

## Integrate, Consolidate and Disseminate European Flood Risk Management Research







#### **DISCLAIMER**

Workshop summary of the international CRUE workshop on CRUE's Research Agenda, held in Budapest, Hungary, on 23 April 2008.

The aim of this summary paper is to provide relevant information and to stimulate discussion amongst those with an interest in flood risk management research and the dissemination and communication of its results. This summary is made available to governments at all levels, research funding bodies, universities, industries, practitioners, and the public by way of the CRUE website (<a href="http://www.crue-eranet.net">http://www.crue-eranet.net</a>).

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## **Executive Summary**

### **CRUE ERA-Net**

CRUE ERA-Net is an initiative under the European Commission's Sixth Framework Programme. CRUE ERA-Net is a network of research funders on Flood Risk Management across 13 European Member States or regions. The network aims to introduce structure within the area of European Flood Research by improving co-ordination between national programmes.

The vision for the CRUE ERA-Net action on flooding is to develop strategic integration of research at the national funding and policy development levels within Europe to provide knowledge and understanding for the sustainable management of flood risks.

On 23 April 2008 CRUE organised an international workshop in Budapest in order to discuss the future of flood-related research in Europe.

### Workshop

#### Workshop objectives

This international workshop in Budapest (HU) brought together approximately 60 policy-makers and experts from 14 European countries, the European Commission, and the USA with the aim to develop a strategic agenda for European flood risk management research over the next 5-10 years.

#### CRUE's Research Agenda

There was broad agreement of the challenges and strategic research areas identified by the CRUE Research Agenda and support for the common call for research on 'Flood resilient communities – managing the consequences of flooding'.

A strong emphasis was placed on the need to address trans-boundary issues, with the benefit of the network and collaborative research underpinning national flood risk management decisions which may impact upon other European countries. It was recognised that trans-boundary issues can only be addressed through successful

trans-national working whereby understanding and lessons learned are shared amongst researchers, policy makers and practitioners.

Issues of improved perception and awareness of flood risks were highlighted as particularly important, with a need to understand the factors influencing these and how best to channel communications for optimum flood risk management and response. Building resilience was seen to cover more than just climate change and tackling this greater complexity requires support from broad scientific understanding.

Detailed comments on the draft Research Agenda and the questions posed would be gratefully received by the CRUE project team to <a href="mailto:crue.eranet@defra.gsi.gov.uk">crue.eranet@defra.gsi.gov.uk</a>.

### Further actions by CRUE

As research funded under the first CRUE common call ends in June 2008, there is a need to ensure effective communication of outputs. Through effective influencing, we should be working to ensure that new understanding underpins the work of policy makers and practitioners across Europe. The political context, divergent timescales and the acceptability of uncertainty were cited as barriers to uptake of research outputs. As scientific excellence should seamlessly support policy development and drive good practice, the CRUE network was seen as an enabler to facilitate effective dissemination and communication of research outputs.

The opportunity for the European network to learn from international experiences in flood risk management was highlighted and the potential benefits derived from greater collaboration emphasised.

All presentations delivered at the workshop are available on the CRUE website under <a href="http://www.crue-eranet.net/meetings\_events.asp">http://www.crue-eranet.net/meetings\_events.asp</a>.

# 1 Introduction and context

## 1.1 Introduction

The workshop was hosted by the Hungarian Central Bureau of Water and Environment (VKKI). The event was chaired by Paul Samuels, from HR Wallingford.

The main purpose of this workshop was to provide a forum for policy makers and research managers to help refine and focus CRUE's draft, floodrelated research agenda which aims to underpin the effective management of flood risk and deliver sustainable development in Europe. The 60 invited delegates from across Europe and the USA made a valuable contribution to CRUE's efforts to determine the future of flood-related research in Europe over the next 5 - 10 years. Delegates came from Austria, England, Finland, Flanders, France, Germany, Hungary, Ireland, Italy, The Netherlands, Poland, Scotland, Spain, USA. A member of the European Commission as well as members from water and environment-related ERA-Nets also joined the workshop.

