Members of

Netherlands Water Partnership

agriculture, nature and food quality · Ministry of Economic Affairs · Rijkswaterstaat · Ministerie van Verkeer en Waterstaat · VROM

Acacia Water · accenture innovation delivered · ADH · Adviesbureau Cuijpers · AIDEnvironment · alert solutions · Alfa Adviesbureau · Alkyon · Alterra Wageningen UR · AMREF Flying Doctors

Aqua Explorer · Aqua for all · Aqualectra · Aquanet bv · aquaterra · ARCADIS · A&W · Ballast Nedam · Bergschenhoek B.V. Civiele Techniek · brabant Water

Brightwork · cascal · croon TBI techniek · DATAwatt · Delft Cluster · Deltares · DHV · Dorcas Aid · Dura Vermeer

EARS · ecodis · ECOJOB · ECORYS · Eijkelkamp · ENP · evers manders subsidieadviseurs · evides waterbedrijf

Ferenci · Frisian Watertechnology · Fugro · GMB · Gemeente werken Rotterdam · Grontmij · HKV Consultants · heijmans

Herder · Het Waterlaboratorium · Hogeschool Utrecht · Hogeschool Van Hall Larenstein · Hogeschool HZ Zeeland · De Stichtse Rijnlanden · Hoogheemraadschap van Delfland · Humana

HydroLogic · IBM · ICCO · if technology · IRC · ITC · IUCN · INFRAM · interbeton

Invest eau · isd · iss · kiwa · KOOP · KROHNE · KWT Group · Landustrie · LeAF

MWH · match business matching · Mott MacDonald · Norit · Nautilus · nedap · Netherlands Watermuseum · NWB Nederlandse Waterschapsbank N.V. · NijghPeriodieken

Nijkus · NMi · optiqua · oranjewoud · PAQUES · PHILIPS · PIERALISI · Plan · PNO Consultants · PRACTICA Foundation

Priva · Provincie Noord-Brabant · Provincie Noord-Holland · Zuid-Holland · rivm · Rabobank · ABBEL · REDOX · ROSSMARK

Royal Boskalis Westminster nv · Royal Haskoning · Schlumberger Water Services · Sita Bruning Water · SenterNovem · Shell · SIEMENS · simavi · Simmons & Simmons · Sweco

SG · SNS REAAL · SNV · Spaans Babcock bv · stowa · Tauw · TENCATE · TOTAL ACTIVE MEDIA · Triqua

TrojanUV · TU Delft · Twynstra Gudde · UNESCO-IHE · unicef · Unie van Waterschappen · University of Twente · van de Geijn Partners bv · Van den Merik Sliedrecht · VHKO

Van Oord · Vewin · Vitens · vlm · VolkerWessels · WASTE · waterforum online · Waterschap De Dommel · Waterschap Noorderzijlvest Groningen · waternet

Waterschap Brabantse Delta · Waterschap Groot Salland · Waterschap Hunze en Aa's · Waterschap Noorderzijlvest · Waterschap Regge en Dinkel · Waterschap Rijn en IJssel · Waterschap Rivierenland · Waterschap Velt en Vecht

Waterstromen · WaterWijs · wavin · WESTT Development BV · Wetlands International · wetsus · Witteveen+Bos · WMD water · WWF

Dutch Water Sector

Dutch Water Sector

2009-2010

2009 - 2010

For an overview of Dutch water expertise, see page 4 - 18

For business partners, see page 20 - 112

For an index of adresses, see page 113 - 134

In cooperation with:

Netherlands Water Partnership

www.nwp.nl

A Nijgh Periodieken BV publication, also publisher of H_2O

DutchWaterSector

2009-2010

Adress, editors and publishing company
Nijgh Periodieken B.V.
's-Gravelandsweg 565
3119 XT Schiedam
P.O. Box, 122, 3100 AC Schiedam
Phone: +31 (0)10 427 41 00
Fax: +31 (0)10 473 99 11
Internet: www.nijgh.nl

Publisher
Rinus Vissers

Editors
Stephanie Hameeteman (index)
Anneke Suider (index)
Michiel van Zaane
Nancy Meijer (NWP)

Advertising
Roelien Voshol
Phone: +31 (0)10 427 41 54
Brigitte Laban
Phone: +31 (0)10 427 41 52

Media-order
Carola Sjoukes
Phone: +31 (0)10 427 41 41

NWP
Jeroen van der Sommen
Phone: +31 (0)15 215 17 28

Lay out and printing
Den Haag media groep, Rijswijk

Ductch Water Sector is published in cooperation with the Netherlands Water Partnership (see page 18) and Partners for Water.

Source of life, source of concern

'Water is the oil of the 21st century'. It's a growing belief and there's some truth in it. Fresh water – and that's what we're talking about – is becoming a luxury for more and more people around the world. Pollution, groundwater abstraction and climate change are reducing freshwater resources world-wide. At the same time, industrialization and a growing world population are increasing the demand for fresh water. A source of life is becoming a source of concern.

Climate changes are also prompting other kinds of concerns. Rising sea levels and overflowing rivers pose a constant threat to millions. More than half of the world's people live in coastal and river delta areas that are vulnerable to flooding. How can we avert this threat? Too little water on one hand, too much on the other: that's the paradox we face. We need to come up with lasting solutions for both problems.

In the Netherlands, we know all about living with water. Our two thousand years of habitation in a delta area close to sea level has produced an ambivalent relationship: we love water and loathe it. Our permanent battle to control the sea and rivers has made us experts in water management. The experience has taught us two fundamental truths: that water management is a process of continuous innovation and that water management has to be a team effort.
That's why the Netherlands possesses both technological expertise and a deep-rooted willingness to cooperate. We have top research institutes in the field of water innovation, dredging firms that operate world-wide, front-ranking hydraulic engineering companies and market leaders in the field of water purification technology. But that's not all. We also have government bodies that are geared up to deal with water, a relevant knowledge infrastructure and, last but not least, a strong public awareness of the issue.
By combining expertise and experience at all levels, we are equipped to devise appropriate solutions to complex problems. Challenges in the field of water policy development; hydraulic engineering and design; construction, implementation and maintenance; water supply and sanitation; flood control; environmental protection, and integrated water management.

Our national track record says it all. We in the Netherlands have reclaimed land, created whole new provinces, increased our freshwater resources, made drinking water safer and prevented natural disasters. The Netherlands is a pioneer in the field of innovative water management. It's as true of institutional structures as it is of delta technology.
And the tradition lives on. Our agricultural and horticultural industry – the heaviest industrial consumer of water anywhere in the world – is now working simultaneously to cut water consumption and increase production. The drinking water industry is investing new applications like decentralised systems for drinking water production and wastewater purification. These create huge savings in transport costs and energy. And we continue to deploy our knowledge of delta technology world-wide.

What can we do? Floods, droughts, safe and reliable drinking water, waterborne diseases, sanitation: the list of challenges is long. Everywhere, people are realizing that we need to work together to solve the world's water problems. And that we need to tackle problems in a holistic, cross-disciplinary way: water and health, water and spatial planning, water and wildlife, water and energy. This approach is paying off. From Bangladesh to the US, Dutch experts and engineers are working hand-in-hand with local partners to protect coastlines and cities against flooding and to provide populations with safe, reliable drinking water.

Oil is a fossil fuel, water a source of life. We may think of alternatives for oil, but not for water. So we must do our utmost best to confront our water problems in a sustainable way. We must work together to deal with water shortages and flooding. This magazine provides an overview of the Dutch water sector: its expertise, services and products. Let it be your guide and inspiration. Together, we can achieve more.

Annemieke Nijhof
Director-General Water
Ministry of Transport, Public Works and Water Management

DutchWaterSector
2009-2010

Skyline of Rotterdam, one of the world's largest harbours and a city of architectural marvels like the Erasmus-bridge on the left and the building of the Port of Rotterdam Authority (center) watching over the New Meuse (Photo: Eric Fecken/Gemeentewerken Rotterdam).

The Dutch water sector: resourceful and cooperative

Wind, water and wide open spaces have shaped the Netherlands and its history. To its inhabitants, the Dutch, water has always been both friend and foe. The country that is the Netherlands, often referred to as Holland, is a relatively small deltaic region in Western Europe. Three major European rivers, the Rhine, the Meuse and the Scheldt, fan out across the country before flowing into the North Sea.

As in many other deltas around the globe, fertile soil, natural transport routes and a strategic position for cross-border and overseas trade have made this low-lying region particularly attractive to many people: from early settlers (farmers and fishermen) to contemporary entrepreneurs in manufacturing and service industries. Not surprisingly, the Netherlands has long been a sea-faring nation with an international outlook.

Joining forces

In order to live here, the Dutch had to be both resourceful and cooperative. By systematically draining wetlands and lakes, building dikes around them and keeping them dry, they have created new land on which to farm and build. These polders are a well-known feature of the Dutch landscape. As far back as the 13th century, local communities developed district water boards to manage their water. Today these democratic institutions are still operational as regional water authorities. They are an example of how the Dutch have naturally joined forces to face a common enemy and find lasting solutions to water-related challenges.

Exporting know-how

As for resourcefulness, having lived in a delta for centuries, the Dutch had to become skilled water managers. They have learned by experience, both at home and abroad, and have long exported Dutch know-how for the benefit of others. As early as the 7th century, the Dutch helped to reclaim and cultivate land around the Elbe delta, in what is now Northern Germany. During the second half of the 19th century, Dutch engineers were invited to work on coastal land reclamation, irrigation schemes, river management and port construction in Japan and China. These and similar experiences across the world proved to be the basis for lasting relationships between the Dutch water sector and international counterparts, leading to the constant exchange of knowledge and application of water management expertise.

From reclamation of the Zuiderzee... (Source: Rijkswaterstaat)

Delta and water technology

Large-scale developments like the embankment of the Zuiderzee to create Lake IJsselmeer (1932) and the construction of the Delta Works in the second half of the 20th century generated new knowledge which was repeatedly applied abroad. Over the decades, the Dutch have honed their expertise in widely varying aspects of water management, from land reclamation to water education. This expertise now encompasses a vast range of disciplines generally referred to as 'delta technology' (a term which encompasses hydraulic engineering, flood protection, port development, coastal zone management and dredging) and 'water technology' (including wastewater treatment, drinking water and sanitation). But the Dutch are equally at home in sustainable irrigation techniques and wetland conservation, in the use of ICT and GIS technology to enhance water management, and devising smart (i.e. small-scale, cost-effective) sanitary, water supply and treatment facilities to help improve living conditions.

Sustainable

On a different level, research, education, capacity-building and institutional development rank high on the Netherlands' international water agenda. The Dutch government is strongly committed to an international water management effort and has signed a number of bilateral agreements to advance integrated water management across the globe by exchanging knowledge and experience and cooperating in the sustainable development of water systems. The Dutch water sector covers every aspect of modern water management. It is therefore able to act as both a reliable and knowledgeable partner in the search for solutions to the world's water challenges.

...to designing and building a floating city (Source: Dura vermeer)

Around the world in 27 projects

This map shows Dutch water experts at work around the world. It features a small, random selection of projects involving Dutch public and private-sector companies, knowledge institutes and non-governmental organisations.

There are some 200 Dutch companies in the water sector working every day on projects all over the world.

Each of these leading companies could fill this world map with projects.
Many of these projects have been visualised online. Visit our Google Earth tour and surf from one project to the other to obtain a bird's-eye view. Zoom in on the storm surge

barrier in Venice, wastewater purification plants in the Middle East, and sanitation programs in Indonesia or India, as well as on countless other projects that the Dutch have carried out in the Netherlands itself.
Go to: www.waterinthenetherlands.org and select a bird's eye view of Water Technology or Delta Technology.

Solving delta dilemma's

Changes in the coming decades are expected to result in no less than 80% of the world's people living in urban areas adjacent to coasts or major rivers. However, space is at a premium and waterside locations present threats as well as opportunities. Especially in view of expected climate changes, the world faces a number of challenges in this respect. The Netherlands has solutions to offer, both at home and abroad.

The Netherlands

Total area:	41,500 km^2
Land:	33,800 km^2
Water:	7,700 km^2

Primary flood defences

Total:	3,500 km
River dikes:	1,430 km
Lake dikes:	1,017 km
Coastal defences:	dikes (430 km), dunes (260 km) and a wide range of flood barriers, dams and weirs.

Living in coastal regions and delta's is a risky business. The Netherlands is vulnerable not only to flooding, but also to water depletion, shortages of groundwater, subsidence, salt intrusion and pollution. A nation struggling to accommodate over 16 million people on a patch of land measuring only 33,800 km^2 - with more than half of it lying under sea level - must necessarily find ways to ensure both productivity and safety. The Dutch solution is a combination of hard and soft measures. Innovative delta technology offers a wide range of methods to protect against flooding. In the Netherlands, delta engineering measures are always considered in relation to spatial planning, economic development and nature development. Delta technology encompasses all forms of hydraulic engineering and water control. This integrated approach ensures the sustainability of measures. The Netherlands uses delta technology not in response to change, but in anticipation of change.

Threats and control

Dikes and dams can keep water out, but only up to a point and certainly not for ever. Living with water is a more sustainable approach than waging a constant battle against it. The Netherlands has always tried to strike a balance between the two. The result is a form of mutually beneficial give and take. Land reclamation (for example,

Delta Works: a series of innovations

The first of the Delta Works was already in operation in 1958. This was the storm surge barrier in the Hollandse IJssel river. This barrier (not a dam) was of great importance because it protected the densely populated Western Netherlands conurbation. By 1976 seventeen 60-metre-wide sluices were operational in the mouth of the Haringvliet, draining off excess water from the Rhine. The Brouwers Dam, situated south of the Haringvliet Dam, was finished within the next year. Also in 1976, the government agreed to build an open barrier, the Eastern Scheldt storm surge barrier, containing a number of sluices to protect the Zeeland delta and preserve the saltwater habitat of the Eastern Scheldt. The sluices were only to be closed when storms and high water levels made it necessary. To maximise the amount of salt water passing through the sluices and maintain tidal movement, the 3,000-metre-long barrier (completed in 1986) has 62 openings, each of them 40 metres wide. It is still one of the biggest structures in the world. The Maeslant barrier in the Nieuwe Waterweg is the final part of the Delta Works masterplan. Completed in 1997 it consists of two swing gates that can be closed at will to protect about one million people in the province of Zuid Holland.

www.deltaworks.org
www.keringhuis.nl

Eastern Scheldt storm surge barrier (Source: ©iStockphoto.com/ Klaas Lingbeek- van Kranen)

Maeslant barrier

to provide extra space for agriculture or industry) goes together with the deliberate surrender of some areas for purposes of water retention and storage. The building of massive storm surge barriers to hold back the sea goes hand in hand with 'building with nature': using valuable natural features as the starting point for the design of delta landscapes and coastal zones.

Engineering

The Dutch have specialised in hydraulic and civil engineering. As early as the 6th century BC, settlers built artificial mounds - 'terpen' - on which to seek refuge from floods and high tides. In the 15th century, windmills were used to pump away unwanted water. The Delta Works were constructed in the 20th century. This series of massive dams and barriers designed to protect the Dutch Delta against the sea, is famous around the world. Today, Dutch engineers are designing entire climate-proof floating cities.

After Katrina

When Hurricane Katrina devastated much of the land around the lower Mississippi in 2005 and caused large parts of New Orleans to flood, the Dutch government was quick to offer help. Only a year before the hurricane struck, the governments of the two countries had signed a Memorandum of Agreement (MoA) to collaborate on policy and water resources planning and management. This marked a new phase in the long-standing reelationship between the Netherlands and the US, creating opportunities to further explore and share common interests. This has led, for example, to the engagement of a Dutch consortium to deliver a conceptual study on the options for providing better flood protection for New Orleans called the Dutch Perspective. This includes two movable storm surge barriers and marshland creation to substantially reduce storm surge and wave levels in and around New Orleans.

Whatever the challenges, the Dutch always respond by developing new techniques and technologies to manage water and use it in sustainable ways. They are born innovators.

Building barriers

Dutch expertise in the design and construction of storm surge barriers has been put to good use both at home and abroad. As recently as 2002, an inflatable dam was constructed at Ramspol: a flood barrier consisting of three huge bellows made of rubberised cloth, which fill with water and air when flooding is imminent. This provides effective protection against the rising water, does not obstruct shipping and is relatively cheap. It is the only inflatable dam of this size and operating on such a scale anywhere in the world. Because storm surge barriers offer a more flexible method of protection against flooding than dikes or dams, Dutch experts are consulted on projects around the world. Teams of consultants and engineers have been involved in the development of protective barriers in Venice, London and St. Petersburg. From carrying out feasibility studies and environmental assessments to the actual construction of water defences, the Dutch water sector covers every aspect of flood control.

Moving earth

When it comes to dredging, the Netherlands has an outstanding reputation. Two Dutch dredging companies account for some 40% of the global market. From primitive forms of dredging and land reclamation have sprung sophisticated techniques and methods, now used in the construction and maintenance of ports and waterways, the protection of coasts and shores, and the creation of new land. The Netherlands itself still acts as a testbed for even more efficient, innovative or sustainable dredging techniques. At a dredging sludge depot on the Maasvlakte (De Slufter), for instance, primary separation of sediment is achieved by combining separation techniques. Part of the resulting product is sand of such high quality that it can be used immediately as a construction material. The remaining sediments can be re-used following treatment in an extractive cleaning plant.

State-of-the-art creation of new land (Source: Boskalis)

New land

In densely populated areas, where space is at a premium, the construction of new land creates exciting and necessary opportunities. In many of the world's coastal areas, Dutch dredging companies are involved in broadening beaches, extending ports or industrial areas, and even creating entire new islands. Modern dredging methods are increasingly being used to fight coastal erosion. Keeping the coastline in its current position is a process of constant measuring, monitoring and planning to ensure that the right amount of sand nourishment takes place in the right places. Sand supplementation is not just a way of keeping beaches intact; it is a fundamental measure to protect land against the force of the sea. Not surprisingly, sand nourishment is increasingly being used to provide a 'soft' defensive line in several places all around the world.

But why stop at maintaining the coastline? At present, the Dutch coastline has some

Deltares: enabling delta life

In order to concentrate and apply relevant knowledge and experience, the Dutch water sector has established the Deltares Institute for Delta Technology. The purpose of this independent institute for applied research and specialist advice is to assist in the sustainable development of densely populated delta regions. By bringing together expertise on water, soil and the subsurface, the institute seeks to meet the challenges posed by the physical planning, design and management of vulnerable deltas, coastal areas and river basins throughout the world.

www.deltares.nl

The Meuse, combining flood protection with the creation of new conservation areas and the improvement of wildlife habitats (Source: Rijkswaterstaat)

weak spots which need to be improved in order to meet current safety requirements. At the same time, the Netherlands faces rising sea levels and heavier use of the coastline for recreational and wildlife purposes. A broader, stronger coast would provide an answer to these challenges. As part of an innovative approach, the sandy beach could be reinforced by more substantial sand supplementations. If the extra sand is deposited in the right places offshore, the current and waves would automatically spread it along the coast in such a way a naturally balanced coastline will be created. This is regarded as a promising approach, using natural processes to create more space for wildlife and reinforce coastal defences in a sustainable, low-maintenance way. An example of what the Dutch like to call 'building with nature'.

Room for the river

A similar new approach is being used in the field of river basin management and flood control. It takes the spatial claims and natural values of the river as the starting point. In view of anticipated climate changes, it is thought likely that the rivers in the Rhine delta will have to accommodate ever-higher peak discharges. Until recently it was standard policy to maintain the required level of flood protection simply by increasing the height of the dikes. This is now seen as ineffective. The new policy is to increase the capacity of river basins by positioning dikes further away from rivers or by deepening washlands to reduce river levels at times of peak discharge. More space can also be created by enlarging the river channel within the dikes. In addition, action is being taken to prevent activities which increase peak river discharges, such as the building of houses and recreational facilities on flood plains. The aim is to strike a balance between present and future spatial requirements, seizing every opportunity both to enhance flood protection and to improve the environment. In other words, to work with, rather than against, nature.

Airborne Survey (Source: Fugro)

Flood Control 2015

Companies and knowledge institutes have joined forces in the Flood Control 2015 programme to maximise the world's ability to prepare for flood events. Model data, continuous monitoring and real-time information provision are coupled to provide a basis for superior risk assessment, enabling effective short-term decision-making and hence improved disaster management. Data on water levels, dike strength, meteorological expectations and forecast consequences of expected flood events are combined to produce an integrated picture, on the basis of which accurate predictions can be made and appropriate measures taken: all a question of the right information at the right time.

Solving water dilemma's

From the connection of the first homes to a basic sewerage system in the 19th century to the supply of high quality drinking water to 99% of the nation by means of an efficient and secure mains system, the Dutch have come a long way. Over the decades, the development of water technology has provided the Netherlands with sustainable systems for the production and supply of water for both private and public consumers and for the collection, treatment and partial reintroduction of 'used' water into the water system. In search of more sustainable, environmentally friendly and widely available solutions to the world's water problems, the Dutch water sector is researching, producing and applying some of the most cutting-edge products and services in the field of water resources management and sanitation.

Production and treatment

At the heart of Dutch water technology expertise is the need to treat, purify and distribute various water flows in order to minimise pollution and risks to public health and to provide domestic, industrial and agricultural consumers with drinking and process water. Through an elaborate and highly efficient system of pipes, pumps, valves and mains, drinking water companies supply clean tap water to almost everyone in the Netherlands. They employ a variety of methods to make water safe - i.e. remove micro- and other organisms, chemicals and other unwanted substances - and to improve its taste, smell and colour. From the established method of 'artificial recharge' (pumping surface water into the ground and using soil as a natural filter) to the more revolutionary application of membrane filters to remove pollutants and ions (salts), the production and provision of high quality water meeting the demands of a range of users is a constant drive for innovation.

In the Netherlands, water supply and sanitation have long been linked. Wastewater and rainwater are collected and transported in a sewerage system to which almost the entire community is connected. Sewerage is conveyed directly to wastewater treatment plants. Almost all communal wastewater (98%) is treated before discharge into the rivers and canals that constitute the Dutch water system. Some industrial users provide their own treatment facilities.

MBR

Membrane technology is fast becoming both a standard option for wastewater treatment in the Netherlands and a major export product. A highly innovative approach to wastewater treatment is the combination of membrane technology with biological treatment methods. Because the membrane filters out the sludge, the biological system can cope with greater throughput: the membrane bioreactor (MBR) can therefore be smaller. The effluent is much cleaner than that from a conventional biological treatment system. MBR combines small scale with high quality.

Biological wastewater treatment, Carrousel Geestmerambacht (Source: DHV)

Experience of its own extensive sewerage and water supply system has made the Netherlands an important supplier of materials for the transport of water through pipes and piped networks. In the changeable and subsiding delta soil, the Dutch have constructed a reliable water mains system approximately 116,000 kilometres long and supported by some 233 pumping stations. Not only is a constant flow of water guaranteed - as pumping stations and water towers create mains pressure - but leakage losses are extremely low (some 4% on average).

Frontrunner

From an international perspective, the Netherlands is a frontrunner in the development of water purification, pre-treatment and treatment technologies, including membrane technology, anaerobic water purification (UASB) and Anammox technology. Membrane technology can be used simultaneously to soften water and to remove colour and pesticides. Water treatment using ozone, hydrogen peroxide and ultraviolet (UV) light is also practised, mainly as a primary disinfection method.

Sustainable solutions

The sustainability of wastewater collection and treatment is being improved by differentiating levels of pollution and re-using both treated water and by-products. A huge research- and development effort has focused on the search for more environmentally friendly, sustainable and widely accessible treatment technologies and expertise. At the same time, new ideas about water recycling and re-use are being turned into valuable applications that can help meet some of the world's water challenges. Seawater desalinisation, the use and re-use of groundwater and wastewater, and the use of water to produce energy are subject to a similar trend.

Completed in 2004, the Sulaibiya Wastewater Treatment plant in Kuwait is one of the largest of its kind in the world (Source: Norit)

This technology makes it possible to eliminate virtually all hazardous substances and organisms.

Meeting MDG7

Shortages of fresh water, pollution of groundwater and surface water, lack of access to safe drinking water - people face the same range of problems world-wide. And water is essential to life. The UN believes that access to safe water and sanitation, as described in Millennium Development Goal 7, is an essential precondition for the achievement of other development goals. The Dutch water sector endorses this view and aims to provide clean water and effective sanitation for 50 million people within a decade. The Dutch government, NGOs, and other Dutch water sector representatives are working together with local stakeholders around the world to establish the best options for both technological and institutional solutions. Low-tech, low-price facilities for water harvesting, water conservation and water re-use seem to offer the best potential.

Small-scale

Countries lacking basic infrastructure can benefit from small-scale, stand-alone facilities for water harvesting, purification, treatment or recycling. Various sustainable technologies and products are being developed to offer potable water to the many at low cost. These include mobile water purification units such as the Perfector-E, which produces high quality potable water from polluted surface water. Another example is the Naïade unit, which uses solar energy to do the same. The Dutch Rainmaker uses wind energy to condense potable water out of air or to turn salt, brackish or polluted water into drinking water.

On a domestic scale, various sanitation concepts have been developed to reduce the need for fresh water through the re-use of household wastewater. Separating the different types of water flow in the home can enable household wastewater to serve as a source for energy and nutrient recovery or simply to be re-used to reduce household water consumption. 'Grey water'

Research for better technology

To promote the development of water technology, Dutch private and public sector partners have initiated a Technological Top Institute for Water Technology. The research institute focuses the combined strengths of industry and renowned universities on the search for practical answers to global water problems. It does so via a concentration on the multidisciplinary use of biotechnology and separation technology. The current research programme includes themes such as desalination and re-use of salts, improving the performance of membrane bioreactors, preventing the biofouling of membranes for the preparation of drinking and process water, and generating energy from water.

www.wetsus.nl.

Rajasthan girls carry water (Source: IRC International Water and Sanitation Centre)

WetSalt, research site (Source: Wetsus, centre for sustainable water technology)

(water discharged from washing machines, showers, baths, sinks and kitchens) has a relatively low concentration of pollutants and can therefore be recycled relatively easy (for household, irrigation and infiltration purposes). 'Black water' (faeces and urine) can be treated and used as the basis for the recovery of nutrients and for bio-energy production. New sanitation concepts developed by the Dutch water sector are based on separation at source and community on-site transport and treatment. They include a range of low-cost, de-centralised applications suitable for use world-wide.

Wastewater is not wasted

Various technologies are used in Dutch treatment plants to polish and recycle industrial wastewater. The polishing of biologically treated wastewater by sand filtration methods has proved highly successful. Combining membrane or other treatment technology with activated carbon and environmentally friendly oxidation (UV, ozone) has made it possible to turn wastewater into a valuable source of high quality process water. Effluent from a wastewater plant often requires only limited purification to be re-used as industrial boiling, cooling or cleaning water. This so-called 'grey water' (relatively clean but not suitable for drinking) can also be used for many non-industrial purposes, such as flushing toilets, washing cars and irrigating gardens. There are places in the Netherlands where effluent from a wastewater treatment plant is being used in fire-fighting (sprinkler systems), in irrigation or for infiltration in the drinking water collection area. The Dutch water sector can offer tailor-made water supply infrastructure and post-treatment technology for the reintroduction of process water and wastewater into the industrial process.

Precious energy

The Dutch water sector is putting great effort into the development of so-called Blue Energy. This hinges on the difference in salt concentration between seawater and river water. By mixing seawater and river water and separating positive and negative ions by the use of ion-specific membranes, it is possible to generate energy. The advantages are obvious: no fuel costs and no emissions other than brackish water. In order to advance the development of Blue Energy and desalination technology, the Dutch public and private sectors have recently set up WetSalt, a joint research site dedicated exclusively to this purpose.

Coordination

Dutch efforts to develop and apply solutions to water problems in the Netherlands and abroad are driven by two desires. Firstly, the desire to manage water resources efficiently and sustainably, while constantly improving the methods and means by which this is done. Secondly, the desire to share and apply Dutch expertise around the world in order to improve local living conditions (in particular to reduce the number of people without access to safe drinking water and basic sanitary facilities). The Dutch water sector believes that its efforts in this direction will be most sustainable if the introduction of technology goes hand in hand with capacity-building and local entrepreneurship. To achieve this, all parties - government, the private sector, knowledge organisations and NGOs - need to coordinate their efforts and complement each other's abilities. This is an area in which the Netherlands has broad experience. The Dutch water sector is keen to use this experience in the future and to apply its expertise to the solution of water-related dilemmas around the world.

The Dutch Water Sector

One of the reasons why the Dutch approach leads to sustainable solutions is that we take a collaborative approach to complex problems. The government, private sector and research community work side by side to develop new technologies, strategies and policies that meet our water-related challenges. And, instead of just relying on 'hard' technological solutions (e.g. building higher levees, installing more powerful pumps, and draining wetlands), we integrate 'soft' solutions such as policies that invite us to live 'with' water rather than fighting it all the time.
Combining our expertise with that of key players around the world helps us to find the best possible solutions to international water issues.

Who is responsible for what?

Rather than operating in isolation, all key players work closely together to align interests and strategies. Together they have an integrated vision on water.

The public sector

Within the Netherlands, government ministries, regional and local government bodies, district water boards and drinking water supply companies are all actively involved in water management. Through bilateral agreements with other countries, mostly in the form of Memoranda of Understanding, the Dutch government has shown its firm commitment to international efforts to ensure water availability and provide protection against flooding. One of the most important elements of these agreements is the creation of an institutional and legal framework governing water. Such a framework guarantees access to water, ensures that the management of water systems is transparent, and allows citizens to participate in decision-making.

Knowledge institutes - research and academia

The Netherlands' long-term need for water management solutions has generated a large, varied and coherent knowledge infrastructure encompassing prominent government and private-sector research centres, technological and educational institutes and several universities. These institutions conduct a broad range of basic and applied research in fields directly and indirectly related to water. Dutch research is also internationally oriented and the institutes have built up networks and experience in water-related issues at international level.

The Netherlands also shares its considerable experience and expertise in institutional capacity-building within the water sector. For more than 100 years, educational institutes in the Netherlands have been offering courses on different aspects of water management to international students. This has created an extensive network of professionals trained in water management by the Dutch.

Non-governmental organisations

Dutch non-governmental organisations (NGOs) working with water are well-organised. And, they do not confine their activities to the Netherlands. A number of them are frequent contributors to international decision-making processes and disseminate information and expertise in water management, especially in the fields of water treatment and sanitation.

Because of the Dutch knowledge infrastructure and government support for water-related development cooperation, the Netherlands is a home from home for international NGOs that focus on the sustainable development of water resources. Through this network, Dutch technologies are frequently used in developing countries (often after slight modifications to suit local circumstances).

The private companies

The private Dutch water sector consists of companies involved in hydraulic engineering, dredging, manufacturing and construction, water supply, consulting and banking. Once proven, the technologies produced are applied around the world.

The Netherlands has a system of integrated water resources management in which public and private organisations cooperate. Where some organisations (like engineering and consultancy firms) offer a wide range of services, other stakeholders specialise in Delta Technology: hydraulic engineering, river basin management and dredging.

The public water sector

On a national scale, water management is on the agenda of five Dutch ministries. These are the:

- Ministry of Transport, Public Works and Water Management (see page 20)
- Ministry of Agriculture, Nature and Food Quality (see page 30)
- Ministry of Housing, Spatial Planning and the Environment (see page 28)
- Ministry of Foreign Affairs (see page 26)
- Ministry of Economic Affairs (see page 29)

In order to stimulate cooperation and create successful matches between players in the Dutch water sector and foreign parties, these ministries run a joint programme called Partners for Water.

Regional government - the provinces
The provinces are responsible for surface water with regard to transport, bathing and other water quality, wastewater treatment and managing groundwater levels.

Local government - the municipalities
The municipalities are responsible for the collection and transport of raw sewage and safeguarding urban water.

Water boards
Water boards have been around since 1250 AD and still play a key role in regional water management. They are responsible for the treatment of sewage and other wastewater, and for protection against flooding. Together with various national and municipal authorities and the ten Dutch drinking water companies, they devise Dutch water management policies, protect the country against water-related risks such as flooding and provide access to clean water for drinking, agriculture, industry and other purposes. By law, water boards have a right to levy taxes to maintain the water management system.

This includes land reclamation, coastal protection and the construction of ports, water works and storm-surge barriers.

Other organisations focus on Water Technology: technology and management for drinking and other water supply and sanitation. This includes water treatment, monitoring, sensoring, aquifer and other resource management, asset management and financing. In other words, private companies represent a vast range of skills and products with respect to water supply and sanitation technology.

The Netherlands is home to the world's ten best engineering firms in the water field. And in the field of hydraulic engineering, two are world leaders in land reclamation, dredging and coastal construction.

Netherlands Water Partnership - NWP

To make the expertise and knowledge of our water sector available to the rest of the world, the Dutch public and private sectors have established the Netherlands Water Partnership (NWP). The principal aims of the NWP are to harmonise the activities and initiatives of the Dutch water sector abroad and to promote Dutch expertise in the water field world-wide. The Dutch industry wants to share its knowledge, and not only on a commercial basis; it is keenly aware of world-wide water issues. This is why the Dutch public and private sectors are helping to achieve the Millennium Development Goals. The NWP is the first port of call for information on Dutch expertise, knowledge, products, consultancies and NGOs working in the water sector world-wide.

Contact
Netherlands Water Partnership - NWP
Bezuidenhoutseweg 2
2594 AV Den Haag
The Netherlands
Tel: +31 (0)15 215 17 28
E-mail: info@nwp.nl
Internet: www.nwp.nl/english
www.waterinthenetherlands.org

Satellite image of the Netherlands

Source: Fugro

European Water Partnership: "A coordinated approach to water in Europe"

Access to safe drinking water, improved sanitation and proper infrastructure are pressing global needs. Often thought to be confined to developing and very arid countries, they apply to wider Europe as well: 40 million Europeans lack access to safe drinking water while 85 million lack basic sanitary facilities. Water is already a major security and competitiveness issue: floods and droughts are increasing in number in Europe and the importance of water in its interlinkages with energy and foodproduction becomes ever more apparent. Climate change exacerbates these challenges even further.

In 2006 the European Water Partnership (EWP) was created by sixteen European organisations as a response to these issues. Based on the Netherlands Water Partnership (NWP) model of harmonising activities and building partnerships in the water sector and supported by the Dutch subsidy programme 'Partners for Water', the EWP reacts to the need for a broader coordination on water issues felt in two major initiatives in the European water sector: the Water Supply and Sanitation Technology Platform (WSSTP) and the European Regional Process preparing for the fourth World Water Forum in Mexico. Following the model of the NWP and EWP, national water partnerships have also been set up in various European countries.

The EWP is an independent, non-profit organisation helping to coordinate initiatives and activities in international water issues and undertaking world-wide promotion of European expertise related to water. It brings together stakeholders from all sectors: private, government, research, finance and NGOs to find innovative solutions for the water challenges in wider Europe and the rest of the world and to stimulate innovative partnerships.

EU Commissioner for the Environment Stavros Dimas at the launch of Aquawareness

Activities

With its activities the EWP, which at the time of writing consists of 51 member organisations, aims to: raise water issues on the agenda of politicians, business and consumers; increase cooperation between all stakeholders; promote innovation and European expertise; mobilise funding and new procurement approaches; support effective implementation of EU legislation and develop projects demonstrating innovative technologies and approaches. This article highlights three of the main projects of the EWP.

Aquawareness

This EWP initiative was set up in autumn 2007 as a response to the European Commission Communication on Water Scarcity and Droughts. Aquawareness supports a shift of mindset in Europe towards a water saving and water efficient culture, creates awareness among political decision makers, key stakeholders and citizens and supports the change of behaviour and practices.
It consists of two main elements: Water Stewardship, aiming to promote sustainable water management in business, cities and regions and the Water Awareness programme, raising awareness on the water challenges among political decision makers, key stakeholders and citizens.

Aquawareness is underpinned by Europe's Water Vision, which expresses the challenges, opportunities and chances Europe faces, presenting a future for Europe on water.

More information at www.ewp.eu/aquawareness

Fifth World Water Forum Istanbul

In March 2009 the fifth World Water Forum takes place in Istanbul. Over the last decennium these global events have grown considerably to connect all stakeholders to

Chairman Tom Vereijken of the EWP

The EWP has created an information platform on European water issues: European Water News. This platform consists of a website and a free weekly newsletter, dedicated to providing news, papers and reviews on water management in Europe, bringing together information on the water challenges facing Europe and the innovative technologies and solutions available to address these challenges. European Water News is accessible via www.european-waternews.com.

European Water News

find solutions to achieve sustainable water use.

To prepare for the Forum, a thematic, political and regional process was set up and the EWP was asked to coordinate the European efforts towards Istanbul. The European Regional Process identified eight themes relevant for Europe, providing the European perspectives on the thematic process at the Forum and mobilising European politicians to take part in the Forum to achieve the political results the Forum aims for. Furthermore it focuses the European participation at the Forum itself in the European Water Area.

More information at www.ewp.eu/erp09

Water for Energy, Energy for Water

The links between water and energy are important and highly complex: energy production requires water while supplying water requires energy.

Water use and energy consumption's impact on climate and changes in climate have an impact on water availability. An integrated and sustainable approach for water resource planning and energy usage is urgently needed.

The EWP works to achieve this integrated approach and set up a dedicated working group in early 2008, generating knowledge on this complex field and working to raise the issue on the political agenda.

More information

The EWP is a very active organisation, constantly developing new initiatives to address European water challenges. At the time of writing the activities on the three main activities described before had just started. More information on the EWP, recent developments within these programmes as well as on other initiatives by the EWP can be found at www.ewp.eu.

Contact
European Water Partnership
Avenue de Tervueren 168-15
B-1150, Brussels
Belgium
E-mail: info@ewp.eu
Internet: www.ewp.eu

Netherlands Water Partnership: United Dutch Water Expertise

To make the expertise and knowledge of the Dutch water sector available to the rest of the world, the Dutch public and private sectors have established the Netherlands Water Partnership (NWP). The principal aims of the NWP are to harmonise the activities and initiatives of the Dutch water sector abroad and to promote Dutch expertise in water world-wide.

The world recognises that the Netherlands has fought a long and successful battle against water. In fact, the Dutch have been building dikes to reclaim land and prevent floods and erosion since the Middle Ages. And neighbouring countries such as the United Kingdom have long made use of Dutch expertise – resulting in the Dutch word 'polder' being used in English to describe land reclaimed from the sea or a lake.

Importantly, however, Dutch experience in the control and protection of all types of water systems – from lakes and rivers, to saltwater estuaries and the sea – is still being used in other countries today.

Ambitions

Aware of the climate change impact on water issues and the environmental aspects of living with water, the Dutch now focus on flood control, water availability and quality as important issues in integrated sustainable water management. This has led to the Netherlands generating highly developed technologies, new strategies and policies which are being widely applied around the world.

The NWP supports the international ambition and collaborative approach of the Dutch water sector to stimulate the exchange of knowledge and increase the export of specific knowledge, services and products. The Dutch industry wants to share its knowledge, and not only on a commercial basis; it is keenly aware of world-wide water issues. This is why the Dutch public and private sectors are helping to achieve the Millennium Development Goals, which is another goal of the NWP.

Creating solutions together

Large-scale water engineering works always rely on a combination of different skills and expertise. Building an island calls for engineers, dredging and construction specialists, hydrologists, biologists, experts in drinking water and sewage systems and in water purification. Companies and institutions within the Dutch water sector regularly form consortia to offer total packages. NWP facilitates this process by acting as a coordination point for the Dutch Water sector. The combined expertise, experience and creativity of the worlds' leading organisations in water management guarantees the best possible solutions. And, as we in the Netherlands know how to look beyond our borders and tailor our approach to local circumstances, we work together with our clients to create exactly the best answers to their individual problems.

The NWP is the first port of call for information on Dutch expertise, knowledge, products, consultancies and NGOs working in the water sector world-wide.

Contact
Netherlands Water Partnership - NWP
Bezuidenhoutseweg 2
2594 AV Den Haag
The Netherlands
Tel: +31 (0)15 215 17 28
E-mail: info@nwp.nl
Internet: www.nwp.nl/english
www.waterinthenetherlands.org

Matchmaking World Water Day 2008

Dutch Water Pavilion

Organizations

The Ministry of Transport, Public Works and Water Management

The Netherlands has a population of over 16 million in an area of just 41,528 km^2, including the territorial sea and surface water. Three major rivers flow into this North Sea delta, the Rhine, Meuse and Scheldt river. Without dikes and coastal dunes, around two-thirds of the Netherlands would be flooded. Flood protection is therefore the top priority in water management for the Dutch Ministry of Transport, Public Works and Water Management. Water quality is another preoccupation of the ministry, to guarantee sufficient clean water both for the human population and for nature. The Netherlands has a tradition of water management going back centuries. This has brought broad experience and learned many valuable lessons. These experiences are shared with countries all over the world, just as the Netherlands benefits from the experience of others. Sustainable water management poses constant challenges. These are best faced by combining strengths.

Ministry of Transport, Public Works and Watermanagement

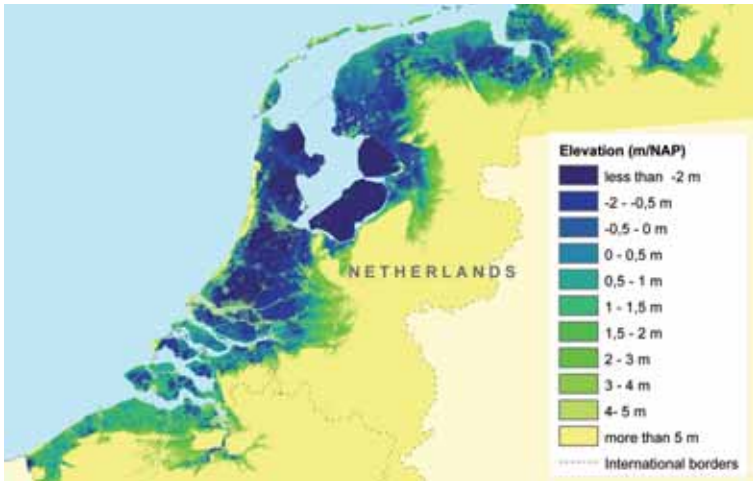
Two divisions of the Ministry of Transport, Public Works and Water Management are particularly engaged in water management. The Directorate-General for Water Affairs coordinates the Dutch water policy. The executive tasks are the responsibility of Rijkswaterstaat, the national water authority.
Rijkswaterstaat's responsibilities can be summarised in four key tasks: protecting the country against flooding; guaranteeing universal access to an adequate supply of clean water; building, managing and maintaining the principal road and waterway networks; and ensuring the safe and unimpeded movement of traffic.
With its ten regional departments, Rijkswaterstaat is represented throughout the whole country.

Flood protection

The flood disaster of 1953 in the province of Zeeland inspired the construction of the Delta Works, which contributed to the Netherlands' world-wide reputation in the field of flood protection. The Netherlands has proved that they are capable of winning the battle against water. Although the high water levels of the Rhine and the Meuse in 1993, 1995 and 1998 and, more recently, the identified 'weak points' in coastal defence made it obvious that the country should always be on its guard.
The adequacy of flood protection measures is kept constantly under review. The same is true for methods determining the risk of flooding. Dutch design standards for flood defences are based on ideas that date back around fifty years. Over that period both population and economy have grown substantially. It became clear that high water levels are not the only factor influencing the risk of flooding. Recent research shows that dike instability is also an important factor. For this reason, work is now being done to develop a new approach regarding flood risk. One aspect of the new approach is to relate the probability of flooding inside a ring dike to the consequences of such an event in the particular place concerned (the likely number of victims and the economic damage) in order to decide whether current measures are appropriate. Over the next few years, all 53 ring dikes in the Netherlands and a few river dikes along the Meuse are to be surveyed for this purpose. It should then be clear what approach regarding flood risk is most appropriate for the country we live in today.
The Dutch coastal zone is under pressure because of rising sea levels and higher waves due to more frequent storm force winds. Sections of the sea defence structures have been identified as weak links and need to be reinforced. Future expansion of the defence system requires precious space. Integrated coastal zone management seeks to guarantee a basic level of protection against flooding, to preserve the natural values of the Dutch coast and improve the spatial planning quality and economic potential of the area.

New approaches to water safety

Changing times produce new approaches to water safety. Guaranteeing flood protection is set to be a perpetual challenge as climate change and a growing population create new risks. Even though the Netherlands' 2000-year history of recurrent flooding has made flood protection a sensitive issue, the Dutch public now realizes that it has to go back to working with - rather than against - the forces of nature. The country cannot go on building ever-bigger dikes and sluices and more and more dams. There is a



limit to the constraints that can be imposed on rivers. So the Dutch have adapted their strategy from 'fighting against water' to a proactive way of 'living with water'. Many projects are now being implemented in the Netherlands to secure more 'room for water'. This includes a wide variety of measures, such as restoring original river courses, letting watercourses meander, moving dikes further away from rivers and digging floodplains, creating space for retention.

