade fairs in Asia, Russia, the Middle East and in South America. With five subsidiaries abroad and 66 foreign representatives covering 89 countries, Messe München has a truly global network.

IFAT 2008 in Munich - Leading international trade fair for the environment and waste disposal presents an expanded exhibition concept

IFAT 2008, the 15th International Trade Fair for Water - Sewage - Refuse - Recycling, which takes place from 5 to 9 May in Munich, is further strengthening its reputation as the world's leading trade fair in the environmental sector. The already extensive range covered by the fair is now to be expanded to include the subjects of coastal protection and flood control. There will also be a greater focus on generating energy from waste materials, a field with great potential for the future and one which covers both high-tech and low-tech as well as integrated solutions.

This means that IFAT 2008 will have an even more extensive range of exhibits than in 2005. The section on coastal protection and flood control is appearing for the first time at IFAT, its inclusion prompted by the changing climate and the problems associated with this. IFAT 2008 will of course also be addressing the whole issue of water, which is of special importance in the United Nations' 'Water Decade'.

IFAT is the world's most important trade fair for the environment and waste disposal. With the expansion of the section on energy generation from waste materials, the area of biogas will come more sharply into focus. The trade fair is thus responding to developments in the market and once again demonstrating its premier position as the leading international trade fair for the environment.

Important trade conferences, symposia and forums, alongside events focusing on flood control and disaster management round off the attractions at IFAT 2008. These forums are intended as a platform for dissemination of new ideas and the latest expertise as well as a valuable opportunity for making business contacts.

Following the record figures for IFAT 2005, which attracted 2,223 exhibitors from 36 countries and 109,000 trade visitors from 166 countries (a rise of 30 percent in each case), the organisers are aiming to further increase the international scope of the fair for 2008 and tap into new potential in the growing markets. The focus regions are Romania, Bulgaria, Croatia and the Ukraine (East and Central Europe) plus Turkey, USA, Canada and India. In order to reach the international market and these key countries, extensive information and support on IFAT 2008 is available on the fair's website, [www.ifat.de](http://www.ifat.de), and marketing and press activities are being launched around the world.





### Aggerverband

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 Sonnenstr. 40  
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 Germany  
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 Fax: +49 (0) 22 61/36-8  
 Email: info@aggerverband.de  
 Web: www.aggerverband.de

## Aggerverband

### Description

The Aggerverband is a water association according to the regulations of the German federal state North-Rhine-Westphalia. It works in the following areas:

### Reservoirs and drinking water supply

The Aggerverband operates two drinking water reservoirs that supply about 500.000 people per year with approximately 25 Mio. m<sup>3</sup> drinking water. A third reservoir provides 12 Mio. m<sup>3</sup> raw water annually. The service area covers 1620 km<sup>2</sup>.

### Running waters

The protection of habitats at creeks and rivers is important to the Aggerverband. Flood protection is ensured by combining natural and integrated artificial systems.

### Design and construction

The Aggerverband conducts design and operation in relation to its fields of activity. This covers waste water systems (sewage works, sewers), water supply (reservoirs, water works), flood protection and maintenance of water bodies.

### Laboratory

To ensure the good drinking water quality the water works and the pipe network are monitored as well as the reservoirs and the waters that flow to the reservoirs. The control also covers the compliance with the limits in the outlets of the wastewater treatment plants and the monitoring of the quality of the running waters.

### Wastewater

The Aggerverband runs 33 sewage treatment plants, 11 pumping installations, 150 storm water overflow tanks and 140 km sewers. The rural structure and the topography account for the high number of small and medium-sized facilities. The aim of the association is to ensure a high water pollution control at bearable costs.

### Sewers and pipe network

Sewer cleaning was originally done for the association only, but is today also offered to municipalities as service. The Aggerverband has at its command the most modern vehicles for the cleaning of sewers and gullies and for TV inspection.

### Perspectives

The Aggerverband wants to meet the challenge of competition in the course of the modernisation of the water services. Its aim is to keep the high quality while reducing the costs. One tool for achieving this goal is the benchmark in all operating fields. The EG-Water-Frame-work- Direktive will dominate coming activities.



## Aquatech's World of Water

**The Aquatech brand has come a long way from its humble but pioneering beginnings as a water-related exhibition in 1964. While Amsterdam has stayed at the epicentre of the show's development, Aquatech tributaries have spread far and wide to include exhibitions in North and South America and SE Asia. The first Aquatech China will also open its doors next May. Paddy Young, senior product manager of the Aquatech domain: "Wherever you visit an Aquatech show you are assured a complete overview of the very latest products, services, technologies and solutions."**

"There are two key reasons why the Aquatech continues to grow in size and international influence," Young says. "The fact that we are a tightly focussed water show rather than a general environmental exhibition sets us apart from the competition. People from across the process, drinking and wastewater industries know where to find each other. Secondly, the current importance of water on the global political and economic stage means our events meet a clear need for a platform where ideas can be exchanged and solutions seen."

### Ambitious plans

Young and his team have ambitious plans to make the next Aquatech in Amsterdam the best yet. "Although we will be celebrating our 21st edition, the event came of age many years ago. Now is the time to further internationalise Aquatech Amsterdam while making sure Dutch exhibitors and visitors continue to feel completely at home. Some 80 percent of the 1000 exhibitors are from outside the Netherlands yet only half of the visitors in 2006 came from abroad. Our goal for the next two editions in 2008 and 2010 is to maintain the number of Dutch visitors while at the same time increasing the international attendance figure to 70 percent."

These goals will be achieved in various ways, including realigning the content and running the sort of carefully targeted marketing campaign for which Amsterdam RAI is renowned. "The International Water Association conference is now being fully integrated into the promotion and strategy of the show," Young explains. "We are working a lot closer with IWA to address the issues that our exhibitors want to see addressed. This will make the conference even more relevant to the exhibition and a more marketable product in its own right."

### Enhanced content

The exhibition floor is also being thoroughly examined and enhanced. For example, the Aquastages, platforms for the in-depth transfer of know-how that were successfully introduced in 2006, are being further developed to meet exhibitor wishes. On the main show floor, three separate theatres will host targeted thematic workshops designed to facilitate discussion and disseminate expertise. And features such as the Aquatech Innovation Award will become more international as judges from overseas are brought in.

"Across the board we are focussing on the content," Young asserts. "In a nutshell, Aquatech Amsterdam will have an even better content than before and be even more relevant to its visitors. As the international nature increases, the event will become even more essential to visit and a concept we can justifiably offer to new markets."



### China bound

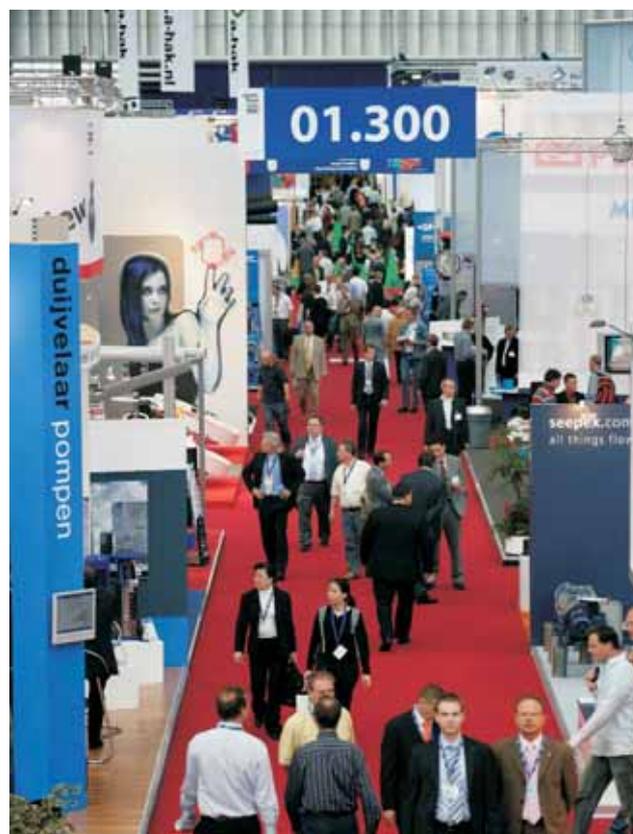
The brand extension into China is a bold development and a direct response to exhibitor demands. "No comprehensive water event was available in this high potential market so Aquatech had to take the plunge," Young explains. "To facilitate this, Amsterdam RAI recently acquired an exhibition that has been running there for a decade."