CRUE ERA-Net (http://www.crue-eranet.net) is a FP6 project (European Commission's Sixth Framework Programme). The network of research funders on flood risk management across 13 European Member States or Regions has been set up to consolidate existing European flood research programmes, promote good practice, identify gaps and opportunities collaboration on future research activities. Network partners come from most European countries that have been particularly badly affected by flooding. By supporting good practice on research management and dissemination, and the spread of knowledge, they expect to improve flood management in their own countries and the rest of Europe.

## 1.2 Scope of Workshop

The full day workshop was held on April 23 2008. The day was divided into two sessions, each one focussing on a particular aspect of the development of a common and shared research agenda on flooding.

In summary , the objectives of the workshop were to:

- Verify the short- and long-term priorities of topics identified and prioritised at the international workshop CRUE held in The Hague (NL), particularly against the background of the EU Floods Directive
- Discuss how the CRUE network can support the implementation of the Floods Directive
- Define trans-national short-and long-term opportunities and collaborations to engage in the research agenda
- Identify and secure long-term funding sources to fulfil the research agenda and realise collaborations
- Define the "added value" CRUE can contribute to linking policy-makers, funding body representatives, academics, NGOs, insurance industry, flood management agencies, and practitioners in their efforts to better understand the consequences of increasing flood risk in Europe and how the policy on EC/national level will respond



# 2The workshop in detail

## Morning session

The workshop was officially opened by László Kóthay, State Secretary of Water in Hungary.

Mr Kóthay, in his welcome note, emphasised that Hungary is very keen to support trans-national cooperation and collaboration in flood risk management and promotes the exchange of information and good practice among international Given that Hungary was, amongst others, one of the first countries to agree to the development of a new EU Directive on floods it has simultaneously joined the CRUE network to integrate Hungarian research activities within Europe. Hungary has a very ambitious plan in the Tisza valley to construct several retention basins (polders) in order to reduce the level of floods by 1m and involves a lot of research and development work. He highlighted that flood events over the past decade clearly show the importance of an integrated approach to flood risk management across Europe.

In addition to setting the context, Mr Kóthay urged all delegates to actively participate in the workshop for a fruitful and inspiring result.

**Sebastian Catovsky** (Defra, CRUE Programme Coordinator) introduced the CRUE ERA-Net, thanked VKKI for hosting and organising the workshop and gave a brief outline of the agenda for the day.

Dr Catovsky highlighted the progress CRUE has made in the last three years in order to establish itself as an active network of research funders in flood risk management. By establishing systematic exchange of information and good practice, CRUE has improved communication among partners in order to develop better mutual knowledge and understanding.

He went on to define CRUE's role in this whole process. He expressed the hope that policy-makers would perceive the CRUE network as a

source of expertise. A good example of CRUE's work are the links with the EC Working Group on Floods in order to support Member States in the implementation of the EU Floods Directive. He reiterated that policy decisions must be based on sound scientific evidence. CRUE envisages its role as bringing emerging knowledge and research needs together.

He also gave an update on imminent CRUE actions. The framework for the second Common Call in CRUE were briefly summarised for the audience and mention was made of the impending launch of "CRUE snapshot", a publication which is intended to succinctly communicate flood-related research highlights for policy-makers across Europe.

Dr Catovsky explained the importance of the discussions that would take place in this workshop in influencing the further development of CRUE's Research Agenda. The outputs of the workshop would be brought together with the analysis that had been done to date in order to prepare a research programme of common interest for Europe.

The workshop continued with two keynote presentations on the importance of (international) research as a first-hand contributor to the flood risk management evidence base, both on national and EU level.

Marta Moren Abat (DG Environment, European Commission) gave an overview of the European Floods Directive in her keynote presentation. The European Commission's new directive builds on the EU's Water Framework Directive (WFD), 2000, which is the cornerstone of EU water protection policy by embracing an approach to sustainable and integrated water resources management. The Floods Directive proposes new measures to help EU Member States choose the right tools with which to reduce the likelihood of floods and limit their impacts while ensuring that they cooperate in shared river basins and coastal areas in order to improve flood protection all over Europe.