Excess rainwater is also being stored in retention ponds by horticulturists, farmers and water boards. Some areas are being appointed as extra flood plains in case of emergency. The idea is to prevent flooding by temporarily accommodating the excess water somewhere where it will do no harm. An extra advantage is that the stored water is then available for use in times of drought. So the storage of excess water kills two birds with one stone. The principle can be applied in both urban ánd rural areas.

An integral part of this and other 'new' policies is the creation of public support. The government puts much effort into providing information and consulting various stakeholders in order to increase public understanding of the need for 'living with water'. In addition, in 2003 the national government, provincial authorities, municipal councils and water boards all signed the National Administrative Agreement on Water. This sets out how Dutch water management is to be organised to make more room for water in the future, and how the relevant measures are to be funded and scheduled.

Integrated water management

Human safety and flood protection will always have top priority in the Netherlands. In the course of the last decades, however, economic growth led to more leisure time. At the same time, there was growing public concern about the environment. The need for agricultural land declined and there was an increasing demand for recreation and wildlife areas. From now on, government will have to balance the demands of public safety, economy and transport against other, less materialistic interests, such as nature and habitat creation. At the end of the last century, a new concept of integrated water management based on the water system approach was introduced. Integrated water management aims to minimise negative human impacts and conserve, restore and - if possible - create natural values.

An integrated approach to water management was first introduced in the discussion document Living with Water and worked out in detail in the Third National Policy Document on Water Management (1989). It has since then become the standard approach in all relevant policy-making. It comprises two aspects: integration to harmonise the quantity and quality of both groundwater and surface water, and integration to harmonise water management policy with policies on spatial planning, the environment and nature management at all levels of government. Ever since then, transport, land-use and environmental considerations have been systematically integrated into the draft of new water management policies. National policy documents on transport, spatial planning and the environment are seen as elements that need to be considered together in order to get an overall picture of present and future challenges and possible solutions. In other words, the nation now recognises that, to be more effective in achieving the aims of water management (to create a safe, habitable country and healthy and sustainable water systems), it is necessary to take related issues and policy-making into account.

Clean water

The provision of sufficient clean water is another main task of the Dutch Ministry of Transport, Public works and Water Management. The Rhine and Meuse rivers supply 75 percent of the Netherlands' total freshwater requirements. If a large quantity of harmful substances is discharged into the upstream part of the Rhine in Germany, France or Switzerland, the Netherlands end up facing the consequences. Clean water is therefore a cross-border issue. The authorities in the Netherlands are therefore cooperating

with other countries to safeguard the quality of the water in the major rivers, the North Sea and the Wadden Sea. Under the heading 'integrated water management', and based on 'the polluter pays' principle, a great deal of success has been achieved since the seventies in the 20th century in tackling water pollution by households, industry and so called 'diffuse sources'. Nowadays the ministry cooperates closely with the provinces, municipalities and water boards to implement the European Water Framework Directive, which aims to improve the ecological and chemical condition of waters in international river basins.

International cooperation

World-wide delta areas are facing major problems due to climate change, soil subsidence and urbanisation. A substantial part of the Netherlands is delta area, facing the same problems.

As low lying delta country, the Netherlands is highly dependent on water management in so called 'upstream' neighbouring countries. Both policies and operational management is coordinated with the involved countries.
International activities can roughly be divided in operational water management, the 'EU' process, international innovation and international knowledge exchange. Especially the development of **European water policies** and its implementation require major efforts. The Water Framework Directive, the Marine Strategy Directive, and the Flood Directive are important legislative tools with the objective to improve water quality and safety from flooding in the EU. **Operational international management** is related to common coastal zones and river areas. Such cooperation is implemented in the Waddensea through the trilateral Waddensea Programme with Germany and Denmark. In the international Scheldt and Eems-Dollard estuary shipping and nature have to develop mutually.

In the international commissions for the protection of the Scheldt, Meuse and Rhine common water management issues are put into practice. With the countries sharing the respective river basin districts, action plans and river basin management plans are internationally coordinated and implemented. In this context, numerous flood protection projects have been initiated and implemented. The OSPAR convention covers Europe's Atlantic Sea. Countries collaborate on marine environmental protection policies and its implementation. **European innovative** approaches on water management are developed and shared via numerous EU funded projects. The Interreg and EU Framework Programme provide numerous cooperation possibilities, such as R&D projects, technology platforms and cohesion supporting measures.

The ministry is keen to **share the knowledge** related to water management and flood protection with other delta areas. This is being done by, amongst others, the 'Partners for Water' programme, which objective it is to strengthen international activities of the Dutch water sector by combining knowledge, expertise and financial resources. The Ministry of Transport, Public Works and Water Management is the leading ministry in the Partners for Water Programme.

The aim is to join forces in order to strengthen the international position of the Dutch water sector (public authorities, businesses, knowledge institutes and NGOs). The programme has three components:

I. Policy harmonisation among ministries,
II. Sectoral cooperation, and
III. An incentives scheme for specific projects.

The Partners for Water programme is managed at governmental level and implemented by a programme bureau jointly led by the Agency for International Business and Cooperation (EVD) and the Netherlands Water Partnership (NWP).

Most of the international cooperation of the ministry in the Partners for Water

Programme is focused on four of the worlds major delta's:

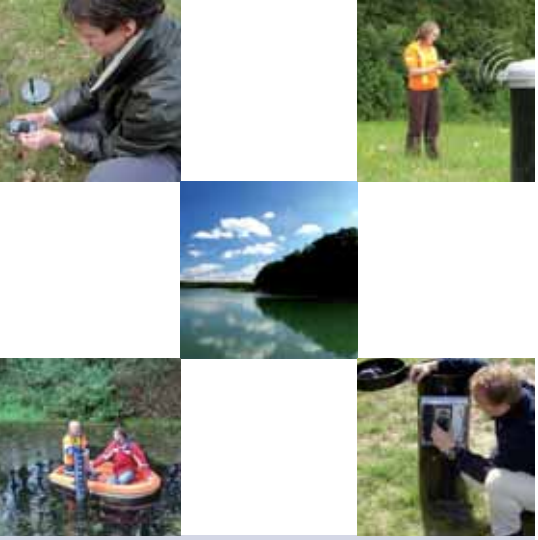
1 Ganges
2 Mekong
3 Ciliwung
4 Nile.

The cooperation with the United States Army Corps of Engineers (USACE) is a good example. In 2004 the Rijkswaterstaat signed a Memorandum of Agreement (MoA) with the USACE. After the hurricanes Katrina and Rita, Rijkswaterstaat participated in the emergency response formulation and political and technical cooperation. Rijkswaterstaat also assissted to prepare an independent perspective on the flood protection of New Orleans and Louisiana.

The ministry seeks to assist the private sector on the international markets. With public-private participation in international projects the Dutch water sector can distinguish itself from (foreign) competitors. With China for example, a long term cooperation exists on water management. The scale and velocity of the developments in China is of such a magnitude that water related decisions become very complex. This complexity results in innovative solutions on water management, urbanisation, spatial planning and other territorial demands. The collaboration is formalised in three 'Memoranda of Understanding', focussing on water management, navigation and water related infrastructural works. Much of the international cooperation, either bilateral or multilateral, relates to the creation of mutual understanding, confidence and long term cooperation. Then knowledge exchange can occur. Valuable information and expertise on industrialised vulnerable deltas can be obtained abroad. This provides interesting new insights that can assist the Netherlands in further developing the national water policy.

Contact

The Ministry of Transport, Public works and Water Management
P.O. Box 20904
2500 EX, The Hague
Tel: +31 (0)70 351 61 71
Internet: www.verkeerenwaterstaat.nl



Eijkelkamp

Automation of your

Eijkelkamp Agrisearch Equipment in Giesbeek (NL) is an international organisation that supplies a wide range of equipment for environmental and agricultural research. Eijkelkamp also has several interesting instruments for automated monitoring of values, such as (ground)water levels. These include the e+ WATER L for measuring surface water levels and Divers for measuring groundwater levels. Both instruments can be connected to the e-SENSE telemetry system developed by Eijkelkamp.

e-SENSE telemetry

In 2001, Eijkelkamp started developing what is now one of its key products, e-SENSE with corresponding e+ sensors. The expectations for e-SENSE were already so high at that time that it was immediately designated a key product. Remote monitoring is becoming more and more of a trend, partly because manpower continues to grow more expensive, and Eijkelkamp therefore sees plenty of prospects for e-SENSE and the e+ sensors in the near future.
e-SENSE® *direct* remote sensing uses intelligent autonomous sensors such as the e+ sensors produced by Eijkelkamp Agrisearch Equipment and the Diver® produced by Schlumberger Water Services. This makes e-SENSE flexible in use and extremely reliable for the collection and transmission of field data. The strength of the e-SENSE system is that the monitoring system not only collects data, but it can also adjust the settings of the measurement systems, so that it offers the possibility not just of telemetry, but also of telecontrol. e-SENSE *direct* supports the e+ sensors with their own alarm systems.

Simple connection

The use of a modern, standardised SQL database system provides e-SENSE *direct* with an Open Interface that makes it possible to easily and cheaply link the system to other software systems such as SCADA, using standard components. In this way, SCADA systems can make use of all the unique facilities of e-SENSE *direct* such as plug and play for changing configurations in the field. It is also possible to activate the e-SENSE *direct* user interface for specific functions that people do not want integrated into the SCADA systems.

Eijkelkamp e+ sensors

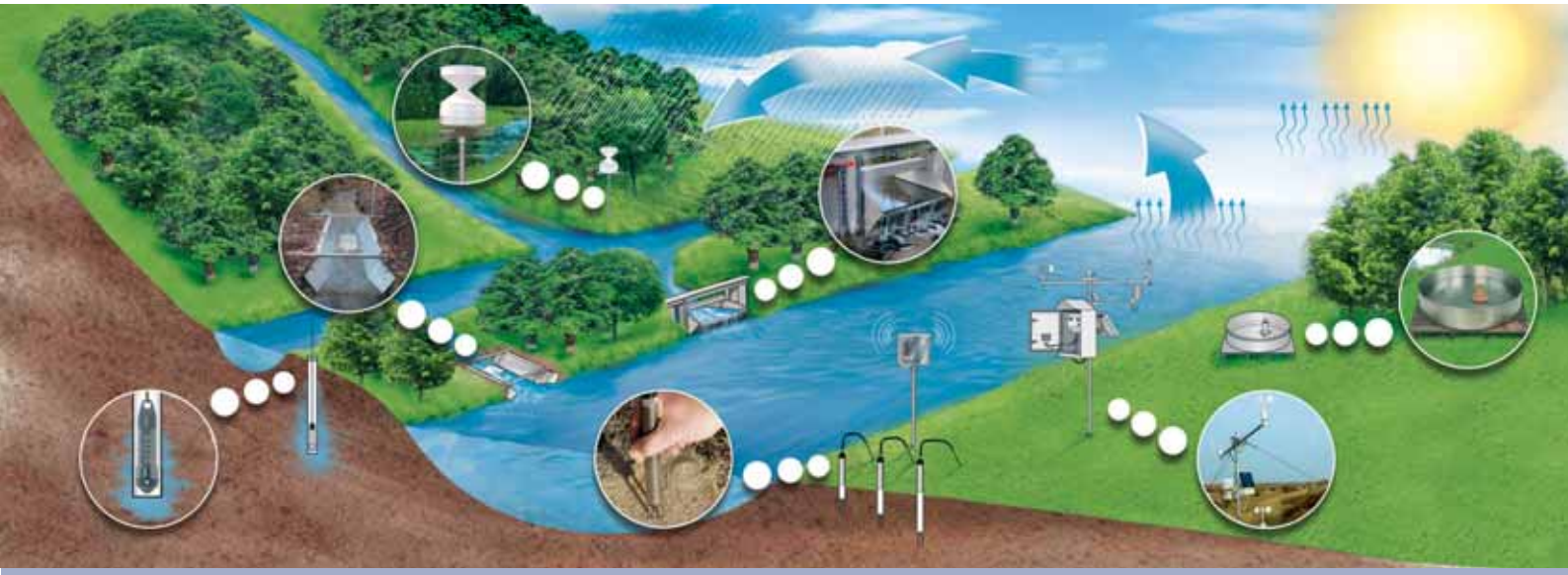
There are different types of intelligent e+ sensors available:

The **e+ WATER L** (Level) sensor is an intelligent and accurate sensor for measuring and recording the levels (0…200 cm) and temperatures (-20..80°C) of surface water.

The **e+ RAIN** sensor measures the intensity of the rain over certain periods as well as totalled amounts (integrator function).

All it takes for **environmental** research

Agrisearch Equipment
measurement network



e-SENSE®

The **e+ SOIL MCT** sensor can measure and record data such as soil moisture, conductivity and temperature.

The **e+ OVERFLOW** sensor is an intelligent and accurate sensor for measuring and registering sewer overflows (how often and for how long do overflows occur).

The **e+ CONTROL** sensor is a handy and robust field instrument for programming and reading all of the other e+ sensors.

All of these sensors can be connected to the e-SENSE modem in any desired combination.

Applications of e-SENSE

- Open water (surface water)
- Irrigation
- Agro-meteorological research / monitoring
- Environmental research / monitoring
- Erosion

Diver data loggers for groundwater measurements

The high-quality data loggers are hermetically sealed against external influences, so that moisture or electrical interference does not affect the measurement result. Four Diver models are available for different environments and uses:

- MiniDiver
- CeraDiver
- MicroDiver
- CTD-Diver

The Diver determines the temperature and groundwater level by measuring the pressure in the water column with a pressure sensor. In addition to the pressure sensor, the CTD-Diver also has a 4-electrode sensor for determining conductivity. To determine the groundwater level, compensation must be made for the prevailing air pressure using the BaroDiver.
The barometric measurements provided by the BaroDiver are compensated automatically using the accompanying software. The result is a continuous and extremely reliable measurement.

Eijkelkamp can offer many extras with respect to its product range, support and assistance, the way it works and, of course, where quality is concerned. For more information, go to www.eijkelkamp.com or phone +31 313 880 200.

P.O.Box 4, 6987 EM
Giesbeek, The Netherlands
T +31 313 88 02 00
F +31 313 88 02 99
E info@eijkelkamp.com
I www.eijkelkamp.com

Eijkelkamp
Agrisearch Equipment

Dutch Development Policy and Water

The history of the Netherlands is closely linked to the history of water management and its organisation. Dutch economic growth is directly related to the rational use of water resources and protection from the sea. A variety of water institutions and water laws secure both our heritage and future. Water has also played an important role in development cooperation over the last three decades, based on our understanding and experience of the huge impact water can have on individuals, society and poverty reduction. The Netherlands is committed to the Millennium Development Goals. Improved water management and access to drinking water and sanitation are key elements of the MDGs. Assistance is provided to ten countries - six of them in Africa - to formulate integrated water management plans, and developing five regional river basins.

Buitenlandse Zaken
Ontwikkelings samenwerking

Integrated Water Resources Management

The concept of Integrated Water Resources Management (IWRM) forms the core of Dutch water development policy. It takes into account the entire hydrological system, including balancing the needs of different groups in society. It links upstream and downstream resources and ecosystems. It integrates technical, social, political, economic and environmental issues and considers them at local, national and international levels. IWRM priorities are grouped into two spheres of actions:

Building institutional capacity:

- developing human resources (training local professionals);
- awareness raising, research, information and technology development;
- cross-border effects of the development of international water resources.

Efficient water use and the management of the different functions of water:

- peri-urban and rural water supply and sanitation;
- underlining the importance of IWRM in food security and livelihood maintenance;
- the issue of IWRM in ecosystems maintenance;
- water as a hazard.

Bilateral cooperation focuses on Indonesia, Egypt, Benin, Mozambique, Bangladesh, Vietnam and Yemen.

Many of the targets are implemented through multilateral organisations like UNICEF, UN-Habitat, GWP, and WASHCC. Cooperation with the regional development banks and the World Bank takes two forms: the promotion of IWRM and specific support to raise the level of investment (loans) in the water sector. Public-private partnerships have been signed with several national and international banks and companies with the aim of mobilising private capital and knowledge.

Photo: Aqua for All

Dutch involvement

The Netherlands supports water-related development in five transboundary river basins: the Mekong, Senegal, Incomati/ Maputo, Zambezi and Nile. Possibilities in the CoNGO basin are also being explored. The aim is to enhance cooperation between the countries in the river catchment areas in the management and use of water resources, and to prevent conflicts about water. In the Incomati/Maputo river basin - an area covering parts of South Africa, Mozambique and Swaziland - a management plan has been developed for the catchment area. It covers aspects such as water distribution and an information exchange programme on floods. In the Mekong basin technical support takes the form of training and capacity.

50 million people

Seeking to contribute in concrete terms to MDG 7, the Netherlands is committed to providing 50 million people with sustainable access to safe drinking water and improved sanitation services by the year 2015. The sustainability of the results is of particular

Photo: Aqua for All

Photo: Aqua for All

importance. Each cooperation contract will come with a strict monitoring protocol to ensure that the services provided will still be functional in 2015. The programme will be implemented through three different channels.

Through our embassies in the partner countries, through multilateral organisations and through private initiatives involving the local and Dutch private sector and NGOs. Until June 2008, various agreements were signed to provide a total of 26 million people with access to safe drinking water and 28.9 million people with improved sanitation facilities. Efforts to reach the output target focus on poor people, especially in Sub-Saharan Africa.

Contact
Ministry of Foreign Affairs, Department fot Environment and Water
P.O. Box 20061
2500 EB The Hague
Tel: +31 (0)70 348 61 14
Fax: +31 (0)70 348 43 03
E-mail: dmw@minbuza.nl
Internet: www.minbuza.nl

Photo: Aqua for All

Bilateral, multilateral and public-private partnerships

The Netherlands is the only country in the world to have drawn up output targets for water and sanitation. Until June 2008 contracts have been signed which will provide safe drinking water for 26 million people and sanitary services for 28.9 million. Bilaterally (country-to-country), the Dutch government concluded a large contract with the Bangladesh Rural Advancement Committee (BRAC). BRAC is a leading NGO in Bangladesh and the Netherlands already has a fruitful working relationship with this organisation for many years. It focuses on the poor and has an extensive network in 70.000 villages in all 64 districts of Bangladesh which enables it to reach more than 100 million people. The project will give 9.6 million people access to toilet facilities and provide 0.6 million with clean drinking water.

An example of multilateral cooperation is the contract signed by the Dutch government in 2006 to participate in the UN-Habitat Lake Victoria Initiative. The initiative enables local authorities in Kenya, Tanzania and Uganda to provide drinking water and sanitation services to more than 600.000 people in 15 small towns around the shores of Lake Victoria. In addition, UNICEF is implementing a programme in Mozambique, Malawi, Kenya, Ethiopia and the Comores that will provide 3.5 million people with clean drinking water and sanitation in the next six years.

The Netherlands expects to reach an additional agreement with UNICEF soon on the provision of safe drinking water for 2 million people and sanitation for 2.5 million in Rwanda, Sudan and Zambia. In the field of public-private partnerships (PPP), a number of projects are being implemented including one with Agua for All, Connect International and Simavi. These PPPs will provide 3.4 million people with clean drinking water and 800.000 with sanitation in Sub-Saharan Africa, Asia and Latin America.

Within the ORET-programme a water facility was set up in 2004 to encourage investments in the water sector, especially in drinking water and wastewater treatment. The initiative has generated a lot of interest. In 2006 a contract was signed with the British water company Biwater and the Sudanese government, which will provide 2.5 million people in Khartoum with safe drinking water. The Netherlands is funding this project jointly with a South African development bank. A PPP was signed with Water Fund Indonesia which will give 280.000 people access to drinking water. In the context of the covenant with Partners for Water, the Drente water authority will develop drinking water programmes for 600.000 people in Indonesia. A PPP has been signed in Maputo with the Vitens water company to supply water to 250.000 new users in Mozambique.

The Ministry of Housing, Spatial Planning and the Environment of the Netherlands

The Netherlands is a densely populated country where issues regarding the living environment require careful consideration. A responsible maintenance of society requires respect for nature, space and environment. The environment that we live, work and recreate in has to remain liveable - not only for ourselves but for future generations as well. The mission of VROM, the Ministry of Housing, Spatial Planning and the Environment is 'to make a contribution to sustainable development by creating conditions and setting parameters for maintaining and improving the living environment.'

VROM uses creative, innovative and sustainable solutions to improve the environment of the Netherlands. VROM operates in three major areas. These are: spatial planning, housing and the environment. The ministry implements its mission in close cooperation with other ministries, local and regional governments (provinces, municipalities and water boards), social organizations, businesses and interest groups. VROM makes policy and regulations and provides subsidies for improving quality of life in (and outside) the Netherlands. It also supports international treaties in areas including climate, environment and spatial planning.

Within VROM's Directorate-General for the Environment (DGM), the Water Department focuses on environmental policies related to quality improvement of groundwater and surface water. Special areas of interest are the burdening of the water environment with nitrates and pesticides. Furthermore this department develops sectoral policies on drinking water supply, sewerage and bathing water.

Internationally VROM makes an effort for multilateral cooperation. Areas of attention are the EU policies and guidelines on water such as the Drinking water directive, the Water Framework Directive, the Groundwater directive, the Priority Substances directive, the Bathing water directive and the Nitrate directive.

On a Pan-European scale VROM is involved in the UNECE Protocol on Water & Health and the Environment for Europe Process. For the global water crisis there is a main focus on the Millennium Development Goals for water, sanitation and human settlements. Other multilateral organizations in which the Ministry of VROM particpates are e.g. UNEP, OECD and the Convention on Biodiversity (CBD).

The VROM Inspectorate is responsible for the enforcement of regulations within the policy area of the Ministry. The Inspectorate is active in international committees dealing with enforcement issues.

The Ministry of VROM is a partner in the interdepartmental programme Partners for Water and the Netherlands Water Partnership (NWP).

The innovative position of the water supply and sanitation sector

In the Netherlands water supply and sanitation operate in the public domain. Over recent years, both sectors proved to be highly innovative. Together with industry and the Netherlands Water Partnership, VROM is active in creating a stimulating environment for innovation, both through the EU-based Water Supply and Sanitation Technology Platform and through national policy in the Future Environmental Policy Agenda. Technological innovation can help to solve national barriers in e.g. the field of drinking water legislation and the Water Framework Directive. It also gives the water sector a leading role in developing solutions for water problems. With this the water sector attributes to bring the achievement of the MDGs closer in a Clean, Clever and Competitive way.

Contact

Ministry of Housing, Spatial Planning and the Environment
P.O. Box 30945
IPC 625
2500 GX The Hague
Tel: +31 (0)70 339 39 39
Internet: www.vrom.nl

The Ministry of Economic Affairs: innovation and sustainability as keys to a competitive Dutch water sector

Entrepreneurial skills, innovative genius and international ambition are quite essential to the development of a competitive Dutch water sector. The Dutch Ministry of Economic Affairs is a dedicated supporter of enterprises as well as knowledge institutes in the water sector that make the difference. Sustainability, innovation and the promotion of emerging markets are key issues in the incentives policy of the Dutch government.

Ministry of Economic Affairs

Stimulating innovation

The history of the Netherlands is inseparable connected to water. Its location in the delta of four major European rivers challenged the Dutch for ages in flood defense, land reclamation and water management. It is the history of adapting to changing situations, inventing and reinventing, experimenting and innovation. This adaptive approach - always being one step ahead - resulted in an excellent international position in the field of delta and water technology.

In order to keep up with future challenges world-wide, the Ministry of Economic Affairs stimulates innovation in the Dutch water sector. Therefore the Dutch water sector launched an ambitious innovation plan in collaboration with the Ministry of Economic Affairs. A clear vision and strategy for the future was formulated. As a result of this collaboration, two innovation programmes - Watertechnology and Deltatechnology - were produced to describe how those ambitions could be achieved in the short term.

SenterNovem: key to innovation, energy and the environment

SenterNovem is an agency of the Ministry of Economic Affairs and active in the field of innovation, energy and the environment. SenterNovem is responsible for setting up and implementing the Innovation Programme Watertechnology. The Programme is funded by the Ministry of Economic Affairs.
Crucially important to innovation is cooperation: in R&D, product development, marketing and in export. So to enhance the cooperation in R&D and business an applied research Center of Excellence was set up. The knowledge that is developed at the Center of Excellence must ultimately be used in marketable applications.
In order to enhance the Netherlands' export position, it is essential that new technologies first are implemented in the home market, since customers abroad in many cases require 'proven technology'. In Harlingen for instance, a demonstration site is opened named 'Wetsalt' to prove and demonstrate new technologies.

EVD: key to international business, cooperation and investments

The Agency for International Business, Cooperation and Investments (EVD) is also an agency of the Ministry of Economic Affairs. Its mission is to promote and encourage international business, international cooperation and foreign investments in the Netherlands. As a partner the EVD aims to help its clients to achieve success in their international operations. A growing network of companies, knowledge institutes and organizations in the public sector has come to rely on the EVD for information, advice, support and access to its international networks. With its wide-ranging knowledge, the EVD develops products and services that meet the needs of its clients. Specific assistance is given by the TWA network to Dutch knowledge institutes and innovative companies in their search for international trends in innovation, scientific research and possible cooperation with international partners. A network of Scientific & Technology Officers is operating world-wide to assist these clients of the EVD. The Netherlands is an obvious choice when it comes to finding the best place to locate a pan-European business. The Netherlands Foreign Investment Agency (NFIA), part of the EVD, has been set up for the specific purpose of helping and advising those businesses who wish to take advantage of the Dutch business environment as a strategic base to cover Europe (www.nfia.com).

Opportunities and incentives

The ambition of the Dutch water sector is to enhance its position as a major player on the international market. Being one of the priority sectors in the Netherlands, the EVD is proactive in identifying potential market opportunities at the earliest possible stage and makes this knowledge available to the sector. Furthermore, the EVD stimulates initiatives of the water sector to form consortia that wish to establish a long-term position for themselves in countries that are likely to offer opportunities.
The products/services and financial instruments delivered by the EVD are also open to the water sector, and are extensible. Amongst other things, the EVD offers services and incentives such as trade missions, market scans, feasibility studies, economic cooperation projects and financing export transactions. The EVD devotes great attention to private sector development in emerging markets and developing countries and administers special programmes to assist the public sector. For more information please visit www.hollandtrade.com.

Contact
Ministry of Economic Affairs
Bezuidenhoutsweg 30
P.O. Box 20101
2500 EC The Hague
Internet: www.minez.nl

Mrs. Van der Hoeven (minister of Economic Affairs) at Wetsalt (Source: Wetsus).

Ministry of Agriculture, Nature and Food Quality

The Ministry of Agriculture, Nature and Food Quality is responsible for agriculture, nature, forestry, the landscape, outdoor recreation, fisheries and food quality. Since the Netherlands is one of the most densely populated countries in the world, the pressure on the rural area is considerable. People want to live, work and relax there, and space is needed for agricultural practices, while valuable nature areas and unique landscapes must be preserved. The ministry plays a vital part in the process to achieve a balance between the various uses of the rural area.

agriculture, nature and food quality

The importance of water for rural areas

Water is of vital importance for the policies of the ministry of Agriculture, Nature and Food Quality, in particular those issues related to water quality, flooding and drought. Sufficient and clean water is crucial for the quality of the rural areas and its uses. The ministry is therefore involved in all major water projects to prevent or solve conflicts and identify synergies for agriculture, recreation, nature and other uses.

Global water policy to improve food security and preserve ecosystems

The contribution of the Ministry of Agriculture, Nature and Food Quality in international water policies is to focus on improving integrated water management and water policy at river basin level, to improve food security in conjunction with strengthening the preservation and sustainable use of ecosystems. The ministry also supports activities in developing and transition countries for healthy ecosystems, sustainable agricultural production and sustainable use and conservation of biodiversity.

This is stimulated by local action, partnerships, knowledge exchange and capacity building. The ministry provides input in several international forums, conventions and organizations like the World Water Forum (WWF), Convention on Biological Diversity (CBD), Ramsar (wetlands) and the Food and Agricultural Organization of the United Nations (FAO). The ministry has two main programmes to achieve these objectives, focussing on policy debates, implementation practices and knowledge exchange. The Wageningen University and Research Centre (WUR) and the Government Service for Land and Water Use play an important role in these activities, together with other (inter)national institutions and NGOs.

The Biodiversity Programme of the Netherlands

The Biodiversity Policy Programme of the Netherlands (Biodiversity works: for nature, for people, forever) brings together policy objectives from six different ministries and sets the agenda for the Dutch activities to shape its contribution towards a sustainable and liveable natural world. Water is seen as a precondition for biodiversity and therefore is an important theme in this programme. The programme translates the policy objectives into specific project activities for the years to come. It also supports international activities and conventions (like CBD and Ramsar) related to sustainable water management, wetlands, biodiversity and forest. Cooperation with societal actors is a key aspect to execute the actions resulting from the programme. More info can be found at http://netherlands.biodiv-chm.org.

The Water for Food and Ecosystems Programme

As an output of the second World Water Forum in 2000, the Ministry of Agriculture, Nature and Food Quality launched the initiative for a programme called 'Water for Food and Ecosystems' with a focus on international exchange of knowledge and experience in the integration of water for food and water for ecosystems. Special attention is paid to exploring the synergies between these two water uses. Projects of the Water for Food and Ecosystems Programme are made possible with financial support from the ministry and from the Dutch 'Partners for Water Programme'. Projects carried out under the Water for Food and Ecosystems programme include sustainable use and conservation of wetlands, stakeholder dialogues and setting up decision support systems for integrated water management in different river basins. The partners in this programme include universities, ministries, research centres, institutes, water management organizations, consultancies and NGOs in over a dozen countries around the world. More information about this programme can be found at www.waterfoodecosystems.nl.

Future activities

For the years to come the Ministry will continue its integrated approach towards water for food and ecosystems at river basin level through policy debates, knowledge exchange and projects in the field. The 2005 FAO-Netherlands 'Conference on Water for food and ecosystems; Make it happen' discussed the lessons learned in achieving water for food and ecosystem synergies. The recommendations have been disseminated for wider application through meetings of the Commission on Sustainable Development (CSD) and the World Water Fora. 'To make it happen' the ministry has engaged in two bi-lateral Partnerships to implement 'Water for Food and Ecosystems'.

Contact
Ministry of Agriculture, Nature and Food Quality
P.O. Box 20401
2500 EK The Hague
Tel: +31 (0)70 378 68 68
E-mail: infotiek@minlnv.nl
Internet: www.minlnv.nl

Province of South Holland

The Province of South Holland is a bubbling and multifaceted region. As a home to 3,42 million people in an area of 2.827 square kilometres, South Holland is the most densely populated region of the Netherlands and also the most important province in terms of economic activities. The province's largest city, Rotterdam, is also one of the world's largest harbours. The provincial capital is The Hague, seat of the national government and the official residence of HM Queen Beatrix of The Netherlands.

The provincial administration represents the government at regional level, operating as an intermediate between the central government and local authorities. It consists of the Provincial Council and the Provincial Executive, both headed by the Queen's Commissioner. The Provincial Council is primarily concerned with regional developments. Their area of responsibility is large and includes spatial planning, economy and environment. It is a constant challenge to strike a balance between the many conflicting interests within such a multi-faceted province.

The responsibility for managing and maintaining the water system and for ensuring the purity of water lies with the regional water authorities or water boards. The province has a supervisory role for policy making and monitoring. Besides that, the province facilitates and stimulates technological innovations concerning a wide range of water topics.

Challenges on water management

South Holland lies, on average, two metres below sea level, and that sea level itself is rising. The province is part of the delta area of two large European river basins, the Rhine and the Meuse. This, in combination with land subsidence, climatic changes and the enormous quantities of river water flowing through the province, causes certain specific problems. The Provincial Administration wishes to reduce this threat by giving the large rivers more room and by raising water storage capacity. The province is also taking action against potential drought and the silting-up of the river beds. Flood risk management is one of the constant concerns in this low lying area.

Vision

Given the many claims on the water system in South Holland, it is a great challenge to ensure sufficient water quality and water quantity for different users (drinking water, nature, agriculture, industry, transport). Besides this, extra space for water is needed in the future to deal with the effects of climate change. The province is convinced that extra space for water and protection of water quality should be found by combining

different spatial functions in the same area: integrated water management is the key to solutions.
The Province's vision on water management is presented in the (quadrennial) policy plan 'Water and Environment'.

International cooperation and ambitions

The province of South Holland participates in several European Programmes on water, environment and spatial planning, e.g. the so called Leader+ and Interreg IIIB programmes, the Regional Programme for Innovative Actions and the Rural Development Programme. In 2006 the projects Time2C and NEW! Delta started. Time2C is a two-year project that aims at developing a joint and politically approved Maritime Programme for the southern North Sea region. NEW! Delta balances between improving the environment on the one hand and maintaining economic growth of ports on the other.

Recent international activitities of the province of South Holland are, among others:

- twinning with the Chinese province of Hei-Bei;
- cooperation with New Orleans region (exchanging experiences related to Hurricane Katrina);
- transboundary river management and flood risk management;
- floating green houses;
- the European FRAME project (Flood Risk Management in Esturaries);
- urban flood control in Japan;
- urban flood management (Dordrecht, London, Hamburg).

Due to its geographical location and the intense usage of the available space the province continuously seeks international cooperation on many issues. We aim to share views, opinions, knowledge and experiences with other delta areas around the world. Dealing with European rules and regulations for water management (Water Framework Directives, Flood Risk Management) as well as research and development of innovative and sustainable solutions for living and working in delta areas (so called Delta Techniques) are important issues in this respect. The province of South Holland is always looking for opportunities to create new (international) business in this characteristical delta region.

Contact

Province of South Holland
P.O. Box 90602
2509 LP The Hague
The Netherlands
Tel: +31 (0)70 441 66 11
E-mail: zuidholland@pzh.nl
Internet: www.zuid-holland.nl

The Perfector series: pure innovation. By PWN.

Pure Water and Nature. That's the core of our business. For over more than eighty years we found new and better ways to satisfy the growing need for clean drinking water. PWN Water Supply Company North Holland is a leading company in developing innovative purification techniques. Our know how is translated into sustainable solutions in water supply. Like the Perfector series R and P for example, innovative surface water treatment plants for the production of drinking water in developing countries.

The Perfector-R is a water treatment plant for the production of drinking water for communities of 50,000 to 250,000 people.

Value for money

Compared with most existing surface water treatment plants the ready-to-build design of the Perfector-R offers:

- equal or lower investment cost;
- lower operation & maintenance cost;
- equal or better drinking water quality;
- all you need by offering a complete system.

Take what you need

Due to the modular design the client has the option to build a complete new treatment plant in green-field conditions or add capacity to an existing treatment plant. The modular design consists of:

- raw water intake on floating pontoons, process units, chemicals preparation and dosing systems, clear water reservoirs, distribution pumping station, electrical infrastructure and various other facilities such as emergency generator, laboratory, offices, work shop, etc.;
- optional waste water storage and pumping.

A range of capacities

- overall net production capacities of 60, 120 and 240 l/s;
- a wide range of capacities for individual modules;
- option of adding modules and expanding the capacity of modules in the future.

Innovative Dutch design

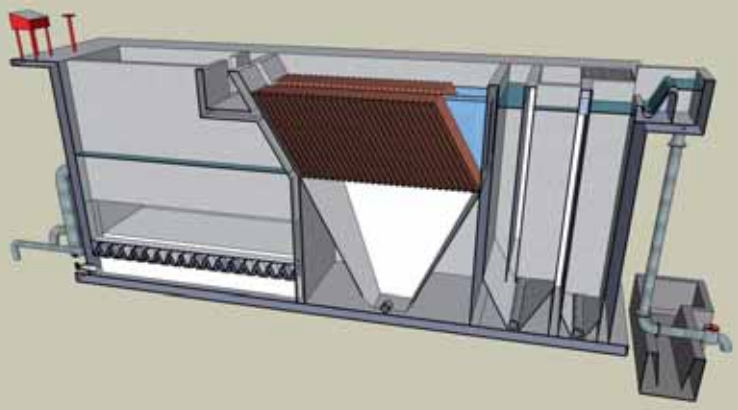
The ready-to-build design of the Perfector-R is the result of 3 years' work by a unique combination of experts from PWN, a leading Dutch water company, and qualified engineers. Existing water treatment plants were evaluated and their shortcomings identified. The result is the Perfector-R design which:

- can easily be built locally;
- can deal with almost all types of surface waters from either rivers, lakes or canals;
- has stable operations, even during strong and rapid fluctuations of raw water quality;
- uses an optimized, robust process;
- shows easy operation & maintenance due to an efficient design and a minimum of mechanical parts.

PWN Water Supply Company North-Holland
Attn. International Projects
Rijksweg 501
P.O. Box 2113
1990 AC VELSERBROEK
The Netherlands

Telephone: +31 23 5413333 (ask for International Projects)
Fax: +31 23 5256105

Email: pwn@pwn.nl
Website: www.pwn.nl



Perfector-R

Excellent performance

Compared with other designs excellent water quality thanks to:

- a highly efficient chemical mixing system;
- flocculator internals that can be customized for actual raw water quality;
- better sedimentation design than usually encountered;
- a sustainable and fool-proof filtration system.

Environmentally friendly

Low energy and chemicals consumption thanks to the optimized treatment process and efficient hydraulics.

Sustainable and reliable

Where conventional water treatment plants give up, the Perfector-R continues its smooth operations during a life-time. Thanks to its innovative design it:

- can easily accommodate rapid and long-term fluctuations in raw water level and quality;
- can deal with high turbidity of the water source;
- is easy to maintain in good condition in the long run.

Perfector-P

Perfector-P

The Perfector-P is developed as a spin off of the Perfector-R. It has all the technical process advantages of the Perfector-R, but it is essentially a different product. It is no total concept like the Perfector-R: it is a purification installation with a production capacity of 10 l/s. The installation is a unit made of steel, so the production time is short. Furthermore it is easy to transport by truck because it is composed of parts.

PWN partner in water supply

PWN supplies water to about 1.5 million people in Holland. Furthermore, PWN supports the improvement of water supply for people in developing countries. PWN has ongoing operations in various countries, including Indonesia end Rwanda. These operations are undertaken by PWN's local affiliates. PWN holds the exclusive rights to market the Perfector series R and P worldwide.

For further information about the possibilities please contact us.

PWN. Pure water and nature.

Rotterdam Climate Proof: The Rotterdam Challenge on Water and Climate Adaptation

With its Rotterdam Climate Proof (RCP) programme, the Rotterdam City Council is leaving no stone unturned when it comes to pooling knowledge and experience in the field of climate adaptation. Making the city a testing ground for the latest innovations can serve as an example for many other delta cities all over the world.

Gemeente Rotterdam

Safe and economically sound

Because of its location on a river delta, several metres below sea level, Rotterdam is particularly susceptible to climate change. As a port city, it is faced by water from every direction: the river, the North Sea, the sky and the soil. Downpours are becoming heavier, the sea level is rising, patterns of river discharge are changing and the problem of groundwater saturation is getting worse. Nevertheless, Rotterdam is one of the safest port cities in the world and that is the way it should stay.

The city is making preparations for more extreme weather conditions. Dykes and quaysides are strengthened, space is made available for extra water barriers, while the capacity of water storage facilities is expanded in order to meet the challenge of high rainfall levels.

RCP seeks not only to help to make the city safer, but also aims to contribute to make it economically strong and an attractive place to live. The preconditions for being able to realise these three ambitions are all present.

Rotterdam as a city of knowledge

Rotterdam is seeking to use the RCP programme to secure itself a firm position in the field of climate adaptation, water knowledge and urban delta technology. The city is investing in innovation and knowledge development in relation to delta technology. Climate related businesses, such as engineering firms, research agencies and knowledge institutes are keen to base themselves here. Rotterdam already utilizes partnerships with knowledge institutes like the Delft University of Technology and the Erasmus University Rotterdam. The Hogeschool Rotterdam (Rotterdam Institute) is launching a course in Water Management, and discussions are being prepared to found a Water and Climate Institute. The concentration of knowledge and expertise is a powerful addition to the Rotterdam region. RCP encourages mutual cooperation, helps pool knowledge and links it to international knowledge.

Rotterdam as a testing ground

Rotterdam can evolve into a global testing ground for climate issues and delta technology. Knowledge institutes, building companies, design agencies and government bodies are starting to work together in order to develop innovative solutions. Options to build outside the dykes and for floating constructions are being examined and applied.
'Stadshavens' is an ideal location for eye-catching water-based constructions.

The ambitions of Rotterdam Climate Proof

Rotterdam will continue to be safe, even now the climate is changing. The city is responding to the economic opportunities presented by water and climate adaptation. Water is an important tool which can enhance the qualities of Rotterdam as an attractive city to live in. Together with various partners, Rotterdam is strengthening its position as a city of water knowledge, both nationally and internationally. As a testing ground for climate adaptation and innovative developments, Rotterdam serves as an example and as a source of inspiration for other cities, not only for cities based on deltas.

Greenery can provide cooling during hot and dry periods and absorb water when it rains

Stadshavens is the collective name for a large number of docks on both sides of the river the Nieuwe Maas, and is a 1,600-hectare urbanised area outside the dykes. The city council and the Port of Rotterdam agreed to develop an ambitious programme here with the intention to create an innovative residential and business environment that will link the city with the port. Even now artists, architects, designers, graphic designers and musicians are settling themselves in the district - creative pioneers who are attracting new initiatives. Stadshavens, in short, is the perfect testing ground for climate adaptation and water technology.

Attractive city to live in

Tackling climate-related problems can be combined with the ambition to make Rotterdam an even more attractive place to live. This is because water-based projects can have a recreational function and serve as meeting points. Water also offers excellent opportunities for creating varied residential environments.

The Rotterdam approach to climate issues

The Rotterdam Climate Initiative (RCI) was launched last year. The RCI is aimed at the basic measures for tackling climate problems. The city council and a large number of companies in the region would like to reduce CO_2 emissions together. Clear objectives have been laid out, and the intention is to cut emissions by 50% by 2025, compared to 1990 levels. However, dealing with just the causes of climate change is not enough. Even if emission levels are successfully cut back, climate change is inevitable. RCI and RCP are designed as a joint response to face up to climate-related issues as a whole.

In densely populated districts the options for extracting water from the ground are limited, which is why the search is on for innovative solutions. In the short term for example, water plazas will be built. Climate adaptation is not just water-related, however. In very hot summers, cities are faced with the phenomenon of heat stress. In these circumstances, temperatures in cities are much higher than those outside them. The presence of greenery in cities can moderate the effects of heat stress. Rotterdam is planting new trees and encourages the construction of green roofs.

Greenery can provide cooling during hot and dry periods and absorb water when it rains.

Example to other delta cities

The floods that affected New Orleans have made the whole world aware of the dangers of climate change and the rise in sea levels. Ports all over the world now realise the urgency of the problems. Eyes from all over the world focus on Rotterdam. Collaboration and the exchange of knowledge with cities such as Jakarta, Shanghai, New York and New Orleans is being further intensified, and businesses in Rotterdam are reaping the benefits of this.
Thanks to the RCP programme, Rotterdam can continue to grow as a safe, attractive and competitive port city, serving as an example to other delta cities.

Contact
Rotterdam Climate Proof
Watermanagement Department
Public Works
City of Rotterdam
P.O. Box 6633
3002 AP Rotterdam
Tel: +31 10 489 5519
Email: a.molenaar@gw.rotterdam.nl

Water Management

Challenges, innovations and solutions that deal with climate change

ARCADIS' international water experts create added value in river management, flood protection, water policy and coastal restoration.

Protecting against flood risks, safeguarding a good and healthy water quality, developing ports and other water-related transport systems: ARCADIS offers innovative, integrated solutions for many water and climate change related issues. Our strong home market positions, combined with international experience enable us to provide local as well as cross-border solutions. Our Dutch heritage is a guarantee for the depth and breadth of our water capabilities. We partner with national and international water authorities and private companies, to deliver sustainable results. To be prepared for the future.

ARCADIS looks ahead. Imagines. Develops. Delivers results.

Alkyon, part of ARCADIS since July 2007, provides specialized consultancy services in the (inter)national water markets, with focus on coastal and river management and design of flood protection, ports and water works.

Complex challenges, Integrated solutions

New Orleans flood protection
In 2005, the hurricanes Katrina and Rita caused massive damage along the coast of Louisiana. As a result, the levees broke in New Orleans, flooding the city. The US Army Corps of Engineers is working hard to raise the Hurricane Protection level of the city to an average of 1 in 100 years. ARCADIS acquired two major Indefinite Delivery Indefinite Quantity (IDIQ) contracts for design services. The work includes multidisciplinary advice and construction supervision for the improvement of levees and for the construction of a number of flood gates and pump stations. The efforts of ARCADIS are also focused on the sustainable protection of the coast of the Gulf of Mexico and the Mississippi Delta.

