Expected impact:

• The project will contribute to RTD capacity building in Ukraine through development and dissemination of example of good practices in designing of a research center's strategy.

• The project team will organise an international symposium on innovation support system in Ukraine and Ukrainian competitive advantage to bring together professionals in the field of innovation policy and experts in sustainable technology management from Ukraine and EU as well as representatives from leading Ukrainian industries and local and regional authorities.

• The project will contribute to increased scope of the centres with increased linkage with economic and social environment through dissemination of the guideline on use of interactive backcasting method for stakeholders involvement in innovation process.

• The project will enhance participation of the country in the 7th Framework Programme through development of training strategy and respective modules.

• The project will also improve networking methods of Ukrainian Research Centers with other research centres in Member States or Associated Countries.

COORDINATOR:

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LIST OF PARTNERS

1. Institute of Hydromechanics of National Academy of Sciences of Ukraine (IHM NASU, Kyiv, Ukraine)

2. Kungliga Tekniska Högskolan / Royal Institute of Technology (KTH, Stockholm, Sweden)

3. Technische Universiteit Delft / Delft University of Technology (TU Delft, The Netherlands)

ERA-WIDE provides a platform for improving IHM NASU international visibility and strengthening the IHM brand in the areas of its academic excellence with high societal relevance and business outreach, thus paving the way for international cooperation and participation in European Framework Programmes.

ERAIHM

"Advancing Research and Cooperation Capacities of IHM NASU towards ERA"

WWW: http://hydromech.kiev.ua/eng/eraihm.html
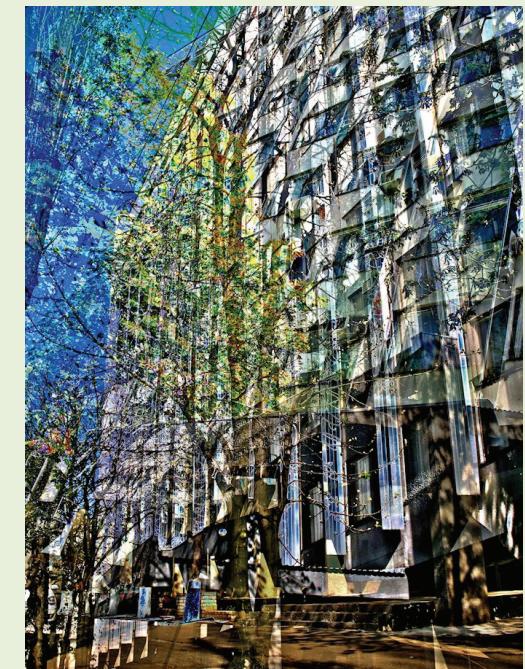
REFERENCE OF THE CONTRACT: 266587

TOTAL BUDGET: 478.706,60 EUR

EC CONTRIBUTION: 385,763.00 EUR

STARTING DATE: 01 November 2010

DURATION: 28 months

Presentation of the research centre:

Institute of Hydromechanics (IHM) of the National Academy of Sciences of Ukraine was founded in 1926 in Kiev and is currently the largest center for research of a wide range of problems in modern fluid mechanics.

In the former Soviet Union, most research projects in the IHM were associated with the problems of hydrodynamics, which were stimulated by military applications. After the secession from the Soviet Union military programs in the IHM were terminated. The Institute got involved in international cooperation with colleagues from the United States and European Research Centers.

The total number of IHM staff is more than 250 people, including 27 full professors. 12 scientific departments of IHM cover the research in all directions of modern hydromechanics, including:

• Study of the characteristics of fluid flows in channels considering phase transitions;

• Development of methods for flows control in the boundary layer for drag reduction to the motion of bodies in the fluid.

• Development of methods for direct numerical simulation of fluid flows.

• Study of sound generation by flow and development of methods for monitoring the efficiency of conversion of kinetic energy flux into the energy of sound.

• Study of the interaction of surface waves with the shore and engineering structures in the coastal zone.

IHM has a developed infrastructure of experimental tools, which is recognized as Ukrainian national heritage. The Institute has experimental pool to model the behavior of surface and underwater vehicles with different modes of towing and a special testing ground for the simulation of the interaction of surface waves with the shore and engineering constructions. Based on results of basic research IHM performs vide range of applied investigations.

Activities:

The ERAIHM project is designed to reinforce cooperation capacities of IHM NASU and to enhance its participation in European Framework Programmes. In order to reach this goal the project includes the following activities:

• Development of a strategy of IHM NASU aimed at ensuring coherence of its RTD activities with socio-economic needs of Ukraine, enhancing its cooperation with European Research Centres and participation in European Framework Programmes.

The IHM strategy will be based on results of two assessments: firstly, evaluation of IHM research scope and quality and secondly, overview of Ukrainian Innovation System and assessment of competitive advantage of Ukraine with focus on the scientific areas of IHM.

• Development and implementation of training modules at IHM to build capacity in participation in Fp7 and to facilitate involvement of stakeholders in innovation process.

This includes:

- Identification of capacity gaps and training needs of IHM staff to enhance participation in Fp7 and to facilitate involvement of stakeholders in its RTD activities.

- Implementation of training modules on the Fp7 for research managers and young researchers at IHM based on experiences of European partners.

- Interactive Backasting Exercise as a method that both creates consensus on future goals for technological development and guides the innovation process over time.

• Development of a communication and dissemination toolkit for improvement of IHM visibility for Ukrainian and European research centres and stakeholders:

- Developing communication and dissemination plan for efficient reach of various stakeholders both in Ukraine and EU countries.

- Developing a web-platform of IHM.

- Networking using structures of the European partner institutions.

- Organising international symposium on innovation support system in Ukraine and Ukrainian competitive advantage.

- Workshop for presenting experiences of interactive backcasting exercise.

- Final project conference