Draft Minutes

4th Meeting Regarding 4-Lateral Exploration of Risk-Based Flood Management Approaches December 2, 2010, Washington, D.C.

Meeting Objective:

The aim of the initiative is to explore risk-based flood management approaches, as being practiced and developed primarily in the Netherlands, the United States, the United Kingdom and Japan, and jointly develop a "best practices" document.

The 4th meeting was organized and hosted by the U.S. Army Corps of Engineers in Washington, D.C., on December 2, 2010. Participants held an in-progress review of the developing document, discussed how information from November 30-December 1 international policy-oriented discussions may affect the direction planned, and considered providing input to the 5th International Conference on Flood Management to be held September 2011 in Japan.

Meeting Participants:

Netherlands:

Mr. Durk Riedstra, RWS Centre for Water Management

Mr. Jos Van Alphen, Delta Program Commission

United Kingdom:

Mr David Rooke, Head of Strategy and Engagement, Environment Agency Japan:

Mr. Kenichiro Tachi, River Bureau, MLIT

Dr. Koichi Fujita, River Division, NILIM

Dr. Atsushi Hattori, River Division, NILIM

Mr. Minoru Kamoto, ICHARM, PWRI

United States:

Mr. Alex Dornstauder, Office of Homeland Security, U.S. Army Corps of Engineers

Mr. Pete Rabbon, Institute for Water Resource, U.S. Army Corps of Engineers

Ms. Lisa Bourget, Institute for Water Resources, U.S. Army Corps of Engineers

Discussions:

Observations regarding Nov. 30- Dec. 1 international policy-oriented discussions. Participants noted that discussions among approximately 100 people from nearly 20 countries on November 30 and December 1 were truly international and not dominated by any one country's perspective. There was considerable agreement on flood risk efforts required. Differences in approach are partly a function of the level of development in the country. A conceptual framework suggested during the concluding session offered a central toolbox, with usage dependent on a country's development and governance. Policy is closely related to each country's background, and to understand a country's approach context is needed; this is difficult to describe for many countries.

<u>Desired changes to first draft expanded outline.</u> Participants discussed the first draft expanded outline and how information from the November 30 and December 1 discussions might further shape the developing 4-lateral document. In particular, participants reviewed the list of desired action items from the final session on December 1 to determine which actions should be addressed within the 4-lateral document. Participants agreed to add text addressing the following issues.

- Countries' background and context.
 - Include a national governance document from each country (Lisa and David.) Participants from each country will make their own inquiries as to whether material developed by others for the Nov 30-Dec 1 discussions may be used or modified for inclusion in the 4-lateral document.
- Provide comparison charts highlighting differences among countries, such as risk assessment and physical infrastructure information, and the general character of each country's flood risks. Kamoto offered to provide one sample comparison; Lisa to provide a framework. Possible comparisons include the following:
 - o How much of the country is floodprone area?
 - o What is the nature of the flood risks?
 - o What level of flood safety is legislated or sought?
 - o What budget is allocated for flood risk management?
 - o How is Tolerable Risk and loss of life used?
 - What is the date of the last major flood? How many floods occur each year?
- Insurance. Include a comparison of insurance in the U.K and U.S.

Provide information on actual costs to the homeowner. (Lisa and David)

- Investment Decision Tools. Provide a comparison of tools used to prioritize investments, such as in aging infrastructure (Jos to provide text comparing the four countries; David to provide text for the Thames as an example case study)
- Terminology. Provide a table first to explain the different uses in different countries, and second to put forth common usage (each country to highlight terms it knows are used differently or terms of interest; will use the terminology document from Nov 30-Dec 1 discussions as the basis for a 4-lateral common usage chart.)
- Learning from other countries. Add text to describe how one country can:
 - Learning from other countries' flood exercises
 - Planning "Observer-controller" where host conceives of an exercise and wants to test through a scenario-based approach, gathers a team of advisers to design the exercise, evaluate exercise effectiveness, and consider lessons learned (Alex to provide overarching text; Durk to provide text regarding the example of the Netherlands exercise with the help of the U.S.)
 - Attending others' exercises (David to provide text regarding the U.K.'s participation in flood exercises in the Netherlands)
 - Setting out the role of international audiences in international exercises and feedback, such that it adds value and may become the way of doing exercises (David to provide text)
 - Learning from others' similar experiences (David to provide text regarding the international barriers' team)
 - Learning from floods that happen in other places (examples, but not prescribed approach)
 - Durk to provide an English translation of lessons the Netherlands could use from going to France, also lessons learned from Katrina
 - Durk to provide text pointing out hesitancy of contacting immediately post-flood, noting the usefulness of a framework or institution that allows for learning but not bothering, and a cadre after the fact
 - Each country to provide text on how it reacts to disasters occurring beyond its borders