Ecomorphology: a sustainable solution for ecological problems in marine wetlands
You can try to solve problems in marine water systems by studying morphological and ecological aspects separately, but a combined, ecomorphological, approach will raise the chance for success. For instance, the ferry waterway to Ameland has to be dredged regularly, causing 450.000 m^3 of sediment to be dumped in the Wadden Sea yearly. To reduce dredging, the ARCADIS company Alkyon Hydraulic Consultancy & Research, formulated a series of solutions for this complex challenge, and created intervention-effect schemes for every solution. Each solution was evaluated using morphological, ecological and ecomorphological criteria. This resulted in two solutions which were both ecological and morphological attractive.

Assessment of 3500 km of dunes, dikes and other flood protection structures
Every five years, the current hydraulic situation of The Netherlands' primary flood protection structures is reported to the Minister of Transport, Public Works and Water Management. This provides insight if the high safety standards for protection against flooding are met. ARCADIS composed the report of the most recent assessment for a total of some 3500 km of dunes, dikes, dams, locks, levees and dike-ring connecting structures involved.

European Water Framework Directive
The European Water Framework Directive (WFD) aims to raise and maintain the quality level of the European surface waters and groundwater bodies. ARCADIS supports the Dutch and other European governments in formulating tangible objectives and measures, while duly considering the complex situation and the large number of stakeholders. For example the Zeeland Department of Waterways and Public Works has requested ARCADIS to identify objectives, dilemmas and measures for the Eastern Scheldt to develop a nature conservancy plan as well as a water management plan.

Visit us on www.arcadis-global.com and on www.alkyon.nl

ARCADIS
Infrastructure, environment, buildings

Alkyon
Hydraulic Consultancy & Research

Vitens-Evides International

Our ambition is to support sustainable water companies in developing countries

sustainable water services

Vitens-Evides International

Involved in supplying safe drinking water to more than 20 million people

Vitens and Evides, the two largest drinking water companies in the Netherlands, have joined forces in the company Vitens-Evides International. The alliance gives the company ample strength and enhanced opportunities to grow internationally. Through this international subsidiary, they make their knowledge and expertise available to water companies in developing countries. This is badly needed as, around the World, a large number of people still have no access to safe drinking water and basic sanitation.

On a non-commercial basis and without financial risks, Vitens-Evides International is contributing towards achieving one of the United Nations' Millennium Development Goals: halving the number of people around the world without access to clean drinking water and sanitary facilities by 2015. Vitens-Evides participates in public-private partnerships in Mozambique, Yemen, Vietnam and Mongolia and operates a management contract in Ghana.

Vitens-Evides International has an annual corporate budget of € 2 million for international projects, shared equally between the parent companies. The corporate budget is used to identify, formulate, develop and manage new and ongoing projects. The corporate budget is leveraged by additional funding from partners and donors such as the Netherlands' Ministry of Foreign Affairs (Development Cooperation), the World Bank, the European Bank for Reconstruction and Development and the Asian Development Bank. In addition, voluntary financial contributions from customers of Vitens and Evides (channelled through the Water for Life Foundation) supplement these funding mechanisms.

A significant method of achieving the millennium development goals is the public-private partnership. The use of public money combined with private funds results in new opportunities for international cooperation in many areas, including drinking water supply and sanitation. Alliances with Vitens-Evides International take various forms. For example, together with Rand Water of South Africa, we won a management contract for urban water supply in Ghana.

Parent companies Vitens and Evides

Vitens-Evides International's two parent companies, Vitens and Evides, believe they have a corporate social responsibility to share know-how and experience with developing countries. They are the two largest drinking water companies in the Netherlands, between them providing high-quality drinking water to 7.4 million people throughout seven of the twelve Dutch provinces. Vitens and Evides employees are deployed through Vitens-Evides International to participate in projects abroad and to transfer know-how and experience to their counterparts in local water companies. The employees see this as an enhancement of their work and it also contributes to their positive experience of Vitens and Evides.

Projects	Supplying water number of people
Yemen	700,000
Mozambique	1,000,000
Vietnam *(Danang, Ho Chi Min City)*	8,800,000
Mongolia	1,500,000
Suriname	500,000
Ghana	8,000.000

Vitens-Evides International focuses on improving the day-to-day operations of local water companies. Depending on the expected results, we do this in the role of manager, operator and/or consultant. Some of the main features of Vitens-Evides International's projects are summarised below:

- improving the operational performance of urban water utilities and their management
- focus on capacity-building through transfer of know-how and expertise
- simultaneous improvement of sanitary services
- not investment driven
- not-for-profit, not-for-loss

Vitens

evides waterbedrijf

Customer funds Water for Life

The Water for Life foundation was set up in 2003 to involve Dutch customers of Vitens and Evides in activities abroad. Customers can make donations to the foundation through their water bills. Water for Life's funds are used for specific activities arising from Vitens-Evides International's projects such as the purchase of pipes, water meters and public standpipes or to train local staff. Donations for Water for Life projects are often doubled by the national Aqua for All foundation. For more information: www.waterforlife.nl/English/

Association of Dutch Water Companies

The Association of Dutch Water Companies (Vewin) is the umbrella organization for all Dutch water supply companies. The Netherlands has 10 of these publicly owned institutions. The sector focuses on the reliable production and distribution of safe high-quality drinking water at a competitive price.

One of Vewin's main activities is the protection of the interests of its members in The Hague and Brussels. Preparing the rules and legislation as well as position papers on matters such as water management, environment and spatial planning, Vewin contributes its input and advice. Members' interests are promoted on the basis of cooperation and dialogue. Vewin intensively combines forces with various institutions to protect the standards of water supply. It discusses matters such as the problem of source contamination. So Vewin also nurtures its contact with organizations associated with nature, agriculture, manufacturing industry, ministries, parliament, European Commission, European Parliament, press, research and scientific organizations and other government and implementing bodies. Vewin formulates opinions and policies for the sector, it carries out research and serves as knowledge and information centre for water companies and externals.

Water companies' supply areas in the Netherlands

High-quality drinking water

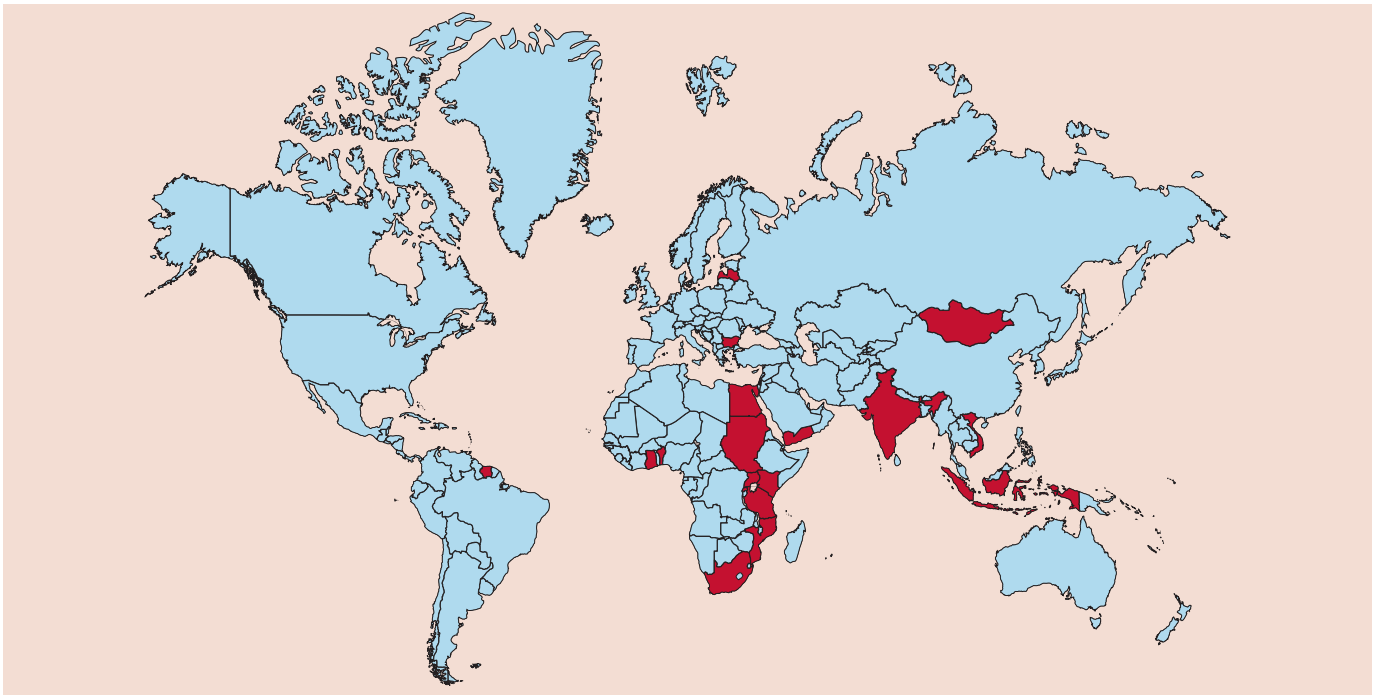
Dutch drinking water is of high quality and meets all Dutch and European directives and laws. The continuity and reliability of supply is outstanding. Today the sector increasingly understands even more the significance of efficiency and sustainability and is actively working on both. Water companies, the state and provinces are all making their contributions to the supply of water, each with their own tasks.
In the Netherlands, drinking water is derived out of groundwater and surface water. The water company collects water from underground, rivers, canals or lakes, purifies it and makes sure it is delivered to the client. Some 60% of all drinking water delivered is made out of groundwater sources: some 40% comes directly or indirectly from surface water such as the Rhine and Maas rivers. Dutch water companies protect the quality of drinking water and keep a close eye on the natural environment. Every day they concentrate extensively on the maintenance, management, development and recovery of natural areas used for water collection and settlement. The Dutch dunes, for instance, are major reservoirs holding many millions of tons of drinking water.

Dutch drinking water statistics 2007

Number of water companies	10
Ownership	public
Number of employees	4,893
Annual water production	1,138,000,000 m^3
Sources:	
ground water	60%
surface water	40%
Drinking water supply	1,088,000,000 m^3
Number of properties served	7,555,000
Mains length	114,649 km
Average price drinking water (incl. VAT)	€ 1.52 per m^3
Average domestic consumption	127.5 litres/person, day

High-quality technology

Dutch water companies work constantly at new extraction and purification technologies. Today they have many elegant and effective treatment methods at their disposal. The Dutch drinking water sector joined forces to do its research in the BTO-programme, financed and instigated by the companies themselves and Vewin. Kiwa Water Research is the coordinator of the programme. Partly thanks to shared efforts the Dutch water sector has advanced and efficient tools at its disposal such as high speed UV disinfection. This method is becoming ever more attractive as a primary disinfection method as it inactivates certain micro-organisms untouched by other methods. Membrane filtration offers benefits such as the possibility to improve quality in one step. This technique allows



World-wide activities of the Dutch water companies

one to soften, decolour and de-pesticide at the same time.
Other techniques involve several steps to reach the same result. Self-cleaning systems and molecular techniques are being developed, partly to ascertain microbiological threats such as Legionella.

International drinking water projects

For many years the Dutch drinking water sector also has devoted itself to better water facilities in developing countries, mainly by setting up and taking part in projects that deal with the structural improvement of facilities. Companies involved are protected from financial risk. They consider these projects to be a social responsibility offering no private advantage. Any profit is reinvested in the project. For these international activities money is collected in several ways. Some water companies may work with existing development organizations asking their clients for voluntary financial support. For other companies knowledge transfer is the main pillar to participate in developing country projects. Staff policy for instance includes the use of water company staff for international projects to transfer knowledge. In some other companies a small part of turnover goes directly to drinking water projects in developing countries. Attention is also paid to possible public-private cooperation.
In this way Dutch water companies operate in about twenty countries world-wide. Many of them are in Africa and south-east Asia, in countries such as Egypt, Tanzania, Sudan and Indonesia. But also closer to home companies contribute actively to improve drinking water facilities. For more information about the world-wide activities of the Dutch water supply companies, see the map at the top of the page.

Benchmark

Efficiency is important to Dutch water companies as it means keeping water costs at a socially acceptable level, providing services of good quality and in a reliable and sustainable way. One of the tools encouraging efficiency is Vewin's benchmarking programme, a sector-wide analysis comparing Dutch water companies. It is conducted annually since 1997. Apart from making the performances of the Dutch drinking water sector transparent, the report offers water companies tools to help them improve their business processes.
The programme tracks performances of the water companies and compares all against each other in their key performance areas: water quality, service quality, sustainability and finance & efficiency.
Benchmarking in the Dutch water supply sector is paying off. Since its introduction the quality of drinking water has improved more and more and good service has been provided, while the costs and the rates have gone down. In addition the sector proved to be able to work in a sustainable manner. A study held by Erasmus University Rotterdam also confirms the positive effects of the benchmarking programme. This study shows the efficiency of the sector has improved by more than 23 percent in a 10-year period of voluntary benchmarking.
Dutch water supply benchmarking is still developing. First the national benchmark will change from voluntary to compulsory. Furthermore, the Dutch drinking water companies are involved internationally in the North European Benchmark Cooperation (www.waterbenchmark.org). Within this cooperation a growing number of European water utilities are being compared. Finally, the Dutch drinking water companies started cross sector benchmarking. On several levels drinking water companies are being compared to other sectors. This shows new insights and creates new horizons for the successful Dutch drinking water industry.

Contact
Vewin
P.O. Box 1019
2280 CA Rijswijk
Tel: +31 (0)70 414 47 50
Fax: +31 (0)70 414 44 20
E-mail: info@vewin.nl
Internet: www.vewin.nl




Treat, manage or master?

Water is increasingly becoming a worldwide concern. In some areas there is insufficient water, while in others it challenges us through violent storms and dike breaches- not to mention the matter of rising sea levels and water pollution. Water is essential and it demands our attention. So whether the concern is water treatment, coastal development, ports and waterways or water management, water can never surprise our experts. Though we might suprise you with our innovative solutions to every conceivable water problem, be it in Panama, the Netherlands or Bangladesh. If you're facing water challenges, let us help you develop sustainable solutions. Because at DHV, we've got nearly 100 years of experience with water.

dhv.com

DHV

Gateway to solutions

Unie van Waterschappen: partner in local water management

Local and regional water management in the Netherlands is largely a responsibility of waterschappen. Waterschappen are decentralised public authorities with legal tasks and a self-supporting financial system. Waterschappen are responsible for flood control, water quantity, water quality and treatment of urban wastewater. Waterschappen are by law embedded in the general democratic structure.

UNIE VAN WATERSCHAPPEN

The waterschappen are public authorities, responsible for management of the regional waters. These are surface waters outside the main rivers, canals, lakes, estuaries and the sea. The waterschappen take care of flood defence, water quality management, sewage treatment, irrigation and drainage.

Operational tasks include the management of pumping stations, wastewater treatment plants, maintenance of waterways and flood defence structures.

Tasks of the waterschappen are laid down in the Dutch legislative system. Waterschappen have their own democratic structures, legislation and financing structures. These structures, although originating from the Middle Ages, still keep up with the demands of our evolving society. The integrated approach to water resources management results in a coherent management of surface and ground water and a well-balanced policy for flood protection, water quantity and quality. The waterschappen are supervised by provincial governments.

The waterschappen finance their work entirely from two taxes which they levy on those concerned: the waterschappen charge for flood protection and water system-management and the pollution levy.

Every four years the tax payers elect a representative in the administration of the water board. Considering the interests of the different categories of stakeholders, the administration decides on policy and management. Waterschappen are functional democratic institutions, based on the interest-pay-say principle.

The Dutch waterschappen are united since 1928 in the Unie van Waterschappen. The Unie is counterpart for national government, parliament, international organizations and non-governmental organizations, on behalf of the waterschappen.

The Unie participates actively in a wide number of policymaking activities at national level: planning, management, legislation and financing. The Unie is member of European organizations. One of them is EUREAU, the European Union of Drinking Water and Wastewater Treatment Organizations. Another is EUWMA, the European Union of Water Management Authorities.
The international policy of the Unie van Waterschappen is mainly directed to the European Union, transboundary river basins and to partner organizations abroad. In international cooperation, focus is put on institutional development. The Unie supports individual waterschappen in international activities and acts as a window for external institutions.

Contact:
Unie van Waterschappen
P.O. Box 93218
2509 AE The Hague
Tel: +31 (0)70 351 97 51
Fax: +31 (0)70 354 46 42
E-mail: info@uvw.nl
Internet: www.uvw.nl

Waterschappen in action abroad: database for demand and offer of international water management knowledge.

The Unie van Waterschappen and the Netherlands Water Partnership have put a water management expert database into use. The waterschappen have many skilled employees willing to participate in water projects abroad, as far as these projects comply with the objectives of the water board. This knowledge could be exposed by means of the database. The water management expert database is a key for project managers to find waterschappen employees with specific knowledge. In 2007 the Unie van Waterschappen handed over the database to Aqua for All. This non-profit organization is an important gateway to relevant water projects abroad. In 2007 the Unie van Waterschappen handed over the database tot Aqua for All. This non-profit organization is an imporant gateway for waterpojects abroad.

The database is available via the Aqua for All website www.aquaforall.nl, button 'experts'.

FUGRO WATER SERVICES

- Water Defense and Flood Control
- Water Resources Management
- Urban Water Infrastructure

www.fugrowaterservices.com

MEETING THE CHALLENGE OF NATURE

Fugro Water Services: tailored solutions based on solid data

Recent tsunamis, hurricanes, floods and droughts, together with the greater public awareness of the possible effects of climate change, have increased demand for technical services relating to water resources management. Fugro Water Services supports its clients in assessing and understanding the nature of these challenges and advises on risks and mitigation measures. Fugro has a worldwide network of water specialists who have a broad experience in data acquisition methods and techniques, data processing, modeling and consultancy. Fugro has more than 12,000 employees stationed in over fifty countries with international experience stretching back for more than 45 years. We offer unique combinations of data acquisition techniques and consultancy services with respect to the following topics.

Water Defense and Flood Control

Worldwide, delta regions are under pressure due to climate change and urbanization. These regions have complex geotechnical and geo-hydrological conditions. Fugro has state-of-the-art investigation techniques, such as FLI-MAP, to map those conditions accurately. Our consultants are specialized in risk assessment and stability of hydraulic structures, particularly dikes. They perform flood risk mapping for entire river and floodplain systems.

With innovative remote sensing technologies, including InSAR and Lidar, we can map geometry and monitor dike movements and subsidence.

Global weather forecasting services and oceanographic measurement systems provide real-time monitoring data for early flood warning. Data collected from such systems may be used as input parameters to a suite of hydrodynamic and atmospheric models for the simulation and prediction of flows, waves, sediments and ecology in rivers, lakes, estuaries, bays, coastal areas and seas.

Tsunami detection system

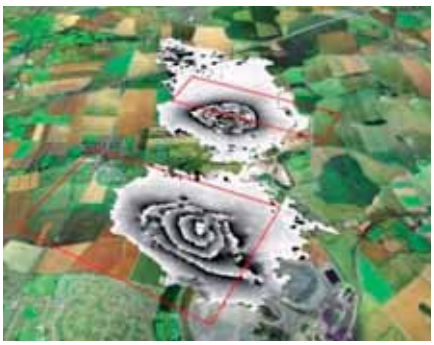
Water Resources Management

Fresh water for consumption is a scarce commodity in many parts of the world, and locating new supplies is a major concern. Understanding the hydrological and environmental aspects of the natural water system is essential for successful water resources management.

Remote sensing and airborne electromagnetic survey techniques provide an extremely cost effective and efficient means of mapping surface and groundwater (aquifer) systems. Integrated with pilot boreholes or exploratory wells, the findings of the airborne survey can be extrapolated to areas beyond the survey. Fugro specializes in large-scale geohydrological field research studies in which hydraulic measurements are carried out using piezometers and pump-tests.

Fugro applies its groundwater and geotechnical expertise to the development of desalination facilities by exploring underground feed water supply sources aiding the design of water intake/outfall structures.

We are fully experienced in marine environmental baseline surveys and habitat mapping. Fugro carries out impact studies of diffuse emissions on water bodies and studies on water-dependent eco-systems and wetlands.



InSAR processing revealing subsidence

Urban Water Infrastructure

Intensive rainfall and less capacity for water storage in urban areas leads to urban and rural flooding. We design groundwater monitoring plans for urban areas and advise our clients on drainage and infiltration systems. Our specialists provide feasibility studies for water supply, wastewater disposal and design water treatment facilities including disposal of residuals.

In response to the growing demand for renewable energy worldwide, Fugro provides geohydrological research for geothermal energy and energy storage in aquifers, for the heating and cooling of buildings or industrial processes.

In order to determine the impact of (civil) construction on the surface and groundwater system, appreciating the interactions between these water regimes is crucial. For the execution of construction works under dry conditions, excess rainwater and seepage needs to be removed by pumping. Fugro gives multi-disciplinary advice on the risks related to the dewatering of excavations.

With solid data at the heart of all services, Fugro can offer solutions tailored to the clients needs on water issues in all parts of the world.

Fugro Water Services
Veurse Achterweg 10
P.O. Box 63
2260 AB Leidschendam
The Netherlands

P: +31 70 311 14 32
F: +31 70 327 70 91

E: fugrowaterservices@fugro.com
I : www.fugrowaterservices.com

Euroconsult Mott MacDonald
Land, Water and Environment Consultancy

Euroconsult Mott MacDonald - land, water and environment consultancy - is a division of the Mott MacDonald Group (UK) and is primarily involved in international development services. Based in Arnhem, the Netherlands, Euroconsult has been involved in the implementation of international development projects around the world for over forty years

Irrigation and drainage

Irrigation is the world's largest user of water as well as the life support of major agricultural economies and the source of livelihood of millions of rural families. With increasing scarcity of fresh water resources the challenges to the irrigation sector are larger than ever.

To achieve higher water output efficiency, to balance agricultural development and the aquatic environment, and ensure equitable access to irrigation services are amongst the challenges that we are confronted with. Bottom line though is that irrigation systems are run as an economically sustainable undertaking.

Our experience in irrigation is long and wide-ranging. We provided technical services for development and rehabilitation of irrigation systems in more than sixty countries. Our main emphasis is to develop and introduce new technical and managerial approaches at the practical level, in close cooperation with national consultants, agencies, contractors, and users. We believe in integrated irrigation development, whereby technical, environmental and institutional dimensions of irrigation are dealt with in a comprehensive way.

Water supply and sanitation

Worldwide one billion people do not have access to safe drinking water and two billion people are deprived from basic sanitation. Reversing this trend is a must.

Unserved urban and rural areas and underutilized sanitation and sewage treatment facilities, accompanied by institutional and financial obstacles, stand in the way of an adequate provision of water supply and sanitation (WSS) services. Services generally improve when shifting towards user management and control and tailoring institutional arrangements to the local conditions

In WSS, technical improvements and institutional innovations reinforce one another. Designs should be adjusted to suit local priorities and capabilities. Training and capacity building of operators and hygiene education of users and awareness creation are as important as investment in infrastructure.

We adopt a businesslike approach in the WSS sector – from rural areas to urban neighbourhoods. This requires increased involvement of the private sector, capacity building in the public sector and promotion of domestic and individual investment, the development of business plans and improved financial management for private or public operators.

Water governance and legislation

Despite increasing effort for change, current water sector constraints in many developing countries are still the government's central role in planning and decision making; outdated legislation; depleted water resources; poor water infrastructure; and lack of investment.

Better management of the scarce water resources depends on the development and implementation of unambiguous national policies and regulatory frameworks for integrated water resources management and the development of improved water service delivery mechanisms.

Water resources should be regarded as common goods, to be managed on a sustainable basis, with community participation. Exemplary legislation to achieve this has been developed through the European Water Framework Directive (WFD), i.e. harmonizing water policy with water management of river basins as a whole, primarily through the development and implementation of river basin management plans. Experience that to a large extent can also be applied in non-European countries.

Our services include: policy making and adaptation of legislation; institutional reform and strengthening of water management organizations; economic aspects of water management.

Selected Typical Projects

Bangladesh Integrated Planning for Sustainable Water Management

Strengthening the capacity of water sector organizations in order to fulfil their different roles in water operation and maintenance of the irrigation and drainage systems. The project is implemented in close cooperation with local level water management organizations, different offices of the Bangladesh Water Development Board, and local government institutions.

Client: Government of Bangladesh /Donor: Government of the Netherlands (DGIS)

Indonesia National Strategy for Participative Lowland Water Resources Management

Promotion of sustainable land and water management by improved resources development, transfer of knowledge and human resources development. The project targets Water Users Associations with regard to participatory water management and Operation and Maintenance in 3 pilot areas with different environmental settings. Furthermore, the project will strengthen planning, budgeting and water control by government agencies.

Client: Government of Indonesia / Donor Government of the Netherlands (DGIS)

Mott MacDonald

Euroconsult Mott MacDonald provides specialist assistance for any type or size of project from project formulation through to project execution. Our technical assistance and general consultancy services range from one-man missions to full-fledged multidisciplinary teams, while the project period may vary from a few days to several years.

Water resources management

Integrated water resource management (IWRM) safeguards sustainable use of water resources, balances and optimizes the various uses, and cast a wide net of supporting interventions and measures. IWRM requires new institutions and new financing mechanisms, supported by new techniques and capacity building

Integration in WRM needs to take place at various levels
At national level, WRM is to be given a place in national policies to integrate water management with other policies.
At regional level. Interests and policies of different stakeholders need to be balanced and water management by the different water users and operators brought together under a common umbrella.
At local level, integration of irrigation management, water supply, groundwater recharge and storm water management has to take place complemented by land use planning and water resource planning;

Our services in IWRM include capacity building and institutional strengthening, and process management to make transboundary water management work. Tools to support our work include monitoring systems, operational water plans, coordination among stakeholders and development of financial instruments

Aquatic resources management

Natural fish resources are not inexhaustible and an important percentage of future protein production must come from aquaculture and from aquaculture-based fisheries.

Development of aquaculture and fisheries requires a strong institutional framework. Often the institutional structure of the concerned ministries is hardly keeping pace with the fast growth of the sector. Markets change and international legislation and environmental impacts increasingly require attention. Thus governments need to plan and monitor their country's budgets for fisheries development, research and extension, and sustainable management of aquatic resources.

Euroconsult offers assistance to the fisheries sector by development and strengthening of institutions. Our services are tailored to the specific requirements of the clients. They include stock assessment, master planning of fisheries research and development, organization and manpower development, sector performance monitoring, management information systems, and training and extension.

Coastal zone management

Over the next decades 75% of the world's population will live within 60 km of the shoreline. Most of these areas provide for a large part the livelihood of coastal communities. Economic development and rapid population growth put increasing pressure on coastal resources and threaten the long-term potential for sustainable development.

Integrated coastal zone management (ICZM) is the best approach to ensure a balanced development. It resolves conflicts among users of coastal resources and helps to determine the optimum mix of resource use over time, recognizing the dynamic nature of both the resources and the demands on these resources. Sustainable development can only be achieved in case all actors are involved in the decision-making process so as to sustain biodiversity maintenance of the various functions of coastal ecosystems is assured.

Our services include: Institutional strengthening and local capacity building; Drafting environmental profiles and management plans for protected coastal areas; Land use planning and sector policy formulation; Environmental assessments and audits; GIS and database management; Vulnerability assessments; Master planning of coastal resource uses; Drafting ICZM plans and strategies.

Zambia Integrated Water Resources Management for the Zambezi River Basin

ZACPRO 6 Phase 1, 1995 - 2000, established a database for water resources information to support planning and management of the region's water resources. Phase 2, 2001 - 2008, established an institutional framework for managing the shared water resources of the Zambezi River basin, and formulated an integrated water resources management strategy for the basin.

Client: Zambezi River Authority / Donor: Swedish International Development Cooperation Agency

China Integrated Mangrove Management and Coastal Protection in Leizhou

Protection of the coastline of the Leizhou Peninsula from typhoon damage, by strengthening the coastal defence facilities and by expanding the area under mangrove forest through enhanced management and restoration of degraded areas and reforestation and sustainable management and utilisation of the forest resources.

Client: Government of China, State Forestry Administration / Donor: DGIS (ORET/MILIEV)

Contact us:
Pieter van Stuijvenberg
Euroconsult Mott MacDonald
Amsterdamseweg 15
6814 CM Arnhem
PO Box 441
6800 AK Arnhem
The Netherlands
T +31 (0)26 3577111
pieter.stuijvenberg@mottmac.nl
www.euroconsult.mottmac.nl

NWP NGO-platform: reduce poverty and illness by collaboration

Together, we can achieve more. The minister for Development Cooperation, Bert Koenders, is fully committed to the Millennium Development Goals and strives to improve the quality and effectiveness of the Dutch contribution. To this end, the minister promotes partnerships with civil society organizations, enterprises and knowledge institutes in rich and poor countries alike.

The NWP NGO-platform's mission and objectives

Dutch non-governmental organizations (NGOs) have solid institutional and financial foundations and a strong international focus. Through the Netherlands Water Partnership (NWP) NGO-platform they combine their efforts to address water issues and meet the Millennium Development Goals (MDGs). The platform's mission is to reduce poverty and illness among people around the world who suffer from inadequate drinking water and sanitation services. So, to develop effective programmes that will contribute to social issues, members of the NWP NGO-platform actively work with governments, businesses, and knowledge institutes. By working in partnerships the platform contributes to the achievement of MDG 7, target 10: halve the number of people without sustainable access to safe drinking water and basic sanitation by 2015. In 2005 the platform's members laid out their common objectives, guidelines and binding agreements in a charter. They have also set up an activity programme for the coming years.

AT@Work: promoting appropriate technology

The NWP NGO-platform promotes the appropriate water and sanitation technology (AT) approach. This led to the formation of a network of Dutch professionals drawn from government, academies, NGOs and the private sector. Known as 'AT@Work', this network is interested in the large scale market introduction of appropiate water and sanitation technologies. This way it aims to reduce the number of people without access to safe drinking water and basic sanitation, in accordance with the Millennium Development Goals.

"The platform's mission is to reduce poverty and illness among people around the world who suffer from inadequate drinking water and sanitation services."

There is strong public support in the Netherlands for development cooperation. Many people contribute in some way, as volunteers or as donors. We take pride in this. Development cooperation is not just a matter for the government, but for society as a whole. Everybody is responsible for ensuring that global poverty is halved by 2015. We have mutual responsibilities and mutual interests, both within the Netherlands and as part of the global community.

Smart Series Solutions

The inspiring booklets Smart Water Solutions, Smart Sanitation Solutions and Smart Water Harvesting Solutions describe 'best practices' and aim to stimulate small-scale and cost-effective household and communitybased solutions that will help to achieve the Millennium Development Goals. The booklets can be downloaded free from the NWP website - www.nwp.nl/publications.

Contact
NWP-NGO Platform
E-mail: info@nwp.nl
Internet: www.nwp.nl/NGO-platform

Current members of the NWP NGO-platform:

- Aqua for All (www.aquaforall.nl)
- Both Ends (www.bothends.org)
- ICCO, Interchurch Organization for Development cooperation (www.icco.nl)
- IRC, International Water and Sanitation Centre (www.irc.nl)
- Plan Nederland (www.plannederland.nl)
- Practica Foundation (www.practicafoundation.nl)
- Simavi (www.simavi.org)
- SNV, Netherlands Development Organization (www.snvworld.org)
- Waste, advisers on urban environment and development (www.waste.nl)
- Wetlands International (www.wetlands.org)
- AMREF Flying Doctors Nederland (www.amref.nl)
- Rain Foundation (www.rainfoundation.org)
- Woman for Water Partnership (www.womenforwater.org)
- Micro Water Facility (www.microwaterfacility.org)
- Connect International (www.connectinternational.nl/english)

Source: IRC

Akvo - the open source for water and sanitation

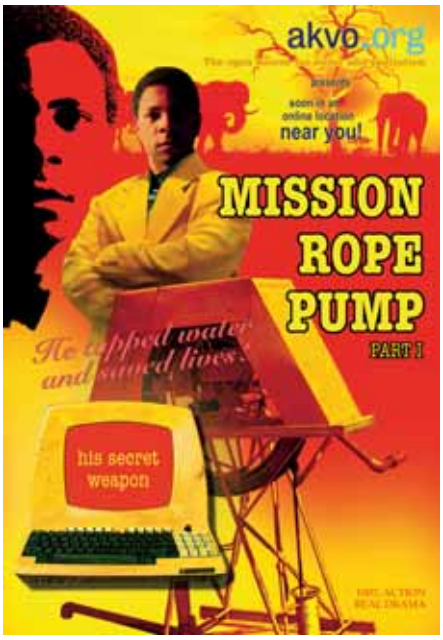
Once merely the home of computer companies designing microchips, Silicon Valley is now pioneering new ways for us to collaborate to specify appropriate technologies, match funders to those seeking investment and ease the burden of reporting. Developments of the past decade such as Wikipedia, eBay and PayPal are being reinterpreted for the development community and promise to help empower communities in the developing world.

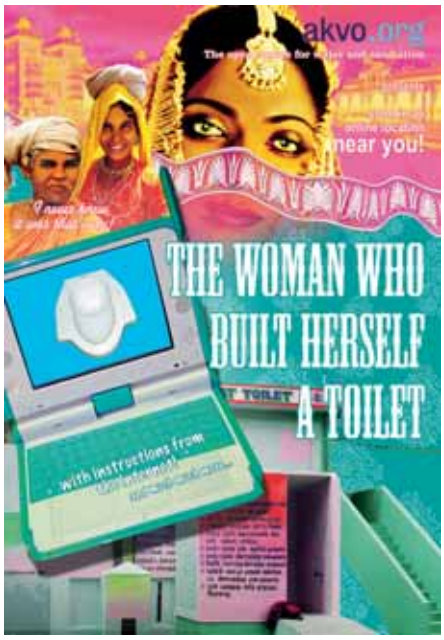
An example is Akvo (www.akvo.org), a global foundation that launched more than 75 pilot projects in 2008, following an investment round led by Netherlands Water Partnership (NWP), Partners for Water and UN HABITAT. The team bridges the water and information technology sectors and has a development team based in the Netherlands, Sweden and California.
Akvo's internet-based tools and working practices help water and sanitation development partners expand their project activities while reducing costs and simplifying reporting. Geared towards projects in locations with poor infrastructure, Akvo's tools and content are available under an 'Open Source' license and are designed to improve through the collective input of many global experts.

Jeroen van der Sommen, managing director at NWP, led the foundation of Akvo. "As I listened to people working in water and sanitation I kept hearing the same problem described - that the developing world needs one global home for water and sanitation information and tools - and today it doesn't exist."
"The good news is we're helping to create it, forging relationships with people around the world who share this vision. We have invested in the Akvo project, which is led by a Swedish technology entrepreneur and draws on a team spread across Europe, the United States and Asia."

The organisation is tackling what is at heart a simple problem - the water sector has struggled to pool its collective knowledge to share with the communities it supports. "Or, put another way, the communities we support haven't been able to use this knowledge," explains van der Sommen. "At NWP, we have cupboards full of booklets and brochures that contain plans for how to build water pumps, rainwater collection systems, toilets and much more. But what use is having them, when they're sitting next door to my office in Delft? We need to make this available in new formats for everyone around the world. And as soon as we do this we can add extra capabilities that build on this knowledge and speed up the pace of development."

The sector has responded positively to ventures such as Akvo. In March 2008, major finance and partnership agreements were signed during Unicef's World Water Day matchmaking event, hosted by Prince Willem-Alexander of Orange and the Mayor of Rotterdam, Ivo Opstelten.
In addition to the seed investors, early funders included Aqua4All, ASN Bank, IRC International Water and Sanitation Centre, NEDAP, Union of Waterboards and Simavi. Akvo signed agreements with implementation partners in the developing world to support over 75 projects during 2008. Future expansion will see an increase in the number of field project volumes as the matchmaking tools come on stream. Akvo is working with corporate partners to enable them to cost effectively launch and manage large-scale direct donor campaigns targeted at consumers, to tackle water and sanitation issues.





Organisations that use Akvo benefit from three core components: a Wikipedia-style knowledge sharing tool for the sector, called the Akvopedia; a matchmaking system to screen and fund projects more easily and cheaply; and a water and sanitation project reporting platform called Really Simple Reporting (RSR).

As well as building the software tools, Akvo is working hard to build the communities that will collaborate to maintain them, bringing international institutions closer to field-based NGOs, opening up participation across local communities and developing ways in which donors in the developing world can follow and interact with funding recipients directly. Several things are happening in parallel, to shape this exciting possibility, explains Mark Charmer, a co-founder of Akvo. "A new generation of knowledge disseminators are beginning to change how information is communicated inside and outside organisations. These people dramatically speed up the pace at which insights are circulated around the world."

Contact
Peter van der Linde
Partner Director Akvo
E-mail: peter@akvo.org
Internet: www.akvo.org.

A key called water

One of the water-related Millennium Development Goals (MDGs) is to halve the percentage of people who have no access to safe and reliable drinking water and hygienic sanitation by 2015. In order to contribute to this goal, the Dutch water sector (both sanitation and drinking water) has combined its means and expertise through the foundation of Aqua for All. Our organization is supported by participants and donors of public and private companies.

Water as key to development

The projects selected by Aqua for All aim for a strong impulse for self supporting economic development. In this way health and a sustainable future can be achieved. Aqua for All focuses on direct access for the poor in the rural and peri-urban areas to safe drinking water and adequate hygienic sanitation. With an annual turnover of approx. 4.2 million euro's, we support small scale ánd large scale water and sanitation projects, initiated by local community based organizations. In order to enhance chances for development the empowerment of women is stimulated.

Promoting Appropriate Technology (AT)

In order to achieve our goals, Aqua for All also strongly promotes the development of promising low cost technologies on water exploration, treatment and storage. A non-conventional approach, based on local available resources, capacity and geographically limiting conditions, offers affordable and sustainable (and therefore appropriate) technology. This also creates opportunities for local business development, in manufacturing, assemblage, operation as well as distribution and service.

Network to enhance efficiency

Aqua for All acts as a matchmaker to establish sustainable, long lasting partnerships between Dutch water partners and Dutch NGOs with their local partners. With subsidy from the Dutch government every euro from the Dutch water sector can be doubled. Aqua for All participates in the NWP NGO-platform.

Participants and donors

Aqua for All is supported by many participants and donors: water companies, water boards as well as private companies and consultancy agents. In the Netherlands partnerships are established with NGOs like Unicef, Novib, Icco, Cordaid, Amref and Simavi, whose programs are supported on the water related parts. Small private Dutch development organizations can be financed by Aqua for All as well.

Aqua for All works with a group of experts from the water sector that support Aqua for All and its partners with advice and project management. They offer highly appreciated knowledge and commitment.

Support of innovation

Aqua for All supports initiatives in innovation, demonstration and marketing, with a spin off to projects with MDG-results. Aqua for All is especially active in:

- waterconservation, for example rainwater harvesting, sanddams and trenching;
- demonstration of new sanitation concepts, with special attention to re-use of urine and faeces for the production of biogas and fertilizer, and re-use of grey water for example for showering;
- business in development, for example stimulation of small businesses and the support of Appropriate Technology. Aqua for All spends about 20% of her budget for this purpose.

Contact
Aqua for All
Groningenhaven 7
Postbus 1072
3430 BB Nieuwegein
Tel: + 31 (0)30 606 94 30
Fax: + 31 (0)30 606 14 31
E-mail: info@aquaforall.nl
Internet: www. aquaforall.nl

Water tap in Accra, Ghana

Public toilet in Accra, Ghana

IRC: 40 years of sharing and learning

The IRC International Water and Sanitation Centre is an independent knowledge centre on water supply, sanitation, hygiene (WASH) and integrated water resources management (IWRM) in the context of development cooperation. IRC conducts research, offers training and advice, and provides information products and services. It works for the public and the private sectors, and for Dutch and international organisations, including UN agencies, development banks, non-governmental organisations and private charities.

IRC aims to contribute to global sustainable development and poverty reduction.
It's mission is 'to facilitate the sharing, promotion and use of knowledge so that governments, organisations and professionals can better support poor men, women and children in developing countries to obtain water and sanitation services they will use and maintain'.

Areas of operation

IRC operates in three major programmes.
The Thematic Programme focuses on knowledge development and innovation. Around ten thematic groups work on topics of critical interest to the WASH and IWRM sectors. Most of the work is executed with partner organisations from the North and the South.
The Information Products & Services Programme provides the global water sector with publications, electronic and printed newsletters, portal and hosting services, and online library services. All of its products are in English; some are also available in French and Spanish, being produced together with partners in French West Africa and Latin America.
The Regional Programmes focus on capacity development in Southern partner institutions. They provide a channel through which the outputs of the thematic programme are streamlined and information products and services are disseminated.

Improving local governance

IRC's thematic programme focuses on knowledge development and innovation. Its overall aim is to improve local governance in the water and sanitation sector. Good local governance is essential to achieve the Millennium Development Goals (MDGs) and to guarantee sustainable WASH services beyond 2015. A number of thematic groups pursue this aim, working together with partners from both the north and the south.

The programme's activities fall into two categories, one relating to content and the other to processes. In 2007, the content-related areas were:

- Hygiene and Sanitation
- WASH in Schools
- Financing for Sustainable WASH Services
- Corruption, Honesty, Accountability and Integrity (CHAI)
- Scaling Up Rural Water Services
- Multiple Use Services (MUS) and local Integrated Water Resources Management (IWRM)
- Good Governance for Sustainable and Pro-poor Local WASH Services (WASHIRIKA)
- Strategic Participatory Planning for Local WASH Governance.

The process-related areas were:

- Innovative Communication
- Action Research and Learning Alliances
- Knowledge Management.

Key topic areas

Assessing the state of knowledge on MUS
IRC took part in a joint study (in 2007) with the International Water Management Institute and Winrock International to assess the state of knowledge on multiple-use services for the poor. The study examined the relative costs, benefits and impacts of MUS compared to single-use services, and evaluated the potential market for MUS, focusing on South Asia and sub-Saharan Africa. The study concluded that, although multiple-use services cost more than single-use services, they generate greater income and have a greater impact on poverty.
Work on MUS is widely quoted and its findings are taken up in different countries and shared in various fora. MUS is also a theme at the 5th World Water Forum in Istanbul in 2009.

Household water container used in Bhopal, India

IRC 40

IRC celebrated its 40th anniversary in 2008, the International Year of Sanitation. A full programme of symposia and other events marked this important milestone in IRC's history.

Fighting poverty with microfinance
Microfinance can be an effective instrument in achieving the MDGs. Used properly, it can reduce poverty and empower women. IRC and the Netherlands Water Partnership published a booklet on microfinance in the WASH sector. The booklet was launched in October 2007, during a finance workshop in India, to coincide with a visit to the country by Queen Beatrix of the Netherlands. Microfinance was one of the topics of discussion during the visit. The booklet gives a short introduction to microfinance in the sector, looking at how it can help households, communities, municipalities and service providers.

Reality check on water and sanitation costs
IRC is working together with international agencies and local organisations to identify the real costs of safe water and sanitation in poor communities. The WASHCost project aims to predict what WASH services should cost, thereby supporting better governance and more efficient use of funds in the sector. This high-profile project is being externally funded with a grant of nearly 10 million euro's in the period 2008-2012.

Contact
IRC International Water and Sanitation Centre
E-mail: general@irc.nl
Internet: www.irc.nl

- Sewage Purification Plants
- Water Supply Systems
- Water Distribution System
- Coal and LNG Terminals
- Marine jetties
- Cruise Jetties
- Deepwater Berths
- Flood control Barrages
- Harbor extensions
- Quay walls
- Causeways
- Breakwaters
- Construction of Wharves
- Water intake / Outfalls

1 Sint Maarten
2 RoRo Vlaardingen
3 Dahej India
4 Svanen
5 Adam Clark Ghana
6 Tunnel Dordtsche Kil
7 Suriname Bridge


1


2


3

Ballast Nedam knows what is important when it comes to water

Ballast Nedam's particular contribution to a project draws directly on the challenges we have faced as a business with its roots in the Netherlands. Our homeland's unique topography has forced us to find innovative solutions in creating its infrastructure. So you will find the resulting skills nowhere else. Many of these are in the realm where land and water meet.

We specialise in adapting and applying those solutions to relevant situations elsewhere in the world. In this folder we highlight these activities, in which Ballast Nedam's expertise is unrivalled.