But floods are just one hazard among the natural hazards that Europe has to face. She stressed the importance of affording European citizens better protection against disaster risks. Key will be the strengthening of early warning systems in Europe and improving public perception, policy responses



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and long term perspectives. Research can help tackle these challenges by the development of a sound knowledge base for policy decisions.

Ms Moren-Abat briefly described FP6/FP7 actions related to flood hazard and gave an outline of the open FP7 calls.

She emphasised the importance of securing coordination of European Commission and Nationally funded research. The role of ERA-Nets in achieving this is seen as critical.

This was followed by the second keynote presentation that was given by Jochen Schanze (Leibniz Institute of Ecological and Regional Development, Germany). Mr Schanze introduced delegates to CRUE's first Research Funding Initiative, outlining the benefits of trans-national based joint research activities for policy makers and research funders.

He described some of the research results emerging from the seven CRUE funded joint research projects, explaining that a synthesis of all of the research will be provided in Autumn this year. The speaker made it very clear that meeting policy demands can be best achieved by active involvement of policy-makers and decision makers in the research preparation process. Through it's Funding Initative, CRUE has sucessfully shown that this can be beneficial to both policy makers as well as researchers.

The first session on CRUE's Research Agenda was opened by Ellen Cleassens (Ministry of Transport, Public Works and Water Management, NL). The purpose of the session was to enable delegates to contribute to the definition of research topics under each research priority outlined in the Research Agenda Discussion Paper and their relative importance. She highlighted CRUE's initial work in supporting implementation and mentioned the strategic structuring initiatives CRUE has used to develop the research priorities as outlined in the Discussion Paper.

Paul Samuels then introduced delegates to the breakout group discussions. Each breakout group incorporated policy-makers, research funders, and research managers, and was asked to address the following:

- How well do the outlined strategic research areas fit with the key challenges?
- What should the key focus of CRUE research be?
- Which specific research (call) topics should be tackled by CRUE within the proposed timeframe (2015)?
- What planned R&D activities in your country would support these strategic research areas?

Each breakout group was asked to focus on one of the four questions above, but they were invited to contribute to all.

Both the discussion in the breakout groups and the feedback from the panel have added considerable value to the development of CRUE's research priorities. Session highlights can be summarised as follows

- CRUE's General agreement with challenges and strategic research areas but it was suggested that more priority should be given to perception and awareness and transnational components - including sharing of knowledge linking and science/policy/practitioners to be added to the list of challenges
- Developing benchmarks and applying equivalent standards across Europe is important
- Resilience should be viewed as a more general issue – not confined to climate change issues
- CRUE should focus on transnational watershed issues, because decisions on mitigating flood risk require common data, data set models and common understanding to make the right choices
- Climate change is dealt with on many levels; this is perhaps not the niche for CRUE
- High attention is also given to social and economic development in relation to spatial planning – a common need in several countries

A high-level panel discussion on present/foreseen flood-related adaptation strategies on national level marked the end of the morning sessions.

Tom Bolger (Office of Public Works, Ireland) welcomed Frédérique Martini (Ministry for

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Environment, France), Maria Grazia Cotta (Ministry for the Environment, Land and Sea, Italy), Joan Pope (US Army Corps of Engineers), Eric Boessenkool (Ministry of Transport, Public Works and Water Management, NL), Florian Rudolf-Miklau (Federal Ministry of Agriculture, Forestry, Environment and Water Management, Austria), and Matthias Löw (Hessian Ministry of Environment, Germany) to this panel discussion and asked the panellists how the policy in their country/organisation will respond to the recent flood-related challenges. Summarising this panel, the panellists addressed the challenge their countries have with a changing climate including the rising risk of flooding and how important an updated policy towards an integral risk approach is. Topics of water management strategies, land use planning, insurance opportunities, public risk perception and awareness, integration of government agencies, implementation of EU Floods Directive or trans-national river basin management were used by several speakers to underline their strategic policy priorities in the next few years.

The discussion afterwards focused on the experience in making private vulnerability on risk maps public. Some of the panellists mentioned the importance of using risk information as a "communication" tool to the public in order to improve public flood awareness. This also has an effect on flood insurance opportunities, which are, in several countries subject to major discussion.