The Water and Membrane show is China's leading event in the membrane technology sector and the consolidation with Aquatech offers one definitive event platform. Young: "The fact that the show is supported by the Water Quality Association means it will also be able to reach the light-commercial and light-industrial sectors. With at least 300 market leaders and specialists in water use and management expected in Shanghai, we anticipate that Aquatech China will be the start of a whole new chapter in the Aquatech success story."

### Sidebar: Dates for your diary

Aquatech exhibitions focus on process, drinking and waste water technology, with an emphasis on water treatment, transport and storage, process control & process automation, and point of use. The following events are currently planned:

- WQA Aquatech USA 2008: 25-28 March 2008, Las Vegas
- Aquatech China: 21 - 23 May 2008, Shanghai
- Aquatech Amsterdam 2008: 30 September - 3 October 2008
- Aquaterra, World Forum on Delta & Coastal Development: February 2009, Amsterdam





## Canal de Isabel II

### Canal de Isabel II

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Web: <http://www.cyii.es/>



### Description

Canal de Isabel II is a Public Sector Company depending on the Government of the autonomous region of Madrid. It tackles the comprehensive water cycle management throughout the region. It deals with all the processes intending to provide an appropriate management of water resources.

### Quality and Environment

Loyal to its commitment to the customer, Canal de Isabel II has a certified Quality Management System according to the international UNE-EN ISO 9002 regulation. This guarantees both product and service quality to its customers.

Likewise, in order to ensure the quality of its water supply to the population living within the autonomous region of Madrid, the company got another important certification. In July, 2001, it was awarded the water analysis laboratories certificate based on the EN-45001. Earlier, in December 2000, the company adopted the new EN-17025 regulation.

On the other hand, Canal de Isabel has meant to extend its commitment to the whole society, by establishing an Environmental Management System certificated according to the UNE-EN-ISO 14001. This System, sanctioned by the company in July, 2002, serves environment protection reflected in all decisions made by the company; viz: to control and reduce its impact; to guarantee the fulfilment of the suggested environmental policy and to prove it in front of third parties. Canal de Isabel II has a Quality Management System certified according to the UNE-EN-ISO 9002:1994 regulation.

### Environmental Quality

#### Management

Canal de Isabel II has an Environmental Quality System certified according to the UNE-EN ISO 14001 regulation. This certification of this System by an external body represents a guarantee for the people of Madrid about the behaviour of this company towards the environment.

Besides, it provides an instrument to take even more care over environmental issues in their service. The reason for this is, that the managed resource, namely water, has an intrinsic environmental relevance.

#### Water Quality

In order to guarantee the quality of water, Canal de Isabel II has established a strict surveillance program from the very origin of water supply to its arrival at the customer. This program is designed in such a way that it surpasses the standard of the laws currently in force for water for public use, both in Europe and Spain. The analyses for this program are carried out by the Canal technicians at a main laboratory in Madrid and eight peripheral ones located in Valmayor, La Jara, Navacerrada, Torrelaguna, Pinilla, Móstoles, San Fernando de Henares and La Poveda. These analyses are complemented by a real time vigilance station network.



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**Operation and Control of Activated Sludge Processes by microscopic Analysis**

Perugia Italy, 16-20 June 2008



"Centro Studi Luigi Bazzucchi", located in Perugia, Umbria Region Central Italy, operates since 16 years on Environmental Resources related subjects in the framework of Provincia di Perugia, a Regional Government Public Body.

The main activities are the organization of Public Debates with local and National Officers, International and National Conferences, Training and Professional Courses at National and International level, on topics related to the Environment and Environmental Sustainability.

The training activities are organised in collaboration with Italian Universities, CNR- Water Research Institute, I.W.A.

International Water Association; Italian Chemical Society- Environment Division; Education and Environment Italian Ministers, European Union, Professional Organizations etc..

The actors and participants to these activities are Officers, Scientists, Consultants, Industry and Public Control Bodies operators, involved in Environmental Themes such as Water, Wastes, Energy, Biotechnology, Climate, Transport Communication and Education.

During the last 15 years more than 1.500 Participants joined the Training Courses and specific Seminars, on Wastewater Treatment plants operation, control and modelling.



[www.EWA-online.eu](http://www.EWA-online.eu)



- Association of professional European organisations within the water sector (wastewater, drinking water, water and water related waste)
- Representation and information of 25 National Member Associations and 20 Corporate Members
- A forum for the discussion of key technical and policy issues
- Organisation of international conferences, workshops and seminars
- Dialogue with European institutions and consultee on EC committees
- Support of CEN standardisation

# European Water Association



## Emschergenossenschaft and Lippeverband

### Emschergenossenschaft and Lippeverband

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[www.lippeverband.de](http://www.lippeverband.de)

### Description

The Emschergenossenschaft and Lippeverband is a water company for the catchment area of the Emscher River and the Lippe River and its tributaries. Emschergenossenschaft and Lippeverband is the largest Association for the disposal of wastewater in Germany.

Emschergenossenschaft and Lippeverband is a non-profit company in the form of a

self-managed corporation under public law, controlled by its members.

The Emschergenossenschaft and Lippeverband plans, constructs and operates wastewater treatment plants, pumping stations, dikes, sewers and rain reservoirs and maintains the bodies of water in its catchment area. The Association co-ordinates planning closely with its members. River Basin Management as required by the EU Water Framework Directive has already been implemented on the Emscher and the Lippe river.

### Range of Products

- Regulation of the water drainage and compensation of the water flow
- Flood protection
- Wastewater purification
- Maintenance of the bodies of water and natural landscaping of improved water courses
- Regulation of the groundwater level



## Gesellschaft zur Förderung der Abwassertechnik e. V. (GFA)

(Organisation for the Advancement of Wastewater Technology)