Ballast Nedam is more than just a builder: the company is involved in the entire construction process, from project development and financing right through to long-term maintenance after project completion. Experts from Ballast Nedam meet with clients at an early stage. Their creative approach is key to helping them produce alternative, more efficient designs. Civil and Marine Engineering and General Building are company hallmarks.

Ballast Nedam's core activities consist of project management and engineering. Furthermore, our specialized activities are what really set us apart, both in the Netherlands and worldwide. These include advanced foundation techniques, port facilities, quay walls, roads and waterworks.

Specific skills and special equipment are vital when it comes to building major structures such as jetties, breakwaters, sea defences, intakes and outfalls A detailed understanding of the marine environment and respect for its intricacies are just as important. Ballast Nedam has been devising innovative solutions to complex marine and civil engineering problems for more than a century. In ports and terminals worldwide. Near shore and offshore.

Water is important and water will become even more important in the future.

4

The climate is changing, sea levels are rising, the sea floor is subsiding. Torrential rainfall is becoming more common and the volume of glacial runoff is increasing. Safety, sustainability and space for water figure prominently in key government policy decisions. Ballast Nedam knows what is important when it comes to water. Our knowledge and expertise are unparalleled in the areas of water management and the economics of water usage. We build sewage treatment plants and sewage systems.
We create ecologically sound river banks. We provide solutions for surface water retention and infiltration provisions to address urban expansion and infrastructural concerns.

Our water-management activities are extensive: from building sewage systems to excavating large-scale hydraulic projects. We provide a wide range of hydraulic engineering work: for bridges, bed-sealing projects, pile planking, ecologically river banks, dredging and maintenance of watercourses. Our proven expertise and know-how allow us to provide any kind of project-related support municipalities and water boards might need.

Contact
Ballast Nedam
P.O. Box 1505
3430 BM Nieuwegein
The Netherlands
Phone: *+31 (0) 30 285 3030*
Fax: *+31 (0) 30 285 4800*
E-mail: *info.infra@ballast-nedam.nl*
Internet: *www.ballast-nedam.nl*


5


6


7

Technology as driving force for rural development

Technology is an important driving force for economic and social change, not just in the rich parts of the world, but also in the world's poor areas. Despite the huge need, the technological means that can help the rural poor to improve their own living conditions are often not available or even non-existent. Through partnerships with other organizations, PRACTICA makes simple and low cost technologies available on local markets, giving people access to the right tools to improve their lives.

Such technologies and services can have a large impact on many aspects of the circumstances of the poor; provided they are made available more widely and in some cases their efficiency and reliability are improved. The preference is to achieve this by engaging the local private sector and follow the principle of 'poverty alleviation as a business'. This strategy requires a catalyst role. The process of introducing low-cost technology to private manufacturers, workshops and end users is labour intensive. Even if in a region a particular technology ultimately catches on, it takes a relatively high investment to get to a 'critical mass'. PRACTICA aims to accelerate this process by taking care of the introductory and dissemination process.
Most of the activities of development, introduction and dissemination of technology take place in the field of manual and mechanized water pumping, water filtration, manual well drilling and small scale irrigation.

PRACTICA receives requests for assistance from different parties in countries in Africa, Asia and Latin America. PRACTICA helps develop these initiatives further with technical assistance and training and by linking proposals with financial resources and marketing opportunities.

The joint project with Unicef in Chad is just one example of how PRACTICA operates: small local well drilling enterprises receive technical and business training, enabling these enterprises to make the wells according to Unicef standards, for only a fraction of the costs that international well drilling enterprises charge.
Another example is the introduction of simple and low cost irrigation equipment in Madagascar; Technologies as treadle pumps and low cost and fuel efficient motor pumps are now available on the market, giving farmers new options for small scale irrigation. Awareness and marketing campaigns and additional training of the farmers have further contributed to the large scale application of the new technologies.

The principles of PRACTICA

- The products and services that PRACTICA promotes should have a clear impact on poverty alleviation;
- The products and services should not have a negative impact on environment in production or application;
- Fine-tuning low cost appropriate products and services to the local context is essential;
- Public sector and civil society have a large role in promoting appropriate technologies and services through capacity building and procurement under various programmes;
- Sustainability is best assured if products and services are available through the local private sector.

The PRACTICA mission

With appropriate water and energy products and services that significantly improve living conditions, PRACTICA aims to reach those who are situated at the very 'bottom of the pyramid', i.e. the vast population in the very low income brackets in developing countries.
In addition PRACTICA makes special efforts to influence policies by familiarizing decision-makers (in national governments, in NGOs and in funding agencies) with the various low cost technological options and encouraging them to incorporate these in their programs.
Other areas of work of PRACTICA include product development, applied and scientific research, feasibility studies and consultancy services.

Contact
PRACTICA Foundation
Maerten Trompstraat 31
2628 RC Delft
E-mail: info@practicafoundation.nl
Internet: www.practicafoundation.nl

Rope pump in Ethiopia

Manual drilling in Madagascar

Small motorpump in Madagascar

World Waternet wants safe drinking water and sanitation for everybody

The World Waternet foundation aims to help provide a sustainable solution for the global water problem, and thereby achieve the UN Millenium Goal 7: by the year 2015, the number of people who lack access to safe drinking water and the number of people who lack access to proper sanitation will be halved compared to the year 1990.

Integral approach

World Waternet makes knowledge available internationally regarding drinking water, wastewater and water management, with a focus on developing countries. The current emphasis of the projects is on integral water management. This encompasses the provision of water and drinking water supplies, sewerage and wastewater treatment and water management. This is only possible in close collaboration with local and national government authorities, knowledge institutions, NGOs and the business community.

Knowledge transfer

Sharing and transferring knowledge contributes to strengthen the organisations that work together with World Waternet. The goal is to enable these organisations to become increasingly more adept at autonomously maintaining their water management in more sustainable fashion. World Waternet enters into long-term relationships with fellow water- and other types of companies and bases its work on an integral vision of sustainable solutions for the water problem. This approach is essential to ensure an effective transfer of vision, knowledge and technology.

Countries

At the moment World Waternet is working in the following five countries:

- Indonesia: strengthening six water companies
- Egypt: better drinking water production and sanitation
- Latvia: water management in the polder
- Surinam: drinking water and sanitation
- Aruba: building and maintenance three wastewater purification plants

Complete water cycle

World Waternet's integral approach stems from Waternet's vision. Waternet is the first and only total water cycle company in the Netherlands since January, 2006. It is responsible for integral water management in Amsterdam and surrounding areas, as well as in the working area of the District Waterboard Amstelland, Gooi and Vecht.

Opportunities for partnerships

The Dutch water sector enjoys an excellent international reputation. The global water problem offers this sector, including the Dutch business community, a great deal of opportunities. Partnerships involving World Waternet and Dutch technology suppliers are set to increase these possibilities. The introduction of the integral water cycle in other countries opens up new markets for the business community. World Waternet is open for partnerships with other knowledge institutions, engineering firms, NGOs, banking institutions and members of the business community. Please feel free to contact us.

Contact
World Waternet
P.O. Box 94370
1090 GJ Amsterdam
Tel: +31 (0) 20 608 35 53

Water as carrier

Access to safe drinking water and adequate sanitation is a fundamental need. Yet billions of people all over the world do not have these simple basic rights. Proper sanitation and water facilities are not only essential for public health, but a necessary condition for further socio-economic and social development. For example economic growth and improving the position of woman.

Simavi for clean water and health care

Simavi has been involved in improving the health of the poorest people in Asia and Africa for over 80 years. The two main focus areas are safe drinking water, sanitation and hygiene, and improving primary healthcare for mothers and children. We support initiatives by local organisations on the ground, as they know best what is needed to improve the basic health of the local population.

supporting healthy solutions by local communities
simavi

Water, sanitation and hygiene: an essential combination for good health

Simavi is committed to safe drinking water, adequate sanitation facilities and hygienic living conditions. And that is urgently needed! Throughout the world, 1.2 billion people lack access to safe drinking water. Twice as many people must do without basic sanitation facilities such as toilets and personal hygiene. These basic facilities are essential to improve people's health. Every year, 1.8 million people die because of poor hygiene. It is a dramatic figure that can be reduced substantially, if people gain access to safe drinking water and if sanitation and hygiene are improved.
To achieve this, public education about sanitation and hygiene is a standard, integral component of all Simavi projects. This education is performed in a variety of ways. In Tanzania, for instance, Simavi is working alongside an NGO that produces a radio soap series about hygiene. The storyline has a comical nature, with characters falling into the latrine every so often. After each broadcast, the audience can call the studio where an expert is ready to answer their serious questions about hygiene. Initiatives such as these turn hygiene into an issue that everyone feels concerned about and takes responsibility for.

2008: International Year of Sanitation

The United Nations has declared the year 2008 as the Year of Sanitation, in an effort to focus attention on the importance of sanitation facilities and personal hygiene when it comes to combatting various diseases. Simavi is therefore putting particular emphasis on access to sanitation facilities in 2008. As part of this effort, we especially focus on schools.

This is why Simavi has established the URGENT NEED fund. This fund is devoted to finance the construction of toilets at schools in Asia and Africa, combined with public education about hygiene. Projects financed through this fund simultaneously serve to increase knowledge about this subject and to stimulate and promote (technical) innovations. One hundred project proposals have been submitted so far. How many of these can be honoured depends on the fund's income, and also of course on the quality of the projects.

Simavi and the millennium goals

In 2000, the international community set itself eight goals. These 'Millennium Development Goals' (MDGs) need to be achieved in 2015. Simavi is specifically devoted to the following millennium goals:
MDG 4 - reducing child mortality
MDG 5 - reducing maternal mortality
MDG 6 - halting the spread of HIV/AIDS, malaria and other diseases
MDG 7 - ensuring ecological sustainability, including halving the number of people that lack access to safe drinking water and sanitation facilities.

Child enjoying a bath, Ghana.

PHOTO: COPYRIGHT SIMAVI.

Countries where Simavi operates

Africa: Ghana, Kenya, Malawi, Uganda, Tanzania, Zambia, Zimbabwe
Asia: Bangladesh, India, Indonesia, Nepal

Simavi also contributes indirectly to the other four millennium goals:
MDG 1 - reducing the number of people living in extreme poverty
MDG 2 - all boys and girls attend and complete primary school
MDG 3 - reducing gender inequality
MDG 8 - promoting partnerships.

Local organisations: capacity building and demand-driven approach

Simavi collaborates with partner organisations active at local level. Since Simavi works relatively often with small organisations, capacity building is very important for the success of our efforts. In more than half of the projects, Simavi therefore contributes to some form of capacity building. This includes training courses for staff, support by an expert (technical support or aimed at organisation strategy), and externally conducted evaluations.
Simavi only carries out projects submitted by local organisations. For we believe that our efforts must connect to developments in the south, and not the other way around. Our partners understand these developments as no other. Furthermore, these organisations are locally embedded and maintain their presence in the area where they operate. This reinforces the sustainability of our project activities.

Income

Simavi's sources of income include the annual national collection, donations by private persons, businesses, service clubs and foundations, the National Postal Code Lottery and government subsidies.

Contact
Simavi
Fonteinlaan 5
2012 JG Haarlem
Tel: +31 (0)23 531 80 55
E-mail: simavi@simavi.org
Internet: www.simavi.org

The one uses it to relieve himself. The other uses it to drink.

Every day, almost 5000 children in Africa and Asia die because of diarrhoea. This is partly due to a lack of sanitation facilities. By constructing simple toilet blocks and providing public education about hygiene at schools, Simavi can reduce child mortality.

Give children a healty future. Support us now.
www.simavi.org

CBF FOR CHARITIES

SUPPORT SIMAVI'S URGENT NEED FUND
GIRO
300100

supporting healthy solutions by local communities
simavi

Interbeton, your innovative partner for ‘water’ solutions

Interbeton bv is the international operating company of Royal BAM Group nv

Founded in 1869, Royal BAM Group is market leader in the Netherlands and one of the largest European construction firms with leading market positions in the United Kingdom, Ireland, Belgium and Germany.

Typical ‘water’ projects

- Seawater intakes and outfalls for cooling water, desalination and treated ocean effluent plants
- Storm surge barriers and submerged tunnels
- Water supply (geohydrologic studies, drilling wells, supply and install pump installations)
- Water purification, sanitation, drainage and irrigation schemes

Interbeton’s added value

- Flexible and experienced staff with proven ability to work in many different cultures
- Proven ability to find innovative answers to clients' needs
- Efficient & effective management systems for multi- and mono-disciplinary projects
- High level of expertise in construction techniques
- Care for communities, occupational health, safety and environment
- Training and transfer of knowledge to local partners and local employees
- Reliable and financially sound company

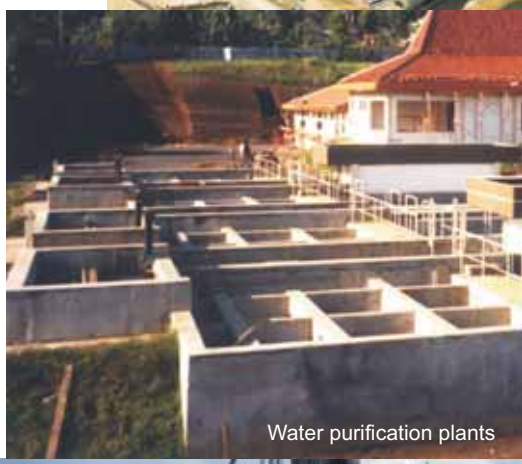
Interbeton's expertise is management of design teams and execution of marine, infrastructural, industrial and building projects in countries outside Europe. Interbeton's service and experience include feasibility studies and financial engineering.

Interbeton bv
P.O. Box 414
2800 AK Gouda
The Netherlands
Telephone: +31 182 59 06 30
Telefax: +31 182 59 08 70
E-mail: pr@interbeton.nl
Website: www.interbeton.nl


Seawater intakes and outfalls


Ocean effluent outfalls


Storm surge barriers


Water purification plants


Water supply

More than 110 years robust & reliable water & sewage treatment systems

Spaans Babcock is a contractor and specialised manufacturer of equipment for Water & Sewage Treatment. The company was established in 1897 and has experience in the design, manufacture and installation of water & wastewater treatment systems in more than 70 countries.
Spaans Babcock equipment is known for their long life time and easy and low cost maintenance.

screw pumps

Archimedean Screw Pumps

Spaans Babcock is worldwide the largest manufacturer of Archimedean Screw Pumps. More than 30,000 pumps with capacities up to 40,000 m3/h were installed throughout the world on waste- water treatment plants, drainage- and irrigation pumping stations. Spaans Babcock is the original developer of the environmentally friendly ECO-Bearing and the lightweight manhandle able ERGO-Cap® bearing cover which makes Maintenance easy and reduces costs.

Aeration Systems

Spaans Babcock is specialised in the process calculation, design and manufacturing of surface aeration systems. Spaans Babcocks latest product development is the O2Max surface aerator which provides Maximum oxygen input against Minimum energy costs. (up to 20% savings compared to traditional cone-shaped aerators!)

aerators

Fine Screens

The Bormet heavy duty stainless-steel fine screens are based on a unique and patented design: a rotating belt of screen-blocks allows removal or exchange of filter-blocks in a few minutes. The system (which can be compared with an escalator) provides herewith a revolution in fine-screen maintenance and minimise downtimes!

fine screens

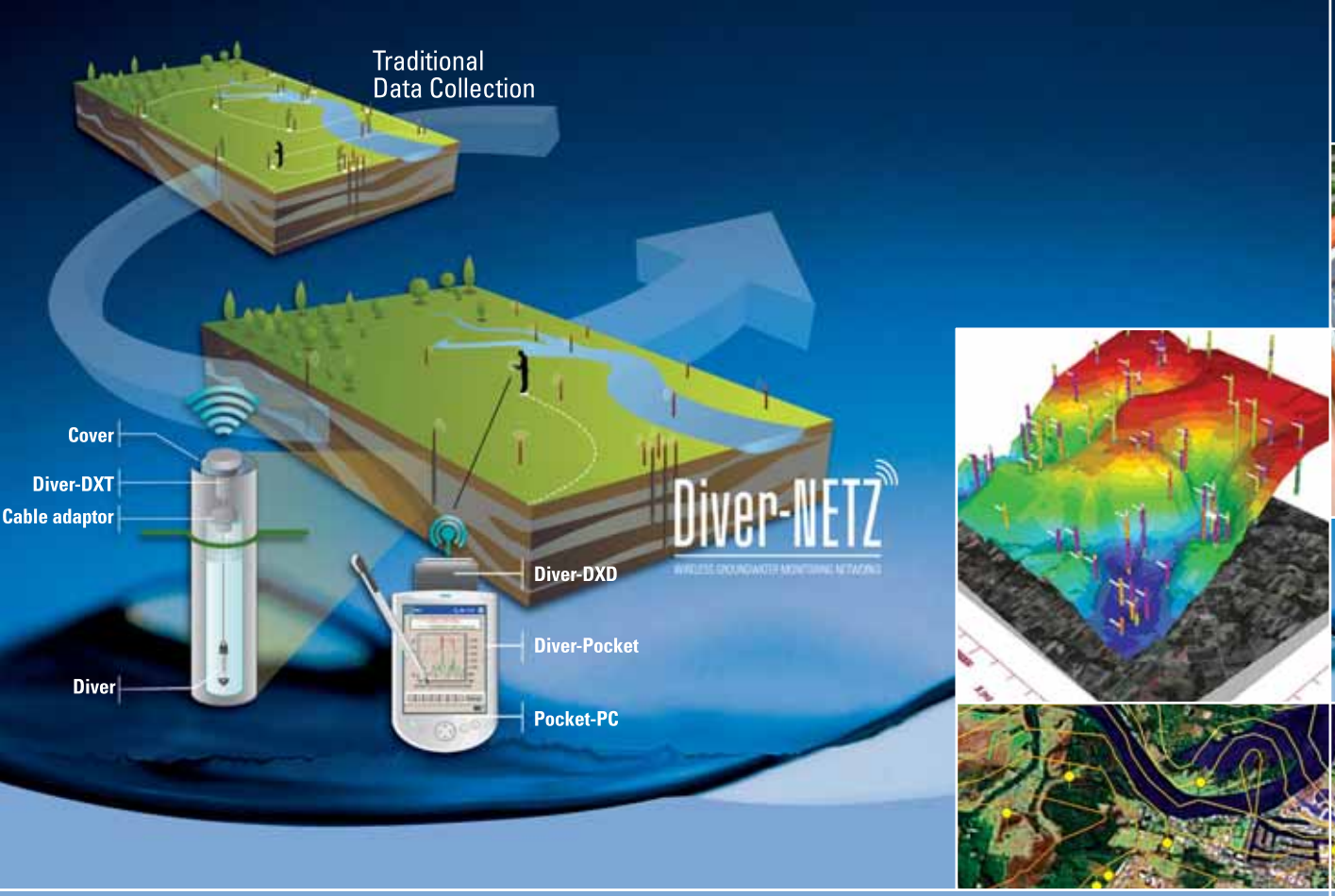
Contracting

over the past years Spaans Babcock has also been successful as a contractor in the design and development of complete treatment plants.
Spaans Babcock finalised the construction of several full size drinking water plant with network in Africa and in 2008 the rehabilitation of a WWTP in Romania will be finalized. New projects are being developed in cooperation with local governments and international partners.

Spaans Babcock

Spaans Babcock bv
P.O. Box 79
8560 AB Balk
The Netherlands

phone +31-514-60 82 82
fax +31-514-60 44 85
sales@spaansbabcock.nl
www.spaansbabcock.com



Streamline your workflow

Experience the Power of Integration

From wireless data collection in the field to project execution in the office, Diver-NETZ*, from Schlumberger Water Services, integrates superior field instrumentation with the industry's latest communication and data management technologies.

- Connect wirelessly to your groundwater monitoring networks and dramatically improve data collection in the field - up to 70% more efficient than traditional methods
- Achieve precise measurements of groundwater levels, temperature, and conductivity† with a completely expandable, industry-proven technology for improved data accuracy
- Enjoy a complete solution of dataloggers, transceivers, acquisition instrumentation, and software
- Manage, analyze, visualize, and report your monitoring data using advanced software technology

Our field to office products are designed to streamline your workflows enabling you to effectively manage your groundwater resources for the long-run. For more information, contact us at sws-diver@slb.com or visit www.swstechnology.com/solutions.

Schlumberger
WATER SERVICES

www.swstechnology.com

Twynstra Gudde

ADVISEURS EN MANAGERS

Collaboration is vital, when our water is at stake!

As history has taught us, only integrated solutions can solve water problems. Of course; we all want to be protected against floods. What's more, we want clean and sufficient water to use and enjoy. At present and in the future. If we also consider the worldwide effects of climate change and EU rules and legislation, the challenge is complete.

Water management amounts to much more than only engineering and technology. It requires the ability to manage and organize in order to come to sustainable integrated solutions. Twynstra Gudde is a leading Dutch organizational consulting firm. Our water management consultants and managers assist and advise government, industry and NGO's in realizing integrated water solutions.
Result-oriented (international) collaboration becomes increasingly important in light of the implementation of EU guidelines, like the Water Framework Directive, or building international knowledge networks and setting up knowledge and innovation programs.
You can call on our consultants and managers for issues like capacity building, program and institutional development. They combine the required knowledge and skills for management, advising and working cross-culturally to help you solve your water problems.

Are you interested? We gladly refer you to www.twynstragudde.nl (search for 'water') or contact Bianca Peters, bpt@tg.nl, +31 33 4677776.

Twynstra Gudde, your water partner!

Twynstra Gudde *Anders* denken, gewoon doen

m1667

Alterra, prime research institution on Environmental Sciences

Alterra, the prime research institution on Environmental Sciences in the Netherlands is part of Wageningen University and Research Centre and includes ILRI.

ALTERRA WAGENINGEN UR

Water is a vital need for life, nature, and the development of civilizations. Humanity will move towards peace and development, if it also ensures access to safe water resources and food for the people of this planet. At the same time, nature, ecosystems, and bio-diversity are essential to decrease vulnerability to extreme hydrological events.

Our approach

Our research is characterized by the 'Wageningen approach' of developing practical and implementable solutions for complex water related problems. We do this by combining different disciplines in the natural and social sciences together with elements of research, education and advisory services.

Our specialties includes:

- To extend past experience in irrigation and drainage further towards the development of sustainable agricultural practices, including emissions of pollution and other qualitative aspects of water use.
- To integrate the protection of natural areas and the use of near natural measures to reduce pollution emissions and to decrease the vulnerability in terms of water stress, both for shortages and excess of water.
- To use the interaction of land and water systems at catchment scale as a key element aiming at rational use of limited water resources, building up prevention measures against extreme hydrological events, and securing bio-diversity.

Knowledge brokerage

In the Netherlands, ever since the Middle Ages, there has been an continuous reclamation of land for agriculture, and adjustment of the hydrological system to meet new and increasing demands. In the last decades, Dutch water management has gradually changed towards a focus on water management strategies based on multiple land use planning. Supporting the knowledge brokerage from and to the Netherlands, critical research topics and reasons to improve our approach are continuously revised.

Catchment hydrology

To develop, apply and exchange knowledge of hydrological processes and patterns at a catchment scale.
To match water demands and water supply, we provide the catchments' water manager with knowledge concerning processes and properties of the hydrological system, using modern techniques such as GIS-based analysis and Remote Sensing. The focus is on processes at the land surface, the unsaturated zone and on the interaction with the drainage system.

Water quality

To develop knowledge on applicable pollution control measures, and to integrate this in knowledge on ecosystems.
Nowadays most water quantity issues include a water quality aspect such as high concentrations of salts, pesticides, heavy

metals and/or nutrients. The scale of the problems varies from a small field to a whole catchment.

Irrigation and drainage

To develop and integrate irrigation and drainage truly in the context of water quantity and quality dynamics.
Resolving the major problems of water scarcity and quality in the irrigation and drainage sector in an environmentally and financially sustainable manner requires location-specific adaptations in land and water use. We assist governments and agencies in identifying and implementing such solutions at field, system, and catchment scales.

Supporting water governance

To integrate technical and non-technical approaches.
Our team is composed by specialists who have complementary, but synergetic expertise and skills, which enables us to integrate the various aspects of IWRM, both technical and institutional. Collaborating with our partner institutes, we cover a broad, multidisciplinary field of expertise to support water governance and policy making.

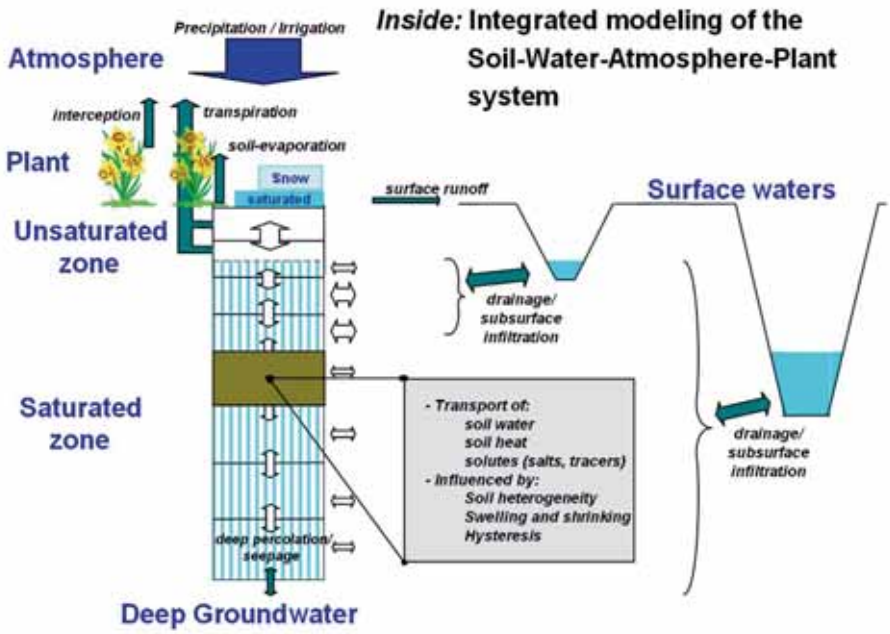
Integrated modeling

To develop advanced integrated tools to quantify the impact of climate change and to explore the impact of management and adaptation strategies.
We develop our own state-of-the-art integrated hydrological models and continuously update them with our knowledge of irrigation, drainage, and water quality. World-wide these tools are used to conduct system analyses and to evaluate land and water management scenarios.

Capacity development

Based on the team's experience and lessons learned over many years in various parts of the world, we have developed our own successful approach towards capacity development. The overall objective is to link the more concrete or explicit aspects of capacity development such as training, institutional strengthening, and adapting the legal system with local or tacit knowledge and aspects of ownership.

Contact
Dr Jochen Froebrich
Alterra, Wageningen University and Research
Droevendaalsesteeg 3
P.O. Box 47
6700 AA Wageningen
Tel: +31 (0) 317 48 15 10
Mobile: + 31 (0)6 10 48 35 27
Fax: +31 (0) 317 41 90 00
E-mail: Jochen.froebrich@wur.nl
Internet: www.wur.nl



Kiwa Water Research: watercycle research and innovation

Kiwa Water Research (KWR) is a leading player in scientific and applied research into the entire watercycle and in the development of technology for optimal drinking water supply and effective wastewater management. KWR also works for, and in collaboration with drinking water companies in special areas such as energy and water.

Based on our extensive watercycle knowledge and experience, we create solutions that are both scientifically tested and practical. Our specialists provide research, technology and advice to a variety of water sector players, such as the government and the business community. KWR's water related expertise is extensive, ranging from spatial planning, hydrology, ecology, process technology and distribution technology, to knowledge of materials, toxicology, chemistry, biology, microbiology and knowledge management. Our facilities include state-of-the-art laboratories and testing plants. KWR undertakes high level research in close cooperation with local and international knowledge partners, often finding the best solutions where various fields of expertise converge or scientific development and practical application meet.

Cooperation

KWR cooperates intensively with other water sector players, both nationally and internationally. This cooperation is essential to maintain our position as a knowledge generator and broker. We have established partnerships with a variety of universities and with other organisations, such as: Vewin (a public affairs and lobbying entity for the Dutch water companies); the Netherlands Water Partnership (NWP); the National Institute of Public Health and Environmental Protection (RIVM); the Foundation for Applied Water Research (STOWA); Alterra (Research Institute for the Living Environment); and Deltares (Institute for Delta Technology). We also collaborate with a number of private companies and consultancy firms in the Netherlands and internationally.

KWR also plays an active role in a world-wide network of renowned research organisations, including the Global Water Research Coalition (GWRC), the American Water Works Association Research Foundation (AWWARF) and the European Water Supply and Sanitation Technology Platform (WSSTP).

BTO

The Joint Research Programme of the Dutch Water Sector (BTO) - with it's Flemish, Aruban and Antillian water company associates - is our prime cooperation framework.
KWR coordinates the BTO and conducts most of the research in close cooperation with water companies, universities and other knowledge institutes and laboratories. The scope of BTO's (applied) research ranges from source to tap and includes water resources and nature management, water treatment, water distribution, water quality and health. A large effort is made by KWR within BTO to transfer knowledge to the water companies and make it suitable for use in every-day practice. BTO has many links with TECHNEAU, the European integrated research project.

TECHNEAU

Technology Enabled Universal Access to Safe Water (TECHNEAU) is an Integrated Project co-funded by the European Commission.

Accomplishments

The work of our specialists leads to practical solutions to the challenges facing the various players in the water sector. Here are two examples of the concrete impact of our work:

Far more efficient Legionella control

The recently introduced Dutch Legionella legislation proved to be very costly. Molecular typing methods were developed to discriminate between different Legionella species in tap water and to understand the ecology of different Legionella species in water networks. The application of these methods revealed that Legionella is very common in water systems, but that health risks only emerge at higher (>25°C) water temperatures, which favour the growth of *L.pneumophila*, the strain most commonly found in human legionellosis. The majority (80%) of in-house water installations that harbour Legionella do not contain *L.pneumophila*, but *L.anisa*, a strain that is not found in cases of the illness in the Netherlands. A specific focus on the detection of *L.pneumophila* would thus allow a far more efficient allocation of resources to limit the transmission of legionellosis. This approach has been discussed in and welcomed by the Dutch Parliament. To facilitate this approach, a culture and a PCR (Polymerase Chain Reaction) method that specifically detects *L.pneumophila* has been developed, tested and validated in tap water by KWR.

Hydrophones to detect activity within water distribution networks

Any activity in a water distribution network, such as pumping, leaking or water intrusion generates sound. This property is used to protect the network against terrorist attacks, which produce sounds like tapping and pumping. Hydrophones, together with intelligent software, can detect, identify and classify these sounds online, thus enabling appropriate and timely action.
TNO, together with Kiwa Water Research, has developed such an acoustic demonstrator. Equipped with hydrophones, of which two are fixed to a fire hydrant and two to a service tap, the demonstrator proved to be an effective and promising system over a limited range. Specifically, it is capable of working in real time and detects around 90% of terrorist-intrusion sounds within 110 m - it could be applied, for example, for the protection of buildings or treatment plants. The identification and quantification of leaking valves has been identified and tested as a further application, but has not yet been fully developed.

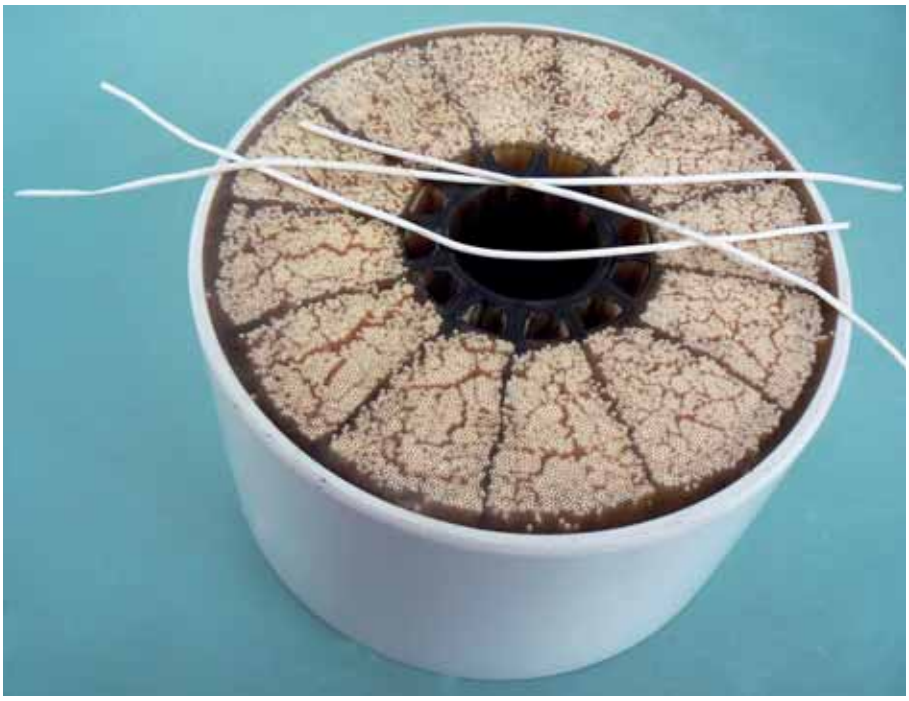
The 19 million euro, five-year project is the biggest ever EU-funded drinking water project, and will run from 1 January 2006 to 31 December 2010. TECHNEAU addresses the enormous challenges facing the water supply sector world-wide to ensure drinking water safety. New, previously unknown contaminants, ageing infrastructures and an increasing shortage of good-quality raw water sources are just a few of the issues that need to be faced.
TECHNEAU will address the challenges by rethinking options for water supply and - through innovation, research and development - by providing new and improved technologies for the entire water supply chain. Kiwa Water Research is the coordinator of the TECHNEAU project.

TTIW/Wetsus

KWR also cooperates with the Technological Top Institute for Water Technology (TTIW/Wetsus) in the fields of advanced water treatment, sensoring and water storage. TTIW/Wetsus provides a unique environment and strategic cooperation to develop cost-effective and long-lasting water treatment technology. Our work with TTIW/Wetsus will add substantially to the international position of the Netherlands in water science and innovation.

HeliXer

KWR and Brabant Water, De Dommel Waterboard, Philips Research and TNO cooperate within HeliXer to develop business opportunities combining water and health. HeliXer aims to generate new collaborations to contribute to cutting-edge water and health innovations.



Kiwa Industry & Water

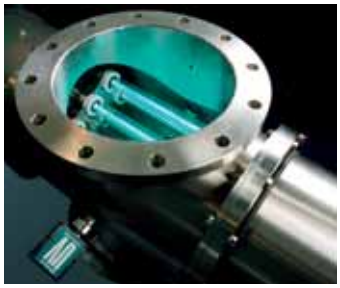
Kiwa Industry & Water (Kiwa IW) was established in 2004 by KWR to meet the increasing requirements of industrial enterprises, sector organisations and water companies for the development and implementation of joint innovations in the 'Industry and Water' sector. In cooperation with numerous companies (including many multinationals), various multi-client, bilateral and network projects have been executed in which Kiwa IW acts as adviser, researcher, knowledge generator and broker, quality assurance body and intermediary.
Seven Kiwa IW Network groups, each covering a different industrial sector (like Food, Chemistry and Paper), provide an excellent platform for our industrial partners to exchange knowledge and information on all kinds of industrial water issues. The Industry & Water Research Programme (OPIW) involves more than twenty projects dealing with various questions, from membrane technology, cooling water issues and demineralised water production, to Legionella in industrial water, and nitrogen and phosphate removal from wastewater.

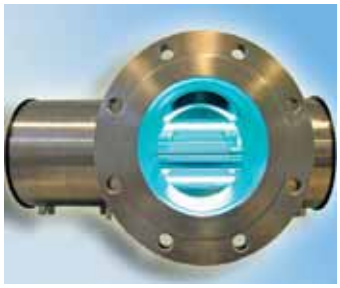
Contact
Kiwa Water Research
P.O. Box 1072
3430 BB Nieuwegein
Internet: www.kiwawaterresearch.eu

berson UV-techniek

Supplying solutions in UV since 1972

BERSON – Offering cutting edge UV disinfection solutions for all municipal applications





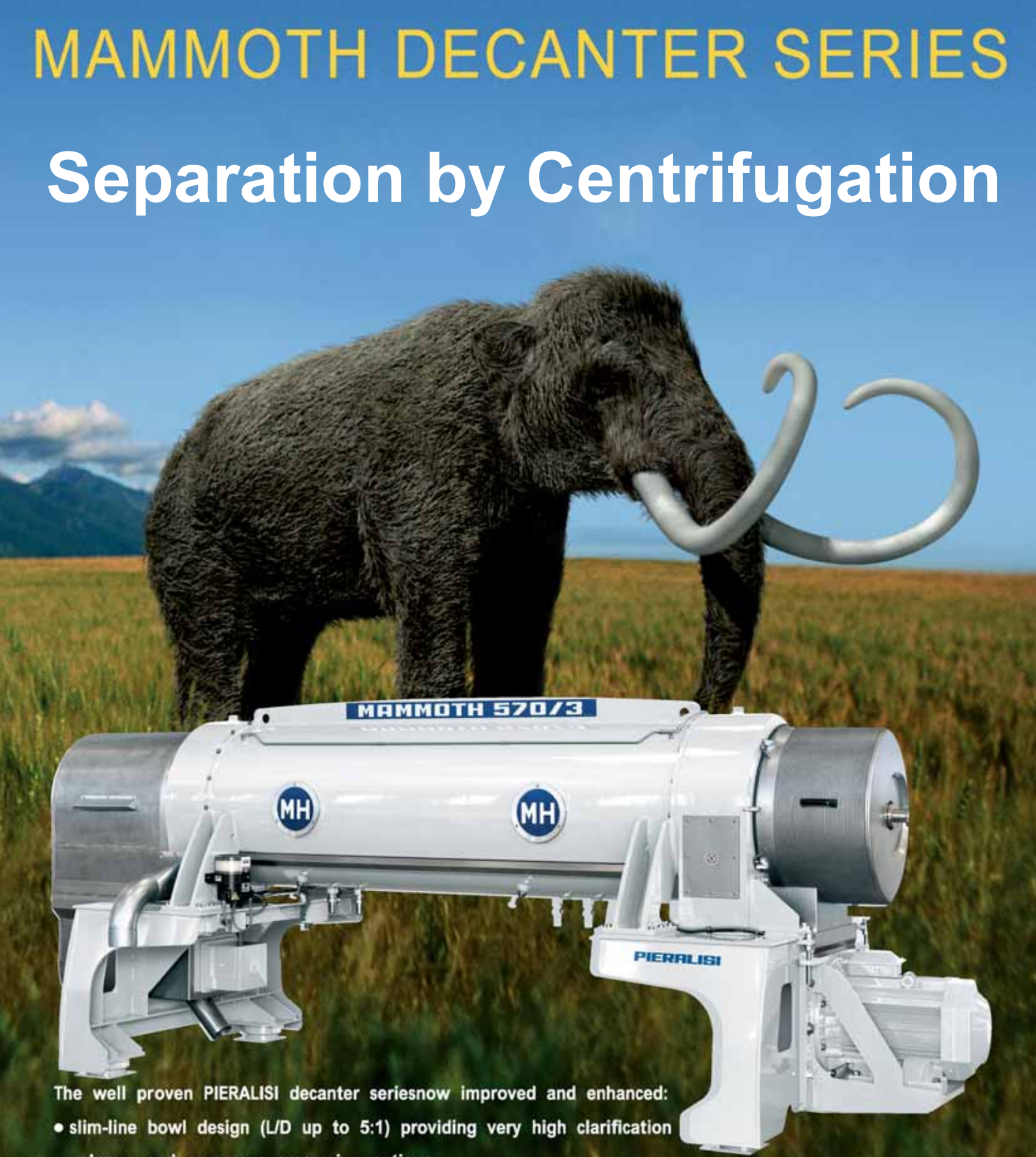
- The broadest range of 3rd party validated units available for both Drinking Water and Waste Water applications
- The latest Medium Pressure technology for greater energy efficiency
- Satisfied municipal clients in major European cities such as Paris, Milan and many German & Scandinavian locations!

Berson UV-techniek
P.O. Box 90, NL-5670 AB Nuenen , The Netherlands
T: +31 40 2907777 F: +31 40 2835755
E: info@bersonuv.com W: www.bersonuv.com

A HALMA COMPANY

MAMMOTH DECANTER SERIES

Separation by Centrifugation



The well proven PIERALISI decanter seriesnow improved and enhanced:

- slim-line bowl design (L/D up to 5:1) providing very high clarification volumes and numerous processing options,
- specially-designed casing and frame ensuring minimum vibrations and extra-low noise levels,
- smart electrical/electronic controls, with rotovariator for automatic differential speed control, guaranteeing minimum levels of energy consumption.

PIERALISI
BENELUX B.V.

Edisonlaan, 22 2665 JC BLEISWIJK - Holland Tel. +31 10 5218788 - Fax +31 10 5218875
www.pieralisi.nl - info@pieralisi.nl

Deltares, a Dutch institute for national and international delta issues

Throughout the world, more and more people are settling in opportunity-rich, but vulnerable, deltas, coastal areas and river basins. That vulnerability is being highlighted because of rising sea levels, extreme river levels, subsiding soil, and increasing pressure on space and the environment.
Deltares provides innovative solutions for water and subsurface issues that make living in delta areas safe, clean and sustainable.

Deltares
Enabling Delta Life

Delta Technology

Where a lot of people live, levels of development and activity are intense, and the infrastructure network becomes intricate. Safety, transport, nature and living are combined in busy delta areas. In a dynamic environment, achieving a sound balance between the various interests is a major technological feat. Prior to implementing technological solutions, social implications must be considered including all the spatial, economic and administrative consequences of the use and management of water and soil. Deltares applies knowledge in an integrated way. This approach is called 'delta technology'. That will lead to the most sustainable solutions.

Areas of expertise

Safety and physical planning of water systems
Preparedness and protection against flooding is a key issue in the low-lying areas of deltas, coastal areas and river basins. Future planning and development of high risk areas requires innovative measures to maintain safety levels and increase flood preparedness while also maintaining the integrity of the natural environment. Integrated physical planning requires reliable tools and methods to identify and quantify risks, to analyse the strengths and weaknesses of flood and coastal defences, and to develop emergency warning and response procedures.

Deltares has developed Delft-FEWS, a state-of-the-art flood forecasting and warning system

Building in soft soils
Rising population density, urbanisation, mobility and prosperity in delta-like areas means that most of the suitable areas for development are now occupied. The increasing needs of our society now require us to develop and build on less suitable sites with even softer soils. Multiple use of space offers one possible solution to the problem of infrastructure development and urban renewal in these areas.

Hydraulic engineering
Hydraulic structures and infrastructure usually form the interface between human activity and water, soil and the natural environment. Hydraulic engineering ensures that this infrastructure complies with all design criteria for safety and sustainability. Construction techniques are becoming ever more complex while the threats from extreme events are becoming more frequent and intense.

Spatial planning of water and subsurface systems
Changes and impacts on one scale of the system may have far-reaching consequences at other scales. Policy development and decision-making can benefit from an integrated approach that incorporates all aspects and scales of the system.

Water management and use
We must protect our cities and developments from the consequences of too much water (flooding) or too little water (drought). The development and sustainable use of water resources

Deltares is solving complex issues related to water pollution, environmental impact assessment, ecological degradation of fresh water systems and wetlands

Deltares combines the expertise of Delft Hydraulics about world-wide water issues with GeoDelft expertise about dikes, roads and underground construction. The new institute also brings together TNO know-how about the subsurface and groundwater and the competences of Rijkswaterstaat in the fields of integrated water management and spatial development. We are well known for both our experimental facilities and our software. Our highly qualified software products are being applied all over the world in a great variety of projects and in research studies.

Part of the Eastern Scheldt, The Netherlands

requires measures and decision-making under complex situations involving many conflicting interests. Careful planning and analysis are required to support such decisions, taking into account technical, economical and environmental aspects in a specific social, cultural and institutional context.

Healthy soil systems and materials
Agricultural, industrial and urban emissions exert an immense strain on the quality of soils. Changes in soil quality are strongly related to the transport of pollutants in groundwater. Management of groundwater and soil systems concentrates on a sustainable use and protection of these subsurface resources, including measures for the rehabilitation of degraded systems. Furthermore, the selective use of chemical and biological processes offers possibilities for in-situ soil sanitation and soil improvement.

Experimental modelling plays an important role in geotechnical engineering. Especially testing in the GeoCentrifuge, one of our large research facilities

Healthy water systems
The quality and health of a water system is continuously changing. Sustainable exploitation and management of these systems requires knowledge of the physical, chemical and biological interactions in the water body as well as methods and tools to evaluate the response of the system to natural or man-made changes and remedial measures.

