

## **Terms of Reference**

**International Flood Risk Management Group, March 20, 2009**

### Objective

To explore risk-based flood management approaches, as being practiced and developed primarily in the Netherlands, Japan, the United States, and the United Kingdom, and jointly develop a “best practices” document.

### Participants

Netherlands:	Dutch Ministry of Transport and Public Works and Water (DG Water)
Japan:	Japanese Ministry of Land, Infrastructure, Transport and Tourism (MLIT)
United States:	U.S. Army Corps of Engineers (USACE)
United Kingdom:	Environment Agency (EA)

### Discussion

The above participants have expressed interest in working together to explore risk-based flood management approaches that:

- Encompass a broad spectrum of flood risks (including coastal and riverine flooding) on project and system/ catchment level, and measures to address them (including structural and non-structural),
- Address a comprehensive array of consequences, including economic (properties, industry, direct and indirect,...) and non-economic considerations such as loss of life, large numbers of casualties, loss of cultural heritage, social disruption and associated public works and services damage, environmental degradation,
- Anticipate changing risks over time, including climate change, social change, economic, land use and environmental<sup>1</sup> change, including related uncertainties (and how to deal with that),
- Include construction as well as management and maintenance aspects (“life cycle approach” and “cradle to grave”),
- Are easy to operate, assess, and explain,
- Are appropriate for a variety of governance structures (local, regional and national level), and developments in this, and
- Are suitable for political discussion and decision-making in each participating country, aimed at better managing flood risks.

Each participant has experience in developing and implementing risk-based approaches for flood risk management. Participants have also cooperated on flood risk issues previously, through both informal and formal mechanisms.

### Approach

- Overview each participant’s approaches, practices, and future ideas, and main driving mechanisms behind, drawing from two case studies from each country (one riverine and one coastal)
- Overview other possible sources (e.g. SAFECOAST) and determine whether or not to further explore

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<sup>1</sup> Environmental changes due to climate change as well as the environmental effects of FRM measures and vice versa the benefits of the environment on flood risk management (like wetlands).

- Prepare inventory of approaches, practices, case studies (coastal and riverine) and ideas by each participant and, if appropriate, from other sources
- Identify and define “long list” of best practices, if necessary select and refine into “short list” of best practices for further development
- Jointly determine which participants will apply and evaluate which best practices, drawing on participants’ unique strengths and experience
- Jointly review and adjust best practices as needed
- Develop introduction and summary
- Present results

#### Milestones

1. March 20, 2009. Initial meeting (Istanbul, Turkey.) Introductions; overviews of each participant’s approaches, practices, and ideas; discussion and agreement regarding terms of reference. Present group’s anticipated efforts at Dutch/CPWC side event to the 5<sup>th</sup> World Water Forum.
2. September 2009 (Japan?) principles of flood risk management approaches (quantitative and qualitative) and related measures (illustrated by some cases) leading to “Long list” of best practices. Meet to exchange experiences and knowledge in Participants’ workshop, if necessary select and refine into “short list”.
3. If necessary spring 2010?
4. Autumn 2010. Selected practices developed. Review and Meet to exchange intermediate results, possibly in conjunction with proposed flood risk management conference in United States.
5. Winter 2010 / Spring 2011 (UK). Best practices document complete.
6. October 2011. Present results at 5<sup>th</sup> International Conference on Flood Management (Tsukuba Science City, Japan.)

#### Roles

- DG Water is organizing and hosting the initial meeting in Istanbul, Turkey, in conjunction with the Co-operative Programme on Water and Climate. Each participant is determining and funding appropriate persons to attend.
- USACE will organize and host a meeting in 2010 in the United States.
- MLIT will organize and host a meeting in 2009 and 2011 in Japan and liaise with the 5<sup>th</sup> International Conference on Flood Management.
- EA will organize and host a meeting in Winter 2010 /Spring 2011 as needed.
- Participants will work primarily through email exchanges, but may establish conference calls as needed in addition to anticipated meetings.
- Each participant will work within its country to bring relevant information to the group.

#### Time and Cost

- Each participant will bear the cost of its participation, including time to review and present case studies, inventory and develop best practices, and travel to meetings.
- Four meetings are anticipated.

- Six conference calls are anticipated.
- The entire effort is expected to span two and a half years, with the great majority of the effort occurring in 2009-2010.
- This effort is intended to conclude with the presentation of results in 2011. Any further collaboration that participants may determine to be desirable shall be considered at a later date.