

EDITORIAL

IAHR 80 YEARS YOUNG AND BACK IN THE HAGUE AFTER 60

BY ARTHUR MYNETT

When IAHR was established in 1935, Johannes Theodor Thijsse, Professor at Delft University of Technology and Director of Delft Hydraulics, was elected to the position of Secretary General. For 66 years until 2001 he and his successors hosted the IAHR Secretariat in Delft. Emeritus Professor and former Secretary General Henk Jan Overbeek reflects on the origin and early days of IAHR in this Special 80th Anniversary Issue of *Hydrolink*. Shortly after the major coastal flooding in 1953, when the Dutch government was developing the Delta Plan to safeguard the Netherlands against future floods, the 6th IAHR Congress was held in The Hague. Since that time, the membership has grown from some 400 to almost 4000 at present, and IAHR has expanded its offices to include Madrid and Beijing.



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world. His research interests are in river engineering, flood risk management, water-related hazards, environmental hydroinformatics and eco-hydraulics. He is promoting applications of new concepts developed in the Netherlands (e.g. Building with Nature, Flood Resilience, Room for the River, Delta Technologies) to river basins in Africa, Asia, and Latin America. He is Chair of the LOC of the 36th IAHR World Congress.

data analysis, aerial photographs and a 1D/2D hydrodynamic model, it was possible to derive measures to start the environmental restoration of the eco-system the Canal del Dique System.

The need for large scale model testing is still relevant to assure dike and dune stability, without which the Netherlands could not secure its safety and economic prosperity. The newly constructed Delta Flume at Deltares in Delft with its advanced control features and measurement techniques, is a recent example of advanced capabilities for research on breakwater stability, bed protection, offshore wind farms, and storm surge barrier construction.

Big data have also entered the field of hydro-environment engineering and research, as illustrated in the article on

Although the Delta Works are completed for some time already, the Netherlands is still heavily involved in building 'Deltas of the Future'. Ambitious investment programmes in research and development and continuous equipment innovation play an important role in keeping ahead as a country known for its hydraulic engineering skills. The concept of Building with Nature heavily relies on multi-disciplinary collaboration in the context of the so-called Dutch Diamond, as elaborated in a joint article from two major dredging companies.

Along the same lines, the Dutch 'Topsector Water' focuses on international cooperation. The Netherlands is actively involved in exploring sustainable solutions on flooding, disaster risk reduction and freshwater supply in close cooperation with international partners. The joint approach on developing a new master plan for the protection and development of the city of Jakarta in Indonesia is a good example referred to in this Special Issue.

The Dutch Water Authorities, which originate back in the 13th century, are an ever-renewing heritage and example of adaptive water governance and operational management, typical for the country of the Netherlands, where more than half of the population and economic activity is below sea level. How to secure its very existence may become clearer after reading this Special Issue.

A typical example of present day hydro-environment engineering practice is presented in the article on the Canal del Dique system, located in the North of Colombia. Large scale rectification and enlargements of the cross section in the mid 80's have resulted in a gradual enlargement of the flow capacity of the canal, leading to major environmental and social problems. With the help of hydraulic and bathymetric

'pervasive sensing and ubiquitous computing: opportunities, challenges'. Some early successes are presented in the field of oceanographic and coastal modelling in the waters around Singapore, where recently Singapore's National Environmental Agency (NEA) initiated a real-time water quality monitoring programme to support the Singapore Government agencies in the management of the coastal waters – the so-called Project Neptune. Such water quality issues are indeed at the heart of IAHR. So is the need for advancing the field of fluid mechanics to deal with environmental issues as clearly illustrated in the article on oil spill modelling and the practical implications in the case of a blow-out, as occurred in the Caribbean Gulf some years ago.

Quality Assurance (QA) is another area of significant interest, as illustrated for the case of the Room-for-the-River programme. In the 1990s the Netherlands changed its policy on river flood management, away from recurrently raising embankments and moving towards making more 'room for the rivers'. In 2006 it was decided to implement 39 measures to deal with design flood levels, at the same time enhancing spatial quality. In order to ensure that this goal was met a Quality Team was established, as explained in the accompanying article.

The 36th IAHR World Congress in The Hague triggered the genesis of the IAHR Young Professionals Network Delft, as elaborated in this issue. The activities developed for the 36th IAHR World Congress in The Hague include (i) speed networking, where YPs meet the leaders of companies in the water sector, (ii) soft-skills workshops, (iii) YPN Forum, (iv) technical tours and (v) evening programs.

Please enjoy this Special *Hydrolink* Issue and the 36th IAHR World Congress!