



UNESCO-IHE  
Institute for Water Education



## MEMORANDUM OF UNDERSTANDING

Between

Deltares,  
Delft, The Netherlands  
and

IDEAM,  
Bogotá, Colombia  
and

UNESCO-IHE,  
Delft, The Netherlands

Hereinafter individually referred to as "Party" and collectively as "Parties"

on

Knowledge sharing and capacity development in the areas of flood risk management, integrated water resources management, climate change, prediction models and early warning systems

The undersigned, representatives of Deltares, IDEAM and UNESCO-IHE

**Considering** that Deltares, IDEAM and UNESCO-IHE represent institutions that are dedicated to support the improvement of water resources and flood risk management and the development and implementation of new techniques for monitoring and prediction.

**Considering** that Deltares, IDEAM and UNESCO-IHE represent institutions that are dedicated to the building of capacity and research in the integrated management of water resources and flood risk.

**Considering** that IDEAM is a prominent institution with the mission to generate knowledge and information to support decision making in sustainable ways to use natural resources and forecast.

**Considering** that Deltares is a non-profit organization for training, research and advisory with the mission of creating knowledge for the society in the areas of water, land and deltas and strengthening capacities of people and institutions in different countries,

**Considering** that UNESCO-IHE is a non-profit organization for post-graduate education, research and capacity building, with the mission of building knowledge and research in water and environment, with a focus on developing countries and countries in transition,

**Considering** that the recommendations of the Dutch mission in Colombia (January, 2011) call for the development of studies, measures and techniques in an integrated way where Deltares has a worldwide experience.

**Desirous** to enhance development of activities in Colombia, by encouraging direct co-operation between the Partners in the fields of research, application and capacity development.

**Desirous** to contribute to a better understanding of the flood risk and water problems and to *develop* integrated and sustainable solutions based on technical, social and economic sciences, for problems related to among others climate change.

**Desirous** to contribute to the development of new norms and policies that can be applied in Colombia on the areas of the flood risk, water management and early warning systems where The Netherlands, Deltares and UNESCO-IHE have a broad experience.

**Desirous** to contribute to the studies that will lead to further insights, understanding and mitigation of floods at national and regional levels.

**Desirous** to participate jointly in projects in the areas of early warning systems, hydrology and hydraulic modeling and risk mapping at national and regional levels.

Therefore,

**Agree** to promote the formal co-operation between IDEAM, Deltares and UNESCO-IHE by obtaining the necessary support for activities of the envisaged partnership,

**Agree** that the Parties, in a concerted effort, will try to find moral and financial support for this co-operation from the national and international community,

**Agree** that the co-operation aims at promoting the cooperation between the Parties in the field of research, application and capacity strengthening in the areas of flood risk and water management,

**Agree** to further explore the possibilities of an innovative and challenging partnership in favor of application and research,

**Agree** on the following operational elements:

**Article1.** The cooperation may include but is not necessarily limited to knowledge sharing and capacity building activities and pilot projects in the following areas and modalities:

1. Flood risk management, e.g.:
  - a. Flood risk mapping
  - b. Flood safety norms
  - c. Hydrological modeling
  - d. Hydrodynamic modeling
  - e. Forecasting and early warning systems
2. Integrated water resources management and planning, e.g.:
  - a. Monitoring and data management
  - b. River basin and groundwater hydrology studies
  - c. Decision support systems
  - d. Water Quality and Environmental Flows
3. Climate change and adaptation, e.g.:
  - a. Effects climate change on water resources
  - b. Climate adaptation measures



4. Strengthening staff capacities of IDEAM, Deltares and UNESCO-IHE in basic and applied research and in the execution of capacity development projects, in collaboration with relevant institution and universities in Colombia.
5. Networking at the local, national and international levels and provide institutional support to sector organizations and knowledge institutes in the Region.

#### Article 2: Implementation of Joint Activities

To achieve the above, on a yearly basis, the Parties will prepare time-bound and output focused Work Plans.

This MoU, including any Work Plan agreed hereunder, does not constitute any fiscal or funding obligation between the Parties, nor any commitment for any Party to perform services. Any commitment to transfer anything of value including reimbursement or to provide funds, goods or services between the Parties for any agreed activity will be outlined in separate agreements that will be drawn up in writing by representatives of the Parties and will be independently authorized by an appropriate authority of the funding party. This MoU does not provide such authority. Any separate agreements for concrete commitments shall be under the scope of this MoU.

#### Article 3: External Contacts and Publications

In the framework of the joint activities, mutually beneficial contacts and cooperation's will be established with national and international organizations and experts, which are active in the same or related fields of expertise. The Parties will inform the other when relevant opportunities related to this MoU arise.

The Parties will take steps to ensure that relevant data and research findings are published, provided that author or institution's rights and copyrights and other intellectual property rights are respected. All publications within the framework of this MoU shall mention the names and logos of the Parties, unless agreed upon otherwise.

Unless agreed otherwise in a separate agreement, the products and subproducts produced under this MoU may be used by the Parties for the propose of this MoU.

#### Article 4: Organization

The Parties will each nominate a representative responsible for the coordination of joint activities and the management of this MoU. These representatives will consult each other at least once per year and will report the activities under this MoU to the management of the Parties. The report may include technical activities, advances and products. The representatives will not be responsible for administrative and financial reports.

The representatives will promote the objectives and activities of this MoU and and facilitate communication and understanding between the Parties.

This MoU will enter into force at the date of signing and its duration is three (3) years and will terminate thereafter automatically, unless otherwise agreed in accordance with the following sentence. This MoU will be evaluated between the Parties during the third (3<sup>rd</sup>) year on effectiveness and efficiency and will continue, if all Parties agree thereto in writing.

The MoU may be terminated unilaterally by any Party by formal communication of this Party to the other Parties two months earlier.



Each Party will comply with any commitments with any of the other Parties that are pending at the termination date of this MoU.

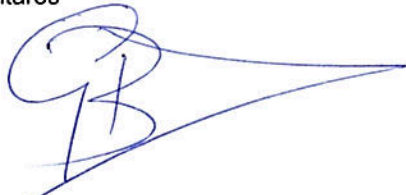
**Article 5: Settlement of disputes**

This MoU shall not constitute any legal obligation and/or commitment, unless agreed otherwise in writing. The Parties shall use their best efforts to settle amicably all disputes arising out of or in connection with this Agreement or the interpretation thereof.

This agreement is drawn up in three (3) copies, each being equally valid.

Delft, June 22, 2012, [date]

for Deltares



**GERARD BLOM**  
Director of Inland Water Systems

Bogotá, 22 June 2012, [date]

for IDEAM



**MARIA CLAUDIA GARCIA.**  
General Directora (E)

Delft, ....., [date]

for UNESCO-IHE



**Professor ANDRÁS SZÖLLÖSI-NAGY, PhD, DSc**  
Rector