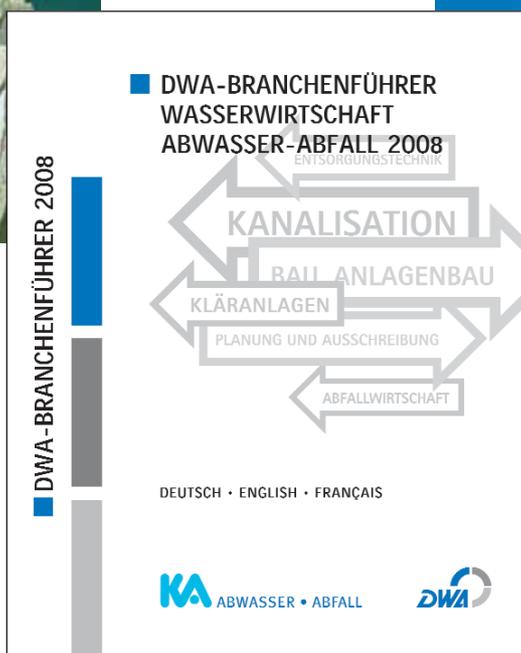
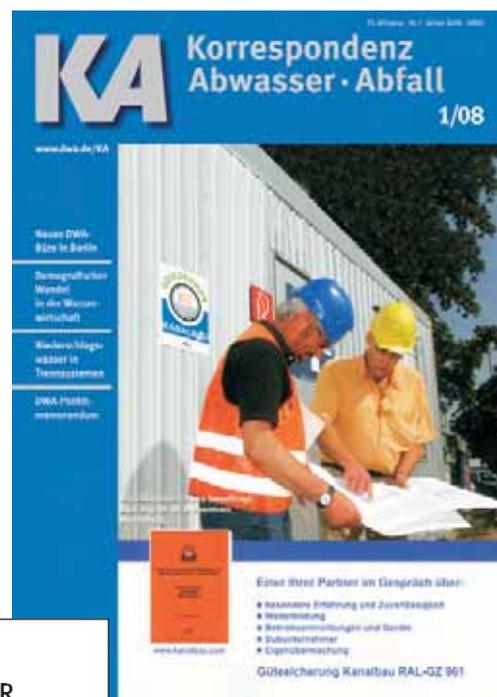
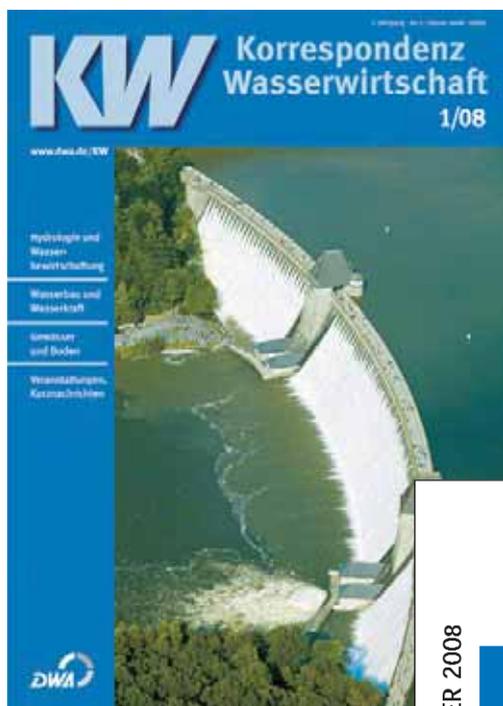
### Gesellschaft zur Förderung der Abwassertechnik e.V. (GFA) (Organisation for the Advancement of Wastewater Technology)

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Website: www.gfa-ka.de,  
www.dwa.de

### Description

GFA is a service company of the German Association for Water Management, Wastewater and Waste (DWA). It publishes the professional journals of DWA: monthly KA - Abwasser, Abfall (KA - Wastewater, Waste) and every three months KA-Betriebs-Info (KA - Info for Operators) and cooperates on behalf of DWA with publishers of other journals on water management in general. In addition, GFA publishes the DWA - Industry Guide (DWA-Branchen-führer), a directory of addresses of companies in the environmental industries, focussing on water and waste. GFA cooperates, on behalf of DWA, with important trade exhibitions concerning water and waste.





## Kocks Consult GmbH



KOCKS CONSULT GMBH is an independent firm of planners and consultants founded in 1946 by Friedrich Kocks, Dr. Ing., Dr. Ing. h.c. The firm employs 180 engineers, architects, planners and environmental experts, collaborating to offer clients a wide range of services. Including KOCKS CONSULT's affiliated companies, there are 450 employees ready to tackle even the most complex tasks.

The range of services offered by KOCKS CONSULT GMBH includes studies and surveys, ecological, economic and engineering expertise, cost and quantity calculations as well as feasibility studies, preliminary and final design. After successful conclusion of the actual planning work, the KOCKS team draws up the necessary tender documents, carries out bid evaluations and supervises construction work and equipment installation. If required, we are also in a position to take over the entire project management, including the financial transactions involved in it. We can offer technical consultancy work during commissioning and train the client's staff to carry out operation and maintenance.

In more than 60 years of successful work, KOCKS CONSULT's engineers have gathered a wealth of experience in the following areas:

- Water
- Environment
- Civil Engineering
- Transport
- Training

KOCKS CONSULT's foreign activities began in the early 50s with work on a project in Luxembourg. Within only a few years, this led to numerous activities world-wide.

KOCKS CONSULT GMBH has its head office in Koblenz, only a short drive from the economic centres of Frankfurt/Rhine-Main and Cologne/Rhine. Registered offices are maintained in both places.

Intraplan Consult GmbH (ITP) established its headquarters in Munich in 1980 and is active in the fields of traffic analysis, prognosis and economic surveys.

UTS Umwelt Technik KOCKS Saarbrücken GmbH was founded in 1994 and is working as environmental consultant and water and waste management specialist.

In addition, the following affiliated companies had been established:

- In 1995: VologdaKocksConsult in Russia,
- in 2004: IK Consulting Engineers in Serbia,
- in 2007: Sino-German Training Center for Water and Environment Ltd, Beijing, China.

In all KOCKS firms, the managers and directors are partners and participate in the company with personal capital.

Professional capability is thus tied to financial interest, assuring the client an utmost accuracy in project execution by all KOCKS CONSULT's engineers. Modern technical equipment and up-to-date intelligent software available today supports the work of our well-qualified staff.





## LightTech Lamp Techn. Inc.

### LightTech Lamp Techn. Inc.

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Hungary

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Email: [info@lighttech.com](mailto:info@lighttech.com)

Web: [www.lighttech.com](http://www.lighttech.com)

LightTech provides clients in the original equipment manufacturer (OEM) market with standard and customized lamps. In addition to offering all standard lamp sizes, LightTech can custom design, engineer, and manufacture the ideal lamps to suit clients' unique application needs. This enables clients to maintain installations as Original New Equipment, thus guaranteeing the functionality over life time. Special designed lamps also provide a safe solution as these lamps do not fit in standard equipment like for general lighting.

EWA relation: In total there are over a hundred germicidal applications for UVC (Ultra Violet) lamps. The main focus in EWA is on drinking water, waste water, and emergency as well as environmental water applications.

Technologies: 185nm, 254nm and fused 185/254, in house production of germicidal glass. Lamp length, diameter, power, base (single & double ended), long life coating, all adapted to specific customer/application needs.

Product range: LightTech provides Amalgam lamps (spot and pellet technology), Ballasts, Starters, Compact lamps, Germicidal UV Cell lamps, High Output lamps, Ozone lamps, Proprietary Bases and matching Sockets, Quartz sleeves, U and Odd shaped lamps.

LightTech is ISO 9001 certified; compliant with the International Organization for Standardization's stringent criteria for work accomplished as well as meeting customer requirements. The company is ISO certified to manufacture and sell medical equipment. LightTech has an accredited laboratory (Deutsche Akkreditierungs Rat -DAR-) for test and measurements. LightTech excels in time to market by short communication lines and pragmatic project management.





## Netherlands Water Partnership

### Netherlands Water Partnership

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### Description

The Netherlands Water Partnership (NWP) is an independent body set up jointly by the Dutch private and public sector to act as a national coordination and information point in relation to water activities overseas. The main aims of the NWP are to harmonize the activities and initiatives of the Dutch water sector overseas and to undertake worldwide promotion of Dutch expertise related to water. The organization is a focal point for the exchange of information related to activities and services of government bodies, knowledge and research institutes and businesses involved in the water sector.

### International Partner

The purpose of this joint initiative is to strive for full exploitation of existing Dutch capacity in the water sector. The NWP provides a single means of access to the entire range of products and services offered by the Dutch water sector.

The Netherlands has vast experience in water management issues, conflicts and projects worldwide, acquired over its many years of international involvement in the field. The NWP provides a collective means of further strengthening this established global reputation.

The NWP is the 'national' discussion partner for bodies like the **World Water Council** (WWC) and the **Global Water Partnership** (GWP).

### Independent Non-Profit Organization

The NWP is an independent non-profit organization. Its board includes representatives of the public sector (central, provincial and municipal governments; knowledge and research institutes; water boards and non-governmental organizations); and the private sector, including water supply companies, consultancy firms, contractors, manufacturing industry and the banking sector.