Measurements, models, prediction and information
The management of natural and man-made systems requires an understanding of what constitutes 'normal' operating conditions as well as planning and anticipation of extreme scenarios. Monitoring networks, data management systems and modelling tools can be combined and integrated to provide real-time and advanced warning systems, and to assist policy makers in assessing risks and uncertainties.

Contact
Deltares
P.O. Box 177
2600 MH Delft
Tel: + 31 15 285 85 85
E-mail: info@deltares.nl
Internet: www.deltares.nl

AQUATECH

Leading trade exhibitions for process, drinking and waste water

AQUATECH AMSTERDAM

AQUATECH CHINA

WQA AQUATECH USA

Organised by

AMSTERDAM RAI

Water Quality Association

Supported by

IWA International Water Association

www.aquatechtrade.com

Geo-information science and earth observation for water resources management and hydrology

One of mankind's greatest challenges is achieving an appropriate balance between the development of natural resources and maintaining an optimal natural environment. To meet this challenge, we need detailed and reliable geo-information and geo-information management tools.

What is ITC all about?

At the International Institute for Geo-Information Science and Earth Observation (ITC), knowledge of geo-information management is readily available and is continually being developed and extended. By means of education, research and project services, we contribute to capacity building in developing countries and countries in transition. In doing so, considerable attention is paid to the development and application of geographical information systems (GIS) for solving problems. Such problems can range from determining the risks of landslides, mapping forest fires, planning urban infrastructure and implementing land administration systems, to designing a good wildlife management system or detecting environmental pollution.

The key words characterising our activities are *geo-information* management, *world-wide* and *innovative*. We concentrate on earth observation, the generation of spatial information, and the development of data integration methods. Furthermore, we provide tools that can support the processes of planning and decision making for sustainable development and the alleviation of poverty in developing countries and countries in transition.

Water and the millennium development goals

Security and sustainable development of our water resources is one of the key problems of the 21st century. Improved water management can make a significant contribution to achieving important millennium development goals established by the UN General Assembly in 2000, in particular in the fight against poverty, hunger, child and maternal mortality, and major diseases. The World Summit on Sustainable Development 2002 devoted great attention to water and sanitation, recognising the need for massive efforts in developing and applying science and technology.

Managing the world's water resources

The availability of spatial information on water quantity and quality will enable closure of the water budget at river basin and continental scales to the point where effective water management is possible. Geo-information science and earth observation will be vital in achieving a better understanding of the water cycle and the better monitoring, assessment, prediction and management of the world's water resources.

The department of Water Resources

ITC's department of Water Resources is a multidisciplinary scientific department specialising in scientific research and education in earth observation and geo-information sciences for the understanding, monitoring, predicting and sustainable use and management of water resources.

Knowledge field

On the basis of future challenges and its existing expertise, efforts in the department of Water Resources focus on the following knowledge fields.

- Satellite Hydrology (Earth Observation of Water Cycle)
- Modelling of Hydrological Processes, using Earth Observation and Data Assimilation
- Water Resources Management using Geo-Information and Earth Observation.

Education

The Water Resources and Environmental Management educational programmes (degree, diploma and certificate) exposes participants to the latest developments in geo-information science and earth observation for assessment, monitoring and prediction in water resources, hydrology and environmental management.

Research

The Research Programme of ITC develops cutting-edge knowledge and innovative approaches in geo-information science and earth observation. The programme addresses applications of geospatial data for space and resource management and provision of geospatial data for the user community. ITC's water research activities are grouped in two research themes:

- Water Cycle and Climate
- Managing Water Scarcity.

Project services

Our project services are realized mainly by means of joint research, education and projects with partner institutions in related applications in water resources management, hydrology, global change, ecosystem monitoring, assessment and predictions. In addition some consultancy services are provided by short training courses and ad hoc projects in water resources management using geo-information and earth observation.

(Photo: © Gerard Küster 2007)

Course participants at ITC are exposed to the latest developments in geo-information science and earth observation

Contact

ITC
Communication department
P.O. Box 6
7500 AA Enschede
Tel: +31 (0)53 487 44 44
Fax: +31 (0)53 487 44 00
E-mail: pr@itc.nl
Internet: www.itc.nl

Water & Climate: time for adaptation

The Co-operative Programme on Water and Climate (CPWC) aims to stimulate activities in the international water sector that contribute to managing the effects of climate variability and change, in particular for the most vulnerable communities. The programme builds bridges between water managers and the climate community, between science and implementation, and between public and private stakeholders. From the local to the global level. By increasing awareness of the issues and of potential solutions we intend to start social, political and economic processes that will lead to the adoption of coping strategies and best practices.

"There is still time to avoid the worst impacts of climate change, if we take strong action now" is Sir Nicholas Stern's advice to the UK Government on the economics of climate change and development. Scientific evidence has now overwhelmingly proven that climate change is a serious global threat, and it requires urgent global response. Even at more moderate levels of warming, all the evidence - from detailed studies of regional and sectoral impacts of changing weather patterns to economic models of global effects - points to serious impacts on world output, on human life and on the environment. Climate change will affect the basic elements of life for people around the world - access to water, food production, health and the environment. Hundreds of millions of people could suffer from hunger, water shortages and coastal flooding as the world warms.

Adaptation to climate change

Taking steps to build resilience and minimize costs is essential. It is no longer possible to prevent the impacts of climate change over the next two to three decades. Though science will only be able to forecast possible futures within measures of probability for the shorter and longer term, time has come to cope with the impacts by protecting our societies and economies, by providing better information, by improved planning, by mechanisms to share risks and by developing climate-resilient crops and infrastructure.

Climate proof

The ambition of the Dutch government is to become known as a 'climate proof' country and to have the expertise to advise its partners abroad on climate proofing. The Netherlands - public and private sectors alike - wish to contribute significantly to the international policy debate, research and capacity building as well as projects abroad on adaptive measures related to water and climate.

This ambition is streamlined via the Co-operative Programme on Water and Climate (CPWC). CPWC is governed by the Netherlands Foundation on Water and Climate, with high level representatives of the Dutch government and scientific institutions. The NFWC directs CPWC to substantiate the Netherlands' ambition on water and climate: to play a leading international role in water-related adaptation to climate change with special reference to topics of particular Dutch interest and expertise: delta areas and coastal development; rural water supply and sanitation; rural development, and urban water management.

CPWC activities

CPWC stimulates and facilitates alliances with partners abroad at global, national or local level and in developed, transitional and developing countries. CPWC links Dutch institutions and experts on 'climate-proofing' to partners abroad. CPWC also develops and maintains relations with the relevant international institutions and organizations in water and climate, including UNESCO, WMO, IWA, IUCN and the World Water Council. CPWC supports the development and dissemination of expertise through advisory services, an expert pool, information services and events.
CPWC's activities include the formation of networks, both formal and informal, national and international; participation in international fora; development of publications; organization of seminars and events; development of an expert pool, and support in bilateral programs (e.g., with Indonesia, China, Vietnam).

The earth's climate is changing and consequently affecting the environment where we live, particularly in the poorest parts of the world. Losses of human lives as a result of natural disasters are increasing world-wide, where water-related disasters play a major role. Water resources are vulnerable to changes in climate. Adaptation towards these changes is essential and the urgency to do so will increase with time. CPWC stimulates and supports activities in the water sector for the management of the effects of climate variability and change, in particular for the most vulnerable communities.

Contact

Co-operative Programme on Water and Climate (CPWC)
P.O. Box 3015
2601 DA Delft
Tel: +31 (0)15 215 17 48
Fax: +31 (0)15 212 16 76
Internet: www.waterandclimate.org

The art and science of consensus building

Two thirds of the Netherlands would be submerged by the North Sea didn't it have dykes and pumps. Our techniques and skills in water management are constantly being innovated. A crucial water management success factor is the involvement of all stakeholders and interests and the associated weighing process. It is based on consensus building, which has been crucial since construction of dykes began more than thousand years ago. The functioning of our waterboards since the 13th century has always depended on consensus-searching mechanisms. In our language the word 'polder' indicates not only land and water structures below sea level, it also indicates the process of organizing interests to solve complex societal issues.

Crucial in consensus searching is a systematic approach to:

- analyze the field of stakeholders by making a long-list of all possible interests including their owners at stake;
- describe the factors that influence realization of each interest;
- selection of the most important factors that determine realization of all interests to the extent possible;
- apply a transparent selection methodology;
- be creative in finding mechanisms that can compensate for 'lost' interests.

The success factors in realizing interests may be compared to a linked system of reservoirs. The complex interrelations can be visualized by amongst others Multi Reservoir Imaging (MRI). The images of the relations between each group of two or three factors can be seen as sets of cross-sections or 3-D images of the reservoirs. The result can be compared to 3-D visualizing of the (hydro)geology of an area.

The process by which the decisive success factors in consensus searching are selected is crucial for the final result. Changes of land use or water management desired by authorities often lead to long court procedures of individuals or groups. However, analysis of such cases reveals that authorities often overlook one or two key factors. Therefore, much attention is given in the Netherlands to careful selection and grouping of success factors and studying them in close cooperation with all stakeholders. This joint analysis often generates new and unexpected solutions. For example, yearly discussions between Egyptian and Netherlands delegates on water management issues yielded policy and technical innovations now applied in one or both countries, such as re-use of drainage water and underground storage of excess water. In the Netherlands, techniques for the selection of decisive factors are integrated in many planning procedures. After the Katrina hurricane that recently flooded Saint Louis, Dutch water managers were asked to not only present 'Dutch dykes', but also to explain our planning mechanisms.

A transparent, creative and scientific selection process of decisive factors is a special art and science. It is a must where differences in interests lead to disputes or even conflicts.

Technical, Management and Communication Faculties of Universities in the Netherlands work together with diplomacy institutions, international training institutes and the private sector to further develop these MRI techniques. Tailor-made consortia are formed for any type of water issue in the world. Close cooperation and respectful listening to each-other are attitudes which water managers in the Netherlands have learned over the centuries when struggling with sea, rivers and groundwater. The combination of technical skills and social sciences adds an additional flavor to Water Management.

Cooperation

Delft Universtity of Technology, SG and Waternet cooperate with other institutions in research and practical projects to improve consensus searching methodologies in water management.

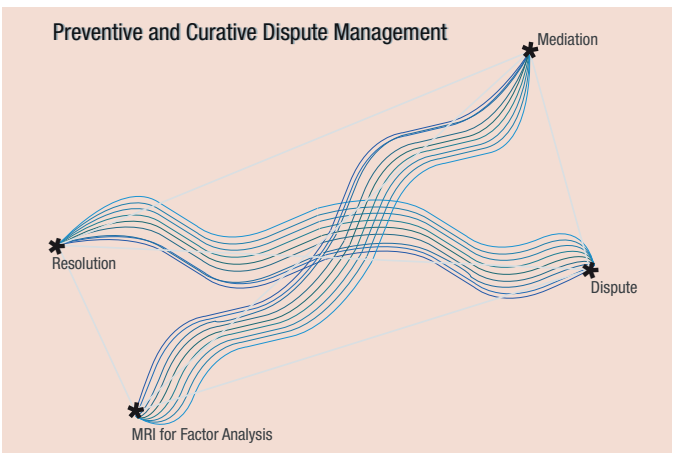
Contact

Prof. dr. ir. T. (Theo) N. Olsthoorn,
Professor Delft University of Technology
Senior Researcher Hydrology Waternet,
E-mail: T.N.Olsthoorn@tudelft.nl
Internet: www.waterresources.citg.tudelft.nl

Drs. E. (Ebel) H. Smidt,
Principal SG
PhD fellow Delft University of Technology
certified NMI mediator,
E-mail: smidt.sg@inter.nl.net
Internet: www.sgmediation.eu

Source:SG

Source:SG



HKV CONSULTANTS

Mailing address:
P.O. Box 2120
8203 AC Lelystad
The Netherlands

Tel: +31 320 294242
Fax: +31 320 253901

E-mail: info@hkv.nl

www.hkv.nl

Safety and risk assessment → Flood

- How high should we build our dikes?
- Should we close off our Delta from the sea?
- How safe are we really?
- Are we prepared for evacuation?

HKV CONSULTANTS is the independent company in the Netherlands that provides

Expertise in water

prevention → Disaster management

Are these your type of questions?
HKV CONSULTANTS helps you to answer them and more!
Always customized to your specific situation.

consultancy services and carries out research in water and water management.

www.hkv.nl

UNESCO-IHE

Educates and trains professionals in the water sector

by offering

- MASTERS OF SCIENCE
- DOCTORATE OF PHILOSOPHY
- PROFESSIONAL SHORT COURSES
- TAILOR-MADE TRAININGS
- ONLINE LEARNING COURSES

in the fields of

- WATER MANAGEMENT
- WATER SCIENCE AND ENGINEERING
- ENVIRONMENTAL SCIENCE
- MUNICIPAL WATER AND INFRASTRUCTURE

www.unesco-ihe.org

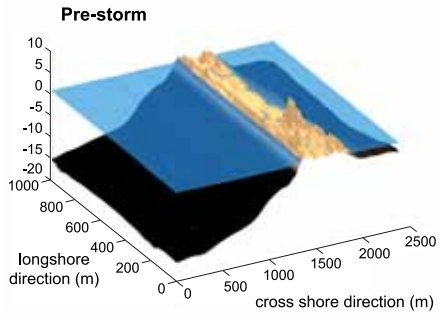
UNESCO-IHE
Institute for Water Education

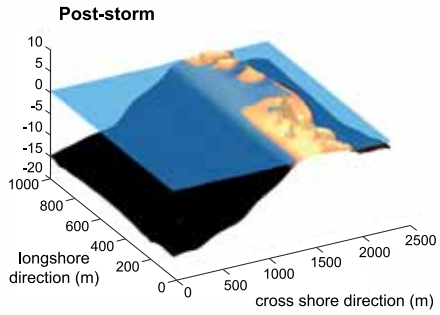
Assessing coastal impacts of global change

The devastating effects of hurricanes on low-lying sandy coasts, during the 2004 and 2005 seasons in the USA and recent cyclones in Bangladesh and Myanmar, have pointed at an urgent need to be able to assess the vulnerability of coastal areas and (re-)design coastal protection for future events, but also to evaluate the performance of existing coastal systems compared to 'do-nothing' scenarios.

UNESCO-IHE
Institute for Water Education

At UNESCO-IHE, research in this area is dealing both with the short-term impacts of hurricanes and cyclones, such as dune erosion, breaching of barrier islands and flooding, and the long-term changes in the sea bed and tidal basins that may affect our security in the long run.





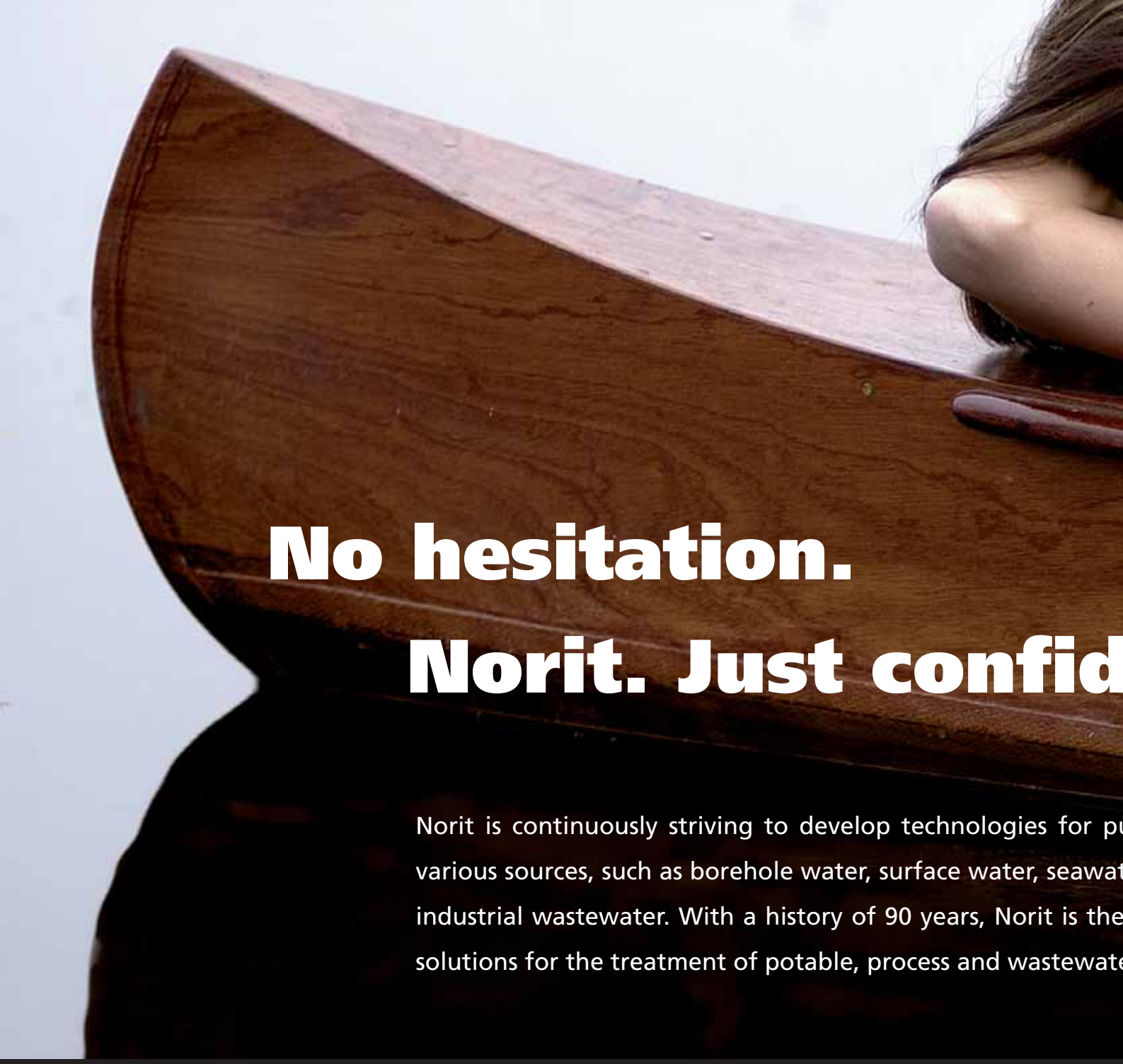
To address the effects of extreme events we are developing a new public domain model, together with Delft partners and with funding from the US Army Corps of Engineers. The model, 'XBeach' (see www.xbeach.org), can predict nearshore waves and currents, dune erosion (scarping), overwashing and eventually breaching of barrier islands. Since it is an open-source model, a rapidly growing user and developer community world-wide can test it in environments as diverse as the Dutch coast, the US Gulf and Atlantic coasts, coral reef islands, Western Australia, Vietnam and many European sites. The picture above shows simulated pre- and post-storm topography for Santa Rosa Island, Florida, after it was hit by hurricane Ivan. A large validation effort is ongoing in collaboration with various institutes.

At least as important from UNESCO-IHE's perspective is the application and further development of such know-how for barrier systems throughout the world, notably in Vietnam, Sri Lanka and Australia, to name a few. Seasonal closure of tidal inlets and river mouths is a fact of life in many such places, but it poses serious problems to fishing communities often cut off from the sea, as well as flooding problems in the rainy season, because of the blocking of river discharge.

On a totally different time-scale - not hours but decades - we worry about the impact of rising sea levels on low-lying coasts. Of course there is the direct impact that higher water levels have on the occurrence of damage to sea defences and dunes. Another - more gradual but equally important - aspect is the undercutting of our coastal protection systems by coastal erosion. Especially where tidal basins and estuaries exchange sediment with the adjacent coasts, rising water levels lead to strong sediment imports into the tidal basins, at the cost of the adjacent coasts.

In order to assess such long-term developments several PhD studies are working with sophisticated process-based models, being used at much longer time-scales than before, thanks to new techniques that help to scale up processes within a tidal cycle or storm to long-term morphological changes. With participants from all over the world and working in environments ranging from inland reservoirs to islands such techniques are validated and refined in close collaboration with institutes like Deltares and the US Geological Survey, as well as institutes from the Meghna estuary to the Yangtze. This will enable the coastal engineers and managers we train to look and plan far enough ahead.

Contact
UNESCO-IHE Institute for Water Education
P.O. Box 3015
2601 DA Delft
Tel: +31 (0)15 215 17 15
Fax: +31 (0)15 212 29 21
Email: info@unesco-ihe.org
Internet: www.unesco-ihe.org



No hesitation.
Norit. Just confid

Norit is continuously striving to develop technologies for pu
various sources, such as borehole water, surface water, seawat
industrial wastewater. With a history of 90 years, Norit is the
solutions for the treatment of potable, process and wastewate

Potable water

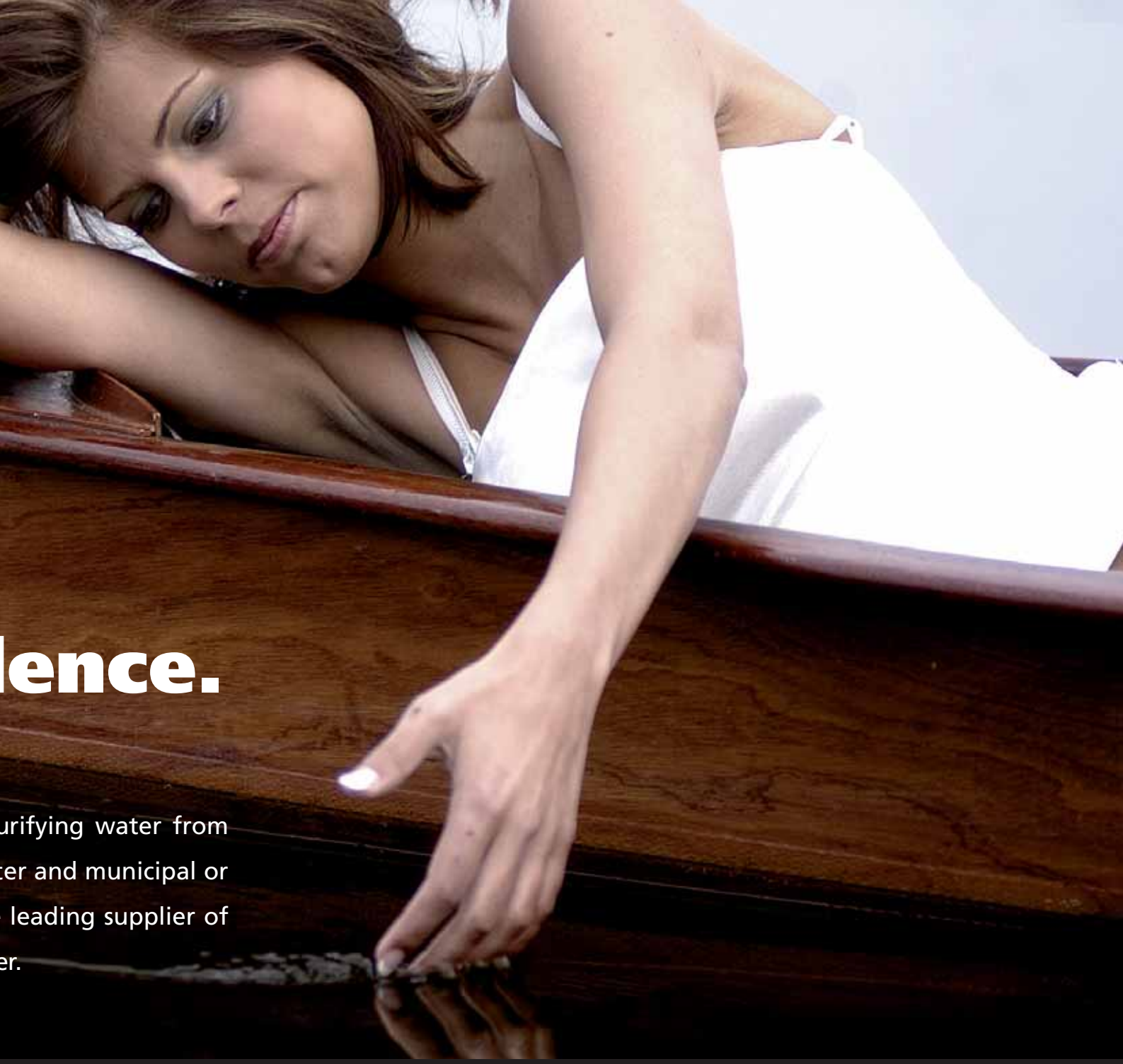
Norit activated carbon and ultrafiltration (UF) membranes are combined in a unique Point-Of-Use (POU) cartridge filter that provides high quality and safe water from the tap. Norit's Perfector-E is especially useful in areas where good drinking water is urgently required. As seawater becomes an ever more important source for the production of potable water, Norit's SEAGUARD UF membranes are a cost-effective way to pre-treat seawater prior to reverse osmosis (RO) membrane filtration. This is often combined with a Norit CO_2 injection system for pH correction.

Process water

Norit membranes and carbon are used in a variety of industries to purify process water for either usage in the process itself or as boiler feed water. Norit's solutions are applied in ultrapure water production for pharmaceutical applications and in the electronics industry. Well water and aseptic bottled beverages are treated by modular microfiltration systems based on Norit membranes, valves and quality control equipment.

Norit

leading in purification



lence.

urifying water from
ter and municipal or
leading supplier of
er.

Wastewater

Norit's XIGA™ UF membranes are used in the world's largest municipal wastewater re-use plant for pre-treatment before RO. The ever-growing demand for clean and safe water stimulates the re-use of wastewater. Norit's unique and compact Membrane BioReactor (MBR) technology, often used in combination with activated carbon, enables customers to turn wastewater into a very valuable source of high-quality process water.

Water Transport

The availability of potable water and the protection against flooding is vitally important for every individual and company on earth. However, there are no guarantees and in many areas nature needs a helping hand. This is where the pumps of Norit fulfill an important role to transport water from wet to dry areas, protect against floods, and assist in the process of "polluted to clean" and "salt to fresh" water.
No hesitation. Norit. Just confidence.

The international network for Storm Surge Barriers Managers

The international network for Storm Surge Barrier Managers is a network consisting of public administrations that plan, construct, manage and maintain Storm Surge Barriers. Aim of the network is sharing experience and knowledge about the organisation, operations and maintenance of storm surge barriers. The network is a joint initiative of the Netherlands, the United Kingdom, Italy and Russia and was founded in 2006.

For centuries the sea has shown itself to be a destructive force, which mankind should always take into account. To protect people against floods static structures like dams and dikes have been built. In the 20th century society demanded that defences should not have a major affect on their surroundings. The movable storm surge barrier was the result.
At present, there is only a handful of European countries that manage or construct large sea-resistant storm surge barriers. These are the United Kingdom, the Netherlands, Italy and Russia. Storm surge barriers require very specific technical knowledge and because there is a limited number of these barriers, knowledge of these unique objects is scarce. Therefore, exchanging knowledge is important in order to learn from each other's experience. Especially now when climate change and rising sea levels are accepted facts that should be taken into account. The public administrations of these four countries with storm surge barriers recognise the usefulness of sharing knowledge and experience and decided to create an international network of storm surge barrier managers.

About the network

The aim of the international network is sharing experiences and the transfer of knowledge on operational and functional management of large movable storm surge barriers in order to optimize the management of barriers by innovative management. This is realised by setting up a network which acts as a meeting place for storm surge barrier managers.

In the network knowledge and experience is shared on many themes. Four main areas can be distinguished:
- general management
- asset management
- operational management and maintenance
- policy issues.

Depending on what stage the member states are relating to the use of storm surge barriers, the focus of interest can differ. For example, both the Netherlands and the United Kingdom already manage existing barriers (built in the 50s, 80s, 90s and the final barrier was taken into use in 2002). Therefore, for these countries the main focus will be on asset and operational management and maintenance. The barriers in Venice and St. Petersburg are still in the construction phase, and in this phase many policy related decisions have to be made which can influence the design. So the current Italian and Russian focus is mainly on these policy issues.
By participation in the network the managers and experts can learn from each other and exchange ideas on common issues. The experience of the English and Dutch of course could be helpful for the Russians and Italians in learning how to set up a management organization.
On the other hand new, innovative techniques of today that are being applied in the new generation barriers, could be of interest for the Dutch and English members whenever a decision on replacement of elements for a barrier should be taken.

Activities, products and services

In 2006 the network was formed and several activities have taken place as part of the network. Each year a conference is held in which barrier managers meet and discuss different topics of mutual interest. In addition to these annual conference meetings, activities take place varying from simple phone calls, conference calls to field trips. Traineeships and joint projects and setting up information facilities enable barrier managers to easily contact each other and find information on other barriers and organisations.
At www.networkbarriermanagers.com you can find the agenda of the international network.

Challenges

The challenge of this network is to enable storm surge barrier managers of different public administrations to collaborate with each other on whatever subject related to the management of the storm surge barriers. For example on complex common issues like the response to climate change, sea level rise and flood warning systems.

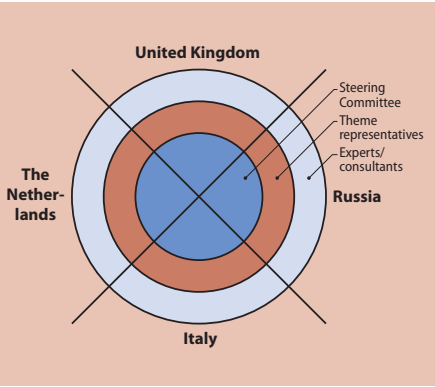
Organisation

The network is a joint initiative of the United Kingdom, the Netherlands, Italy and Russia. The network is organised by means of a steering committee, theme representatives and experts, as shown in the organisation diagram:

The participating organisations and storm surge barriers in the network are:

- Environment Agency, the United Kingdom: Thames Barrierand associated barriers
- Rijkswaterstaat, the Netherlands: Maeslant barrier, Eastern Scheldt barrier and associated barriers
- Groot Salland Water Board, the Netherlands: Ramspol barrier
- Magistrato alle Acque di Venezia, Italy: Venice barrier/Mose project
- Consorzio Venezia Nuova, Italy: Venice barrier/Mose project
- Ministry of Regional Development, Russian Federation: Flood protection barrier of St. Petersburg.

The steering committee takes all strategic decisions (ambition, strategy, aim). Their main agreements are summarised in so-called gentleman agreements. The steering committee consists of representatives of all different organisations involved in the network and the coordinator for the international network. The coordinator of the international network also joins the steering committee and has a facilitating, initiating and intermediating role between the different organisations involved.



Theme representatives are employees of the involved organisations that have knowledge and information on a certain theme. They are involved in the network on a continuous basis and are strategically connected to the network. They play an important role to determine the agenda for the network.

Sometimes, experts and consultants are involved to fill knowledge and information gaps. These experts are not strategically connected but will be invited when needed for specific issues.

Contact

Whenever you have a question related to a specific storm surge barrier you can contact:

***Thames Barrier**: Andrew Batchelor, the Environment Agency*
E-mail: andrew.batchelor@environment-agency.gov.uk

***Maeslant barrier**: Marc Walraven, Rijkswaterstaat Zuid-Holland*
E-mail: marc.walraven@rws.nl

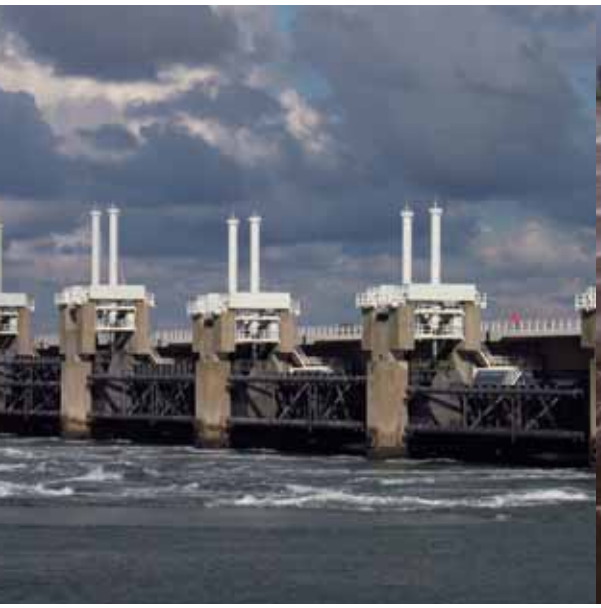
***Eastern Scheldt barrier**: Soer van Herk, Rijkswaterstaat Zeeland*
E-mail: soer.van.herk@rws.nl

***Ramspol barrier**: Evelien van der Kuil, Waterschap Groot Salland*
E-mail: ekuil@wgs.nl

***Venice barrier**: Maria Teresa Brotto, Consorzio Venezia Nuova*
E-mail: mariateresa.brotto@consorziovenezianuova.com

***St. Petersburg barrier**: Rosa Mikhailenko, Ministry of Regional Development*
E-mail: rosaecol@online.ru

If you would like to receive more information about the international network for storm surge barrier managers you can contact one of the participants or Bianca Peters coordinator of the international network.
E-mail: bpt@tg.nl
Internet: www.networkbarriermanagers.com



Acacia Water

Solutions in Groundwater

- Groundwater technology
- Groundwatermanagement
- Strategic consultancy
- Knowledge transfer

Jan van Beaumontstraat 1 • 2805 RN Gouda • Tel: +31 (0)182 68 64 24
Fax: +31 (0)182 68 62 39
info@acaciawater.com • www.acaciawater.com

Harnaschpolder

Waste water - The Hague Area

Harnaschpolder: the first PPS construction in the water management landscape. The waste water purification systems of Harnaschpolder and Houtrust have the largest capacity for waste water processing, with a total capacity of 49.7 million litres of waste water per hour. Together, they purify the waste water of the entire The Hague area. In 2003, the Delfluent consortium and Delfland District water control board signed the DFBO contract for the design, construction, financing, and maintenance of the Harnaschpolder purification, the renovation of the Houtrust purification system in Scheveningen, and 30 years of maintenance and exploitation of the transport pipe system, the transport pumping-stations, and both purification systems.

Beside Design, Build, and Operate, Delfluent is responsible for the entire financing of the project. The total investment of the project amounts to € 1.5 billion, of which € 250 million is meant for the design and construction of the purification plants, and approximately € 400 million of investments on behalf of the pipe system. Heijmans and Strukton have taken the design and the construction of the civil and architectural share on their accounts, and were partially responsible for the organisation and technical aspects in the multidisciplinary consortium regarding the environmental, process, and project management. In addition, Heijmans Infra Techniek has acquired the assignment of the renovation of nearly the entire pipe system.

heijmans

Heijmans Infra Techniek B.V.
P.O.Box 68
5240 AB Rosmalen
Phone: +31 (0)73 543 68 01
Fax: +31 (0)73 543 68 02
E-mail: hit@heijmans.nl
www.heijmans.nl

PROJECT DURATION
Construction commencement:
December, 2003
Exploitation over 30 years

COMPLETION
June, 2008 (5 months before the contractual date of November, 2008)

CONTRACT SUM
Appr. € 250 million

PRINCIPAL
Delfland District water control board

DELFLUENT PARTICIPATION
Veolia Water (40%), Evides Water Company (40%), Rabobank (10%), Strukton (5%), and Heijmans (5%)

ACTIVITIES
Design, soil works, demolition, site preparations, sheet pile walls, pile driving, civil-technical and architectural labour, architectural share in construction team

FIGURES
Construction of 33 tanks on appr. 25 hectares, of which 31 tanks with prefab walls and 2 tanks with sliding casing, fifteen different buildings, and six distribution devices

Drinking Water, Waste Water & Process Water Treatment

Worldwide at your service

Nijhuis Water Technology offers products and services throughout Europe, the Middle East, Asia, Africa, USA & Canada, Central & South America and Australasia via an extensive network of agents, distributors and Nijhuis Water Technology satellite offices.

- Equipment
- Process Design
- Construction
- Service

Filter systems
Flotation & Gravity separation systems
Coagulation & Flocculation systems
Aerobic & Anaerobic treatment systems

FOOD
(PETRO)CHEMICAL
PULP & PAPER
TEXTILE
MUNICIPALITIES
OTHER INDUSTRIES

Sludge treatment systems
Membrane systems
Pilot & Rental plants
Service Programme

For your nearest point of contact please contact our Global Sales Department at the head office in The Netherlands:

T +31 315 655 466
F +31 315 655 494
E info@nijhuis-water.nl

Please also visit our website:
www.nijhuis-water.nl

NIJHUIS WATER TECHNOLOGY

the Caring Eye on Water

Altenburg & Wymenga ecological consultants

Altenburg & Wymenga ecological consultants (A&W) is a Dutch consultancy established in 1988 and working in the field of environment and ecology. Among our 40 staff members we have specialists in various areas of ecology, conservation, protected area management, environmental legislation, water management, statistics and GIS. Our services cover ecological research (flora and fauna), monitoring, ecological impact assessment, integrated visions and practical advice on nature conservation, urban- and rural development. We operate world-wide and our clients are central and local governments, engineering consultants, water boards and NGOs working in the areas of agriculture, environment and nature conservation. Our team works according to scientifically up-to-date standards. Findings are documented in readable and transparent reports and frequently lead to joint publications with our clients. A&W is certified according to the European standard for management quality (NEN-EN-ISO-9001-2000).

Altenburg & Wymenga ECOLOGICAL CONSULTANTS

Our keystones: field knowledge, new technologies and an integrated approach

Ecological advice requires a sound understanding of ecosystems and field experience. Therefore, even in desk studies, we consider actual field knowledge desirable and all our staff is regularly active on the ground. Our ecological knowledge and experience thus acquired is applied in research and practical advice. We use advanced tools for data collection and analysis such as Remote Sensing, GIS, Digital Elevation Modelling, radio tracking, radar tracking and ecological modelling. For multidisciplinary projects we involve external experts from our pool of hydrologists, engineers, urban and rural developers, landscape architects, sociologists, pastoralists and others. Being a specialised company, we also work in complementary partnerships with international NGOs and large consultancy firms.

Global ecological issues

Our work is inspired by global ecological issues and in that context we contribute to Sustainable Development, Biodiversity Conservation and Ecosystem Restoration adopting the Ecosystem approach and Stakeholder participation. Although A&W is firmly rooted in the lowlands of the Netherlands, our working area varies from large African floodplains to the mountains of the Carpathians. The scale of our work ranges:

- from local impact assessment to trans-continental flyways,
- from wildlife crossings of highways to international ecological networks,
- from sedentary small frogs to migratory large bears,
- from aquatic vegetations to succulent plants,
- from desolate areas to suburban sites,
- from strict nature reserves to abandoned fishponds..,

but wherever we work, we proceed with dedication and with a keen eye on developments taking place at the site.

Current projects

A&W is currently involved in management planning of Natura 2000 sites and catchment plans for the European Water Framework Directive.
In West Africa we work in a partnership with the Mali Government, NGOs, Dutch government agencies and a large Dutch consultancy firm in a project on integrated river basin management (IWRM) of the upper Niger River. For this project A&W develops a dynamic water management model to provide users a decision support tool for optimal water allocation with regard to agriculture, livestock, hydropower, domestic use and biodiversity. Also in West Africa, a number of projects investigate the mortality of migratory birds breeding in the Netherlands and wintering in West African wetlands in relation to land use such as rice cultivation, hunting and water management. In Eastern Europe a project has been completed to develop a modelling methodology for the establishment of an ecological network (as part of the Pan European Ecological Network) in Romanian Carpathians. A follow-up project has been started in the Ukrainian Carpathians bordering Poland and Romania. A new project is in development in the Belarus-Ukrainian wetlands to support the livestock and water sectors in this area in order to optimise landuse compatible with optimal habitat for meadow birds.

Contact
Zuiderweg 2
9269 TZ Veenwouden
Mail: P.O. Box 32
9269 ZR Veenwouden
Tel: +31(0)511 47 47 64
E-mail: info@altwym.nl
Internet: www.altwym.nl

Evides
Source of Knowledge

As a leading waterpartner to the industry in the Netherlands, Evides Industriewater is responsible for the production and supply of process water, demineralised and distilled water. In addition, Evides Industriewater possesses and manages various industrial and domestic waste water plants. All process water and waste water plants are designed and built by Evides' own specialists and operated for contract periods up to 30 years according to specification (according to Design Build Finance & Operate principle). Full outsourcing of water services in order to achieve reliability in water supply and treatment. Evides Industriewater, strong in water commodities, excellent in DBFO management of water treatment plants.

Evides Industriewater
Schaardijk 150 • 3063 NH ROTTERDAM
P.O. Box 4472 • 3006 AL ROTTERDAM
tel. +31 (0)10 293 51 72 • e-mail sales@evides.nl

www.evides.nl

evides
industriewater

Evides Industry Water, Source of Knowledge

Evides Industry Water is part of Evides NV, which as a supplier of drinking water in the province of Zeeland and the south-western part of Zuid-Holland is the second largest drinking water company in the Netherlands. Evides Industry water is a leading European supplier of water services to the industry. These services range from production and supply of process water, demineralised water and distilled water all the way to wastewater treatment and effluent re-use.

Process water

Process water is produced in centrally located plants (commodity) as well as customized plants at or near the production site of the client. Evides uses state of the art technologies (filtration, integrated membrane technology, ion exchange) to convert various water qualities into the required process water quality. All plants are built and operated by Evides' highly efficient and knowledgeable specialists on the basis of so-called DBFO (design, build, finance and operate) contracts.

Long term experience

Evides has more than 130 years experience with the purification of drinking water. Technological innovation and reliability in supply are considered of paramount importance. For the supply of water services to the industry Evides has a 20-year track record of reliability and excellence in performance and technological innovation. These advantages, as well as proximity to Europe's leading port and chemical areas (Hamburg, Rotterdam, Vlissingen and Antwerp) have gained Evides contracts with major petrochemical and chemical companies such as Dow Chemical, Shell, BP, Total, ExxonMobil, DuPont, AKZO, DSM and Cargill.

Wastewater and re-use

In addition to process water plants, Evides Industry Water also possesses and manages various industrial and domestic wastewater plants. Evides Industry Water owns and operates two sewage treatment plants near The Hague (49,000 m^3/hr). These are the biggest treatment plants in the Netherlands. Evides also owns and operates wastewater treatment plants at Schiphol International Airport (Amsterdam) and in chemical parks such as Vlissingen (Total refinery) and Delfzijl. Wastewater treatment is an important link in the water chain: by re-using the effluent of a wastewater treatment plant for the production of process water, the use of fresh water can be reduced. Evides designed, engineered, constructed and operates Holland's biggest effluent re-use plant (4 million m^3 per year). Treated effluent of a sewage treatment plant of the city of Terneuzen is treated to demineralised water quality by means of a reversed osmosis plant. The demineralised water is supplied to a nearby Dow Chemical facility. The re-use water treatment plant is part of one of the biggest integrated water treatment facilities in Europe, which are all owned and operated by Evides.

DBFO: a strong means to water partnering

Customised services require customised solutions. Evides Industry Water executes the supply of process water and the treatment of wastewater by means of so-called Design Build Finance and Operate contracts (DBFO). This means that Evides Industry Water does not only provide the knowledge, but also constructs the water treatment plant to customer specifications and subsequently operates the plant to contractual obligations for a length of years. The resulting water-partnership of Evides with its customers allows them to focus on their core business and in the process to benefit from the operational skills of Evides and reduction of the need for own investments.

Consortium

Evides Industry water is broadening its horizons. The Dutch possess great knowledge of water and will put this knowledge at the disposal of others. That is why Evides is making a contribution to the export of Dutch water technology. Evides Industry Water is for instance part of the consortium NethWater, that has the objective to put Dutch expertise concerning water on the international market. This consortium will offer integrated technological solutions to industrial users of water abroad. These integrated solutions will make the best possible use of Dutch technology.

Contact
Evides Industriewater
P.O. Box 4472
3006 AL Rotterdam
Tel: +31 (0)10 393 51 72
E-mail: sales@ evides.nl
Internet: www.evides.nl

Grontmij develops integrated solutions for complex water problems. We have extensive expertise in the fields of drinking water, sewer systems and wastewater. We actively assist water authorities in developing integrated solutions for water resource management.

We also have extended experience developing solutions to the threat of flooding. Thanks to Grontmij's specialist knowledge and local presence we are always prepared to manage whatever water challenge comes our way.

www.grontmij.com

Grontmij

planning connecting
respecting
the future

Grontmij: integrated and sustainable solutions

There is a continuous social demand for environmental-friendly solutions. Not just in the interest of today's generation, but especially for future generations. This is why we are working on sustainable solutions and improvements for the environmental infrastructure. The emphasis in our services is on safety, recovery and structuring of water and eco-systems, water policy and flood prevention. Grontmij offers a very broad expertise in the field of water.

Delta technology

The definition of the term Delta technology is: integrated and sustainable approach of the safety and landscape development related cases within the challenging conditions of the river delta.

