



# Recommendations for improving flood risk governance, derived from the STAR-FLOOD project

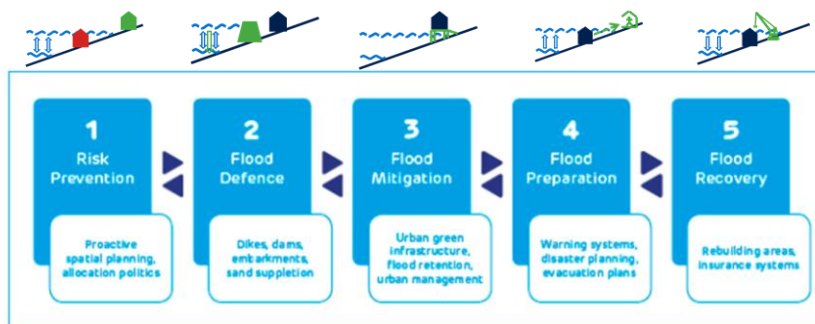
PROVIA Adaptation Futures conference,  
session SP6.3  
10 May 2016, 13:30  
Penn Room II  
Dr. Dries Hegger, Utrecht University

**STAR-FLOOD**

## STAR-FLOOD: combined social science and legal research

**STAR-FLOOD**

- **ST**rengthening **A**nd **R**edesigning European **FLOOD** risk practices: towards appropriate and resilient flood risk governance arrangements;
- Researched diversification of Flood Risk Management Strategies in 6 European countries and 18 case studies;
- 1 October 2012 – 31 March 2016



# EU Floods Directive and EU Research Projects (source: Philippe Quevauviller)



**FP6**



A direct contribution to the development of the Flood Directive



Enhanced knowledge of CC impacts on extreme floods



An integrated approach at regional level

**IMPRINTS:**  
Preparedness and risk management for flash floods and debris flow events



**FP7**

**CORFU:**  
Collaborative research on flood resilience in urban areas



**STARFLOOD:**  
Towards resilient flood risk governance



**FLOODPROBE:**  
Technologies for the effective flood protection of the built environment



Universiteit Utrecht



Grontmij



Middlesex  
University  
London



PAN  
POLISH ACADEMY OF SCIENCES



LULEA  
UNIVERSITY  
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UNIVERSITÉ  
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TOURS



KATHOLIEKE UNIVERSITEIT  
LEUVEN



CEPRI  
Centre Européen de  
Prévention du Risque d'Inondation



Radboud Universiteit Nijmegen



## Countries and cases



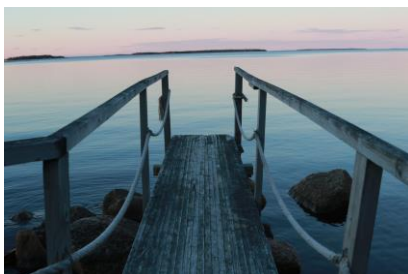
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Nijmegen  
Zuidplaspolder  
E: River Thames, London  
Hull  
Leeds  
B: Antwerp  
Geraardsbergen  
Lessines  
S: Gotheburg  
Kristianstad  
Karlstad  
P: Slubice  
Poznan  
Wroclaw  
F: Nice  
Nevers  
Le Havre



## Successful flood risk governance achieves the desired outcomes of resilience, efficiency and legitimacy



- Recommendations pertain to improving flood risk governance processes and outcomes.
  - Processes: increase the chance that outcomes are met.
  - Outcomes: flood-resilience in terms of capacity to resist, to absorb/recover, and to adapt; resource efficiency and legitimacy



## Improving flood risk governance processes - 1



- Need for **clarity amongst societal actors** (including private parties and citizens) about divisions of **responsibilities**, actual **flood risks** – societal expectations need to be managed
  - Public authorities are struggling with risk communication; it is tempting for politicians to undertake a defence paradigm.
- Need for a forward planning approach
  - Use of climate change projections, time horizon of 50-100 years.



## Improving flood risk governance processes - 2



- **Knowledge infrastructures** and processes of joint knowledge production need to be stimulated
  - More need for inter-country exchange of lessons and good practices and dialogues – establish national/international knowledge exchange platforms.
- **Private actors, including businesses, community groups and NGOs should adopt partial responsibility for their own risk.**
  - Involvement needed for substantive and normative reasons.
  - Think in terms of “multi-actor co-production” rather than “delegating responsibilities to private parties”



## Improving flood risk governance processes - 3



- Need to let flood risk governance take place at the **most appropriate level**
  - No “blind decentralisation” - responsibilities should be met with formal powers and resources.
  - Different roles at different levels: e.g. approving/facilitating at national/EU level; initiating at local/regional level.
- **Priority of flood risks in spatial planning** should be in line with what societies consider **acceptable levels of risk**
  - Elements: discouraging development in high-risk areas, provisions for when development is unavoidable (accountability)



## Improving flood risk governance processes - 4



- Clear, enforceable and enforced rules and regulations
- More experience needed with applying catchment-based approaches to FRM



Grunwaldzki bridge from Cathedral tower, Wrocław





## Enhancing resilience – some design principles - 1

**Capacity to resist** is enhanced by

- Approaches **tailored to local circumstances** by putting in place the right actors, discourses, rules, resources.

**Capacity to absorb and recover** is enhanced by

- Appropriate consideration of flood risks in planning processes.
- Effective forecasting and warning systems; emergency preparation and response systems.
- Availability of strategies to recover from floods.



Cumbria, UK

## Enhancing resilience – some design principles - 2



**Capacity to learn, innovate and improve** is enhanced by

- Creating opportunities for social/institutional learning.



## Enhancing resource efficiency – some design principles



- Consideration of societal **costs** vis-a-vis societal **benefits** needs due concern (e.g. through well-developed CBA practices).
- Think in terms of **multi-functionality** – FRM measures can serve multiple societal goals (e.g. Delta Dikes); or measures not intended for to be FRM measures can serve FRM goals (e.g. hydropower dams).



## Enhancing legitimacy – some design principles



- Need for high degree of **public participation**, **social equity** and **perceived accessibility**.
- Need for **accountability mechanisms**.
- **Citizens** are aware of their **rights** and **responsibilities**.
- **Clear** and **transparent** decision making processes.
- Mechanisms and processes needed to ensure **access and delivery of procedural justice**.



## So: appropriate and resilient flood risk governance arrangements ...



- ...**fit** within the existing national and local **context**
- ...involve **public authorities, companies, community groups** and **citizens** and have a **clear division of responsibilities**
- ...manage to **align** different Flood Risk Management Strategies
- ...ensure that choices made are accompanied with **sufficient investments and other resources**
- ...establish **flood awareness** of all societal actors
- ...have a built-in **long-term perspective** and use/develop future visions/scenarios
- ...all this stimulated and facilitated by **appropriate rules and regulations** at the local/regional, national and international level.



## Thanks for your attention



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See [www.star-flood.eu](http://www.star-flood.eu) for:

- Final report
- Practitioner's guide
- Policy briefs
- Country-specific reports
- In progress: special feature in Ecology and Society (open access)