### Politecnico di Torino

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## Politecnico di Torino

The Politecnico di Torino ([www.polito.it](http://www.polito.it)), descending from the Technical School for Engineers born in 1859, was founded in 1906. It is a centre of teaching and research excellence, and one of the most important universities in Europe for architecture and engineering studies, strongly committed to collaboration with industry. Politecnico di Torino offers diversified teaching: from Aerospace Engineering to Telecommunications, from Biomedics to Mechatronics, Industrial Design, Automotive Engineering and Engineering for Cinema and Media Engineering, and a wide range of courses and specialization programs. Distance-learning programs are also available.

### The internationalisation is one of the main aim of Politecnico:

over 89 international agreements allow to obtain double degrees, and 2,000 foreign students per year are enrolled in different schools in the university, including PhD students. Six collaboration agreements with Chinese universities have recently been signed, and in the new buildings of the Tongji University of Shanghai ([www.tongji.edu.cn](http://www.tongji.edu.cn)) the Sino-Italian Campus has been inaugurated. New agreements have already been planned especially with Indian universities in the ICT sector.

### Excellence in Research

Politecnico di Torino is a research university with close connections to international institutions, high-tech companies and government bodies. Advanced research fields and top quality education scope include all areas of architecture and engineering sciences.



### Research Fields

Research activities of the Politecnico di Torino are managed by 18 Departments, each specializing on specific field. Research activities can be grouped in 6 branches:

- Physical, Chemical and Mathematical Sciences for Engineering
- Computer Science and Information and Communication Technologies
- Industrial Engineering
- Production System Engineering and Management
- Industrial design
- Architecture and Civil Engineering
- Environmental Engineering and Territorial Planning

### Working with the Politecnico di Torino

The Politecnico di Torino can cooperate with public or private bodies, both national and international, in education and consulting. All the activities can be carried out either on one-off or through more general agreements, "framework conventions".

- Research Services
- Consulting Activities
- Results Transfer
- Analysis, Tests and Calibrations
- General Services
- PhD Sponsorship
- Internship Programmes
- Conference Facilities





## R. Späne GmbH Produktion

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### Description

For more than 30 years the R.Späne GmbH has been manufacturing and promoting cleaning and disinfection agents for potable water installations, for the disinfection of pipelines and rehabilitation of boreholes, wells and filters. In 1998 we introduced new products and service for the in-situ cleaning and rehabilitation of industrial water systems, such as cooling circuits, heat exchangers, pipe networks etc. Our products are distributed under the brand name **CARELA®** and exported to all continents. A worldwide network of experts assists our customers in all applications of our patented products. Our customers are water supply companies, well rehabilitation companies, municipalities, hospitals, schools etc., as well as industrial companies.

**CARELA®** offers a complete range of products and services, including consulting and solutions to individual problems.

**CARELA®** service works carried out by our local partners are the choice of those amongst our customers who prefer a turnkey service in the field of cleaning and disinfection.

### Range of Products

**CARELA® Potable Water Range:** Cleaning and disinfecting potable water installations, such as water storage tanks, boreholes, wells, filter installations, pipelines etc. in one working cycle. Removing iron, lime, manganese, ochreous and sintered deposits as well as biofilms from all kinds of surfaces.

**CARELA® Industrial Range:** Wherever lime, corrosion products and other deposits give your pipelines, heat exchangers, cooling circuits and other systems a hard time, **CARELA®** products provide for clean surfaces.

**CARELA® Equipment:** Application equipment, such as low pressure spray units, dosing and circulation pumps and accessories, completes the range of **CARELA®** products.

**Work in the EWA**  
Corporate Member of the EWA

**Disinfection  
cleaning of  
a water  
storage tank**





## Saneamento Da Costa Estoril, S.A.

### Contact information

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Web: [www.sanest.pt](http://www.sanest.pt)

### Description

SANEST is a private company whose capital is shared by Águas de Portugal, sgps (a governmental holding) and four municipalities near Lisbon (Amadora, Cascais, Oeiras and Sintra).

### Range of Products

SANEST is the operator company responsible for the wastewater collection, treatment and disposal in the ocean by a long sea outfall of an agglomeration of about 720 thousand p.e. in the neighbourhood of Lisbon.

### Work in the EWA

Corporate Member

**SISTEMA Municipios**

Os quatro Municípios abrangidos pelo Sistema de Saneamento da Costa do Estoril contam-se entre os de maior densidade demográfica em Portugal: Sintra tem uma população da ordem dos 300 mil habitantes, Amadora aproximadamente 200 mil habitantes, Cascais e Oeiras albergam mais 150 mil habitantes cada. Sendo Cascais o único concelho que drena na totalidade para o sistema de saneamento da costa do Estoril, a população equivalente (E.P.) nos quatro municípios é de cerca de 720.000 habitantes.

Proveniência das águas residuais em função do caudal médio diário tratado na ETAR da Guia:

7% AMADORA	89% CASCAIS	18% OEIRAS	10% SINTRA
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## Tuttahs & Meyer Ingenieurgesellschaft mbH

### Tuttahs & Meyer Ingenieurgesellschaft mbH

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Germany

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### Description

#### TUTTAHS & MEYER

Ingenieurgesellschaft mbH provides Engineering and Consulting Services for the entire Water Management Cycle, from planning, design and construction supervision to site management and operation. Our customers are associations, municipalities, water works, public authorities as well as local and international enterprises. The elaboration of comprehensive research and development measures and the participation in various professional groups are the basis for TUTTAHS & MEYER's implementation of innovative, future oriented solutions. Since our establishment in 1948, the company developed into an efficient, internationally operating consulting firm with 65 highly qualified employees.

### Fields of Expertise

#### 1. Surface and Underground Water Management

With the introduction of the new European Union Water Framework Directive, the importance of careful management and the need for a long-term strategy, with focus on the amelioration of surface water conditions, becomes apparent. With their implementation of this directive, TUTTAHS & MEYER support their clients with traditional and innovative engineering concepts and services.

#### 2. Water Supply

TUTTAHS & MEYER began their activities in the field of water management during the post-war period. Our scope of expertise ranges from initial conception works to complex re-investment projects for major German water works and also includes the reconstruction and rehabilitation of water supply networks abroad. We offer the highest professional standards in design and implementation as well as economically feasible solutions in all of our projects.

#### 3. Wastewater Engineering

As a specialised engineering firm for waste management in the water sector, we develop and perform tailor-made concepts for the treatment and discharge of both storm- and wastewater. TUTTAHS & MEYER's team of engineers has a substantial level of expertise, which covers the entire wastewater cycle enabling the development of optimised solutions for discharge, treatment and purification.

#### 4. Consulting Services

TUTTAHS & MEYER are dedicated to the responsible use of natural resources for the benefit of human beings. We develop solutions, which not only prove to be technically and economically feasible but are also ecologically sustainable. In close cooperation with European universities and research institutes, TUTTAHS & MEYER undertake the management of ecological R & D initiatives in the water sector, which are funded primarily by the German government and the European Union. Trained team of internationally experienced consultants develops tailor-made solutions for our clients in both the private and public sectors, including services such as project development, technical design works, supervision of works, management assistance and training as well as assistance for project financing acquisition.

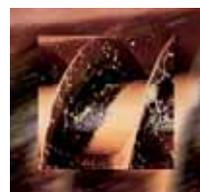
#### 5. Infrastructure

(waste o energy o road)

Our range of activities covers the entire technical and economical environment of international projects and programmes. We design, implement, and monitor projects related to urban and rural water supply, water management, wastewater treatment, waste management, road construction and the energy sector. In the energy sector in particular, we identify sustainable ways and means to provide technically and economically secure solutions of ecological value, e.g. hydrogen-technology.