The Delta technology is Grontmij's core business for more than 90 years. Grontmij shows her deep consciousness of the safety tasks combined with the feeling for space, innovation and sustainable development of the areas situated along and in the water in a great amount of recent projects.
Due to the ongoing climate change the increasing sea water level is a fact. The protecting dunes and dikes along the coast must withstand heavier hydraulic conditions due to this changes. The river beddings and areas along the river are even more sensitive to the changes in our climate. Not only the melting glaciers but also faster and faster run off due to increasing paved area's ask for innovation and creativity in service of the general safety. The available pool of Grontmij specialists is covering all necessary fields and has a highly competent flexible approach. This makes Grontmij efficient in solving complex tasks in the delta area. The synergy of Grontmij's knowledge of the policy, technique and familiarity with the case area leads to inspirational projects with great added value to all parties involved.

Water technology

Water is the vital source of life and nowadays we still have the challenge to provide the entire world population with access to safe drinking water and sanitation services.

Within the area of water, Grontmij provides consultancy services about all significant areas of drinking water, sewer systems and wastewater treatment. We are involved in each phase of every project and together with our clients and important stakeholders we have the objective to achieve the best possible solutions based on technical, financial and environmental considerations. We create sustainable solutions taking into account difficult geographical, political and socio-economic factors.

Effective water treatment is a necessary condition to guarantee a basic safe and reliable water supply to domestic and industrial customers. Based on our extensive international experience, we realise that a broad range of skills is required in order to identify and solve water supply network problems, like the common problem of leakage.
In the field of sewer systems, Grontmij is a leading consultant in the European market. Our wealth of experience in design, operations and maintenance and being a trendsetter in data management, makes us a strong partner in managing your valuable asset. Strict demands for effluent discharges requires sophisticated solutions for domestic and industrial wastewater treatment. Typically this involves treatment processes for biological and chemical nutrient removal from domestic wastewaters, or specialized processes for the removal of industrial impurities. Besides a rich knowledge in conventional technologies we have the distinctive feature of developing and implementing innovative technologies that provide our clients with additional value.

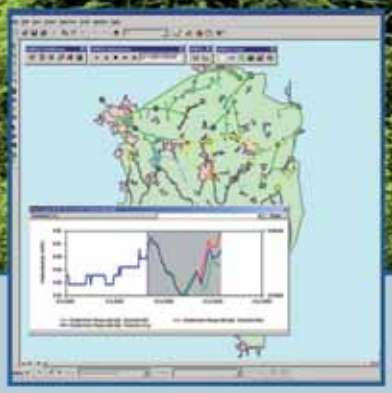
Innovations

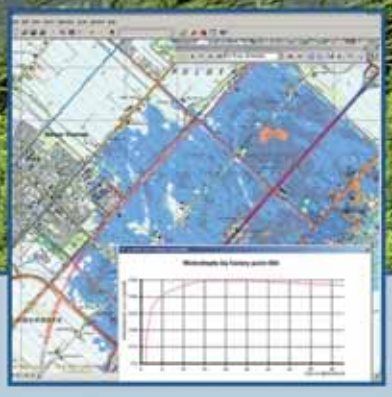
Main driving force for innovation in wastewater treatment is usually a higher water quality and/or the reduction of costs, energy consumption and sludge production. As Grontmij we have a significant track record in the implementation and development of innovative technologies. Our dedicated consultants are in this way continuously improving our customer-related services.
A good example of a successful implementation is the innovative approach at the WWTP Ootmarsum where the treated wastewater is discharged into a water system with considerable ecological vulnerability. Grontmij carried out the design study resulting in the choice for a so-called hybrid system, combining a conventional system followed by a sand filter with a membrane bioreactor (MBR). With a hybrid MBR, the costs can be reduced compared to those of a complete MBR plant without sacrificing effluent quality. A thorough risk assessment resulted in a successful implementation of this new concept.

Grontmij offers several technologies based on microbiological nitrogen removal processes and proved to be a reliable partner for treating nitrogen-rich liquids. This already started in the 1990's, when Grontmij was responsible for the development of the SHARON-process for the treatment of return liquid at a municipal wastewater treatment plant. Since then, ten full-scale SHARON-plants have been designed and constructed by Grontmij, including New York, Geneva and Manchester. Moreover, Grontmij has recently acquired two additional nitrogen removal processes, DEMON and ScanDeNi, thus successfully maintaining its position as reliable partner for innovative and stable nitrogen removal.

Contact
Grontmij
P.O. Box 203
3730 AE De Bilt
Tel: +31 (0)30 220 79 11
Fax: +31 (0)30 695 63 66
E-mail: info@grontmij.nl
Internet: www.grontmij.com

effective solutions for *hydro*informatics





Company profile

*Hydro*Logic provides effective solutions to water-related problems in rural and urban water systems. We offer research and development in watermanagement and ICT, tools for the analysis, design, engineering and operation of water systems. We provide services for transparent communication with stakeholders.

*Hydro*Logic has a leading position in development of decision-support systems (DSS) for operational water management and strategic water research in the Netherlands.

*Hydro*Logic is active in three fields:

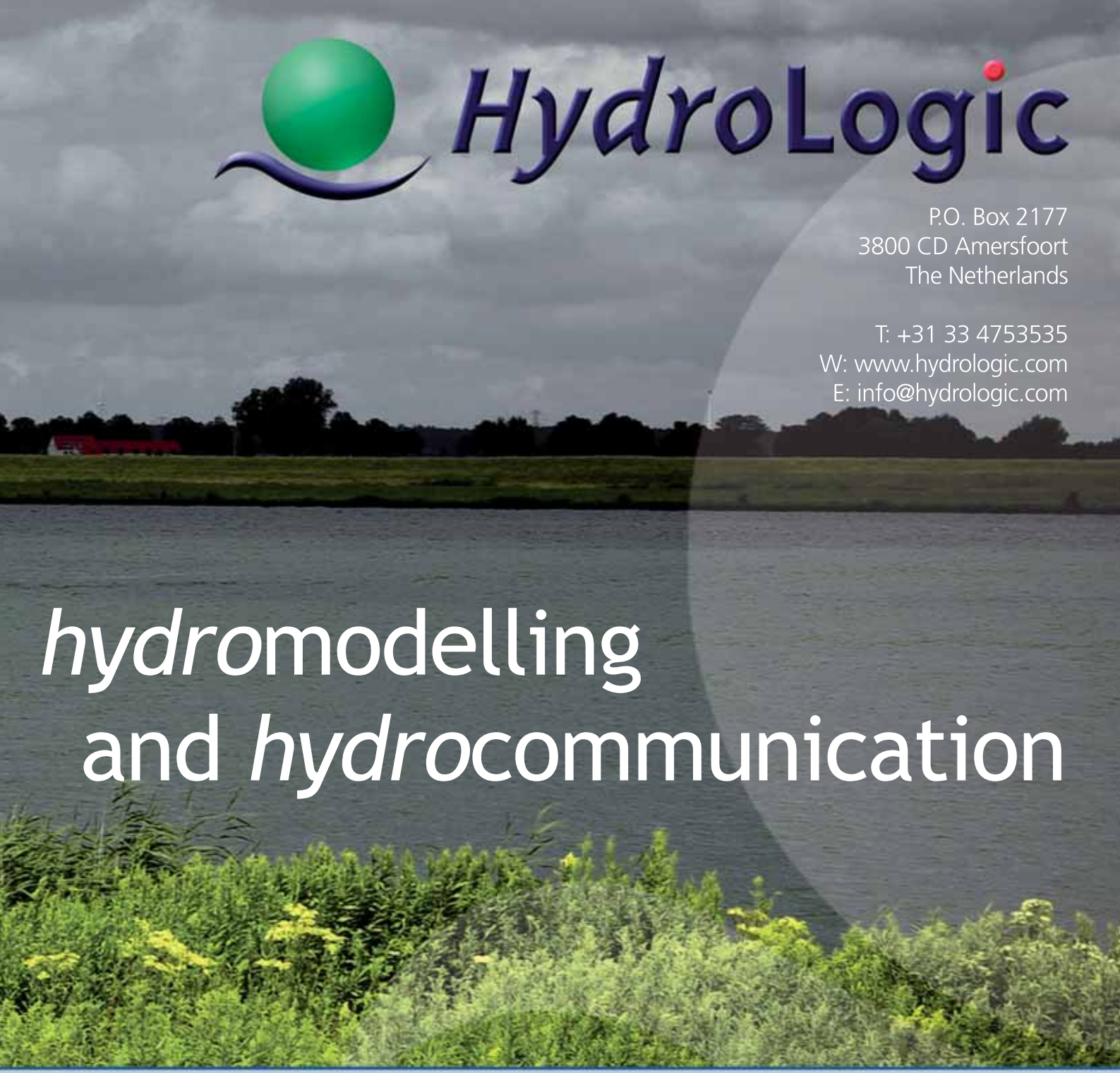
1. *Hydro*modelling - building models from spatial and temporal data for the analysis of water-system operation, natural hazards and climate-change effects.
2. *Hydro*communication - development and application of knowledge-management techniques to solve stakeholders' water problems and to make the results of water research easily accessible.
3. *Hydro*informatics - information and communication technology in support of watermanagement.

Our clients are water authorities: water boards, provinces, municipalities, central governments and the European Commission. We cooperate frequently with European universities and research institutes. Currently we are leading the FP7 Lenvis project on localised environmental information services (www.lenvis.eu).

HydroLogic

P.O. Box 2177
3800 CD Amersfoort
The Netherlands

T: +31 33 4753535
W: www.hydrologic.com
E: info@hydrologic.com



*hydro*modelling and *hydro*communication

*Hydro*logic products

- HydroNET: a weather and water decision-support network that operates with radar data, satellite data and meteorologic forecasting data (e.g. world-wide EPS) and which connects to monitoring networks.
- HydroAlert: real-time alerting and information system for water-induced hazards, using mobile technologies (smart phones, PDA, GPRS, GPS, web services).
- HydroSense: remote-sensing information processing, computing rainfall, actual evapotranspiration and crop production from satellite images.
- HydroStudio: GIS-based modelling environment to build hydrologic, ecologic and hydrodynamic models for e.g. Sobek, Mike and SWAT modelling systems.
- HydroDSS: decision support system for operational water management and real-time forecasting of floods and droughts.
- HydroCIS: calamity information system for 1D/2D inundation simulation, dike collapse analysis, hazard analysis, damage computation and flooding assessment.
- HydroComm: GIS and Google Maps-based communication tools to support knowledge sharing, knowledge dissemination and stakeholder negotiation.
- HydroWeb: interactive websites for international cooperation of stakeholders, water-community support, and communicating with target groups.

Clean water - with ProMinent

Experts in Chem-Feed and Water Treatment

ProMinent®

Chemical dosing, measurement & controls, storage and disinfection technologies

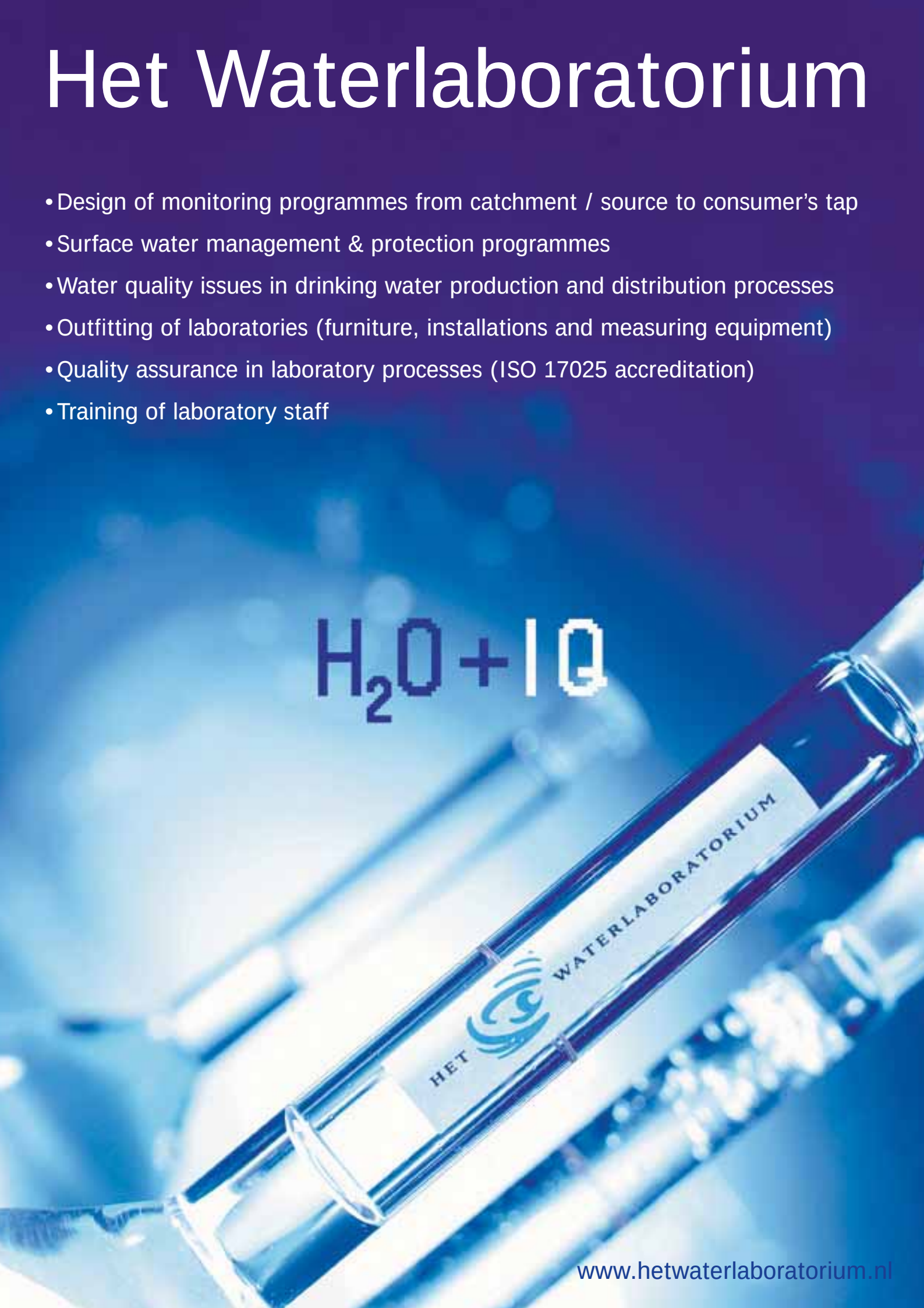
- Potable water treatment
- Swimmingpool water treatment
- Cooling water treatment
- Process water treatment

www.ProMinent.com

ProMinent Verder B.V. • Utrechtseweg 4A • NL-3451 GG Vleuten • T: +31 30 677 92 80 • F: +31 30 677 92 88 • E: info@prominent.nl • www.prominent.nl
ProMinent Dosiertechnik GmbH • Im Schuhmachergewann 5-11 • D-69123 Heidelberg • T: +49 6221 842-0 • F: +49 6221 842-617 • www.prominent.com

Het Waterlaboratorium

- Design of monitoring programmes from catchment / source to consumer's tap
- Surface water management & protection programmes
- Water quality issues in drinking water production and distribution processes
- Outfitting of laboratories (furniture, installations and measuring equipment)
- Quality assurance in laboratory processes (ISO 17025 accreditation)
- Training of laboratory staff



www.hetwaterlaboratorium.nl

The KWT Group: leading manufacturer of flow control devices

Transparent and clear. That's the KWT Group in a nutshell. From the very first contact up to and including delivery, you can count on our original and innovative approach. Our enthusiastic, driven and experienced team of civil engineers are able to optimise water management for any construction or renovation project, always in close cooperation with the client, and as a team. KWT Group is your partner in water management projects, when flow control devices for sewage treatment (pumping stations, STP, WWTP) or surface water are required.

Fast and targeted operations

KWT Group is a highly specialized manufacturer of flow control devices such as penstocks, tilting weirs, overflow weirs and valves. At KWT Group you will find all the disciplines, necessary for optimum results, under one roof. We take your project, specification or design sketch and develop it into a series of professional products that will positively contribute to your productivity. With its vast field experience, combined with an experienced global network of agents and distributors, KWT is well equipped to provide a fast and matching solution for your specific needs in managing any quantity of both brackish and natural water.

Experience generates quality

KWT Group is involved in numerous international projects. In Hong Kong, practically no DSD drainage project has been executed without checking the availability of KWT's high quality HDPE/SS316 penstocks as a solution. In Mexico, KWT supplied a range of high-pressure penstocks specified against 24 mwc for a foreign oil companies' caisson project. In Sharjah, UAE, KWT has been the selected source of penstocks for its STP expansion nr. 7. Dubai's high profile Motor and Sports City STP projects have been supplied with KWT's uniquely designed medium pressure stainless steel penstocks. At home, the Dutch waterboards could not do without KWT's surface water management

solutions. The Blue City project, creating an ecologically challenging eco-tourism area where nature and population go hand in hand, has been a recent success with international exposure. Flood control, another Dutch expertise, has been a cornerstone of our business since 20 years, resulting in major projects like Grey Lakes in Somerset and the tilting weirs at Land van Cuijk, an area full of history at the Meuse river bank near the German-Dutch border.

The process

Plans are transformed into rough sketches. Sketches are transformed by our engineers into detailed drawings reflecting your requirements with a precision of 1/100 mm! These details are then directly entered into application software which drive our CNC production machines. Just a small example of the short, practical link between engineering and technology: one of countless examples of combining innovative ideas and progressive production methods. This is KWT Group: the number one partner generating optimum returns for small-, mid-sized and large clients and valued trade partners.

Safe and responsible

The product is important, but also the way it is produced. The KWT Group is proud of the people who conduct work in-house and on-site. They are well aware of the social importance their work has for other people and the environment at large and do their utmost best to ensure smooth, responsible and safe operations. The same goes for both large, comprehensive projects and smaller, more specific projects. With an eye for both people and their talents, the KWT Group is committed to provide a quality working environment for all those involved in our projects. We are an ISO and VCA certified company.

Contact
KWT Group
Wentelploeg 42
8256 S N Biddinghuizen
Tel: +31 (0)321 33 55 66
Fax: +31 (0)321 33 55 76
E-mail: info@kwtgroup.nl
Internet: www.kwtgroup.nl

MWH B.V. knows about water

As a Dutch based company, MWH B.V. knows about water. The Netherlands is long known as a trailblazer when it comes to water management. Other countries look at our low lands country for solutions and innovations which involve water. The Dutch MWH B.V. offers support in solving questions where water plays a role. Tackling integrated water questions is perhaps the most important spatial task for the 21st century. Today's society makes new demands to water. Due to the changes brought on by the climate change, the Netherlands finds itself in a position to take serious measures regarding the water management. To develope those measures we must realise the needs we have for water as a source for nature, recreation, consumption and as energy supply.

MWH

BUILDING A BETTER WORLD

MWH B.V. is able to carry out a large range of projects for you within the comprehensive water sector. This ranges from water quality and ecology, to water and spatial planning, from water bottom and polluted sediments activities, to urban water management, sewerage and safety and climate.

We also do our best to anticipate on social changes brought forward by innovative projects. Providing courses and workshops we transfer our knowledge and skills. We are equipped to handle both implementation and policy projects.

About MWH B.V.

MWH B.V., founded in 1983, is a consulting firm specialised in water and environment related issues, based in the Netherlands. Our client- and solution oriented approach allowed us to grow over time and we are now one of the leading consulting firms in the Netherlands, with over 250 staff members. We share our expertise with our clients to create the optimum environment for exploring new opportunities and possibilities.
Competence, flexibility and applicability of services are MWH B.V.'s key aims. Our company is a key player on the Netherlands' water and environment scene, with a network of contacts and relationships extending from the national to provincial and local levels. MWH B.V. is the Dutch subsidiary of MWH Global, a leading global provider of consulting, engineering, construction and management services in water, natural resources, and infrastructure sectors.

MWH B.V.'s themes now and in the future

We engage ourselves with topics which affect our society now and in the future:

- The sustainable (re)development of the urban and rural area
- Area-specific and integrated plan shaping and implementation
- The care for the quality of the public space
- Digital opening up government information
- Optimising the work processes of government and businesses in the field of environment, space and building.

Environmental policy and environmental management is the core business for over a quarter of our consultants, focusing on environmental policy and planning for municipal, provincial and national authorities. Our water specialists assist municipalities, water boards and private companies in technical, logistical, institutional, community and economic issues involved in the medium and long-term planning of water management activities.
We know what's at stake at all levels within municipalities and present our proposals and solutions in a practical and implemental way, with close attention paid to sustainability. We also participate in the national bodies, which focus on the future of the Netherlands and initiate innovative projects.

MWH B.V.'s areas of water expertise

- Dredging/management of sediments
- Water Quality and Ecology
- Sewerage and urban drainage
- Spatial aspects of water
- Safety and prevention of flooding
- EU Water Framework Directive
- Strategic consulting and stakeholder analysis.

To assure short lines with our customers all over the Netherlands, MWH B.V. has three offices located strategically. We have an office in the north: Amsterdam, the southeast: Arnhem and the west: Delft, which is our head office. Our company is the only Dutch based water and environment consultancy with its head office in Delft, internationally recognised for its water institutions and leadership in global water management. MWH B.V. plays an important role in the city of Delft and many of its staff members have been educated in these institutions or participate in their activities.

Contact
MWH B.V.
P.O. box 270
2600 AG Delft
Tel: +31 (0) 15 751 23 00
Fax: +31 (0) 15 262 53 65
Internet: www.mwhglobal.nl



Watermanagement with Hirschmann.

Hirschmann offers the solution of choice when you are looking for across-the-board flexibility and variety. Our broad portfolio of tailored Industrial Ethernet products are designed to meet your individual needs and take the pressure of your budget. Thanks to our made-to-order manufacturing and fast reaction times Hirschmann will continue to offer the highest flexibilty, also in water management.

www.hirschmann.nl
e-mail: hirschmann@hirschmann.nl
Tel. + 31 (0)294 - 462555

SIMPLY A GOOD CONNECTION

HIRSCHMANN
A Belden Company

Water pollution,
the worldwide backlog in sanitation systems and
increasing pressure on water resources …

Sustainable Environmental Protection calls for Creative Solutions

LeAF (Lettinga Associates Foundation) develops and implements innovative environmental protection technologies that

- provide a safe and healthy living environment,
- protect fresh water sources, *and*
- result in (re)use of natural resources and water.

The working fields of LeAF cover:

- (de)centralized sanitation
- (anaerobic) treatment of industrial waste(water)
- water reuse and energy production.

LeAF is an independent knowledge centre and a non-profit foundation for:

- knowledge transfer and awareness activities
- desk studies and feasibility studies
- applied research
- consultancies

As a spin-off of Wageningen University, The Netherlands, LeAF bridges the gap between research and practical application, making us an interesting partner worldwide for a broad range of contractors.

Check www.leaf-water.org or contact us at: info@leaf-water.org

Naïade produces drinking water world-wide

Nedap N.V. is a leading company in the field of electronics in the Netherlands. Based in Groenlo, engineers and technicians constantly develop and produce, next to many other applications, high tech power supplies for water treatment plants.
During their world-wide trips, they encountered many cities, in which a substantial part of the population was unable to obtain reliable drinking water for prices which were in proportion with their daily income. It motivated them to develop and design a state-of-the-art water disinfection unit, which could operate 24 hours a day and would be independent from the electrical grid.
At the beginning of 2004, their efforts gave birth to the Naïade.

The Naïade, named after an old-Germanic water fairy, is a compact water disinfection unit, powered by a solar panel. The unit can produce up to 3,000 litres of water per day, hence fulfilling the needs of up to 400 people.
After taking the water from any sweet water source, the user simply pours the water into the container. The water passes a sieve, which takes out coarse materials, like leaves, small pieces of wood etc., passes two filter bags, the last one being just 10 micron, to remove worm eggs, colloidal parts and such and then passes a tube, which holds an UV lamp. Since UV inactivates bacteria, protozoa and viruses, the unit can produce potable water, which fulfils the high WHO standards for drinking water. A reduction of log 3 is standard, but even reductions of log 4 have regularly been measured in the field. This means a kill-rate of 99,99 %!
It all takes only seconds, since it is a full flow-through system. There is no need for chemicals and the water can be drunk immediately after it comes out of the tap.

Due to the fact that the unit is powered by an integrated solar panel, is completely pre-assembled and easy to install at the spot, Nedap N.V. has enabled even the most remote areas to disinfect water from any source, without making the users depend on fossil fuel. For use during the dark hours, the unit has been fitted with an integrated (car) battery with an appropriate charging circuit. High tech controls in the system avoid misuse or the delivery of off-standard drinking water, thus avoiding the production of untreated, hence sickening water.

This kind of technology helps the rural population to improve their sanitation standards with high tech for prices less than two euro per person per year. Being a community device. The daily chats between users will remain, since it is located next to the spot where they gather to pick up their daily water amount. Maintenance is reduced to the cleaning of the re-usable filterbags and an every now-and-then cleaning of the glass tube, which holds the UV lamp. Experience in many countries in Africa, South America and Asia has shown that this even can be done by non-technicians.

Contact
Nedap Naïade team
Tel: +31 (0)544 471 899
E-mail: info@naiade.com
Internet: www.nedapnaiade.com

Sustainability is in our DNA

Sustainable enterprise. It seems as if this is a trend that has only come about in recent years. But corporate social responsibility is in reality not so new at Rabobank: in fact, Rabobank has focused on it for more than a century. It is part of our DNA and sustainable enterprise nowadays is embedded into the core of our activities. Rabobank began more than a hundred years ago as a straightforward credit cooperative for the local agricultural society. Our organisation's founding principles were consequently based on common economic and social interests.

Today, in 2008, Rabobank still acknowledges and accepts its responsibility for society. It fulfils this duty by investing in a sustainable society, initiating social and cultural projects, focusing on the people within the organisation and respecting the planet.
Rabobank has reached the world-wide top in the field of sustainable enterprise. And it is committed to maintaining this prominent position. This is why, as market leader in the SME sector, Rabobank stimulates and supports companies that also consciously opt for sustainability and innovation.

Climate-neutral business operations

There is plenty of evidence that Rabobank has made sustainability a priority. Its commitment is reflected in the fact that it maintains an ongoing dialogue with social and economic partners and has decided upon climate-neutral business operations by implementing its own innovations.
It also finances initiatives in the field of sustainable energy and sustainable water usage and combats poverty in third world countries by extending (micro) credits.
But the commitment doesn't stop there. Rabobank is also ensuring that corporate social responsibility is becoming an increasingly integral part of the very core of its banking activities. It has recently begun including sustainability aspects in the decision-making process regarding credit applications. In order to identify risks and, above all, opportunities.

Investing in sustainable technology

Sustainable enterprise offers a world of opportunities. Companies are expected to become increasingly willing to invest in essential sustainable innovations. The sustainable market is forecast to achieve strong growth. Rabobank is convinced that these developments provide yet another reason to finance sustainable investments. The spectrum of possible investments encompasses everything from alternative energy sources, new drinking and wastewater technologies, air purification, biotechnology, water recycling, waste recycling and heat and cold storage to sustainable cultivation of agricultural crops, sustainable construction and sustainable water management.

Sustainable enterprise is a driving force for innovation

Sustainable enterprise also stimulates companies' innovation and creativity.
At Rabobank, our sustainability mindset has led to innovative products and services. Rabobank International's Clean Tech Desk, private equity funds (Rabo Participations, Rabo Innovation Capital Fund and Robeco Clean Tech Private Equity Fund), Schretlen's informal 'Money Meets Ideas' investing service and De Lage Landen's Environmental Technology Lease are all examples of innovation in action. The Rabo Capital Strengthening Loan that focuses on increasing access to the credit market for SME and Green Financing are likewise prime examples of an innovative sustainable solutions.

Opportunities for your company

Sustainable enterprise also offers opportunities for your company. And Rabobank will be pleased to help you to tap into these possibilities. With informational meetings, concrete advice and products. Business success and caring for the environment can genuinely go hand in hand. Rabobank has been proving that fact for more than a century.

Contact
Peter Vos
Senior Water Manager
Rabobank Nederland
Gildenkwartier 199
3511 DH Utrecht
Tel: +31 (0) 30 213 09 18
Mobile: +31 (0)6 57 56 90 37
E-mail: Vos.P@rn.rabobank.nl







Wateropleidingen

Wateropleidingen, for and by professionals

Wateropleidingen (SWO) is the Dutch training institute for water management. SWO promotes and organises training programmes and courses for employees in the water sector. The programmes and courses are well known for its quality, technical knowledge and actual water know how, combined with practical experiences.

The SWO concept:

- **Training for professionals by professionals;**

The first aspect of the unique concept of SWO is that the participants are trained by professionals from the water sector itself. About 250 teachers are available on a freelance basis for all types of courses, be it technical, financial, managerial, or communications skills. The teachers themselves work on different levels and in different disciplines: for drinking water companies, water boards, engineering bureaus, industries or the government.

- **Inspiring and practical courses, dedicated and tailor-made;**

SWO developes courses in cooperation with the water sector. Teachers working in the sector themselves, know best which knowledge and know how is required. Examples from their own practice appear to be very inspiring. Our courses are of high quality and are frequently updated. SWO can offer you a program tailored to your company and to your employees.

- **Not-for-profit, not-for-loss**

Being a training institute owned by the water sector, the primary goal of SWO has always been to teach practical and up-to-date knowledge on all waterrelated subjects. Working on a not-for-profit, not-for-loss basis guarantees a sustainable organisation. All costs have to be paid by the participants or their company, but with a limited staff we keep costs moderate. Freelance trainers and authors receive a fee. Our courses offer value for money, both in the Netherlands and abroad.

Products and services offered

- Practical training programmes and courses, trainers and course books on all kind of water subjects;
- Technical training courses, tailor made, with an integrated train-the-trainer programme;
- Business development to set up a training centre according the SWO-concept.

Would you like to receive more information, please contact us!

Wateropleidingen/SWO
P.O. Box 1410
NL-3430 BK Nieuwegein
The Netherlands
t: +31 (0)30 - 60 69 400
f: +31 (0)30 - 60 69 401
e: info@wateropleidingen.nl
www.wateropleidingen.nl

Ever wondered how water affects your future business?

Water is vital for production in many industries; ranging from a transport medium to a convenient way to discharge production waste. With global warming, water is going to be an ever more precious resource. As glaciers disappear and summer temperatures increase, fresh water becomes more scarce and thus more and more expensive. With less water flowing in rivers during summer, less water is available for agriculture and drinking water. Moreover relatively small amounts of pollution may render this water unsuited for the production of drinking water. Hence governments may resolve to restrict water intake by industry and impose ever stricter effluent demands.

REDOX WATER TECHNOLOGY

Be one step ahead of water issues with REDOX

The original equipment manufacturer who solves tomorrow's problems today. In addition to conventional systems, REDOX already offers some unconventional solutions.

More treatment in less space

- Sedimentation and DAF systems that are up to 75% smaller.
- Biological treatment systems with up to 80% smaller foot prints.

Lower running costs

- Chemical processes that recover proteins with very little chemicals.
- Anaerobic systems that convert organic pollution into biogas.
- Aeration systems with the best ratio between investment and electricity consumption.
- Sludge processing systems that generate biofuel.

Make water last longer

REDOX tertiary treatment systems produces water out of wastewater at affordable rates.

Know-how and service

REDOX has an active R&D department to develop solutions for tomorrow's problems. Our well trained sales staff helps to identify your water problems, explains how to solve them and allows you to choose the solution that fits your needs best.
REDOX strives to guarantee service ensuring your continued peace of mind about your water.

WATER FOR THE FUTURE

Contact
REDOX Water Technology B.V.
P.O. Box 218
7100 AE Winterswijk
Tel: +31 (0)543 53 10 30
Fax: +31 (0)543 51 90 89
E-mail: info@redox.nl
Internet: www.redox.nl

Paques, leading in natural solutions

Paques is a world-class player in the field of high-quality purification systems for water, gas and air. The company sets trends in developing natural and sustainable solutions with leading knowledge of biotechnology and technological flair. The result is a product range and service that allows its customers to combine economic progress with environmental responsibility, an increasingly important position in these days of social accountability.

- Innovative and sustainable in biotechnology
- Leading in waste water and gas treatment
- Added value through renewable energy
- Proven technology based on natural solutions
- Worldwide network
- Dedicated professionals
- Outstanding service and support
- High return on investment
- Success through long-term partnerships

With Paques' products you can bridge the gap between environmental responsibility and economic progress!

Paques, leading in natural solutions

Paques is a world-class player in the field of high-quality purification systems for water, gas and air. The company sets trends in developing natural and sustainable solutions with leading knowledge of biotechnology and technological flair. The result is a product range and service that allows its customers to combine economic progress with environmental responsibility, an increasingly important position in these days of social accountability.

Products and services

Paques develops and produces cost-effective water- and gas purification systems using innovative biotechnology. With bacteria working in most of its technologies, organic pollutants in industrial wastewater are converted into biogas in its anaerobic BIOPAQ® purification plants. Using a patented THIOPAQ® scrubber, this biogas can then be used as renewable energy. A recent discovery of a new form of bacteria allowed the company to shortcut the nitrogen cycle, creating a nitrogen removal process known as ANAMMOX®. This process uses no chemicals and saves up to 90% energy while CO_2 emissions decrease by no less than 88%. Other technologies include an aerobic wastewater treatment using the CIRCOX® reactor and separation technologies such as ASTRASAND® and ASTRASEPARATOR®.

Markets

Paques is world leader in the field of anaerobic wastewater treatment. The company's technologies are applied around the world in the most diverse sectors, varying from the water, mining and metal industry, to the chemical and pharmaceutical arena. Paques is especially strong in the brewing, food and paper sectors. Growing environmental awareness is causing industries to seek out sustainable solutions. To meet these requirements, Paques is involved in ongoing R&D to develop the latest in biological technologies, both through in-house research and close cooperation with universities and technological institutes.

Innovation

Paques' innovation lies in its ability to convert research and lab-scale solutions rapidly into full-scale applications. When new, useful bacteria or processes are found, these are subsequently developed further in close cooperation with researchers and engineers. The goal is to achieve both sustainability and added value. This includes recycling water for further use, generating energy and reclaiming valuable substances from wastewater. Various awards in the field of environment and sustainability have acknowledged this approach for both Paques and its customers.

Environmental impact of Paques' technologies

Even though the Paques' technologies are mainly built on economic grounds, significant environmental advantages are reached with the Paques reference base, such as:

- *Pollution reduction:* Daily 9 million kg of organic pollution treated with Anaerobic BIOPAQ® installations of Paques.
- *CO_2-emission reduction*: A staggering 3.2 Mt CO_2 reduction, equalling 25% of the reduction commitment of the Netherlands according to the Kyoto treaty.
- *Green energy production:* Sufficient energy production to meet the natural gas requirements of a city with 1.4 million inhabitants, two times a city like Amsterdam.
- *SO_2-emission reduction:* Yearly, 36.5 million kg SO_2 is prevented from being emitted into air, comparing to 75% of the emission limit for the Netherlands conform the Kyoto protocol.

Green energy: environmental and economical profit!

The future scarcity of fossil fuels and the expected influence of the greenhouse effect are enhancing the importance of renewable or green energy. Alongside solar, water and wind-driven technologies, biogas production from (renewable) organic resources is growing rapidly as a highly efficient, profitable and sustainable source of energy.

Using renewable energy from biogas eliminates greenhouse gas production and reduces the use of non-renewable fossil fuel. This is referred to as a so-called 'CO_2 neutral' alternative. The use of biogas as an alternative source of energy contributes significantly to attaining the Kyoto protocol and other sustainability targets.
Hundreds of our anaerobic purification installations produce a total amount of biogas sufficient to meet the natural gas requirements of a city with 1.4 million inhabitants (about twice the size of Amsterdam). Converting this biogas into electricity generates approximately 3,000,000 MWh of electrical power per year, representing a value of 2 to 3 hundred million euro per year. In less than a single year, efficient use of biogas can result in a full return on investment!
Apart from reducing CO_2 emissions, Paques' biological desulphurization installations reduce SO_2 emissions by some 36.5 million kg each year. As a reference: the Netherlands' emission limit for SO_2 is 50 million kg SO_2 per year in 2010.
Every day, Paques proves that applying biological technologies contributes significantly to attaining European and global sustainability targets. Combined with the positive return on investment period, the future looks promising!

Biological technologies for green energy

- *BIOPAQ® IC: anaerobic wastewater treatment*
- *THIOPAQ® scrubber: upgrading gas streams cost-effective and comprehensive*
- *BIODESOX®: biological flue gas desulphurization*

Future

The future looks extremely promising. Water and the environment are increasingly high profile issues and of the greatest importance for a sustainable future for our planet. There is no doubt that industries, governments and society will demand new biological solutions. Paques will continue to develop more and new technologies that meet these requirements to safeguard where we live. Standardized and tailored plants offer both sustainable and cost effective solutions. The environmental market offers enormous potential and can only grow further in the future. Paques is ready for the challenge!

Contact
Paques bv
P.O. Box 52
8560 AB Balk
Tel: +31 (0)514 60 85 00
Fax: +31 (0)514 60 33 42
E-mail: info@paques.nl
Internet: www.paques.nl

Our ultraviolet lamps have the power to purify water.

Water is one of the world's most valuable resources. So to help provide clean water to areas with shortages, Philips developed a lamp that purifies water safely by inactivating bacteria and viruses without using chemicals.
www.philips.com/uvpurification

PHILIPS
sense and simplicity

Simplicity is a lamp with the power to purify water

Providing affordable community and household water purification solutions addresses the needs of the more than 1 billion people - 20% of the planet's population - who have no access to safe drinking water. Philips works on several technological solutions for water purification. One of our solutions is the Philips TUV lamp, which emits in a part of the ultraviolet (UV) spectrum that is highly effective in inactivating bacteria.

PHILIPS

In many parts of the world, supplying water for drinking and other purposes to growing populations will continue to be one of the main problems. Numerous diseases are carried by impure water, and water-borne organisms and pathogens are one of the largest health threats to large groups of people, especially children and others with reduced resistance. Untreated drinking water can cause a range of diseases including typhoid, cholera, gastroenteritis and hepatitis A (jaundice). There is an obvious need for an economic and widely applicable method of water purification that eliminates these serious health hazards reliably. Clean water can be provided by purification systems incorporating UV (ultraviolet) treatment. This is a proven method for effectively eliminating bacteria and viruses, as well as parasitic infections and other potentially harmful constituents such as mould spores, algae and other micro-organisms, all of which can be present in drinking water supplies.

How UV Purification works

Simulating the positive aspects of natural sunlight, ultraviolet water purification works by irradiating water by a powerful UV (ultraviolet) lamp. In addition to visible light, natural sunlight emits UV wavelengths: UVA, UVB and UVC. Most of the UVB and UVC radiation is absorbed by the atmosphere, so 99 per cent of the UV radiation reaching the surface of the earth is UVA. The UV radiation which is most effective for water sterilization is in the UVC range. These wavelengths can be generated by special discharge lamps. The UV lamps are built into filter units by manufacturers specialized in water treatment systems. A complete filter unit typically has a multistage construction including a UV lamp and a conventional mechanical filter. Philips makes UV water purification possible with systems including lamps, ballasts and sleeves that are designed to fit into filter units.

For municipal drinking water

The growing pollution and the costs of maintaining distribution networks make fast and cost-effective water treatment inevitable. Around the world governments invest heavily to provide their citizens safe drinking water. The driving force is to inactivate bacteria and viruses, but avoid the use of chlorine. The use of advanced oxidation by UV is emerging and considered as an alternative for drinking water treatment due to its relatively low costs compared to other methods, low levels of byproducts and efficiency.

For residential drinking water

The purification systems incorporating UV are available for installation either at the point of water entry into the home or at the point of use such as the kitchen sink. Built-into the units UV lamps reliably provide the assurance of safe drinking water. UV lamps should be combined with a conventional mechanical or active carbon filter stage to remove suspended particulates and organic materials. The result is water that is not only biologically pure but also sparklingly clear.

Wastewater

Wastewater streams must be disinfected before they are discharged into the environment. This is essential both to protect the often vulnerable natural ecosystems in the discharge areas, as well as to minimize the health risk to populations living in and around those areas. Treatment by ultraviolet radiation is proving to be an increasingly popular way to treat wastewater streams because it is highly cost-effective and does not add any chemicals like chlorine or residues to the water, and as a result to the environment. Using its extensive knowledge of lighting technology, Philips already offers a comprehensive portfolio of UV products for a wide range of applications like wastewater, drinking water, cleaning of ponds and swimming pools. Near water applications Philips UV can also be used for air purification, like for example in hospitals. Products that are in line with the strategy that innovative products enhance people's lives, giving them easy access to quality of life benefits.

Contact
Philips Lighting B.V.
UV Health & Wellness
Zwaanhoefstraat 2
4702 LC Roosendaal
Tel: +31 (0)165 577 011
Fax: +31 (0)165 577 907
Internet: www.philips.com/uvpurification

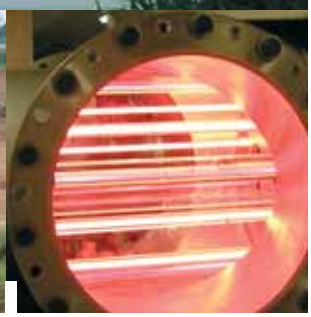
Managing the source of life

With the discussion on climate change and global warming, water is in the center of worldwide attention. It is our goal to address the diverse and challenging issues related to water management in an active and innovative way and to provide real solutions on a global scale. We deliver services in the whole water supply and sanitation chain, whether it concerns technical, financial or institutional expertise.

With 4,300 staff and 68 offices present in over 25 countries, Royal Haskoning advises and delivers services in the fields of spatial development, infrastructure & transport, architecture & building, building services, industrial installations, project management, water & water management, environment, coastal & rivers, docks and maritime projects.

www.royalhaskoning.com

ROYAL HASKONING
consultants architects engineers



Water: source of life

Water is vital for the life and health of people and ecosystems and a basic requirement for the development of countries. However, around the world many people lack access to adequate and safe water to meet their most basic needs. Pollution, improper land-use, climate change and many other forces threaten water resources and ecosystems. These problems are challenging. Technical advances and experience have led to new opportunities.

Witteveen+Bos likes to be your partner to take up these challenges. We believe in close co-operation with our clients to obtain optimum results. Tailor-made solutions characterise our project approach: from extensive infrastructure works, to dedicated small scale water installations; from innovative technology application, to robust appropriate solutions. Witteveen+Bos applies this approach to advise on all aspects of the water cycle.

Process technology: making new ideas work

From our strong experience in conventional treatment practice, we have always developed new solutions and put these into practice. We implement effluent polishing and application of membrane bioreactors from the research phase to full-scale application.

On water supply we have engineered the revolutionary double membrane (UF/RO) WTP at Heemskerk, the Netherlands. Witteveen+Bos has conducted designs for UV primary disinfection and oxidation (Andijk and Beerenplaat, the Netherlands), ozonation, and ion exchange application (Oldeholtpade, the Netherlands)

Integrated watermanagement

A strong point of our firm is thinking and working from an integrated watermanagement approach and to translate this in practical and sustainable solutions. This integrated approach includes the disciplines hydrology, geohydrology, geochemistry and aquatic ecology. In our integrated river basin management plans, these four disciplines are always taken into account to find solutions to get more water available for drinking water production or industrial and agricultural use, to prevent flooding, to decrease landsubsidence, to restore groundwatersystems and to restorate wetlands.

Integrated approach

Integrated management of aquatic eco systems and water resources, water abstraction & treatment, sewerage & wastewater treatment, tailor made solutions for industrial clients: we wish to adopt an integrated approach towards balanced and robust solutions serving every need.

Worldwide network

We have built up a strong record of water services in Caribbean, Africa, Asia and Europe. Facilitated by international branch offices and in close co-operation with clients and partners our professionals are ready for water challenges across the world.

Witteveen+Bos
Van Twickelostraat 2
P.O. box 233
7400 AE Deventer
The Netherlands
t +31 570 69 79 11
f +31 570 69 73 44

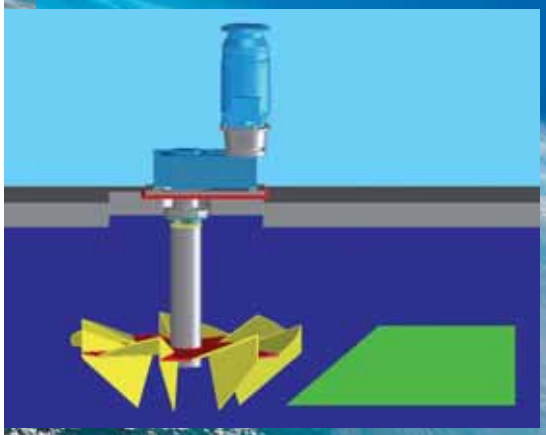
SAVINGS WITHOUT INVESTMENT

Landustrie

80% ***of the power at a WWTP is consumped by aeration***

30% ***energy can be saved by adapting the installation to the actual instead of maximum loading***

For improving the efficiency of the Landy surface aerators Landustrie has developed the Oxybooster. The Oxybooster consists of a number of baffles which are positioned in the lower part of the basin, but higher than usual. This Oxybooster has already proved its existence in praxis.



