



# Exploring the frontiers of the possible – Adapting old water infrastructure systems to manage future problems

## **IVA's Division III: The Built Environment welcomes you to this seminar on January 27th 2010 in Gothenburg**

Managing an excess of water is becoming increasingly challenging for many countries, including Sweden, due to climate changes and rising sea levels. The water infrastructure systems in most countries date from the first half of the last century and cannot handle the challenges at both the input and output ends of the system. Preserving and updating the integrity of the water infrastructure is thus essential both for continued economic development and prosperity as well as the avoidance of public health catastrophes associated with breakdowns in water infrastructure functions.

Present water infrastructures are experiencing stress both due to ageing and increased load. These two demands are often in conflict with each other and traditional methods of infrastructure management are increasingly being found inadequate. This seminar wants to highlight that modern methods of risk analysis and risk management coupled with new technologies provide new opportunities to address the water infrastructures problems. Prominent scientists and engineers from Sweden and abroad will show amongst others what we can learn from past disasters, what future dangers lie ahead and how visualisation of water infrastructure management will help decision-makers to safeguard our livelihoods.

The objective of the seminar is twofold; to explore the “frontiers of the possible” in water infrastructure risk management in order to find out how best to prevent overstressing and collapse of the water infrastructure, and to stimulate the creation of visualisation tools that will enable more integrated decision-making in water infrastructure management.

*Welcome!*

*Kyösti Tutti*

Chairman of IVA's Division III

*Klas Cederwall & Des Hartford*

Seminar Coordinators, Members of Division III

## **Registration and information**

*Date:* Wednesday the 27th January, 2010, 10:00–17:00 incl. lunch.

*Venue:* Wallenstamsalen, Göteborg City Museum, Gothenburg, Sweden.

*Registration:* Please register via IVA's website at [www.iva.se/avd-III-20100127](http://www.iva.se/avd-III-20100127) before January 20th. Participation in the seminar is free of charge for all interested.

*More info:* Contact Marika Thunberg, e-mail [mt@iva.se](mailto:mt@iva.se), tel. 08-791 29 04.

## Program

- 10:00 **Gota River – Operation and facilities to balance present and future needs**  
Mr *Claes-Olof Brandesten*, Head of Dams & Dam Safety, Vattenfall AB
- Flood protection and land use planning for the City of Gothenburg**  
Mr *Ulf Moback*, City of Gothenburg
- New Orleans after hurricane Katrina  
– Observations made & lessons learned**  
Prof *Hans Hanson*, Water Resource Engineering, University of Lund
- Flood risks in Sweden in a climate change perspective**  
Prof *Sten Bergström*, Swedish Meteorological and Hydrological Institute
- 12:00 **Lunch**
- 13:15 **End of Lunch – Break before the beginning of afternoon programme**
- 13:30 **The role of risk management of water infrastructure in a life-cycle perspective**  
Dr *Des Hartford*, Scientific Advisor – Safety and Risk Assessment, BC Hydro, Canada
- Managing risks from rising sea level and river floods in the Thames estuary**  
Mr *Andy Tagg*, Principal Engineer, HR Wallingford
- Göta älv Valley – slope stability and coastal environment according to climate change**  
Dr *Marius Tremblay* and Mr *Bengt Rydell*, Swedish Geotechnical Institute
- OECD review of risk management policies in Japan: Large-scale floods and earthquakes**  
Mr *Ulf Bjurman*, Independent Expert, previously SRSA
- 15:10 **Break**
- 15:40 **Concluding remarks**  
Dr *Des Hartford* & Prof *Klas Cederwall*
- Panel Discussion:**  
**Policy recommendations for improving Swedish water infrastructure management**  
*Speakers and audience*
- 17:00 **End of seminar**

Moderator: Dr *Des Hartford*



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