Paul Samuels summarised the morning sessions as a good starting point for CRUE to further develop its Research Agenda. He emphasised that key elements of the Research Agenda should be around issues concerning transnational basin and water management and adaptation not only to climate change but also to other issues, e.g socioeconomic development.

#### Afternoon session

The afternoon session was opened by **Sylvie Charron** (Ministry of Environment, France), focusing on implementation routes for CRUE's Research Agenda. In her presentation she outlined the need for a better link between policy and research, and how the exchange of information would support CRUE in implementing its Research Agenda.

Paul Samuels then explained the second breakout session, asking delegates to focus their discussions on the following:

- How to link policy with research?
- How to develop best evidence and innovation for sustainable flood risk management
- How to integrate knowledge and the exchange of information?

To each of these questions, delegates had to consider:

- Barriers and enablers
- Tools and routes
- Funding possibilities

Each breakout group was asked to focus on one of the three questions above, but they were invited to contribute to all.

Considering the first issue, attendees identified and summarised as main obstacles for an efficient transfer from science into policy the following:

- Policy and research work on different timescales (good science often needs time but policy often requests a simple and quick response)
- Scientists have to deal with uncertainties – but policy-makers want definitive answers
- Science needs effective and appropriate translation into policy and practice
- Policy-makers and researchers communicate in different ways and in difference languages

Issues, raised by the delegates to the second question included:

- Pilot projects are enablers
- Stakeholder participation in projects from the beginning
- Lack of evidence as a barrier need better mechanisms to overcome this
- Disaster can be a "great" enabler to increased engagement
- Legislation is both a barrier and an enabler

Participants from the second session made the following comments and recommendations:



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- Intellectual Property Rights can be perceived as a barrier
- More professional help is needed in moving results from research projects through the dissemination process to market them to the operational people.
- Communication and language issue major requirement to overcome in terms of integration of knowledge
- Educate the educators basic education requiring public to understand flood risk
- Enterprise GIS has a role
- Importance of Internet, and the local interest in flood-related issues

Andy Moores (Environment Agency, UK) summarised the main findings of the day and

invited further discussion from the audience. Whilst delegates felt that the discussions were useful, there was concern that the issues being discussed were still very general. Mr Moores reiterated that the CRUE network would welcome further comment or recommendations on its draft Research Agenda, in particular on the series of questions posed in the Discussion Paper.

The workshop was closed by **Sebastian Catovsky**, who expressed his thanks to everyone for their active participation and the helpful and interesting contributions from the speakers and panel experts.

# 3 Implications for the CRUE Network

ERA-Net CRUE invites views from stakeholders across Europe on the draft Research Agenda, including possible alternative approaches and solutions. Public consultation, feedback and comment on the proposals in the Research Agenda Discussion Paper will be critical in informing refinements to the design. Detailed comments on the draft Research Agenda and the questions posed would be gratefully received by the CRUE project team to <a href="mailto:crue.eranet@defra.gsi.gov.uk">crue.eranet@defra.gsi.gov.uk</a>.

CRUE is further aiming to strengthen the link between policy, research and practice in the area of flood risk management. Therefore, the CRUE partners are still seeking for ways how to consider the present raised needs and recommendations into national and joint based research activities. It is obvious that the vision of a long-term based strategy for bringing research into use cannot be achieved as a stand-alone activity in the framework of ERA-Net CRUE. The establishment of contacts, the co-ordination and the exchange of information between flood and water relevant ERA-Nets (e.g. IWRM.net, SNOWMAN, CIRCLE; SKEP), Networks of Excellence, Integrated Projects (e.g. FLOODsite), INTERREG programmes and also any other national research initiatives in the partner countries will be crucial for a successful implementation of CRUE's vision to make research outputs more readily available to the relevant user groups.

With (i) CRUISE, a trans-national based database on flood-related research, (ii) more research focussing on the issues of concern to policy-makers and stakeholders (CRUE's first and second Common Call), and (iii) the launch of CRUE snapshot publication addressing flood-related research highlights across Europe, a first step towards an enhancement of the relationship between policy, research and practice has been made. Further actions will respond to the recommendations mentioned above.



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