



## **SESSION REPORT**

### **TITLE OF THE SESSION**

FT5.30      The Global Climate Change and Urban Flood Mitigation

### **SESSION CONVENERS**

Netherlands Water Partnership (NWP)

### **KEYNOTE SPEAKERS**

Mr. Chris Zevenbergen (NWP, UNESCO-IHE)

### **CONVENORS GENERAL REMARKS ABOUT THE SESSION**

The session has addressed Urban Flood Management as an integral component of urban Planning. Emphasis was laid on local actions in areas of specific concern, which are the vulnerable 'hot spots' of major (re)development projects in deltaic and coastal regions.

Both the key note addresses as well as the panel discussion have addressed the main issues and formed an integral view on the problems and solutions within the scope of this session. The high number of attendees as well as their quality had a very positive impact on the discussions.

### **SYNOPSIS**

The session has addressed Urban Flood Management as an integral component of urban Planning. Emphasis was laid on local actions in areas of specific concern, which are the vulnerable 'hot spots' of major (re)development projects in deltaic and coastal regions.

In this session four keynote presentations have been given:

- General Introduction by Mr. Chris Zevenbergen (NWP/UNESCO-IHE); In his presentation he elaborated on major findings of the EU COST action on Urban Flood Management (C22) and on innovative approaches;

- Multi-purpose use of flood prevention facilities in Japan by Mr. Seikou Fukuda (NILIM/MLIT). Mr. Fukuda presented an overview of the Japanese Flood Management policies directed to control urban floods from an historical perspective and then moved on to more detailed information of the rationale and technology of the Tsurumi Multi-purpose Basin;
- Integration of urban planning and flood management in the historical city of Dordrecht by Mrs. Ellen Kelder. Mrs. Kelder presented an overview of the current practice and challenges of urban flood management in the city of Dordrecht and outlined background information and current status of a joint research project on Urban Flood Management with engagement of three European cities (Hamburg, London and Dordrecht). The objective of this project, which has been launched in 2005, is to develop understanding at local stakeholders level and methodologies to integrate urban flood management in urban planning.
- Long-term initiatives for flood risk environment by Mr. Robbert Barker (BACA). Mr. Barker, an architect and planner from the UK, presented innovative urban design concepts for new developments in the Thames Gateway. His concepts embrace the principle of Living with Water in which the urban system itself has the ability to absorb the impact of flood water.

Proceeding to the keynote presentations a panel discussion with public stakeholders have been held. Representatives from Japanese, French, English and Dutch public institutions participated in this panel, that was chaired by Mr. Frank van Dooren (Municipality of Zaanstad, The Netherlands). The following statements emerged during the panel discussion:

- General. The risk of urban flooding is generally increasing world-wide as a result of rapid urbanisation (encroachment of flood prone areas, increase impervious area, etc.) and climate change. It is more and more recognized that new integrated approaches should be adopted to manage future floods risk. These approaches involve a combined strategy to reduce both flood probability as well as flood impacts and are in accordance with the philosophy of 'Living with Water'.
- Sense of urgency. Sense of urgency at local level is generally lacking with a few exceptions in urban areas with major (re)development programmes in flood prone areas, such as in the Tokyo Metropolitan Area, the Thames Gateway, Hamburg and Dordrecht. These programmes incentivize local actors to consider flood risk in their planning process including the long time horizon, and the prevailing uncertainties, about climate change. Urban Flood Management is more than safety alone, but also involve measures and strategies to control economic damage and to sustain or improve spatial quality in the urban environment.

- Role local actors. Local actors, such as municipalities, water boards, the insurance industry, developers and building companies have an important role to play in reducing flood vulnerability in the urban environment. Awareness raising, flood resilient planning, burden sharing and insurance schemes are among others basic components of strategies to reduce flood vulnerability at the local level. However, they cannot be addressed in isolation and as a consequence, effective implementation warrants joint actions of and partnerships with these local actors.
- Exchange of experiences. In order to reverse effectively the abovementioned adverse trends local actors should establish a platform/network which allows exchange of knowledge and experiences world-wide. The front-runners in this field have an important role to play in this respect: they are in the position to inspire others by providing them compelling evidence that urban floods are manageable.

The session concluded with a concrete action to explore the feasibility to involve cities of developing countries, which encounter similar challenges, in the ongoing European Urban Flood Management project. Chris Zevenbergen will coordinate this action and contacts have already been made with local representatives from Bangladesh, Malaysia and Costa Rica.