### Work in the EWA

As Corporate Member of the EWA our Managing Director Dr. Markus Schroeder is member of the Task Group Central and Eastern European Countries.





## Vewin

### Vewin

Association of Dutch Water  
Companies (Vewin)

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Fax: +31 6 53 41 00 85

Email: [frentz@vewin.nl](mailto:frentz@vewin.nl)

Web: [www.vewin.nl](http://www.vewin.nl)

### Association of Dutch Water Companies

Vewin is the national association representing Dutch water supply companies. Back in 1952 it was founded, more than 200 water supply companies were active in the Netherlands. Today there are some 10, a change that has altered the association's essential task. Vewin focuses primarily on representing the interests of its members in The Hague and Brussels by creating an environment in which members are able to optimally achieve their objectives.

One of the most important current activities is the representation of members' interests in the Dutch centre of government the Hague, and Brussels - a crucial task, especially when the preparation of government policy documents on matters such as water management, the environment and urban and rural planning are on the agenda. Vewin naturally takes a leading position with its expert information and advice in the preparation of new legislation relevant to the sector.

Vewin's involvement obviously extends far beyond The Hague and Brussels. Together with nature and agricultural organisations, it also addresses the challenge of pollution of the sources for drinking water. In cooperation with national ministries of Health (VWS), Housing (VROM), and Economic Affairs (EZ), facility suppliers and research institutes it stimulates the sustainable use of water in the Netherlands. Together with the Association of Water boards it supervises experiments in the total water management process. Keywords here are sustainability, environment and cost efficiency, transparency and customer concern. In contacts with coordination organisations such as the Inter Provincial Platform (Inter Provinciaal Overleg) and the Union of Dutch Local Authorities (Vereniging van Nederlandse Gemeenten) it is mainly about initiating, developing and supporting the interests of the drinking water sector and individual water supply companies.

drs. A. Frentz  
*Manager*

# VIVAQUA Vivaqua - Water for Live



- Vivaqua treats sewage 24 hours a day. Vivaqua provides sewage services in the Brussels-Capital Region as well as for 6 municipalities of the Flemish Region. It also runs the sewage treatment plant of Brussels South.

### Vivaqua - Sustainable development 24 hours a day

- Vivaqua has been protecting the environment for more than 100 years. Since its foundation, Vivaqua has been protecting the purity of its groundwater by purchasing the grounds where it collects water and where its aqueducts are laid. To do so, its facilities have always been and still are under constant supervision.

### Vivaqua

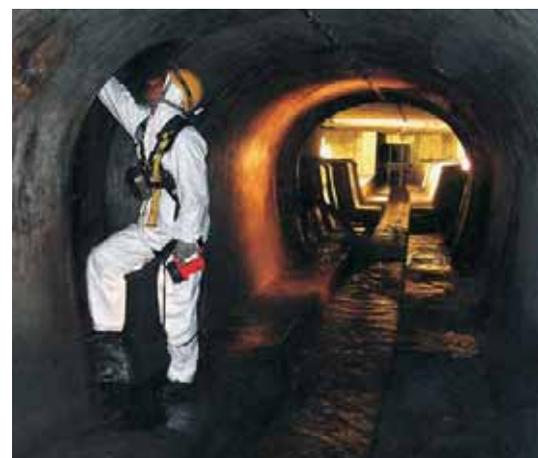
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Belgium  
Email: [info@vivaqua.be](mailto:info@vivaqua.be)  
Web: [www.vivaqua.be](http://www.vivaqua.be)  
ISO 9001

Vivaqua is one of Belgium's leading water companies. It manages the whole water cycle, from the production of drinking water and its distribution, to the sewage treatment. Vivaqua also puts a lot of effort into sustainable development and develops a long-term environmental, social and economic policy.

### Vivaqua - The water cycle 24 hours a day

- Vivaqua produces and distributes drinking water 24 hours a day. Active in the 3 regions of the country, Vivaqua produces and distributes 360,000 m<sup>3</sup> of drinking water a day to 2.1 million people among which all Brussels inhabitants.
- Vivaqua ensures water quality 24 hours a day. Vivaqua supplies water of unquestionable quality that meets the standards specified in the three Belgian regional legislations. Its laboratory guarantees this quality by constantly checking the whole water cycle, from the catchment point to the delivery point at the end user's.

- Vivaqua keeps on creating jobs. 221 jobs have been created in 4 years, which accounts for 12.5% personnel growth! Vivaqua creates skilled and less skilled work in the three regions of the country. Besides, it takes all possible steps to constantly improve the working conditions of its personnel.
- Vivaqua increases its turnover year after year. Vivaqua has been developing for several years a policy of extension and diversification of its activities in the three regions of the country. Its turnover went from 170.5 million euros in 2002 up to 200.1 million euros in 2006.





**WUPPERVERBAND**

für Wasser, Mensch und Umwelt

### **Wupperversband**

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### **WiW**

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## **Wupperversband**

### **Wupperversband**

Being one of Germany's longest-serving water management corporations, the Wupperversband manages the catchment area of the river Wupper with respect to all water-management tasks since 1930. The catchment area comprises an area of 813 square kilometres with about 2300 kilometres of rivers and streams. More than 900000 inhabitants live in this area.

The Wupperversband is a corporation under public law. Its statutory tasks are sewage treatment and waste disposal, operation of dams to control the water flow in the River Wupper and other rivers, provision of drinking and process water, maintenance and restoration of the rivers and streams. The Wupperversband runs 11 sewage treatment plants, 56 kilometres of sewers, 71 storm-water tanks and sewage pumping stations and 12 dams.

The members of the Wupperversband are the cities and district towns, water supply companies and other companies in the catchment area.

