

# **MEMORANDUM OF UNDERSTANDING**

between

The UNESCO-IHE Institute for Water Education (UNESCO-IHE)

Delft, the Netherlands

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La Universidad Nacional Autónoma de México, Institute of Engineering, (II-UNAM)

México City, Mexico

for

# Integrated Water Resource Management

The signatories hereto, legal representatives of UNESCO-IHE Institute for Water Education (UNESCO-IHE) and the Institute of Engineering of the Universidad Nacional Autónoma de México (II-UNAM), together with the Water Network of the UNAM (RAUNAM)

Whereas the UNESCO-IHE and the II-UNAM are institutes that are dedicated to improving the environmental & water sectors, and to understanding the effect of accelerated pressure on water systems caused by increase in demand and climate change. The global extent of these effects and circumstances make it necessary to adapt and to come up with a solution to the challenges faced in managing water resources for a variety of uses and threats.

Whereas the II-UNAM is a research institute whose mission is to conduct world-class research with a view to finding solutions for fundamental and applied problems in several areas of engineering. Its purpose is to contribute to sustainable development and the wellbeing of the community, with emphasis on water and the environment, by increasing knowledge and implementing better management strategies.

Whereas the RAUNAM is a knowledge network that creates, stores, distributes and analyses knowledge regarding water-related problems, from an interdisciplinary point of view from within the UNAM. Its purpose is to facilitate transfer of knowledge and work as a team, by applying its outstanding ability to deal with major local problems.

Whereas the UNESCO-IHE is an educational, training and research institute whose mission is to increase the abilities of people and organizations in developing countries so as to improve the sustainable use of water and environmental resources.

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countries to collaborate in carrying out interdisciplinary research into water resources. The purpose of the Agreement is to create a synergy so that researchers may make a more effective contribution in the area of integrated water resource management.

Whereas there is now a unique opportunity to set up a new team to provide education and conduct research in the water sector, in view of the fact that the challenges that decision makers are facing around the world are becoming more and more complex, intense and urgent. Environmental changes, natural disasters, growth in population, shortage of water, increase in sea level and malnutrition do not stop at national frontiers. That is why countries need to work together and exchange resources in order to deal with these problems.

International collaboration in researching these problems provides a solid base for coming up with engineering and scientific solutions to these global problems. We are convinced that state-of-the-art research and technological innovation will aid economic growth,

With the wish to increase scientific activity and develop human resources in Latin America and the world by cooperating in the following areas:

- Water safety
- Water management and governance
- Managing water conflicts
- Hydrology, eco-hydrology and water resources
- Extreme events (e.g. floods and droughts)
- Risk and resilience
- Hydro-information technology
- Sanitary engineering
- Supply of clean water
- Preventing pollution
- Handling water ecosystems (e.g. wetlands)
- Coastal engineering

<u>The parties agree</u> to jointly seek moral and financial support for their association from the local and international community.

The parties agree that the purpose of their cooperation is to promote research and increase capability in the field of water resources, academic exchange, development of technical activities of mutual interest and set up a network of scientists, information, knowledge and technology transfer.

The parties agree that operating elements are as follows:

- (1) Exchange of visiting lecturers and academic staff.
- (2) Exchange of post-graduate students.
- (3) Joint research into subjects related to water.
- (4) Academic exchange of solutions and publications.

## Clause 1: Education

1.1 The parties shall work together to design a joint masters' degree course in hydraulic engineering.

## Clause 2: Research

Cooperation in this area shall be established and maintained so

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institutes in the fields specified may exchange knowledge. Both parties will identify active projects so that they may commence these activities, the number of which may increase as cooperation between the parties increases (new projects shall be attached hereto as exhibits).

2.2 Both parties shall create new international collaboration projects in the fields specified herein by increasing collaboration between the masters' and PhD students of both institutes.

## Clause 3: Increasing Abilities

- The activities referred to in this clause include reinforcing both institutes and 3.1 developing human resources in the areas of education, research and training, by arranging joint short courses at the II-UNAM in Mexico City. These courses will be open to the academic sector and the industry. Courses will include the subjects referred to herein.
- 3.2 There will be an exchange of post-graduate students between the II-UNAM and UNESCO-IHE to take the short courses related to the MoU. It is also likely that there will be a number of short stays of students and lecturers who work on these projects. The UNESCO-IHE, for its part, will offer UNAM students a reduced rate (at a discount of between 5% and 10%, depending on the number of students).

### Clause 4: Implementation of joint activities

- The institutes shall draft working plans every year that shall include specific times and deliverables. Both parties agree that they shall draft a separate document for each particular activity that shall stipulate administrative and financial aspects thereof.
- Both parties shall work together on the condition that lecturers' services, such as giving courses and supervising PhD and research students, shall be paid at market rates. Financial agreements must be signed before the commencement of specific projects.

### Clause 5: External contacts and publications

- 5.1 The parties shall establish contact with international organizations and experts who are active in the same field of research, to the benefit of both. The parties shall establish these contacts by mutual agreement.
- The parties hereto shall make sure that all relevant information and results are published and that the copyright of the institutes and academics are respected. All publications made within the framework of this cooperation must include the name and logotype of both parties.

### Clause 6: Organization

Both parties shall appoint a representative who shall be responsible for the coordination of joint tasks and administration of this MoU. The representatives Ishalfopez Lopez meet at least once a year and report the tasks that each has under the representatives Ishalfopez Lopez. The II-UNAM appoints Dr. Adrian Pedrozo-Acuña, Hydraulics III-UNAM appoints Dr. Adrian Pedrozo-Acuña Acuña Acuña

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representative, and the UNESCO-IHE appoints Dr. Gerald Augusto Corzo Perez, Coordinator of the Hydro-Information Technology Group of the Department of Governance and Integrated Water Systems, as its representative.

- 6.2 Both representatives may appoint specific researchers for exchange purposes in the specific fields referred to herein.
- 6.3 This MoU shall come into effect the day it is signed and shall remain in effect for five years. The parties shall assess the effectiveness of the MoU in the fifth year and decide whether to extend the effective term or not.
- 6.4 Each party shall complete its commitments with the other party before the stipulated date of termination.
- 6.5 Either party may terminate the MoU at any time, provided that it gives the other party at least six months' notice. This will not affect the programs that the parties have agreed to finalise, unless, they agree otherwise in writing.

### Clause 7: Settling disputes

8.1. The parties shall make their best effort to settle amicably any dispute that may arise between them regarding the tasks undertaken hereunder and their interpretations.

Two (2) copies hereof are signed in Spanish and two (2) in English, each of which shall be equally valid.

By the UNAM, Ciudad Universitaria.

By the UNESCO-IHE, Delft, The Netherlands,

András Szöllösi-Nagy, PhD, DSc

Rector

Nasa

Dr. Eduardo Barzana Garoja

Registrar

Dr. Carlos Aramburo de la Hoz Scientific Research Coordinator

Dr. Adalberto Nøyola Robles

Director of the Institute of Engineering

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I, Estela López López, Expert Translator duly authorized by the Superior Court of Justice for the Federal District, as published in Official Gazette No. 128 on August 7, 2013, with Registration No. 89, DO HEREBY CERTIFY that the foregoing translation in four (4) pages is, to the best of my knowledge and belief, true and complete.

This translation is not intended to prove the accuracy of the paures document in Commish or to certify that the contents thereof are authentic.

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Mexico City, August 12, 2013