Higher oxygen transfer

Landustrie has developed a toolbox for checking the functioning of the surface aerators in relation to the actual load. The goal of this aeration scan is to optimise the aeration, thus improving the efficiency and durability.

Landustrie

Landustrie Sneek BV
P.O. Box 199
NL-8600 AD Sneek
The Netherlands

Tel. +31 515 - 48 68 88
Fax+31 515 - 41 23 98
e-mail info@landustrie.nl
website www.landustrie.nl

Office address Pieter Zeemanstraat 6, Sneek

Watertechnology

OMEGAM Laboratoria

When analysis counts...

Omegam is one of the leading laboratories in the Netherlands. Our broad range of chemical analyses in various matrices forms the basis for research and monitoring programs.
For over 30 years we have been delivering reliable and accurate results which provide the cornerstone for professional advice, decision-making and enforcement of environmental legislation.

When it comes to analysis of trace level components in water, Omegam is the Netherland's absolute leader.
We are specialised in both emerging pollutants and pollutants included in (European) legislation. Dutch water authorities already count on us for analysis of pesticides, pharmaceuticals, estrogenic compounds and the priority substances of the Water Framework Directive.

The laboratories of Omegam are NEN-EN-ISO 17025 accredited by the Dutch Council of Accreditation. Analytical methods are carefully established and in compliance with national and international standards. Advanced techniques and methods enable us to execute precise analyses and reach trace level reporting limits.

We are centrally located in the capital Amsterdam, near the international airport Schiphol, and we are ideally situated for acceptance of samples from all over the world. We combine comprehensive experience and knowledge with excellent service. More than one hundred experts at Omegam are at your disposal to solve your analytical problems.

Contact
Omegam Laboratoria BV
H.J.E. Wenckebachweg 120 - 1096 AR Amsterdam
P.O.Box 94685 - 1090 GR Amsterdam
The Netherlands
T +31 (0)20 - 5976 680 - **F** +31 (0)20 - 5976 689
E customerservice@omegam.nl - **I** www.omegam.eu

You can count on us

TenCate: innovative materials from an innovative country

TenCate is a multinational focusing on a combination of textile technology and chemical processes. For several centuries already, it is recognized as one of the most innovative enterprises in the Netherlands. TenCate develops and produces specialized materials with specific unrivaled properties. Safeguarding and security underlay and unite our product portfolios. Water in all its aspects is at the heart of our attention, be it for anti evaporation, coastal protection, contaminated canal remediation or sludge dewatering.

Geosystems for Marine Structures

For Marine applications this technology is simple and effective. Hydraulically fill up a high strength woven TenCate Geotube® container with a mixture of sand and water. The water drains through the pores of the fabric, transforming the container into a large sand filled structure. This innovative technique has been developed by TenCate 40 years ago in close cooperation with the worlds leading dredgers and engineers. Besides financial advantages, our staff can inform you about the savings on required primary materials and ground space usage. A multitude of studies and publications supporting this technique are available for designers to calculate and design TenCate Geotube® constructions.

Constructing dams and dikes becomes easy even in waters as deep as 20 meters. All over the world Geotube® systems have successfully been used to construct dune cores, breakwaters, jetties, dams, dikes and submerges breakwaters for coastal protection and land reclamation.

www.tencate.com/geotube

Geotube® Dewatering Systems

Today TenCate has a full range of dewatering fabrics and specialized departments now supporting the Geotube® technology in thousands of dredging and industrial projects.
Dredging with TenCate Geotube® means no investment in expensive vulnerable dewatering equipment. The system has unlimited filling capacity. In most cases the dry solids and effluent results are at least equal to conventional dewatering devices. Since Geotube® units can be stacked it is by far the most flexible solution. It is noiseless and odourless. Dewatering is instantaneous and takes place on the spot, reducing the amount of transport movements.
Contaminated rivers, lakes and lagoons are increasingly cleaned out with Geotube® technology. Indeed, heavy metals, PCB, TBT, mercury and other types of contamination can be contained with the solids without anyone touching the contaminants. Geotube® remediation technology is the most cost effective and most efficient.
It is used by wastewater managers working in all types of industries; in the chemical industry and in mineral and mining to recuperate valuable materials, in power plants to deal with fly ash lagoons. It even dewaters digester, agricultural and municipal sludges. As a back-up Geotube® safeguards the continuity of regular production even if a press or centrifuge would fall out.

www.tencate.com/geotube

TenCate Nicolon® Water Storage & Saving products

Water scarcity is a growing problem world-wide due to urbanization, climate change and extension of irrigated farmland. To ensure crop production, large amounts of water need to be buffered in open air reservoirs. TenCate Nicolon® liners are used for storage of a.o. irrigation water. To avoid water loss due to evaporation, TenCate has developed an unique Anti-Evaporation system which can cover water basins, allows rain-water to penetrate but reduces evaporation up to 80%. Moreover, this system fights algae growth and salt build-up which results in a better water quality and consequently better crop performance.

www.tencate.com/nicolon

VWS MPP Systems B.V

VWS MPP Systems is a business unit of Veolia Water Technologies & Solutions specialized in developing, marketing, manufacturing and servicing water purification systems based in Ede, the Netherlands.

99,9999% removal of dissolved and dispersed hydrocarbons from water. That is the purifying capacity of Veolia's MPPE-technology. MPPE stands for Macro Porous Polymer Extraction, a proven and flexible extraction technology to remove hydrocarbons like aliphatics, aromatics, halogenated e.g. chlorinated, bromated hydrocarbons and poly aromatic hydrocarbons (PAHs) from process, offshore and onshore produced, waste- en groundwater. Influent concentrations of thousands of ppm (parts per million) can be reduced to below 1 ppb (parts per billion).
The principle is that Porous Polymer Particles act as carrier of non-toxic and biodegradable extraction medium that absorbs and separates hydrocarbons from water. By simultaneous regeneration in a two column system the removed hydrocarbons can be used as residue for re-use in a 100% pure form. VWS MPP Systems delivers turnkey stationary and mobile MPPE installations with a lifetime guarantee of the MPPE material performance and the process.

Industrial process & wastewater

Processwater streams are treated upstream and end of pipe for possible re-use of water in the production process (cooling water, boiler feed water), or for discharge to surface water or to site/community biological wastewater treatment.

Main issues are:
- High influent concentrations
- High reduction factors
- Varying concentrations and flow
- Presence of salts, surfactants, heavy metals, alcohols, monomer residues, pre-polymers etc.

Specific benefits are:
- Upstream integrated operation with remote control
- Scope for adding other process- and groundwater streams, in one unit
- Reduced sludge formation in biotreatment
- Modular set up for large flows.

References: TOTAL, Philips, Albemarle, Gaz de France, Akzo Nobel, Dupont, German Chemical Industy.

Offshore Produced Water

Regulations for offshore produced water are becoming more stringent and more risk based. New technologies are required for this challenging segment in order to meet future emission standards that are being set by international organizations like OSPAR for the Northeast Atlantic.

Main issues are:
- Tough future requirements
- Environmental burden
- Tough water environment (salts, metals, surfactants)
- Space and weight
- Utility requirements & consumption
- Varying compositions and flows (aromatics, PAHs, aliphatics)
- Toxic load giving
- Remote unmanned platforms

Specific benefits are:
- High separation performance
- 95 to 99% reduction of the Environmental Impact Factor (EIF)
- Separated hydrocarbons in pure form for use as a product
- No waste stream or emissions to air
- Compact, small footprint
- Low energy consumption
- Proven robustness and reliability
- Fully automated and remote controlled for unmanned operation.

References: NAM (Shell/Exxon), TOTAL, Vermilion Harlingen, Statoil-Hydro/Shell - Ormen Lange, Statoil-Hydro - Kollsnes, Woodside - Pluto LNG plant.

Groundwater

Aromatic, polyaromatic and halogenated hydrocarbons in groundwater in lower concentrations dissolved in water diffused over the area or concentrated as DNAPL's (dense non-aqueous-phase liquids) or LNAPL's (light non-aqueous-phase liquids) creating an enduring source of contaminant supply to the water phase.

Main issues are:
- Broad compositions
- Unexpected composition changes
- Disturbing natural compounds like humic acids, iron
- Variable/high iron concentrations.

Specific benefits are:
- No iron removal necessary
- Removing unexpected higher concentrations/other compositions at no additional costs
- Robust, can withstand e.g. salts, humic acids, surfactants, heavy metals, dissolved/suspended solids, etc.
- No waste stream, no air emissions
- Scope for combination with other ground- and processwater streams in one unit.

DNAPL removal from decades to weeks

DNAPL's take decades to remove with standard pump and treat. Solvent/ Surfactant Enhanced Aquifer Remediation removal of DNAPL's reduces the remediation period from decades to weeks.

Main issues are:
- Separation of DNAPL from surfactant- or alcohol water mixture
- Re-use of surfactant/alcohol.

Benefits are:
- Separation of thousands of ppm DNAPL from water
- Re-injection surfactant/alcohol in the ground.

References: German Chemical Industry, Diosynth, Solvay, Alameda, governments.

Contact
VWS MPP Systems B.V.
P.O. Box 250
6710 BG Ede
Tel: +31 (0) 318 66 40 10
Fax: +31 (0) 318 66 40 01
E-mail: MPPSystems@Veoliawater.com
Internet: www.vwsmppsystems.com

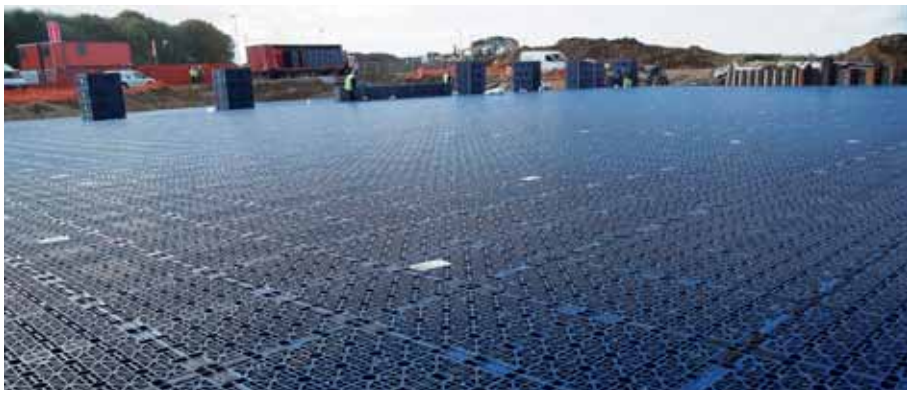
MPPE unit LBC Rotterdam

Rainwater: meeting the challenge

Water needs to be constantly managed, whether it is too scarce or too plentiful. Sustainable water management is one of the core activities of Wavin, leading supplier of plastic pipe systems and solutions. Wavin provides integrated above ánd below ground solutions for the controlled supply and discharge of water. These solutions range from high quality products and systems to consultation and design services and product and implementation support. Wavin is headquartered in Zwolle (the Netherlands). The company has offices in 28 European countries, employs 7,000 people and markets its products and technologies outside Europe via its export organisation Wavin Overseas. Wavin Overseas owns a growing network of over 120 agents and licensed partners who are active in Asia, Australia, Africa, Latin America, the Middle East and North America.

We help to manage water

Water has both life-enhancing properties and destructive potential. To manage the natural cycle of rainfall is one of our focus areas. In order to meet global challenges with rainwater, we offer systems and solutions for collection of rainwater from roofs and other impermeable surfaces and separation of leafs and dirt from the water. To complete the system, our experts can advise you on rainwater storage, infiltration back into the ground and re-use of rainwater for irrigation, washing, etc.



Collect and store: Wavin solutions in practice. To minimise the risk of flooding in the area, this substantial underground storage facility with AquaCell units was created. The structure can cope with the drainage requirements of 1,500 houses!

Collection

Rain- and storm water needs to be collected from roofs and streets. For large roof areas, we advise to use a siphonic system (Wavin QuickStream) to discharge the rainwater quickly and cost-effective. Water from the street is collected using Wavin road or line gullies. Our website offers detailed information on these solutions.

Transport

Wherever it needs to go, collected rainfall must be transported there quick and clean. On the basis of more than 50 years of experience in plastic pipe systems, Wavin developed various sewer pipe systems such as Wavin X-Stream. As access for inspection and cleaning of such pipe systems, we developed the Wavin Tegra inspection chambers and manholes.

Storage and infiltration

Rain- and stormwater comes in huge volumes and in order to manage the run-off, water needs to be slowed down and buffered. We provide special units for this purpose. These units (Wavin AquaCell & Wavin Q-Bic) help to control rainwater and retain it in temporary storage before infiltration or controlled release into watercourses or sewers.
Infiltration becomes increasingly important world-wide to retain good groundwater levels. The units are assembled in single or multiple layers to create underground structures of any size or configuration.
Stored rainwater can also be re-used for household and community purposes, such as watering gardens or flushing toilets.

Water management solutions in practice

Wavin holds an impressive portfolio of water management reference projects: from siphonic roof drainage systems for a car plant in the Czech Republic to a 29,000 infiltration units system for the largest water attenuation system in the United Kingdom, from PVC systems for water supply in Surinam to a complete water supply and sewer system in Cape Verde.

The Wavin water-management solution

Wavin as your partner

In today's competitive environment you are looking for a partner who is in tune with new technology and market developments, on whom you can rely for innovative, end-to-end solutions - a supplier who will deliver products on time and within budget around the globe. We have the capabilities, the scale and the international presence to live up to this promise.

The Wavin company is a leader in plastic pipe technology. With dozens of production facilities across the globe we have developed an unrivalled portfolio of systems and technologies. Our pool of experts is ready to advise you on all aspects of a plastic pipe system.

Our know-how relates to a wide area of products, systems and supporting services such as PVC biaxially orientated pressure systems for drinking water supply, sewer systems (PVC, PE and PP/ solid and structured wall), inspection chambers and manholes, pipe renovation systems (gas/ water/sewer) and hot & cold plumbing systems (PEX, MP, PPR).

Contact
Internet: www.wavin.com
www.wavinoverseas.com

Index

Waste water

Consultancy (engineering)

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Chemical analysis

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Omegam Laboratoria, Amsterdam
Tel. +31(0)20-5976680, Fax +31(0)20-5976689
E-mail: customerservice@omegam.nl
For more information see page 109

Equipment

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Landustrie Sneek B.V., Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
E-mail: info@landustrie.nl
For more information see page 108

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Nijhuis Water Technology B.V., Dinxperlo
Tel. +31(0)315-655466, Fax +31(0)315-655494
E-mail: info@nijhuis-water.nl
For more information see page 84

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Treatment

Akvo, Delft
Tel. +31(0)15-2151889
E-mail: peter@akvo.org
For more information see page 49

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Recycling

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Septic systems for domestic purposes

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Maintenance

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Norit Components & Services B.V., Enschede
Tel. +31(0)53-4287020, Fax +31(0)53-4287021
E-mail: info@noritcs.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Process industry

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Deposit treatment

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

TenCate Industrial Fabrics, Almelo
Tel. +31(0)546-544811, Fax +31(0)546-544490
E-mail: industrial@tencate.com
For more information see page 110

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Purification

Akvo, Delft
Tel. +31(0)15-2151889
E-mail: peter@akvo.org
For more information see page 49

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Interbeton bv, Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
E-mail: h.kuipers@interbeton.nl
For more information see page 58

Landustrie Sneek B.V., Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
E-mail: info@landustrie.nl
For more information see page 108

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Philips Lighting B.V., Roosendaal
Tel. +31(0)165-577906, Fax +31(0)165-577907
E-mail: uvpurification@philips.com
For more information see page 104

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

VWS MPP Systems B.V., Ede
Tel. +31(0)318-664010, Fax +31(0)318-664001
E-mail: MPPSystems@veoliawater.com
For more information see page 111

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Drinking water

Consultancy

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

IRC International Water and Sanitation Centre, Delft
Tel. +31(0)15-2192939, Fax +31(0)15-2190955
E-mail: general@irc.nl
For more information see page 51

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Twynstra Gudde, Amersfoort
Tel. +31(0)33-4677777, Fax +31(0)33-4677799
E-mail: bpt@tg.nl
For more information see page 61

Het Waterlaboratorium, Haarlem
Tel. +31(0)23-5175900, Fax +31(0)23-5175999
E-mail: info@hetwaterlaboratorium.nl
For more information see page 93

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Chemical analysis

Omegam Laboratoria, Amsterdam
Tel. +31(0)20-5976680, Fax +31(0)20-5976689
E-mail: customerservice@omegam.nl
For more information see page 109

Het Waterlaboratorium, Haarlem
Tel. +31(0)23-5175900, Fax +31(0)23-5175999
E-mail: info@hetwaterlaboratorium.nl
For more information see page 93

Equipment

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Components & Services B.V., Enschede
Tel. +31(0)53-4287020, Fax +31(0)53-4287021
E-mail: info@noritcs.nl
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Nijhuis Water Technology B.V., Dinxperlo
Tel. +31(0)315-655466, Fax +31(0)315-655494
E-mail: info@nijhuis-water.nl
For more information see page 84

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Maintenance

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Norit Components & Services B.V., Enschede
Tel. +31(0)53-4287020, Fax +31(0)53-4287021
E-mail: info@noritcs.nl
For more information see page 2, 78, 135

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Treatment

Akvo, Delft
Tel. +31(0)15-2151889
E-mail: peter@akvo.org
For more information see page 49

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Nedap Energy Systems, Groenlo
Tel. +31(0)544-471801, Fax +31(0)544-466008
E-mail: paul.dereus@nedap.com
For more information see page 98

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Purification

Akvo, Delft
Tel. +31(0)15-2151889
E-mail: peter@akvo.org
For more information see page 49

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Interbeton bv, Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
E-mail: h.kuipers@interbeton.nl
For more information see page 58

Nedap Energy Systems, Groenlo
Tel. +31(0)544-471801, Fax +31(0)544-466008
E-mail: paul.dereus@nedap.com
For more information see page 98

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Philips Lighting B.V., Roosendaal
Tel. +31(0)165-577906, Fax +31(0)165-577907
E-mail: uvpurification@philips.com
For more information see page 104

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Ground water

Consultancy

Acacia Water, Gouda
Tel. +31(0)182-686424, Fax +31(0)182-686239
E-mail: arjan.devries@acaciawater.com
For more information see page 82

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Van Essen Instruments B.V., Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
E-mail: pwesterhuis@slb.com
For more information see page 60

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

SG Consultancy and Mediation B.V., Engelen
Tel. +31(0)73-6312777, Fax +31(0)73-7510766
E-mail: smidt.sg@inter.nl.net
For more information see page 73

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Drainage

Acacia Water, Gouda
Tel. +31(0)182-686424, Fax +31(0)182-686239
E-mail: arjan.devries@acaciawater.com
For more information see page 82

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Equipment

Van Essen Instruments B.V., Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
E-mail: pwesterhuis@slb.com
For more information see page 60

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Laboratories

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Omegam Laboratoria, Amsterdam
Tel. +31(0)20-5976680, Fax +31(0)20-5976689
E-mail: customerservice@omegam.nl
For more information see page 109

Purification

Akvo, Delft
Tel. +31(0)15-2151889
E-mail: peter@akvo.org
For more information see page 49

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Nedap Energy Systems, Groenlo
Tel. +31(0)544-471801, Fax +31(0)544-466008
E-mail: paul.dereus@nedap.com
For more information see page 98

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Philips Lighting B.V., Roosendaal
Tel. +31(0)165-577906, Fax +31(0)165-577907
E-mail: uvpurification@philips.com
For more information see page 104

VWS MPP Systems B.V., Ede
Tel. +31(0)318-664010, Fax +31(0)318-664001
E-mail: MPPSystems@veoliawater.com
For more information see page 111

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Surface water

Consultancy

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Van Essen Instruments B.V., Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
E-mail: pwesterhuis@slb.com
For more information see page 60

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Transport

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Chemical analysis

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Omegam Laboratoria, Amsterdam
Tel. +31(0)20-5976680, Fax +31(0)20-5976689
E-mail: customerservice@omegam.nl
For more information see page 109

Het Waterlaboratorium, Haarlem
Tel. +31(0)23-5175900, Fax +31(0)23-5175999
E-mail: info@hetwaterlaboratorium.nl
For more information see page 93

Equipment

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

Van Essen Instruments B.V., Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
E-mail: pwesterhuis@slb.com
For more information see page 60

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Nijhuis Water Technology B.V., Dinxperlo
Tel. +31(0)315-655466, Fax +31(0)315-655494
E-mail: info@nijhuis-water.nl
For more information see page 84

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

Sludge

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

TenCate Industrial Fabrics, Almelo
Tel. +31(0)546-544811, Fax +31(0)546-544490
E-mail: industrial@tencate.com
For more information see page 110

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Treatment

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Laboratories

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

Omegam Laboratoria, Amsterdam
Tel. +31(0)20-5976680, Fax +31(0)20-5976689
E-mail: customerservice@omegam.nl
For more information see page 109

Purification

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Nedap Energy Systems, Groenlo
Tel. +31(0)544-471801, Fax +31(0)544-466008
E-mail: paul.dereus@nedap.com
For more information see page 98

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Philips Lighting B.V., Roosendaal
Tel. +31(0)165-577906, Fax +31(0)165-577907
E-mail: uvpurification@philips.com
For more information see page 104

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Process water

Consultancy

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Het Waterlaboratorium, Haarlem
Tel. +31(0)23-5175900, Fax +31(0)23-5175999
E-mail: info@hetwaterlaboratorium.nl
For more information see page 93

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Equipment

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Components & Services B.V., Enschede
Tel. +31(0)53-4287020, Fax +31(0)53-4287021
E-mail: info@noritcs.nl
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Nijhuis Water Technology B.V., Dinxperlo
Tel. +31(0)315-655466, Fax +31(0)315-655494
E-mail: info@nijhuis-water.nl
For more information see page 84

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Pieralisi Benelux B.V., Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
E-mail: sales@pieralisi.nl
For more information see page 67

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

TenCate Industrial Fabrics, Almelo
Tel. +31(0)546-544811, Fax +31(0)546-544490
E-mail: industrial@tencate.com
For more information see page 110

Recycling

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Philips Lighting B.V., Roosendaal
Tel. +31(0)165-577906, Fax +31(0)165-577907
E-mail: uvpurification@philips.com
For more information see page 104

VWS MPP Systems B.V., Ede
Tel. +31(0)318-664010, Fax +31(0)318-664001
E-mail: MPPSystems@veoliawater.com
For more information see page 111

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Process industry

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Berson UV-Techniek B.V., Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
E-mail: info@bersonuv.com
For more information see page 66

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit Process Technology B.V., Enschede
Tel. +31(0)53-4287357, Fax +31(0)53-4287001
E-mail: info@noritpt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

REDOX Water Technology B.V., Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
E-mail: info@redox.nl
For more information see page 101

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Sewerage

Consultancy and engineering

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Equipment

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Landustrie Sneek B.V., Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
E-mail: info@landustrie.nl
For more information see page 108

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Septic systems for domestic purposes

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Maintenance

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Landustrie Sneek B.V., Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
E-mail: info@landustrie.nl
For more information see page 108

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Recycling

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Waste water treatment

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Purification

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Interbeton bv, Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
E-mail: h.kuipers@interbeton.nl
For more information see page 58

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America, Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
E-mail: info@norit.com
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Spaans Babcock B.V., Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
E-mail: sales@spaansbabcock.nl
For more information see page 59

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Consultancy and engineering

Waste water

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Drinking water

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Twynstra Gudde, Amersfoort
Tel. +31(0)33-4677777, Fax +31(0)33-4677799
E-mail: bpt@tg.nl
For more information see page 61

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Ecological Consultancy

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Ground water

Acacia Water, Gouda
Tel. +31(0)182-686424, Fax +31(0)182-686239
E-mail: arjan.devries@acaciawater.com
For more information see page 82

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Process water

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Norit Membrane Technology B.V., Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
E-mail: info@noritmt.nl
For more information see page 2, 78, 135

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Sewerage

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Water management

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Ballast Nedam N.V., Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
E-mail: info.infra@ballast-nedam.nl
For more information see page 52

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

SG Consultancy and Mediation B.V., Engelen
Tel. +31(0)73-6312777, Fax +31(0)73-7510766
E-mail: smidt.sg@inter.nl.net
For more information see page 73

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Other

Altenburg & Wymenga ecological consultants, Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
E-mail: info@altwym.nl
For more information see page 85

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Infrastructure

Consultancy

Fugro Water Services, Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
E-mail: fugrowaterservices@fugro.com
For more information see page 44

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

Concrete

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Interbeton bv, Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
E-mail: h.kuipers@interbeton.nl
For more information see page 58

Pumping Engines

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Interbeton bv, Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
E-mail: h.kuipers@interbeton.nl
For more information see page 58

Landustrie Sneek B.V., Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
E-mail: info@landustrie.nl
For more information see page 108

Pipes

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Interbeton bv, Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
E-mail: h.kuipers@interbeton.nl
For more information see page 58

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Maintenance

Heijmans Infra Techniek B.V., 's-Hertogenbosch
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
E-mail: hit@heijmans.nl
For more information see page 83

Wavin Overseas B.V., Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
E-mail: wavin.overseas@wavin.com
For more information see page 112

Information Technology

Management Information Systems

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Van Essen Instruments B.V., Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
E-mail: pwesterhuis@slb.com
For more information see page 60

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Process technology

DHV, Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
E-mail: info@dhv.com
For more information see page 42

Grontmij Nederland B.V., De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
E-mail: corporate.communication@grontmij.com
For more information see page 88

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Norit N.V., Zenderen
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
E-mail: info@noritpt.com
For more information see page 2, 78, 135

Nijhuis Water Technology B.V., Dinxperlo
Tel. +31(0)315-655466, Fax +31(0)315-655494
E-mail: info@nijhuis-water.nl
For more information see page 84

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

ProMinent Verder B.V., Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
E-mail: info@ProMinent.nl
For more information see page 92

Royal Haskoning, Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Organizations

Remote sensing

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Van Essen Instruments B.V., Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
E-mail: pwesterhuis@slb.com
For more information see page 60

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Landustrie Sneek B.V., Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
E-mail: info@landustrie.nl
For more information see page 108

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Norit Components & Services B.V., Enschede
Tel. +31(0)53-4287020, Fax +31(0)53-4287021
E-mail: info@noritcs.nl
For more information see page 2, 78, 135

Paques, Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
E-mail: info@paques.nl
For more information see page 102

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Other

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

HydroLogic B.V., Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
E-mail: info@hydrologic.com
For more information see page 90

KWT Group, Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Acacia Water, Gouda
Tel. +31(0)182-686424, Fax +31(0)182-686239
E-mail: arjan.devries@acaciawater.com
For more information see page 82

Aquatech/Amsterdam RAI, Amsterdam
Tel. +31(0)20-5491212, Fax +31(0)20-6461894
E-mail: aquatech@rai.nl
For more information see page 70

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Financial institutes

Rabobank Nederland, Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99

Knowledge institutes

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

IRC International Water and Sanitation Centre, Delft
Tel. +31(0)15-2192939, Fax +31(0)15-2190955
E-mail: general@irc.nl
For more information see page 51

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

Kiwa Water Research, Nieuwegein
Tel. +31(0)030-6069511, Fax +31(0)30-6061165
E-mail: info@kiwawaterresearch.eu
For more information see page 64

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

UNESCO-IHE Institute for Water Education, Delft
Tel. +31(0)15-2151715, Fax +31(0)15-2122921
E-mail: info@unesco-ihe.org
For more information see page 76

Het Waterlaboratorium, Haarlem
Tel. +31(0)23-5175900, Fax +31(0)23-5175999
E-mail: info@hetwaterlaboratorium.nl
For more information see page 93

Authorities

Gemeentewerken Rotterdam, afd. communicatie, Rotterdam
Tel. +31(0)10-4894751, Fax +31(0)10-4764836
For more information see page 34

Ministerie van Buitenlandse Zaken, Den Haag
Tel. +31(0)70-3486486, Fax +31(0)70-3484848
E-mail: karin.roelofs@minbuza.nl
For more information see page 26

Ministerie van Economische Zaken, Den Haag
Tel. +31(0)70-3798911, Fax +31(0)70-3796879
E-mail: b.j.m.vanbolhuis@minez.nl
For more information see page 29

Ministerie van Landbouw, Natuur en Voedselkwaliteit, Den Haag
Tel. +31(0)70-3786868, Fax +31(0)70-3785868
E-mail: j.p.hoogeveen@minlnv.nl
For more information see page 30

Ministerie van Verkeer en Waterstaat, Rijkswaterstaat, Den Haag
Tel. +31(0)70-3518080, Fax +31(0)70-3518926
For more information see page 20

Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (VROM), Den Haag
Tel. +31(0)70-3393939, Fax +31(0)70-3391288
For more information see page 28

Ministry of Agriculture, Nature and Food Quality, Den Haag
Tel. +31(0)70-3786868, Fax +31(0)70-3786100
For more information see page 30

Ministry of Economic Affairs, Den Haag
Tel. +31(0)70-3796437, Fax +31(0)70-3797361
For more information see page 29

Ministry of Foreign Affairs, Den Haag
Tel. +31(0)70-3486486, Fax +31(0)70-3484848
E-mail: dg.adema@minbuza.nl
For more information see page 26

Ministry of Housing, Spatial Planning and the Environment, Den Haag
Tel. +31(0)70-3393939, Fax +31(0)70-3391288
For more information see page 28

Ministry of Transport, Public Works and Water Management, Den Haag
Tel. +31(0)70-3518774, Fax +31(0)70-3518931
E-mail: bert.keijts@rws.nl
For more information see page 20

Provincie Zuid-Holland, directie Water en Milieu, Den Haag
Tel. +31(0)70-4416614, Fax +31(0)70-4417831
For more information see page 31

Rijkswaterstaat, Capelle aan den IJssel
Tel. +31(0)10-4027178
E-mail: bpt@tg.nl
For more information see page 80

Rijkswaterstaat Waterdienst, Lelystad
Tel. +31(0)320-298411, Fax +31(0)320-249218
E-mail: info.waterdienst@rws.nl
For more information see page 20

Associations and Foundations

Aqua for All, Nieuwegein
Tel. +31(0)30-6069621, Fax +31(0)30-6069431
E-mail: info@aquaforall.nl
For more information see page 50

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

European Water Partnership (EWP), Delft
Tel. +31(0)15-2151883, Fax 16
E-mail: h.riestra@ewp.eu
For more information see page 16

Lettinga Associates Foundation (LeAF), Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
E-mail: marjo.lexmond@wur.nl
For more information see page 97

Netherlands Water Partnership, Delft
Tel. +31(0)15-2151728, Fax +31(0)15-2151759
E-mail: info@nwp.nl
For more information see page 18

NWP-NGO Platform, Delft
Tel. +31(0)15-2151869
E-mail: r.neijland@nwp.nl
For more information see page 48

Practica Foundation, Delft
Tel. +31(0)15-2575359
E-mail: info@practicafoundation.nl
For more information see page 54

Simavi, Haarlem
Tel. +31(0)23-5538055, Fax +31(0)23-5328538
E-mail: simavi@simavi.org
For more information see page 56

Association of Dutch Water Companies (Vewin), Rijswijk
Tel. +31(0)70-4144750, Fax +31(0)70-4144420
E-mail: info@vewin.nl
For more information see page 40

Water Companies

Evides N.V., Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
E-mail: info@evides.nl
For more information see page 86

PWN Waterleidingbedrijf Noord-Holland, Velserbroek
Tel. +31(0)23-5413333, Fax +31(0)23-5256105
E-mail: pwn@pwn.nl
For more information see page 32

Vitens N.V., Utrecht
Tel. +31(0)30-2487911, Fax +31(0)30-2487910
E-mail: communicatie@vitens.nl
For more information see page 38

Waternet, Amsterdam
Tel. +31(0)20-6082464, Fax +31(0)20-6083900
E-mail: paul.bonne@waternet.nl
For more information see page 55

Water Boards

Unie van Waterschappen, Den Haag
Tel. +31(0)70-3519751, Fax +31(0)70-3544642
E-mail: info@uvw.nl
For more information see page 43

Personnel and training

Secondment

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Training

Alterra, Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
E-mail: info.alterra@wur.nl
For more information see page 62

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Eijkelkamp Agrisearch Equipment, Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
E-mail: export@eijkelkamp.com
For more information see page 24

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

HKV Consultants, Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
E-mail: info@hkv.nl
For more information see page 74

International Institute for Geo-Information Science and Earth Observation (ITC), Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
E-mail: pr@itc.nl
For more information see page 71

MWH B.V., Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
For more information see page 95

Stichting Wateropleidingen, Nieuwegein
Tel. +31(0)30-6069400, Fax +31(0)30-6069401
E-mail: info@wateropleidingen.nl
For more information see page 100

UNESCO-IHE Institute for Water Education, Delft
Tel. +31(0)15-2151715, Fax +31(0)15-2122921
E-mail: info@unesco-ihe.org
For more information see page 76

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Recruitment and selection

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Internet

Akvo, Delft
Tel. +31(0)15-2151889
E-mail: peter@akvo.org
For more information see page 49

Aquatech/Amsterdam RAI, Amsterdam
Tel. +31(0)20-5491212, Fax +31(0)20-6461894
E-mail: aquatech@rai.nl
For more information see page 70

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Hirschmann Automation and Control B.V., Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
E-mail: hirschmann@hirschmann.nl
For more information see page 96

IRC International Water and Sanitation Centre, Delft
Tel. +31(0)15-2192939, Fax +31(0)15-2190955
E-mail: general@irc.nl
For more information see page 51

Euroconsult Mott MacDonald, Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
E-mail: euroconsult@mottmac.nl
For more information see page 46

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Trade magazines

ARCADIS Nederland B.V., Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
E-mail: info@arcadis-global.com
For more information see page 36

Co-operative Programme on Water and Climate (CPWC), Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Deltares, Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
E-mail: info@deltares.nl
For more information see page 68

IRC International Water and Sanitation Centre, Delft
Tel. +31(0)15-2192939, Fax +31(0)15-2190955
E-mail: general@irc.nl
For more information see page 51

Witteveen+Bos, Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
E-mail: water@witteveenbos.nl
For more information see page 107

Index of addresses

A

Acacia Water
Jan van Beaumontstraat 1, 2805 RN Gouda
Tel. +31(0)182-686424, Fax +31(0)182-686239
Internet: www.acaciawater.com
E-mail: arjan.devries@acaciawater.com
For more information see page 82
member of NWP

Accenture
Gustav Mahlerplein 90, 1082 MA Amsterdam
P.O. Box 75797, 1070 AT Amsterdam
Tel. +31(0)20-4938383, Fax +31(0)20-6748650
Internet: www.accenture.com
E-mail: marketing.nl@accenture.com
member of NWP

AIDEnvironment
D. Curtiusstraat 7-523, 1051 JL Amsterdam
Tel. +31(0)20-5818250, Fax +31(0)20-6866251
Internet: www.aidenvironment.org
E-mail: info@aidenvironment.org
member of NWP

Akvo
Westvest 7, 2611 AX Delft
P.O. Box 3015, 2601 DA Delft
Tel. +31(0)15-2151889
Internet: www.akvo.org
E-mail: peter@akvo.org
For more information see page 49

Alert Solutions
Rotterdamseweg 145, 2628 AL Delft
Tel. +31(0)15-2568551, Fax +31(0)15-1564637
Internet: www.alertsolutions.nl
E-mail: info@alertsolutions.nl
member of NWP

Alfa Adviesbureau
Stationsweg 30b, 8141 SL Huizen
Tel. +31(0)572-390773, Fax +31(0)572-390640
Internet: www.alfaconsultancy.eu
E-mail: info@alfa-adviesbureau.nl
member of NWP

Alkyon Hydraulic Consultancy & Research
Voorsterweg 28, 8316 PT Marknesse
P.O. Box 248, 8300 AE Emmeloord
Tel. +31(0)527-248100, Fax +31(0)527-248111
Internet: www.alkyon.nl
E-mail: info@alkyon.nl
member of NWP

All DREGDE HOLLAND
Vlierlaan 102, 4907 AE Oosterhout
Tel. +319(0)-162-471455, Fax +31(0)162-471556
Internet: www.alldregde.nl
member of NWP

Altenburg & Wymenga ecological consultants
Zuiderweg 2, 9269 TZ Veenwouden
P.O. Box 32, 9269 ZR Veenwouden
Tel. +31(0)511-474764, Fax +31(0)511-472740
Internet: www.altwym.nl
E-mail: info@altwym.nl
For more information see page 85
member of NWP

Alterra
Droevendaalsesteeg 3, 6708 PB Wageningen
P.O. Box 47, 6700 AA Wageningen
Tel. +31(0)317-4474700, Fax +31(0)317-419000
Internet: www.alterra.wur.nl
E-mail: info.alterra@wur.nl
For more information see page 62
member of NWP

AMREF Flying Doctors Nederland
Stevensbloem 269, 2331 JD Leiden
Tel. +31(0)71-5769476, Fax +31(0)71-5763777
Internet: www.amref.nl
member of NWP

Aqua Explorer
Agora 1, 8934 CJ Leeuwarden
Tel. +31(0)58-2846277, Fax +31(0)58-2846287
Internet: www.aquaexplorer.nl
member of NWP

Aqua for All
Groningenhaven 7, 3433 PE Nieuwegein
P.O. Box 1072, 3430 BB Nieuwegein
Tel. +31(0)30-6069621, Fax +31(0)30-6069431
Internet: www.aquaforall.nl
E-mail: info@aquaforall.nl
For more information see page 50
member of NWP

Aqualectra
P.O. Box 230, Willemstad, Curacao, Netherlands Antilles
Tel. +559(0)9-4632000, Fax +559(0)9-4626251
Internet: www.aqualectra.com
member of NWP

Aquanet
Groningenhaven 7, 3433 PE Nieuwegein
P.O. Box 1072, 3430 BB Nieuwegein
Tel. +31(0)30-6069506, Fax +31(0)30-6069509
Internet: www.aquanet.nl
E-mail: aquanet@aquanet.nl
member of NWP

Aquatech/Amsterdam RAI
Europaplein 8, 1078 GZ Amsterdam
P.O. Box 77777, 1070 MS Amsterdam
Tel. +31(0)20-5491212, Fax +31(0)20-6461894
Internet: www.rai.nl
E-mail: aquatech@rai.nl
For more information see page 70
member of NWP

ARCADIS Nederland B.V.
Lichtenauerlaan 100, 3006 AE Rotterdam
P.O. Box 4205, 3006 AE Rotterdam
Tel. +31(0)10-2532222, Fax +31(0)10-2532294
Internet: www.arcadis-global.com
E-mail: info@arcadis-global.com
For more information see page 36
member of NWP

B

Ballast Nedam N.V.
Ringwade 71, 3439 LM Nieuwegein
P.O. Box 1505, 3430 BN Nieuwegein
Tel. +31(0)30-2853030, Fax +31(0)30-2854800
Internet: www.ballast-nedam.nl
E-mail: info.infra@ballast-nedam.nl
For more information see page 52
member of NWP

Bergschenhoek Civiele Techniek B.V.
Boterdorpseweg 10, 2661 AC Bergschenhoek
P.O. Box 45, 2650 AA Berkel en Rodenrijs
Tel. +31(0)10-5242650, Fax +31(0)10-5242651
Internet: www.bergschenhoek-ct.com
E-mail: infobct@bergschenhoek-ct.com
member of NWP

Berson UV-Techniek B.V.
De Huufkes 23, 5674 TL Nuenen
P.O. Box 90, 5670 AB Nuenen
Tel. +31(0)40-2907777, Fax +31(0)40-2835755
Internet: www.bersonuv.com
E-mail: info@bersonuv.com
For more information see page 66

Royal Boskalis Westminster N.V.
P.O. Box 43, 3350 AA Papendrecht
Tel. +31(0)78-6969000, Fax +31(0)78-6969555
Internet: www.boskalis.com
member of NWP

Brabant Water N.V.
Magistratenlaan 200, 5223 MA 's-Hertogenbosch
P.O. Box 1068, 5200 BC 's-Hertogenbosch
Tel. +31(0)73-6838888, Fax +31(0)73-6838999
Internet: www.brabantwater.nl
E-mail: klantenservice@brabantwater.nl
member of NWP

Brightwork B.V.
Beatrixstraat 2, 8601 HH Sneek
Fax +31(0)515-433791
Internet: www.brightwork.nl
E-mail: info@brightwork.nl
member of NWP

C

Cascal p/a The Greater Nelspruit Utility Company (Pty) Ltd
P.O. Box 12753, Nelspruit, South-Africa
Tel. +27(0)13-7526839, Fax +27(0)13-7553973
member of NWP

Co-operative Programme on Water and Climate (CPWC)
Westvest 7, 2611 AX Delft
P.O. Box 3015, 2601 DA Delft
Tel. +31(0)15-2151748, Fax +31(0)15-2121676
Internet: www.waterandclimate.org
E-mail: cpwc@unesco-ihe.org
For more information see page 72

Croon Elektrotechniek B.V.
Schiemond 20-22, 3024 EE Rotterdam
P.O. Box 6073, 3002 AB Rotterdam
Tel. +31(0)10-4483344, Fax +31(0)10-4760471
Internet: www.croon.nl
member of NWP

Adviesbureau Cuijpers
Leeghwaterlaan 26, 5223 BA 's-Hertogenbosch
Tel. +31(0)73-6214265, Fax +31(0)73-6211592
Internet: www.adviesbureaucuijpers.nl
E-mail: info@adviesbureaucuijpers.nl
member of NWP

D

Datawatt B.V.
Tukseweg 128d, 8331 LH Steenwijk
P.O. Box 119, 8330 AC Steenwijk
Tel. +31(0)521-536333, Fax +31(0)521-518270
Internet: www.datawatt.com
member of NWP

Delft Cluster
Keverling Buismanweg 4, 2628 CL Delft
P.O. Box 69, 2600 AB Delft
Tel. +31(0)15-2693793, Fax +31(0)15-2693799
Internet: www.delftcluster.nl
member of NWP

Deltares
P.O. Box 177, 2600 MH Delft
Tel. +31(0)15-2858585, Fax +31(0)15-2858582
Internet: www.deltares.nl
E-mail: info@deltares.nl
For more information see page 68
member of NWP

DHV
Laan 1914 35, 3818 EX Amersfoort
P.O. Box 1132, 3800 BC Amersfoort
Tel. +31(0)33-4682574, Fax +31(0)33-4682801
Internet: www.dhv.com
E-mail: info@dhv.com
For more information see page 42
member of NWP

Dorcas Aid International
Bedrijvenweg 6, 1619 BK Andijk
P.O. Box 80, 1618 ZH Andijk
Tel. +31(0)228-592824, Fax +31(0)-228-595916
Internet: www.dorcas.net
member of NWP

N.V. Duinwaterbedrijf Zuid-Holland
Stationsplein 4, 2275 AZ Voorburg
P.O. Box 34, 2270 AA Voorburg
Tel. +31(0)70-3577500, Fax +31(0)70-3577509
Internet: www.duinwaterbedrijf.nl
E-mail: info@dzh.nl
member of NWP

Dura Vermeer Business Development B.V.
Kruisweg 835, 2132 NG Hoofddorp
P.O. Box 3098, 2130 KB Hoofddorp
Tel. +31(0)23-5692345, Fax +31(0)23-5692332
Internet: www.duravermeerbusinessdevelopment.nl
member of NWP

Dutch Docklands International B.V.
Koornmarkt 41, 2611 EB Delft
Tel. +31(0)15-2126688, Fax +31(0)15-2131656
Internet: www.dutchdocklands.com
E-mail: info@dutchdocklands.com
member of NWP

E

EARS B.V.
Kanaalweg 1, 2628 EB Delft
Tel. +31(0)15-2562404, Fax +31(0)15-2623857
member of NWP

Ecodis B.V.
Munnikenheiweg 47g, 4879 NE Etten-Leur
Tel. +31(0)76-5441766, Fax +31(0)76-5441767
Internet: www.ecodis.eu
member of NWP

ECO-Job B.V.
Frederik Hendriklaan 48, 2582 BD Den Haag
Tel. +31(0)70-3546454, Fax +31(0)70-3514308
Internet: www.ecojob.nl
E-mail: info@ecojob.nl
member of NWP

Ecological Management Foundation (EMF)
Prinsengracht 840, 1017 JM Amsterdam
Tel. +31(0)20-6205662, Fax +31(0)20-6243488
Internet: www.emf.nl
member of NWP