- Environmental Concerns. Add text to discuss how U.S. policy is often to restore to pre-flood conditions, but new draft Principles and Guidelines prompt questions as to whether restoration is the proper approach; emphasize environmental aspects. Include examples of what we're doing to address the environment; it's imperfect, but efforts are being made. (Pete to provide text; Japan to add some experiences and possibly text for an illustrative proverb.)
- Resiliency. Lisa to add a couple sentences to address expanded concept of resiliency (not just structural, but social)
- Land-use planning and personal responsibility. Adjust the introduction to address what may be the necessary conditions under which theory can become practice (can pick out elements that are useful depending on culture and level of development) (Lisa)
- Communication. Indicate how each country communicates the risk (100-year flood, 1% chance flood, map with water depth and no message not particularly useful; red/green colors signalling danger/safe are widely understood) (Lisa to circulate draft chart for consideration)
- Objectives for Flood Risk Management each country to provide one sentence describing its overall flood risk management objectives.

Update on Planning for 5th International Conference on Flood Management.

Kamoto gave a presentation describing plans for this major conference, the only recurring international conference wholly focused on flood-related issues. The conference will be held in Tsukuba City, Japan, September 27-29, 2011, and has a theme of "Floods: From Risk to Opportunity." Five plenary sessions and 30 parallel sessions are anticipated in addition to poster sessions and side events (upon request.) Plenary sessions are being planned by partners.

Parallel sessions are organized by five topic areas and further sub-topics. A special session regarding the 4-lateral risk-based flood management approach of approximately one hour is proposed. Approximately 2500 brochures will be issues worldwide in January, including to those who attended the 4th conference in Toronto in 2008. Approximately 300-350 people are expected to attend, with more than half from Japan. The event will be conducted entirely in English.

Participants preferred that the 4-lateral effort be included in a plenary session; Kamoto will note such for further consideration in planning the conference. Lisa will circulate a draft 500-word abstract for review prior to submission by the deadline of March 1, 2011.

<u>Document Completion:</u> The group determined it needed to present a finished document in advance of the September 2011 International Conference on Flood Management, as originally agreed. The document will not rank practices, but provide a collective set of best practices among the four countries, which may be useful to others based on their own countries' background and context. With a revised version of the document in hand, a meeting is preferable to consider these best practices, and <u>Jos</u> offered to look into the possibility of hosting such a meeting in the Netherlands (a conference call is a less-desirable fallback.) The group agreed to the following milestones:

Jan 31, 2011 Additional text due (all; see specific assignments above)
Feb 28, 2011 Draft synthesis of material due (Alex)
March 1, 2011 Abstract submission (Lisa, circulation in advance)
April 14 or 15, 2011 Possible meeting in the Netherlands to consider revised

document and best practices (Jos)

Watershed Investment Decision Tool. Mark Sudol, Institute for Water Resources, U.S. Army Corps of Engineers, provided a live web demonstration of the Watershed Investment Decision Tool (WIDT). The WIDT combines and displays various geospatial data layers, many in the public domain, to give decision-makers on-line scalable information to identify areas of concern. Data layers are maintained by those responsible. The tool provides a means for illustrating the potential risk of flooding based on environmental, economic, and social factors. It allows decision-makers to evaluate for themselves multiple scenarios for determining flood risk at a watershed scale.

<u>Tour of Flood Risk Management Sites</u>. Stacy Underwood and Claire O'Neill, Baltimore District, U.S. Army Corps of Engineers, provided an overview of the background and issues associated with three flood projects: (1) the Washington D.C. Levee Project, (2) the Anacostia Levee Project, and (3) the Huntington Flood Risk Management Study. Participants visited each project for on-site context and further discussion with project experts and local community officials.

<u>Coordination on Simulation Work</u>. Following presentations made at the 3rd meeting in June 2010, Japan and the United States exchanged information regarding their simulation efforts, with particular emphasis on real-time simulation. Kenichiro brought additional information for discussion to Washington. It was agreed to add this subject to the agenda of the next meeting.