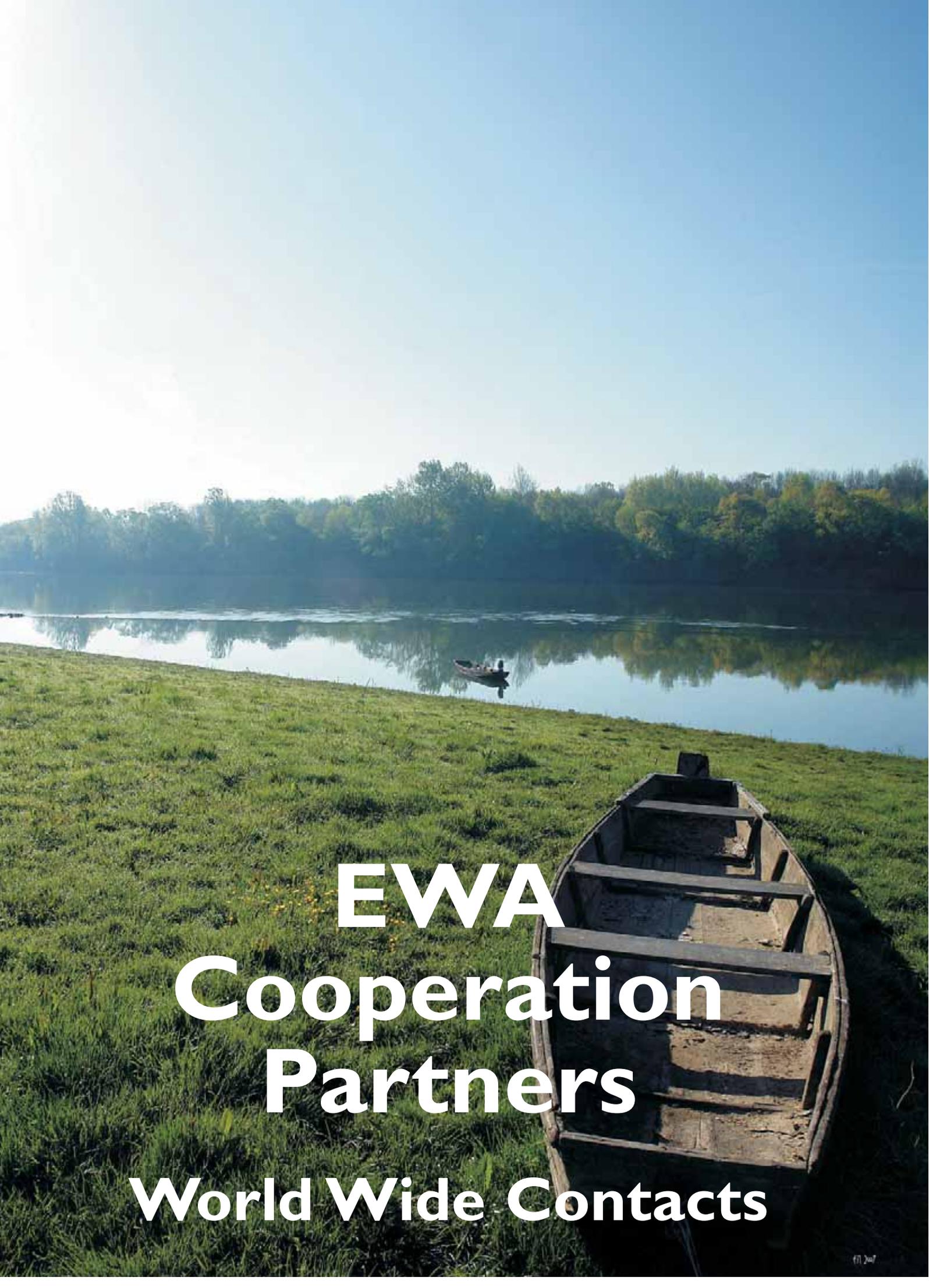
**WiW**

Wupperversbands-gesellschaft für integrale Wasserwirtschaft mbH



### **WiW mbH**

The WiW - Wupperversbands-gesellschaft für integrale Wasserwirtschaft mbH is a wholly-owned subsidiary of the Wupperversband to bring in the entire know-how and the long-standing experience of the Wupperversband in water resources management, water law and economic into successful cooperation with towns, municipalities and industry, beneficial to customers and water bodies.



**EWA  
Cooperation  
Partners  
World Wide Contacts**



## International Water Association

**IWA**

IWA has its roots in two strong associations: the International Water Supply Association (IWSA) and the International Water Quality Association (IAWQ). IWSA was established in 1947 while IAWQ was originally formed as the International Association for Water Pollution Research in 1965. IWSA and IAWQ came together in a merger in 1999 to form IWA.

Today, IWA is a member driven organization. There are three member types within the Association: Individual, Corporate and Governing Members. In aggregate our members involve and represent approximately 10,000 individuals worldwide. The Association is a non-profit organization, self-governing and responsible to its Governing Members. A Governing Assembly, Board of Directors, a Strategic Council and various committees guide and direct the Association.

### IWA's Vision

Connecting water professionals worldwide to lead the development of effective and sustainable approaches to water management.

### IWA's Mission

To create and foster a global network of leading-edge water professionals through the provision of services and products to members, including conferences, publications and support for member groups. In addition, to represent the views of members in international forums and to project key messages to the sector at large, aimed at advancing best practice in sustainable water management.

### IWA Governance

The Association is a not-for-profit organisation. Governing Members from geographic regions represent the interests of their regional constituency (individual and corporate members) and nominate representatives to the Governing Assembly. The Governing Assembly is responsible for setting broad policy for the Association and electing the Association's officers

The Board of Directors is responsible for the management of the affairs of the Association. It is supported by various Committees who have specific tasks guiding activities or overseeing particular delegated areas. The Association has a permanent staff housed in its headquarters in London to support the activities of the Association and its members. The Association's Executive Director and the headquarters management team direct the staff. The Association's President and two Vice-Presidents serve as officers to the Association.

### IWA Activities

- Conferences
- Publications and Information Services
- Specialist Groups
- Global Development Solutions
- Interest Groups (representing specific sectors of the water industry)
- Web-based Knowledge Networks
- Forums
- Task Forces
- Regional Associations



**Paul Reiter (right) Executive Director of IWA and Johannes Lohaus (left) General Secretary of the EWA**

### Contact

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## Japan Sewage Works Association

**JSWA**

### I Introduction

Starting in the latter half of the 1950s, rapid growth of industrial economy led to such social problems as aggravation of the living environment and water pollution in public water bodies. This was the situation when the Sewerage Division of the Japan Water Service Association and the National Sewage Works Development Conference were integrated to form the Japan Sewage Works Association in April 1964. JSWA got permission to establish itself as a public interest corporation in January 1965 and began full-scale activities with public organizations as regular members. The Association's objectives are to develop sewerage services soundly, while conducting research on sewerage systems, and to preserve public water bodies for the improvement of people's lives. As a network organization of bodies involved in sewage works, JSWA carries out a wide range of activities to promote development of sewage works, and facilitates communication and cooperation between public organizations implementing and planning sewage works on the one hand, and National government, related organizations, enterprises and civic groups on the others.

### 2 Membership

JSWA has 1,570 organizations implementing or planning sewage works as regular members, 71 as associate members, 1,309 enterprises as supporting members, 497 as individual members and 7 honorary members, for a total of 3,454 organizations and individuals as of January 1, 2008.

### 3 Activities

JSWA carries out a wide range of activities to promote the sewage works. The four main categories of activities are:

#### 1) Promotion

- Activities to Secure Finances  
(Annual General Meeting, Sewage Works Development Meeting)
- Improving people's awareness  
(National Sewerage Promotion Day, Sewage Works Contest)
- Supporting Related Organizations  
(Acting as Related Organizations' Secretariat)
- Awarding Achievements



#### 2) Improvement

- Researching Management and Engineering  
(Committee Meetings)
- Training Personnel  
(Various Kinds of Courses and Seminars)

#### 3) Information

- Issuing Journals and Publications
- Holding Sewage Works Exhibitions
- International Technical Exchange

#### 4) Safety

- Establishing Standards
- Inspection and Authorization System of Factories
- Liability Insurance Plan



Table 1 Membership

Regular Members	Type 1	Local governments and public organizations that implement sewage works
	Type 2	Public corporations(e.g., public organizations) that implement sewage works for national or local governments
Associate member		Local governments and public organizations that plan to provide a sewerage service
Supporting member		Enterprises which are intimately related to sewage works and supports the objectives of Japan Sewage Works Association
Individual member		Individuals interested in managing sewage works or sewerage-related technology
Honorary member		Individuals whose an outstanding achievements contributed to the development of sewage works and who have been nominated by the chairman and the approved by the Annual General Meeting

#### 4 Committee Meetings

JSWA has about 35 committee meetings.

##### Management Committee

To promote eighth 7-year program for sewerage systems construction, JSWA researches basic subjects such as financial problems, improving sewerage systems' quality, supporting measures for municipalities, sewage property, sewage reuse.

##### Technical Committee

JSWA compiles Guideline and Manual for Planning and Design in Sewerage Systems, revision of Guideline for Measures against Earthquake and other manuals.

##### Prefectural Committee

JSWA discusses sewage works problems and exchanges information with prefectures, particularly stormwater measurement in prefectures. It also studies prefectural roles in the measurement.

##### Municipal Committee

JSWA researches problems in planning, construction, maintenance and operation for small-scale sewerage systems in municipalities

##### Sewer equipment and materials committee

JSWA proposes standards to standardize and improve quality of sewer equipment and materials. It also provides Inspection and Authorization Systems for Factories to secure high quality level of sewer equipment and materials as well as to conduct inspections effectively.

##### International Committee

This committee exchanges information worldwide with other organizations. It holds international conferences for technology exchange.