Ecorys-Nederland B.V.
Watermanweg 44, 3067 GG Rotterdam
P.O. Box 4175, 3006 AD Rotterdam
Tel. +31(0)10-4538800, Fax +31(0)10-4523660
Internet: www.ecorys.nl
E-mail: netherlands@ecorys.com
member of NWP

Van Essen Instruments B.V.
Delftechpark 20, 2628 XH Delft
P.O. Box 553, 2600 AN Delft
Tel. +31(0)15-2755000, Fax +31(0)15-2755055
Internet: www.swstechnology.com
E-mail: pwesterhuis@slb.com
For more information see page 60
member of NWP

European Water Partnership (EWP)
P.O. Box 3015, 2601 DA Delft
Tel. +31(0)15-2151883, Fax 16
Internet: www.ewp.eu
E-mail: h.riestra@ewp.eu
For more information see page 16
member of NWP

Evers & Manders Consult B.V.
Drs. W. van Royenstraat 2, 3871 AN Hoevelaken
P.O. Box 173, 3870 CD Hoevelaken
Tel. +31(0)33-2534820, Fax +31(0)33-2534259
Internet: www.emconsult.nl
E-mail: info@emconsult.nl
member of NWP

Evides N.V.
Schaardijk 150, 3063 NH Rotterdam
P.O. Box 4472, 3006 AL Rotterdam
Tel. +31(0)-2935000, Fax +31(0)-2935010
Internet: www.wbe.nl
E-mail: info@evides.nl
For more information see page 86
member of NWP

Eijkelkamp Agrisearch Equipment
Nijverheidsstraat 30, 6987 EM Giesbeek
P.O. Box 4, 6987 ZG Giesbeek
Tel. +31(0)313-880200, Fax +31(0)313-880299
Internet: www.eijkelkamp.com
E-mail: export@eijkelkamp.com
For more information see page 24
member of NWP

F

Ferendi B.V.
Koningskade 30, 2596 AA Den Haag
P.O. Box 90413, 2509 LK Den Haag
Tel. +31(0)70-3143630, Fax +31(0)70-3284862
Internet: www.ferendi.com
E-mail: info@ferendi.com
member of NWP

Frisian Waterallliance
P.O. Box 20120, 8900 HM Leeuwarden
Tel. +31(0)58-2925838, Fax +31(0)58-2925865
Internet: www.waterallliance.nl
member of NWP

Fugro Water Services
Veurse Achterweg 10, 2264 SG Leidschendam
P.O. Box 63, 2260 AB Leidschendam
Tel. +31(0)70-3111432, Fax +31(0)70-3277091
Internet: www.fugrowaterservices.com
E-mail: fugrowaterservices@fugro.com
For more information see page 44
member of NWP

G

Gemeentewerken Rotterdam, afd. Watermanagement
Galvanistraat 15, 3029 AD Rotterdam
P.O. Box 6633, 3002 AP Rotterdam
Tel. +31(0)10-4895519, Fax +31(0)10-4764836
Internet: www.gw-rotterdam.nl
member of NWP

Gemeentewerken Rotterdam, afd. communicatie
P.O. Box 6633, 3002 AP Rotterdam
Tel. +31(0)10-4894751, Fax +31(0)10-4764836
Internet: www.gw.rotterdam.nl
For more information see page 34
member of NWP

Genap B.V.
Goorsestraat 1, 7041 GA 's-Heerenberg
P.O. Box 27, 7040 AA 's-Heerenberg
Tel. +31(0)314-661644, Fax +31(0)314-662137
Internet: www.genap.nl
member of NWP

van de Geijn Partners B.V.
Paardenhoeve 80, 3992 PK Houten
Tel. +31(0)30-6380707, Fax +31(0)30-6380711
Internet: www.vdgp.nl
member of NWP

GMB Watertechnologie
Oostzeestraat 3b, 7202 CM Zutphen
P.O. Box 181, 7200 AD Zuthpen
Tel. +31(0)575-514430, Fax +31(0)575-511017
Internet: www.gmb.eu
member of NWP

Green Cross Netherlands
Laan van Roos en Doorn 39n, 2514 BC Den Haag
member of NWP

Grontmij Nederland B.V.
De Holle Bilt 22, 3732 HM De Bilt
P.O. Box 203, 3730 AE De Bilt
Tel. +31(0)30-2207444, Fax +31(0)30-2200294
Internet: www.grontmij.com
E-mail:
corporate.communication@grontmij.com
For more information see page 88
member of NWP

H

Hogeschool Van Hall Larenstein
Larensteinselaan 26a, 6862 CT Velp
P.O. Box 9001, 6880 GB Velp
Tel. +31(0)26-3695718, Fax +31(0)26-3695882
Internet: www.vanhall-larenstein.nl
E-mail: transfer@larenstein.nl
member of NWP

Herder B.V.
P.O. Box 8010, 4330 EA Middelburg
Tel. +31(0)118-6679500, Fax +31(0)118-638730
Internet: www.herder.nl
E-mail: sales@herder.nl
member of NWP

Van den Herik Sliedrecht
Industrieweg 24, 3361 HJ Sliedrecht
P.O. Box 191, 3360 AD Sliedrecht
Tel. +31(0)184-412881, Fax +31(0)184-417500
Internet: www.herik.nl
E-mail: info@herik.nl
member of NWP

Heijmans Infra Techniek B.V.
Bruistensingel 600, 5232 AJ 's-Hertogenbosch
P.O. Box 68, 5240 AB Rosmalen
Tel. +31(0)73-5436801, Fax +31(0)73-5436802
Internet: www.heijmans.nl
E-mail: hit@heijmans.nl
For more information see page 83
member of NWP

Hirschmann Automation and Control B.V.
Pampuslaan 170, 1382 JS Weesp
P.O. Box 92, 1380 AB Weesp
Tel. +31(0)294-462555, Fax +31(0)294-480639
Internet: www.hirschmann.nl
E-mail: hirschmann@hirschmann.nl
For more information see page 96

HKV Consultants
Botter 11-29, 8232 JN Lelystad
P.O. Box 2120, 8203 AC Lelystad
Tel. +31(0)320-294242, Fax +31(0)320-253901
Internet: www.hkv.nl
E-mail: info@hkv.nl
For more information see page 74
member of NWP

Hogeschool Utrecht
Padualaan 101, 3584 CH Utrecht
P.O. Box 182, 3500 AD Utrecht
Tel. +31(0)30-2308121, Fax +31(0)30-2319270
Internet: www.hu.nl
E-mail: info@hu.nl
member of NWP

Hogeschool Zeeland, Aquatic Ecotechnology and Integrated Water Resources Management
Edisonweg 4, 4333 KJ Middelburg
P.O. Box 364, 4380 AJ Vlissingen
Tel. +31(0)118-489000, Fax +31(0)118-489200
Internet: www.hz.nl/spring
member of NWP

Hoogheemraadschap van Delfland
Phoenixstraat 32, 2611 AL Delft
P.O. Box 3061, 2601 DB Delft
Tel. +31(0)15-2608108, Fax +31(0)15-2124968
Internet: www.hhdelfland.nl
member of NWP

Hoogheemraadschap Hollands Noorderkwartier
Lingerzijde 41, 1135 AG Edam
P.O. Box 130, 1135 ZK Edam
Tel. +31(0)299-663000, Fax +31(0)299-663333
Internet: www.hhnk.nl
member of NWP

Hoogheemraadschap Stichtse Rijnlanden
P.O. Box 550, 3990 GJ Houten
Tel. +31(0)30-6345700, Fax +31(0)30-6345998
Internet: www.hdsr.nl
E-mail: post@hdsr.nl
member of NWP

HydroLogic B.V.
Stadsring 57, 3811 HN Amersfoort
P.O. Box 2177, 3800 CB Amersfoort
Tel. +31(0)33-4753535, Fax +31(0)33-4753879
Internet: www.hydrologic.com
E-mail: info@hydrologic.com
For more information see page 90
member of NWP

I

IBM Nederland N.V.
David Ricardostraat 2-4, 1066 JS AMSTERDAM
member of NWP

IF Technology B.V.
Frombergstraat 1, 6814 EA Arnhem
P.O. Box 605, 6800 AP Arnhem
Tel. +31(0)26-3535555, Fax +31(0)26-4460153
Internet: www.iftechnology.nl
E-mail: info@iftechnology.nl
member of NWP

Infram B.V.
Voorsterweg 28, 8316 PT Marknesse
P.O. Box 16, 8316 ZG Marknesse
Tel. +31(0)527-241120, Fax +31(0)527-241119
Internet: www.infram.nl
member of NWP

ISD, Innovative Solution Developers B.V.
Hof van Azuur 44, 2614 TB Delft
P.O. Box 56, 2280 AB Rijswijk
Tel. +31(0)15-2138599, Fax +31(0)15-2138585
Internet: www.isd-bv.com
E-mail: info@isd-bv.com
member of NWP

Institute of Social Studies (ISS)
P.O. Box 29776, 2502 LT Den Haag
Tel. +31(0)70-4260666, Fax +31(0)70-4260770
Internet: www.iss.nl
member of NWP

Interbeton bv
H.J. Nederhorststraat 1, 2801 SC Gouda
P.O. Box 414, 2800 AK Gouda
Tel. +31(0)182-590630, Fax +31(0)182-590870
Internet: www.interbeton.nl
E-mail: h.kuipers@interbeton.nl
For more information see page 58
member of NWP

Investeau
Lekdijk West 6a, 2861 ER Bergambacht
Tel. +31(0)182-303105, Fax +31(0)182-303109
member of NWP

IRC International Water and Sanitation Centre
Internet: www.irc.nl
E-mail: general@irc.nl
For more information see page 51
member of NWP

International Institute for Geo-Information Science and Earth Observation (ITC)
Hengelosestraat 99, 7514 AE Enschede
P.O. Box 6, 7500 AA Enschede
Tel. +31(0)53-4874444, Fax +31(0)53-4874400
Internet: www.itc.nl
E-mail: pr@itc.nl
For more information see page 71
member of NWP

Nederlands ComitÈ voor IUCN
Plantage Middenlaan 2k, 1018 DD Amsterdam
Tel. +31(0)20-6261732, Fax +31(0)20-6279349
Internet: www.wetlands.nl
member of NWP

K

Keller Meettechniek B.V.
Leeghwaterstraat 25, 2811 DT Reeuwijk
P.O. Box 59, 2810 AB Reeuwijk
Tel. +31(0)182-399840, Fax +31(0)182-399841
Internet: www.keller-holland.nl
E-mail: sales@keller-holland.nl
member of NWP

KIWA
Sir Winston Churchillaan 273, 2288 EA Rijswijk
Tel. +31(0)70-4144400, Fax +31(0)70-4144420
Internet: www.kiwa.nl
member of NWP

Kiwa Water Research
Groningenhaven 7, 3433 PE Nieuwegein
P.O. Box 1072, 3430 BB Nieuwegein
Tel. +31(0)030-6069511, Fax +31(0)30-6061165
Internet: www.kiwawaterresearch.eu
E-mail: info@kiwawaterresearch.eu
For more information see page 64
member of NWP

Koop Bronbemalingen B.V.
Industrieweg 13, 7761 pv Schoonebeek
Tel. +31(0)524-532610, Fax +31(0)524-532006
Internet: www.koopbronbemaling.nl
E-mail: info@koopbronbemaling.nl
member of NWP

Krohne Nederland B.V.
Kerkeplaat 14, 3313 LC Dordrecht
P.O. Box 110, 3300 AC Dordrecht
Tel. +31(0)78-6306200, Fax +31(0)78-6306405
Internet: www.krohne.com
E-mail: info@krohne.nl
member of NWP

KWT Group
Wentelploeg 42, 8256 SN Biddinghuizen
Tel. +31(0)321-335566, Fax +31(0)321-335576
Internet: www.kwtgroup.nl
E-mail: kwtwaterbeheersing@kwtgroup.nl
For more information see page 94
member of NWP

L

Landustrie Sneek B.V.
Pieter Zeemanstraat 6, 8606 JR Sneek
P.O. Box 199, 8600 AD Sneek
Tel. +31(0)515-486863, Fax +31(0)515-412398
Internet: www.landustrie.nl
E-mail: info@landustrie.nl
For more information see page 108
member of NWP

Eef Leeuw Consultancy
Tesschenmacherstraat 52, 7241 CV Deventer
Internet: www.waterstromen.nl
member of NWP

Lettinga Associates Foundation (LeAF)
P.O. Box 500, 6700 AM Wageningen
Tel. +31(0)317-482023, Fax +31(0)317-482108
Internet: www.leaf-water.org
E-mail: marjo.lexmond@wur.nl
For more information see page 97
member of NWP

M

Match+
Mollerusweg 102f, 2031 BZ Haarlem
P.O. Box 6030, 2001 HA Haarlem
Tel. +31(0)23-7505105, Fax +31(0)23-7505106
Internet: www.matchplus.nl
E-mail: info@matchplus.nl
member of NWP

Milieu Oplossingen
Emmastraat 15 d203, 9722 EW Groningen
Tel. +31(0)50-8508120
Internet: www.milieuoplossingen.nl
member of NWP

Ministerie van Buitenlandse Zaken
Bezuidenhoutseweg 67, 2594 AC Den Haag
P.O. Box 20061, 2500 EB Den Haag
Tel. +31(0)70-3486486, Fax +31(0)70-3484848
Internet: www.minbuza.nl
E-mail: karin.roelofs@minbuza.nl
For more information see page 26
member of NWP

Ministerie van Economische Zaken
Bezuidenhoutseweg 20, 2594 AV Den Haag
P.O. Box 20101, 2500 EC Den Haag
Tel. +31(0)70-3798911, Fax +31(0)70-3796879
Internet: www.minez.nl
E-mail: b.j.m.vanbolhuis@minez.nl
For more information see page 29
member of NWP

Ministerie van Landbouw, Natuur en Voedselkwaliteit
Bezuidenhoutseweg 73, 2594 AC Den Haag
P.O. Box 20401, 2500 EK Den Haag
Tel. +31(0)70-3786868, Fax +31(0)70-3785868
Internet: www.minlnv.nl
E-mail: j.p.hoogeveen@minlnv.nl
For more information see page 30
member of NWP

Ministerie van Verkeer en Waterstaat, Rijkswaterstaat
Koningskade 4, 2596 AA Den Haag
P.O. Box 20906, 2500 EX Den Haag
Tel. +31(0)70-3518080, Fax +31(0)70-3518926
Internet: www.rijkswaterstaat.nl
For more information see page 20
member of NWP

Ministerie van Volkshuisvesting, Ruimtelijke Ordening en Milieubeheer (VROM)
Rijnstraat 8, 2515 XP Den Haag
P.O. Box 30945, 2500 GX Den Haag
Tel. +31(0)70-3393939, Fax +31(0)70-3391288
Internet: www.vrom.nl
For more information see page 28
member of NWP

Ministry of Agriculture, Nature and Food Quality
Bezuidenhoutseweg 73, 2594 AC Den Haag
P.O. Box 20401, 2500 EK Den Haag
Tel. +31(0)70-3786868, Fax +31(0)70-3786100
Internet: www.minlnv.nl
For more information see page 30
member of NWP

Ministry of Economic Affairs
Bezuidenhoutseweg 30, 2594 AV Den Haag
P.O. Box 20101, 2500 EC Den Haag
Tel. +31(0)70-3796437, Fax +31(0)70-3797361
Internet: www.ez.nl
For more information see page 29
member of NWP

Ministry of Foreign Affairs
Bezuidenhoutseweg 67, 2594 AC Den Haag
P.O. Box 20061, 2500 EB Den Haag
Tel. +31(0)70-3486486, Fax +31(0)70-3484848
Internet: www.minbuza.nl
E-mail: dg.adema@minbuza.nl
For more information see page 26
member of NWP

Ministry of Housing, Spatial Planning and the Environment
Rijnstraat 8, 2515 XP Den Haag
P.O. Box 20951, 2500 EZ Den Haag
Tel. +31(0)70-3393939, Fax +31(0)70-3391288
Internet: www.vrom.nl
For more information see page 28
member of NWP

Ministry of Transport, Public Works and Water Management
Koningskade 4, 2596 AA Den Haag
P.O. Box 20906, 2500 EX Den Haag
Tel. +31(0)70-3518774, Fax +31(0)70-3518931
Internet: www.rijkswaterstaat.nl
E-mail: bert.keijts@rws.nl
For more information see page 20
member of NWP

Euroconsult Mott MacDonald
Amsterdamseweg 15, 6814 CM Arnhem
P.O. Box 441, 6800 AK Arnhem
Tel. +31(0)3577111, Fax +31(0)3577577
Internet: www.euroconsult.mottmac.nl
E-mail: euroconsult@mottmac.nl
For more information see page 46
member of NWP

MWH B.V.
Delftechpark 9, 2628 XJ Delft
P.O. Box 270, 2600 AG Delft
Tel. +31(0)15-7512300, Fax +31(0)15-2625365
Internet: www.mwhglobal.com
For more information see page 95
member of NWP

N

Nautilus Eco-Civiel B.V.
De Kloosterhof 23, 1852 AC Heiloo
Tel. +31(0)72-5331399, Fax +31(0)72-5334334
Internet: www.nautilusschanskorven.nl
E-mail: info@nautilusschanskorven.nl
member of NWP

Nedap Energy Systems
Parallelweg 2k, 7141 DC Groenlo
P.O. Box 101, 7140 AC Groenlo
Tel. +31(0)544-471801, Fax +31(0)544-466008
Internet: www.safe-drinkwater.com
E-mail: paul.dereus@nedap.com
For more information see page 98
member of NWP

Nederlands Meetinstituut
Hugo de Grootplein 1, 3314 EG Dordrecht
P.O. Box 394, 3300 AJ Dordrecht
Tel. +31(0)78-6332332, Fax +31(0)78-6332309
Internet: www.nmi.nl
member of NWP

Nederlandse Waterschapsbank N.V.
Rooseveltplantsoen 3, 2501 KR Den Haag
P.O. Box 580, 2501 CN Den Haag
Tel. +31(0)70-4166266, Fax +31(0)70-4166262
Internet: www.nwb.nl
member of NWP

Netherlands Water Partnership
Westvest 7, 2611 AX Delft
P.O. Box 3015, 2601 DA Delft
Tel. +31(0)15-2151728, Fax +31(0)15-2151759
Internet: www.nwp.nl
E-mail: info@nwp.nl
For more information see page 18
member of NWP

Provincie Noord-Holland
Houtplein 33, 2012 DE Haarlem
P.O. Box 3007, 2001 DA Haarlem
Tel. +31(0)23-5144280, Fax +31(0)23-5143030
Internet: www.noord-holland.nl
member of NWP

Norit Nederland B.V., Headoffice Europe, Asia, Pacific, Africa & South America
Nijverheidsweg Noord 72, 3812 PM Amersfoort
P.O. Box 105, 3800 AC Amersfoort
Tel. +31(0)33-4648911, Fax +31(0)33-4617429
Internet: www.norit-ac.com
E-mail: info@norit.com
For more information see page 2, 78

Norit Components & Services B.V.
Marssteden 50, 7547 TC Enschede
P.O. Box 751, 7500 AT Enschede
Tel. +31(0)53-4287020, Fax +31(0)53-4287021
Internet: www.noritcs.nl
E-mail: info@noritcs.nl
For more information see page 2, 78

Norit Membrane Technology B.V.
Marssteden 50, 7547 TC Enschede
P.O. Box 731, 7500 AS Enschede
Tel. +31(0)53-4287010, Fax +31(0)53-4287011
Internet: www.noritmt.nl
E-mail: info@noritmt.nl
For more information see page 2, 78

Norit Process Technology B.V.
Marssteden 50, 7547 TC Enschede
P.O. Box 741, 7500 AS Enschede
Tel. +31(0)53-4287357, Fax +31(0)53-4287001
Internet: www.noritpt.nl
E-mail: info@noritpt.nl
For more information see page 2, 78
member of NWP

Norit N.V.
Hertmerweg 42c, 7625 RH Zenderen
P.O. Box 89, 7620 AB Borne
Tel. +31(0)74-2550777, Fax +31(0)74-2550779
Internet: www.norit.info
E-mail: info@noritpt.com
For more information see page 2, 78

NWP-NGO Platform
p/a Netherlands Water Partership, Westvest 7, 2611 AX Delft
Tel. +31(0)15-2151869
Internet: www.nwp.nl
E-mail: r.neijland@nwp.nl
For more information see page 48
member of NWP

Nijgh Periodieken B.V.
's-Gravelandseweg 565, 3119 XT Schiedam
P.O. Box 122, 3100 AC Schiedam
Tel. +31(0)10-4274100, Fax +31(0)10-4739911
Internet: www.nijgh.nl
E-mail: algemeen@nijgh.nl
member of NWP

Nijhuis Pompen B.V.
Parallelweg 4, 7102 DE Winterswijk
P.O. Box 102, 7100 AC Winterswijk
Tel. +31(0)543-547474, Fax +31(0)543-547475
Internet: www.nijhuis.com
member of NWP

Nijhuis Water Technology B.V.
Anholtseweg 32, 7091 HB Dinxperlo
P.O. Box 89, 7090 AB Dinxperlo
Tel. +31(0)315-655466, Fax +31(0)315-655494
Internet: www.nijhuis-water.nl
E-mail: info@nijhuis-water.nl
For more information see page 84

O

Omegam Laboratoria
H.J.E. Wenckebachweg 120, 1096 AR Amsterdam
P.O. Box 94685, 1090 GR Amsterdam
Tel. +31(0)20-5976680, Fax +31(0)20-5976689
Internet: www.omegam.eu
E-mail: customerservice@omegam.nl
For more information see page 109

Van Oord N.V.
Watermanweg 64, 3067 GG Rotterdam
P.O. Box 8574, 3009 AN Rotterdam
Tel. +31(0)10-4478444, Fax +31(0)10-4778101
Internet: www.vanoord.com
member of NWP

Optisense B.V.
Hengelosestraat 705, 7521 PA Enschede
Tel. +31(0)53-4836377
Internet: www.optisense.nl
member of NWP

Ingenieursbureau Oranjewoud B.V.
Zutphenseweg 31d, 7418 AH Deventer
P.O. Box 321, 7400 AH Deventer
Tel. +31(0)570-679444, Fax +31(0)570-637227
member of NWP

P

Paques
T. de Boerstraat 24, 8561 EL Balk
P.O. Box 52, 8560 AB Balk
Tel. +31(0)514-608500, Fax +31(0)514-603342
Internet: www.paques.nl
E-mail: info@paques.nl
For more information see page 102
member of NWP

Philips Lighting B.V.
Zwaanhoefstraat 2, 4702 LC Roosendaal
Tel. +31(0)165-577906, Fax +31(0)165-577907
Internet: www.philips.com/uvpurification
E-mail: uvpurification@philips.com
For more information see page 104
member of NWP

Pieralisi Benelux B.V.
Edisonlaan 22, 2665 JC Bleiswijk
Tel. +31(0)10-5218788, Fax +31(0)10-5218875
Internet: www.pieralisi.nl
E-mail: sales@pieralisi.nl
For more information see page 67
member of NWP

PNO Consultants
Flight Forum 95, 5657 DC Eindhoven
P.O. Box 7018, 5605 JA Eindhoven
Tel. +31(0)40-2580770, Fax +31(0)40-2580771
Internet: www.pnoconsultants.com
member of NWP

Practica Foundation
Maerten Trompstraat 31, 2628 RC Delft
Tel. +31(0)15-2575359
Internet: www.practicafoundation.nl
E-mail: info@practicafoundation.nl
For more information see page 54
member of NWP

Priva B.V.
Zijlweg 3, 2678 LC De Lier
P.O. Box 18, 2678 ZG De Lier
Tel. +31(0)174-5522600, Fax +31(0)174-533700
Internet: www.priva.nl
member of NWP

ProMinent Verder B.V.
Utrechtseweg 4a, 3451 GG Vleuten
P.O. Box 12, 3450 AA Vleuten
Tel. +31(0)30-6779280, Fax +31(0)30-6779288
Internet: www.ProMinent.nl
E-mail: info@ProMinent.nl
For more information see page 92

Provincie Noord-Brabant
Brabantlaan 1, 5216 TV 's-Hertogenbosch
P.O. Box 90151, 5200 MC 's-Hertogenbosch
Tel. +31(0)73-6812812, Fax +31(0)73-6141115
Internet: www.brabant.nl
E-mail: info@brabant.nl
member of NWP

Provincie Zuid-Holland, directie Water en Milieu
Zuid-Hollandplein 1, 2596 AW Den Haag
P.O. Box 90602, 2509 LP Den Haag
Tel. +31(0)70-4416614, Fax +31(0)70-4417831
Internet: www.zuid-holland.nl
For more information see page 31
member of NWP

PWN Waterleidingbedrijf Noord-Holland
Rijksweg 501, 1991 AS Velserbroek
P.O. Box 2113, 1990 AC Velserbroek
Tel. +31(0)23-5413333, Fax +31(0)23-5256105
Internet: www.pwn.nl
E-mail: pwn@pwn.nl
For more information see page 32
member of NWP

R

Rabobank Nederland
Gildenkwartier 199, 3511 DH Utrecht
P.O. Box 17100, UH P7054, 3500 HG Utrecht
Tel. +31(0)30-2130918, Fax +31(0)30-2161348
Internet: www.rabobankgroep.nl
E-mail: Vos.P@rn.rabobank.nl
For more information see page 99
member of NWP

Rebel Group Advisory
Wijnhaven 3-O, 3011 WG Rotterdam
Tel. +31(0)10-2755995, Fax +31(0)10-2755999
Internet: www.rebelgroup.nl
member of NWP

REDOX Water Technology B.V.
Stevinstraat 11, 7102 DZ Winterswijk
P.O. Box 218, 7100 AE Winterswijk
Tel. +31(0)543-531030, Fax +31(0)543-519089
Internet: www.redox.nl
E-mail: info@redox.nl
For more information see page 101
member of NWP

RIVM, Rijksinstituut voor Volksgezondheid en Milieu
Antonie van Leeuwenhoeklaan 9, 3721 MA Bilthoven
P.O. Box 1, 3720 BA Bilthoven
Tel. +31(0)30-2749111, Fax +31(0)30-2742971
Internet: www.rivm.nl
E-mail: info@rivm.nl
member of NWP

Rossmark Waterbehandeling B.V.
Celsiusstraat 34, 6716 BZ Ede
P.O. Box 250, 6710 BG Ede
Tel. +31(0)318-691500, Fax +31(0)318-691883
Internet: www.rossmark.nl
E-mail: info@rossmark.nl
member of NWP

Royal Haskoning
Barbarossastraat 35, 6522 DK Nijmegen
P.O. Box 151, 6500 AD Nijmegen
Tel. +31(0)24-3284284, Fax +31(0)24-3241059
Internet: www.royalhaskoning.com
E-mail: info@nijmegen.royalhaskoning.com
For more information see page 106
member of NWP

Rijkswaterstaat
Ketensedijk 4, 2901 LA Capelle aan den IJssel
Tel. +31(0)10-4027178
Internet: www.networkbarriermanagers.com
E-mail: bpt@tg.nl
For more information see page 80

S

Sea Spring Water B.V.
De Boelelaan 1085, 1081 HV Amsterdam
Tel. +31(0)20-5989907, Fax +31(0)20-5989904
Internet: www.seaspringwater.com
E-mail: info@seaspringwater.com
member of NWP

Senter Novem
Catharijnesingel 59, 3511 GG Utrecht
P.O. Box 8242, 3503 RE Utrecht
Tel. +31(0)30-2393493, Fax +31(0)30-2316491
Internet: www.senternovem.nl
member of NWP

SG Consultancy and Mediation B.V.
Kraanvogellaan 68, 5221 GB Engelen
Tel. +31(0)73-6312777, Fax +31(0)73-7510766
Internet: www.sgmediation.eu
E-mail: smidt.sg@inter.nl.net
For more information see page 73
member of NWP

Shell International B.V.
P.O. Box 38000, 1030 BN Amsterdam
Tel. +31(0)20-6303320, Fax +31(0)20-6302712
Internet: www.shell.nl
member of NWP

Siemens Nederland N.V.
Pr. Beatrixlaan 800, 2595 BN Den Haag
P.O. Box 16068, 2500 BB Den Haag
Tel. +31(0)70-3333333, Fax +31(0)70-3332917
Internet: www.siemens.nl
member of NWP

Simavi
Fonteinlaan 5, 2012 JG Haarlem
Tel. +31(0)23-5538055, Fax +31(0)23-5328538
Internet: www.simavi.org
E-mail: simavi@simavi.org
For more information see page 56
member of NWP

Simmons & Simmons Advocaten
Weena 666, 3012 CN Rotterdam
P.O. Box 190, 3000 AD Rotterdam
Tel. +31(0)10-4042662, Fax +31(0)10-4042333
Internet: www.simmons-simmons.com
member of NWP

Smart Water Systems B.V.
Nipkoweg 15, 8501 XH Joure
Fax +31(0)35-6025889
Internet: www.smartwatersystems.nl
member of NWP

SNS Reaal
Pettelaarpark 120, 5216 PT 's-Hertogenbosch
P.O. Box 70053, 5201 DZ 's-Hertogenbosch
Tel. +31(0)73-6833355, Fax +31(0)73-6833698
Internet: www.snsbank.nl/assetmanagement
member of NWP

SNV Nederlandse Ontwikkelingsorganisatie
Dr. Kuyperstraat 5, 2514 BA Den Haag
Tel. +31(0)70-3440244, Fax +31(0)70-3855531
Internet: www.snvworld.org
member of NWP

Spaans Babcock B.V.
Meerweg 26, 8561 AV Balk
P.O. Box 79, 8560 AB Balk
Tel. +31(0)514-608282, Fax +31(0)514-604485
Internet: www.spaansbabcock.nl
E-mail: sales@spaansbabcock.nl
For more information see page 59
member of NWP

Stichting Connect International
Jan van Houtkade 50, 2311 PE Leiden
Tel. +31(0)71-5141111, Fax +31(0)71-5141111
Internet: www.connectinternational.nl
E-mail: info@connectinternational.nl
member of NWP

Stichting Enviro-Pure Milieutechnieken
Dovenetelweg 25, 2555 TB Den Haag
Tel. +31(0)70-3456549, Fax +31(0)84-7391766
E-mail: enviro-pure@planet.nl
member of NWP

Stichting Humana
P.O. Box 65, 3980 CB Bunnik
Fax +31(0)30-6562804
Internet: www.humana.nl
member of NWP

Stichting ICCO
Joseph Haydnlaan 2a, 3533 AE Utrecht
P.O. Box 8190, 3503 RD Utrecht
Tel. +31(0)30-6927811, Fax +31(0)30-6925614
Internet: www.icco.nl
E-mail: info@icco.nl
member of NWP

Stichting Plan Nederland
Van Boshuizenstraat 12, 1083 BA Amsterdam
P.O. Box 75454, 1070 AL Amsterdam
Tel. +31(0)20-5495555, Fax +31(0)20-6444065
Internet: www.plannederland.nl
E-mail: info@plannederland.nl
member of NWP

Stichting Wateropleidingen
Groningenhaven 7, 3433 PE Nieuwegein
P.O. Box 1410, 3430 BK Nieuwegein
Tel. +31(0)30-6069400, Fax +31(0)30-6069401
Internet: www.wateropleidingen.nl
E-mail: info@wateropleidingen.nl
For more information see page 100

Stichting WaterWijs
Keizersgracht 676, 1017 ET Amsterdam
Tel. +31(0)20-7942211, Fax +31(0)20-7942212
Internet: www.stichtingwaterwijs.nl
member of NWP

Stowa, Stichting Toegepast Onderzoek Waterbeheer
A. van Schendelstraat 816, 3511 ML Utrecht
P.O. Box 8090, 3503 RB Utrecht
Tel. +31(0)30-2321199, Fax +31(0)30-2321766
Internet: www.stowa.nl
E-mail: stowa@stowa.nl
member of NWP

T

Tauw Groep B.V.
Handelskade 11, 7417 DE Deventer
P.O. Box 133, 7400 AC Deventer
Tel. +31(0)570-699911, Fax +31(0)570-699666
Internet: www.tauw.nl
E-mail: info.deventer@tauw.nl
member of NWP

TenCate Industrial Fabrics
Sluiskade N.Z. 14, 7602 HR Almelo
P.O. Box 236, 7600 AE ALMELO
Tel. +31(0)546-544811, Fax +31(0)546-544490
Internet: www.tencate.com/geotube
E-mail: industrial@tencate.com
For more information see page 110
member of NWP

TNO Bouw en Ondergrond
Princetonlaan 6, 3584 CB Utrecht
P.O. Box 80015, 3508 TA Utrecht
Tel. +31(0)30-2564256, Fax +31(0)15-2564800
Internet: www.nitg.tno.nl
member of NWP

Total Active Media
P.O. Box 12480, 1100 AL Amsterdam
Tel. +31(0)7509400, Fax +31(0)7509401
Internet: www.totalactivemedia.nl
member of NWP

Triqua B.V.
Vadaring 7, 6702 EA Wageningen
P.O. Box 132, 6700 AC Wageningen
Tel. +31(0)317-466644, Fax +31(0)317-466655
Internet: www.triqua.nl
member of NWP

Trojan Technologies Europe
Dovenetelweg 25, 2555 TB Den Haag
Tel. +31(0)70-3456549, Fax +31(0)70-7391766
member of NWP

TU Delft
Stevinweg 1, 2628 CN Delft
P.O. Box 5048, 2600 GA Delft
Tel. +31(0)15-2789111, Fax +31(0)15-2781179
Internet: www.tudelft.nl
member of NWP

Twynstra Gudde
Stationsplein 1, 3818 LE Amersfoort
P.O. Box 907, 3800 AX Amersfoort
Tel. +31(0)33-4677777, Fax +31(0)33-4677799
Internet: www.twynstragudde.nl
E-mail: bpt@tg.nl
For more information see page 61
member of NWP

U

UNESCO-IHE Institute for Water Education
Westvest 7, 2611 AX Delft
P.O. Box 3015, 2601 DA Delft
Tel. +31(0)15-2151715, Fax +31(0)15-2122921
Internet: www.unesco-ihe.org
E-mail: info@unesco-ihe.org
For more information see page 76
member of NWP

Unicef Nederland
Jacob van den Eyndestraat 73, 2274 XA Voorburg
P.O. Box 30603, 2500 GP Den Haag
Tel. +31(0)70-3339333, Fax +31(0)70-3824774
Internet: www.unicef.nl
member of NWP

Unie van Waterschappen
Koningskade 40, 2596 AA Den Haag
P.O. Box 93218, 2509 AE Den Haag
Tel. +31(0)70-3519751, Fax +31(0)70-3544642
Internet: www.uvw.nl
E-mail: info@uvw.nl
For more information see page 43
member of NWP

Universiteit Twente, Faculteit Construerende Technische Wetenschappen
Drienerlolaan 5, 7522 NB Enschede
P.O. Box 217, 7500 AE Enschede
Tel. +31(0)53-4899111, Fax +31(0)53-4892000
Internet: www.utwente.nl
member of NWP

V

Vereniging van Waterbouwers in Bagger-, Kust en Oeverwerken (VBKO)
Stavorenweg 3, 2807 PT Gouda
P.O. Box 474, 2800 al Gouda
Tel. +31(0)182-567367, Fax +31(0)182-567373
Internet: www.vbko.nl
member of NWP

Association of Dutch Water Companies (Vewin)
Sir Winston Churchilllaan 273, 2288 EA Rijswijk
P.O. Box 1019, 2280 CA Rijswijk
Tel. +31(0)70-4144750, Fax +31(0)70-4144420
Internet: www.vewin.nl
E-mail: info@vewin.nl
For more information see page 40
member of NWP

Vitens N.V.
van Deventerlaan 10, 3528 AE Utrecht
P.O. Box 1090, 8200 BB Leleystad
Tel. +31(0)30-2487911, Fax +31(0)30-2487910
Internet: www.vitens.nl
E-mail: communicatie@vitens.nl
For more information see page 38
member of NWP

VLM/FME-CWM
P.O. Box 190, 2700 AD Zoetermeer
Tel. +31(0)79-3531100, Fax +31(0)79-3531365
Internet: www.vlm.fme.nl
E-mail: vlm@fme.nl
member of NWP

Volkers Wessels Innovatie Management
Loodsboot 15, 3991 CJ Houten
P.O. Box 55, 3990 DB Houten
Fax +31(0)88-186779
member of NWP

VWS MPP Systems B.V.
Celsiusstraat 34, 6716 BZ Ede
P.O. Box 250, 6710 BG Ede
Tel. +31(0)318-664010, Fax +31(0)318-664001
Internet: www.vwsmppsystems.com
E-mail: MPPSystems@veoliawater.com
For more information see page 111

W

Waste Advisers on urban environment and development
Nieuwehaven 201, 2801 CW Gouda
Tel. +31(0)182-522625, Fax +31(0)182-550313
Internet: www.waste.nl
E-mail: office@waste.nl
member of NWP

Water Forum Online (WFO)
P.O. Box 228, 2640 AE Pijnscker
Tel. +31(0)15-3610260, Fax +31(0)15-3610262
Internet: www.waterforum.net
E-mail: info@waterforum.net
member of NWP

Water Insight B.V.
Dreijenlaan 2, 6703 HA Wageningen
P.O. Box 435, 6700 AK Wageningen
Tel. +31(0)317-210004, Fax +31(0)317-210101
Internet: www.waterinsight.nl
E-mail: info@waterinsight.nl
member of NWP

NV Waterbedrijf Groningen
Griffeweg 99, 9723 DV Groningen
P.O. Box 24, 9700 AA Groningen
Tel. +31(0)50-3688688, Fax +31(0)50-3122534
Internet: www.waterbedrijfgroningen.nl
E-mail: info@waterbedrijfgroningen.nl
member of NWP

Rijkswaterstaat Waterdienst
Zuiderwagenplein 2, 8224 AD Lelystad
P.O. Box 17, 8200 AA Lelystad
Tel. +31(0)320-298411, Fax +31(0)320-249218
Internet: www.rijkswaterstaat.nl
E-mail: info.waterdienst@rws.nl
For more information see page 20
member of NWP

Het Waterlaboratorium
J.W. Lucasweg 2, 2031 BE Haarlem
P.O. Box 734, 2003 RS Haarlem
Tel. +31(0)23-5175900, Fax +31(0)23-5175999
Internet: www.hetwaterlaboratorium.nl
E-mail: info@hetwaterlaboratorium.nl
For more information see page 93
member of NWP

N.V. Waterleidingmaatschappij Drenthe
Lauwers 3, 9405 BL Assen
P.O. Box 18, 9400 AA Assen
Tel. +31(0)592-854500, Fax +31(0)592-854599
Internet: www.wmd.nl
E-mail: info@wmd.nl
member of NWP

Nederlands Watermuseum
Zijpendaalseweg 26-28, 6814 CL Arnhem
Tel. +31(0)26-4452548, Fax +31(0)26-4439163
Internet: www.watermuseum.nl
E-mail: info@watermuseum.nl
member of NWP

Waternet
Spaklerweg 16, 1096 BA Amsterdam
P.O. Box 94370, 1090 GJ Amsterdam
Tel. +31(0)20-6082464, Fax +31(0)20-6083900
Internet: www.waternet.nl
E-mail: paul.bonne@waternet.nl
For more information see page 55
member of NWP

Waterschap Brabantse Delta
Bergschot 69-1, 4817 PA Breda
P.O. Box 5520, 4801 DZ Breda
Tel. +31(0)76-5641000, Fax +31(0)76-5641011
Internet: www.brabantsedelta.nl
member of NWP

Waterschap de Dommel
Bosscheweg 56, 5283 WB Boxtel
P.O. Box 10001, 5280 DA Boxtel
Tel. +31(0)411-618618, Fax +31(0)411-618678
Internet: www.dommel.nl
E-mail: info@dommel.nl
member of NWP

Waterschap Groot Salland
Dokter van Thienenweg 1, 8025 AL Zwolle
P.O. Box 60, 8000 AB Zwolle
Tel. +31(0)38-4557200, Fax +31(0)38-4530111
Internet: www.wgs.nl
E-mail: info@wgs.nl
member of NWP

Waterschap Hollandse Delta
Handelsweg 100, 2988 DC Ridderkerk
P.O. Box 4103, 2980 GC Ridderkerk
Tel. +31(0)88-9743492, Fax +31(0)88-9743001
Internet: www.wshd.nl
E-mail: info@wshd.nl
member of NWP

Waterschap Hunze en Aa's
Aquapark 5, 9641 PJ Veendam
P.O. Box 195, 9640 AD Veendam
Tel. +31(0)598-693800, Fax +31(0)598-693893
Internet: www.hunzeenaas.nl
E-mail: waterschap@hunzeenaas.nl
member of NWP

Waterschap Noorderzijlvest
Stedumermaar 1, 9735 AC Groningen
P.O. Box 18, 9700 AA Groningen
Tel. +31(0)50-3048910, Fax +31(0)50-3048997
Internet: www.noorderzijlvest.nl
E-mail: info@noorderzijlvest.nl
member of NWP

Waterschap Regge en Dinkel
Kooikersweg 1, 7609 PZ Almelo
P.O. Box 5006, 7600 GA Almelo
Tel. +31(0)546-832525, Fax +31(0)546-822536
Internet: www.wrd.nl
E-mail: info@wrd.nl
member of NWP

Waterschap Rivierenland
P.O. Box 599, 4000 AN Tiel
Tel. +31(0)344-649090, Fax +31(0)344-649099
Internet: www.wsrl.nl
E-mail: info@wsrl.nl
member of NWP

Waterschap Rijn en IJssel
Liemersweg 2, 7006 GG Doetinchem
P.O. Box 148, 7000 AC Doetinchem
Tel. +31(0)314-369369, Fax +31(0)314-369362
Internet: www.wrij.nl
E-mail: waterschap@wrij.nl
member of NWP

Waterschap Velt en Vecht
Burg. Feithsingel 2, 7742 BP Coevorden
P.O. Box 330, 7740 AH Coevorden
Tel. +31(0)524-592222, Fax +31(0)524-592200
Internet: www.veltenvecht.nl
E-mail: info@veltenvecht.nl
member of NWP

Waterschap Veluwe
Steenbokstraat 10, 7324 AX Apeldoorn
P.O. Box 4142, 7320 AC Apeldoorn
Tel. +31(0)55-5272911, Fax +31(0)55-5272704
Internet: www.veluwe.nl
E-mail: waterschap@veluwe.nl
member of NWP

Wavin Overseas B.V.
Rollepaal 19, 7701 BR Dedemsvaart
P.O. Box 158, 7700 AD Dedemsvaart
Tel. +31(0)523-624911, Fax +31(0)523-624600
Internet: www.wavinoverseas.com
E-mail: wavin.overseas@wavin.com
For more information see page 112
member of NWP

Wereld Natuur Fonds
Driebergseweg 10, 3708 JB Zeist
P.O. Box 7, 3700 AA Zeist
Tel. +31(0)30-6937333, Fax +31(0)30-6912064
Internet: www.wnf.nl
member of NWP

WESTT Development B.V.
Agora 1, 8934 CJ Leeuwarden
Tel. +31(0)58-2885040, Fax +31(0)582801329
Internet: www.westt.nl
E-mail: info@westt.nl
member of NWP

Wetlands International
Droevendaalsesteeg 3a, 6708 PB Wageningen
P.O. Box 471, 6700 AL Wageningen
Tel. +31(0)317-477770, Fax +31(0)317-478850
Internet: www.wetlands.org
E-mail: post@wetlands.org
member of NWP

Wetsus, centre of excellence for sustainable water technology
Agora 1, 8934 CJ Leeuwarden
P.O. Box 1113, 8900 CC Leeuwarden
Tel. +31(0)58-2846200, Fax +31(0)58-2846202
Internet: www.wetsus.nl
E-mail: info@wetsus.nl
member of NWP

Witteveen+Bos
van Twickelostraat 2, 7411 SC Deventer
P.O. Box 233, 7400 AE Deventer
Tel. +31(0)571-280836, Fax +31(0)570-697344
Internet: www.witteveenbos.nl
E-mail: water@witteveenbos.nl
For more information see page 107
member of NWP

Woman for Water Partnership
Benoordenhoutseweg 23, 2596 BA Den Haag
Tel. +31(0)70-3469304, Fax +31(0)70-3459346
Internet: www.womanforwater.org
E-mail: coordinator@womenforwater.org
member of NWP

Y

Consortium IJkdijk
Paterswoldeweg 810, 9728 BM Groningen
P.O. Box 424, 9700 AK Groningen
Tel. +31(0)50-5214466, Fax +31(0)50-5214530
member of NWP