#### 5 Publications

##### Main publications

Guideline and Manual for Planning and Design in Sewerage Systems

Guideline for Maintenance and Operation in Sewerage Systems

Estimation of Manual for Sewerage Construction

Estimation of Manual for Sewerage Maintenance and Operation

Sewage Works in Japan

Standard Methods for the Examination of Water and Wastewater

Glossary Wastewater System

Japan Sewage Works Association Standards

About 100 other publications





## Water Environment Federation

### WEF

The U.S.-based Water Environment Federation (WEF) is a not-for-profit technical and educational organization with more than 33,000 individual members and 81 affiliated Member Associations representing an additional 50,000 water quality professionals throughout the world. Formed in 1928, WEF is a leader in providing water quality information, educational resources and networking opportunities both in the U.S. and around the globe. WEF members include practitioners, scientists and academicians who have chosen to devote themselves to protecting public health and ensuring sustainable water resources by addressing water quality challenges on a daily basis.

As WEF President, I try to give context about the importance of what we do to whomever I'm speaking with. Whether it is a group of like-minded water professionals, WEF members or the general public, I try to reinforce the role that water professionals have in protecting public health and the environment. You see, it is possible to drive a bus and care nothing about the transportation industry, but it is impossible for us to do our jobs and care nothing about water. Our profession is more than a job - it is a vocation. That is reflected in the interest we share in all aspects and impacts of water around the world. We wonder how we will maintain our aging infrastructure, what the true impacts of microconstituents released to the environment are, and how global climate change will affect future generations.

As water professionals, we have been at the forefront of one of the longest running wars in the history of humanity: the fight against waterborne disease and the quest to improve quality of life. Last year, the British Journal of Medicine cited the advances in sanitation as the single greatest factor in extending human life in the last 150 years. We have a lot to be proud of, especially in North America. In fact, we have done such a good job that the work we do is often unnoticed. With the exception of drought or pipe breakage, the public rarely thinks about us at all. The public expects to turn on a spigot and get safe water, to flush a toilet, and to be able to enjoy a safe environment, and they don't usually have any idea how this is accomplished. As a technical and educational organization dedicated to the preservation of the global water environment it is part of WEF's job help these stakeholders - public officials, legislators, the media and the general public - gain a better understanding of what we do, how we do it and why we commit our professional lives to providing clean water and protecting public health and the environment.



## The Future of WEF

Many of our members came into this profession and joined WEF to make a difference. For previous generations there were ample opportunities to do things that offer dramatic improvement in the U.S. but not outside of our borders. Not so for our younger members.

Our young WEF members have a great passion to make a difference throughout the world. Domestically, water resource availability and climate change are strong and important interests. The plight of the rest of the world, however, is a larger story. Young people's humanitarian compassion is drawn to the fact that 20% of the world's population (1.2 billion people) doesn't have access to adequate water, and twice that number doesn't have adequate sanitation. The challenge for WEF is to integrate this desire to do good in the world while continuing to do good at home, and coupling that with limited resources. After all, the wealth of nations has not eliminated these problems - yet.

How will we handle all the challenges that face us? Frankly, I neither know the answers nor see the paths clearly. What I do have is faith that we will come up with the best way possible to use WEF's resources to protect the water resources of our planet. That faith is grounded in what I see as the unique strength of WEF. We are an organization of individuals coming together from many backgrounds and working together in many ways to find and implement solutions for the water environment.

While we have a community of interest, we are not a trade organization nor speak for any special interest. Our stock in trade is knowledge, its development and dissemination, and we are recognized as a center of excellence. Why? Because we believe decisions should be grounded in real science. This gives us credibility. How do we accomplish this? We find ways to work together with others to achieve a beneficial goal. We believe that an individual can make a difference, and WEF affords many avenues to do so.

- Adam Zabinski, 2007-2008 WEF President





## Arab Countries Water Utilities Association

ACWUA

الجمعية العربية  
لمرافق المياه

### Background:

The role of water utilities, from national and regional perspectives, is to provide wide and equitable access to clean water sanitation services for all sectors of society including the poor. However, there are many challenges to fulfilling this role both in high income and in developing countries including the Arab region. Such challenges include water scarcity, water-related conflict situations, weak sector policies, high infrastructure investment needs, lack of local management and technical capacity, and an ever-increasing demand due to expanding populations and urbanization.

Water utilities in the Arab region have much to gain from talking to, and learning from, each other so as to enhance their ability to meet these challenges, to build their capacity, to ensure that sector investment is well utilized, and eventually to raise standards of service delivery. This will provide long-term benefits in terms of health and productivity to the populations served by these utilities and will contribute to the attainment of the Millennium Development Goals (MDGs) to reduce by half the proportion of people without sustainable access to safe drinking water and basic sanitation by 2015. A proposal therefore has been made to promote the idea of establishing an association of Arab water utilities, to be named Arab Countries Water Utilities Association (ACWUA), to help them realize the above-mentioned benefits. This proposal has the support of UN-ESCWA and German Development Cooperation, represented by GTZ

The **ACWUA vision** is to be a self-sustainable, strong regional association of Arab water utilities that can provide many benefits in terms of helping members improve their service delivery, make efficiency gains through performance benchmarking etc., develop and meet technical standards, and ensure that the very large ongoing investment programs in the region are well managed. Moreover, ACWUA could provide a regional advocacy platform for its members to interact effectively not only with each other but also with governments, the private sector, as well as donors and international lending organizations to the mutual benefit of all concerned

### Establishment Process:

#### 1. Country Missions: ESCWA Member States

A team from GTZ and ESCWA went on missions to most ESCWA member states to contact the water sector officials within these countries and introduce the idea and discuss the process of establishing ACWUA. The idea was very well received throughout the member states, and most water sector officials decided to send representatives to the Consultative Meeting to be held in Cairo.

#### 2. Consultative Meeting: Cairo, 4-6 September 2006

GTZ and ESCWA jointly organized a consultative meeting from 4 - 6 September 2006 in Cairo, Egypt to discuss with representatives of utilities and service providers from countries within the ESCWA region the need and modalities for establishing an Arab regional association for water utilities. The meeting issued the Cairo Statement to endorse the establishment of an association of Arab water utilities, and nominated a Steering Committee (SC) composed of 10 members from the representatives of the countries that participated in the meeting.





**ACWUA Foundation Committee**

### **3. Steering Committee Activities**

- ACWUA Steering Committee held a meeting hosted by the German Water and Wastewater Association (DWA) in Hennef, Germany from 10-16 December 2006 to discuss next steps necessary to establish the new association such as the association's charter and bylaws, a business plan, and membership.
- Another SC meeting was held in Manama, Bahrain on 23 January 2007 and discussed the association's charter and bylaws, foundation meeting venue, membership issues, and logo.

### **4. ACWUA Foundation Meeting: Abu Dhabi, UAE, 23-24 April 2007**

- This meeting, held on 23-24 April 2007 in Abu Dhabi, was hosted by the Abu Dhabi Water and Electricity Authority (ADWEA). The Association was officially founded during the meeting, and the Steering Committee was turned into a Foundation Committee that will lead the ACWUA until the first annual meeting in 2008 in which the first Board of Directors will be elected.
- Seven ACWUA Working Groups were established to deal with issues such as capacity development, benchmarking, wastewater reuse, poverty oriented water sector policies, private sector participation, water resources management, and utility management.
- Membership applications were filled by corporate, individual, and associate members and presented to ACWUA interim secretariat, which is hosted by the GTZ-ESCWA Project.

### **5. Foundation Committee Activities**

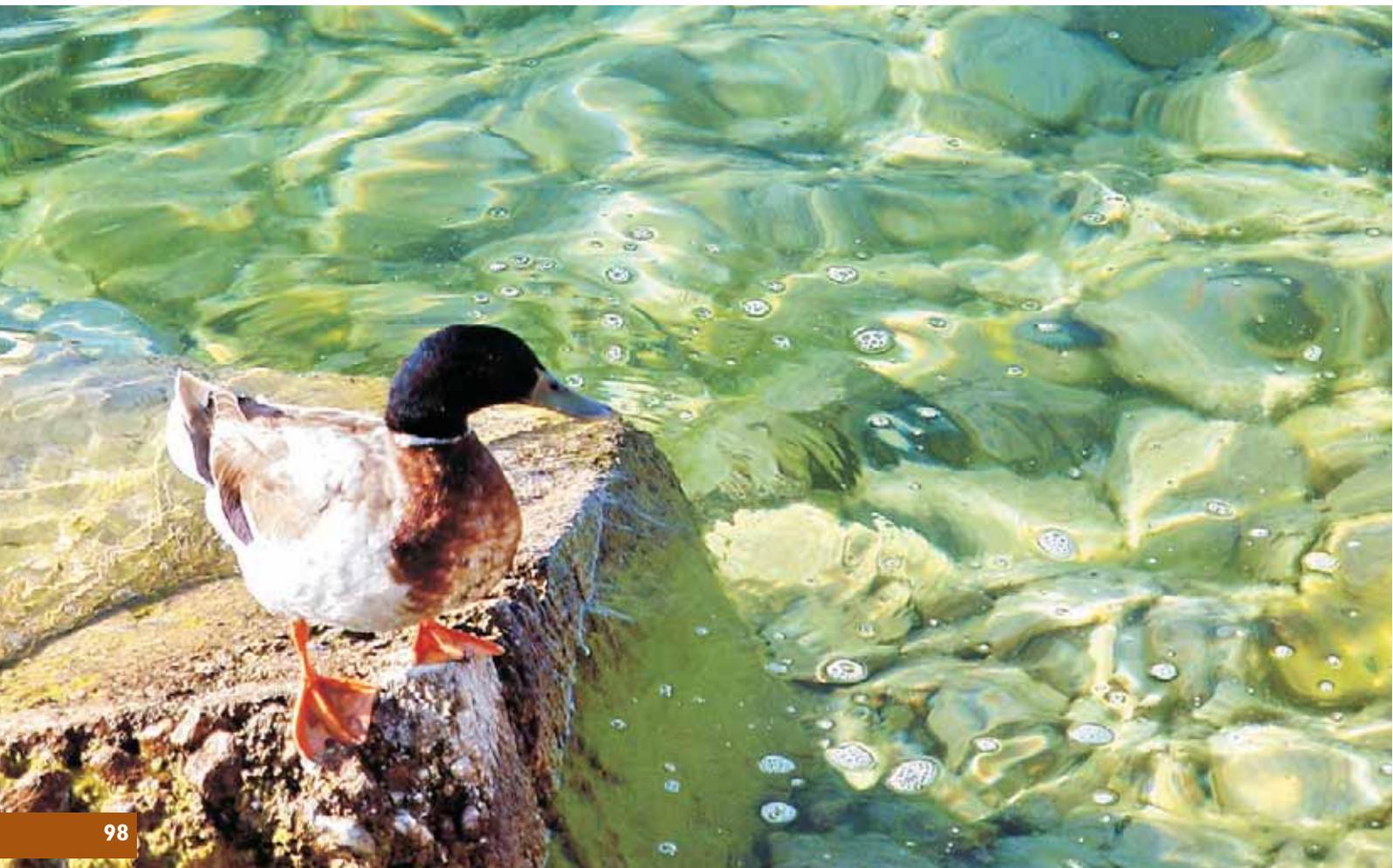
ACWUA Foundation Committee held a meeting at the Dead Sea, Jordan from 22-24 October 2007 and approved the association's charter and by-laws, membership fees for various membership categories, criteria for hosting the ACWUA Secretariat, and next steps such as the future FC meetings and the 1st General Assembly meeting in 2008.

## Summary - facts about water

1. Of all the earth's water, 97 % is salt water found in oceans and seas.
2. Only 1 % of the earth's water is available for drinking water. Two percent is currently frozen.
3. About two thirds of the human body is water. Some parts of the body contain more water than others. For example, 70 % of your skin is water.
4. In Europe, each person uses about 116 litre of water a day at home.
5. You can survive about a month without food, but only 5 to 7 days without water.
6. The average five-minute shower takes between 40 to 70 litres of water.
7. An automatic dishwasher uses approximately 12 (modern once) to 25 litres of water while hand washing dishes can use up to 30 litres.
8. A dairy cow must drink four litre of water to produce one litre of milk. Depending on ambient temperature and milk yield a dairy cow needs 60 to 180 litres of water a day.
9. A person should consume 3 litres of water per day (from all sources of water, food, etc.) to maintain good health.
10. In households, approximately 15 percent of the drinking water is used for washing machines.

Roughly about 45 litres and therefore approximately 1/3 of the water consumption per person is flushed away by using the toilet flush (using old toilet tanks). By changing over to a two-quantity flush or by installing a flush Stop-button only 3 to 6 litres will be used, instead of constantly 6 or even up to 10 litres.

One can reduce the quantity of water running through the tap by installing an aerator. Aerator add water bubbles to the water, so that the water jet remains as full as before, although less water is used. Instead of using approx. 15-20 litres per minute, water use is reduced to approximately 10 litres per minute. Whilst keeping the same comfort, water consumption is reduced by 30-50 %.





### **More than 100 years of wastewater treatment in the City of Prague:**

In 2006 the City of Prague celebrated 100 years of municipal wastewater treatment. The original plant was designed by an English civil engineer William H. Lindley. The plant was one of the first on the European continent at that time. The plant was located in the underground of an office building. The plant was well preserved and now is converted to a museum of sanitation and wastewater treatment: [www.ekotechnicke-museum.cz](http://www.ekotechnicke-museum.cz). ACE CR is one of the supporters of the museum.

### **Interesting facts from Austria:**

Precipitation and the inflow from borderlands result in a freshwater volume of 120 billion m<sup>3</sup>/a in Austria. Thereof 84 billion m<sup>3</sup> are available for usage. The total annual consumption of fresh water is in average 2.6 billion m<sup>3</sup> per year, which is approx. 3 % of the available freshwater. Thereof two-thirds are used by industry and agriculture and only one-third by households.

88 % of the Austrian citizens are of the opinion that the origin of drinking water is very important. The current sources for Austrian drinking water are spring water and groundwater, each by 50 %. The sources are well protected by the Austrian Water Act. Most water utilities supply with natural and untreated or preventively disinfected water.

87 % of the Austrian population live in areas covered by water supply (7.05 of 8.1 million). Approximately one million citizens have individual water supplies (springs and wells). More than 500 water utilities provide the Austrians with high quality drinking water. 96 % of the supplied customers are satisfied with their services.

Approximately 89 % of the Austrian households are connected to a municipal sewage plant. As to the remaining 11 % the disposal is properly carried out by decentralized plants.

The Austrian water bodies have an energy-potential of approximately 53.700 GWh/a. 64 % of this potential is already used, while another 2 % is under construction. About 60 % of the used electrical energy in Austria is provided by hydropower plants.

2002 Austria was hit by an exceptionally rare flood. The main regions suffering from this flood were the rivers "Kamp", "Steyr", "Aist" and the Danube. This flood claimed 9 lives, had a devastating effect on infrastructure and surrounding properties and caused damages of 3 billion euros. Three years later another part of Austria experienced a disastrous flood. Main area of the flood was Tyrol, Vorarlberg and Salzburg. In some valleys the rainfall reached a maximum amplitude of 250mm per day. The flood caused a total damage of 700 million euros. During the last years Austria spent 220 million euros annually on flood protection paid by federal, provincial and municipal authorities.

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