

From flood prevention to multi-layer safety in the Dutch Delta

Governance implications of implementing an integrated flood risk approach.

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Intro

- Analytical framework
- Dutch Flood management
 - Multi-Layer Safety: Policy proposal and discussion
- Analysis
- Conclusions and discussion
 - Framework
 - MLS



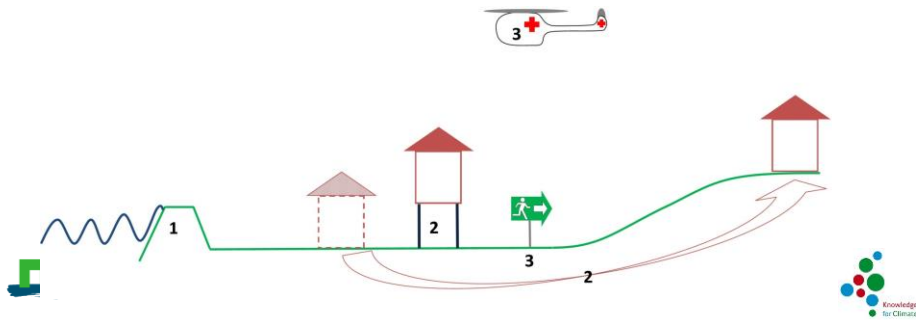
Analytical framework

Theme	Key challenges
Organizing connectivity	How to realize coherent action in a context characterised by intense fragmentation?
Reallocating responsibilities	How to come to an optimal distribution of responsibilities, costs and benefits?
Dealing with controversies	How to deal with uncertainties and ambiguities?
Rethinking normative principles	Which normative principles fit into the challenges of climate change adaptation?



Multi-Layer Safety

- 2009 policy proposal by Ministry of Transport and Water
- 3 layers:
1. Prevention
 2. Damage reduction: spatial planning and building codes
 3. Crisis control and evacuation



Background of the discussion

- Deltaprogram detailing MLS concept
- Strong focus on (traditional) first layer
- Cost-effectiveness important criterion
- Some cooperation spatial planning and water boards:
 - Water assessment spatial plans
 - Mainly pluvial flooding and water quality
 - New norm LIR 10^{-5}
- Safety regions (3rd layer) play a small role
- Flood funding schemes are for embankments

Governance Challenges MLS (1)

Organising connectivity

- Include 3rd layer in discussion
- Synchronising spatial planning and water management plans and processes



Governance strategies MLS (1)

Organising connectivity

- Provisions for synchronising decisions spatial planning and flood management
 - Role water assessment
 - Delta Program
 - 'Safety assessment' to include safety regions?
- Drawing clear boundaries with regard to the position of water authorities in 1st layer



Governance Challenges MLS (2)

Reallocating responsibilities

- Who is responsible for what?
 - Norms for spatial planning?
 - (LIR norm is for water managers, not spatial planning...)
- Include private sector?



Governance strategies MLS (2)

Reallocating responsibilities

- Making spatial planning and safety regions co-responsible (casualties norm LIR 10^{-5})
- Look for innovative funding mechanisms
- Open up flood defence funding schemes to alternative flood risk measures
- Larger role for (semi)private organisations: resilient critical infrastructure



Governance Challenges MLS (3)

Dealing with controversies

- Frame differences
- Uncertainties in knowledge and interpretation
- Norms versus softer types of knowledge



Governance strategies MLS (3)

- Dealing with controversies
 - Include different knowledge types in assessments
 - Changes in concept of MLS (reframing)
 - From exchange between layers to focus on e.g. critical infrastructure



Governance Challenges MLS (4)

Normative principles

- Rethinking meaning of solidarity (and resilience)
- Introducing elements of cost-recovery principle



Governance strategies MLS (4)




■ Normative principles

- Cost-effectiveness
 - Strongly dominates discussion
- Resilience
 - Implicit aim, but not very present in discussion. Stronger focus on resistance
- Solidarity
 - Local waterboard now pays 10% of cost of reinforcing primary embankment



Relations between themes

	Organising connectivity	Reallocating responsibilities	Dealing with controversies	Normative principles
Organising connectivity	x	Connectivity is needed if responsibilities are shared by multiple actors	Frame analysis and reflection is means for enhancing connectivity	Synchrony needs some level of shared normative principles Drawing clear boundaries might increase juridical legitimacy of decisions made within each field, but might decrease democratic legitimacy.
Reallocating responsibilities		x	Reallocation leads to controversies, because of loss of influence, funds. Also because of changing underlying normative principles	Legitimacy, solidarity, (cost)-effectiveness are overlapping concepts. Allocation of risks and responsibilities depends highly on (interpretation of) normative principles
Dealing with controversies			x	Differences in frames influence the use / interpretation of normative principles
Normative principles				x

Relations between themes

	Organising connectivity	Reallocating responsibilities	Dealing with controversies	Normative principles
Organising connectivity	x			
Reallocating responsibilities	Waterboards: have new actors the knowledge needed to carry responsibility? Different policy and plan processes hinder cooperation	x		
Dealing with controversies	Clash between the technical and financial oriented world of water managers versus the more social and creative world of land use planners	Potential loss of funds and influence reinforces controversy of MLS among water managers	x	
Normative principles	Water managers focus on solidarity, safety provided and cost-effectiveness, land use planners take also other values into account (e.g. attractiveness of landscape). Makes the communication between the groups difficult.	Increasing use of other indicators than cost-effectiveness can increase the role of spatial planning.	Different frames on MLS: interesting new issue to tackle (spatial planners) vs a threat to safety and status quo. (traditional water authorities)	x

Preliminary conclusions and discussion

- Added value of four different disciplinary themes
 - Each give different views and solutions
 - Interdisciplinary: Broader spectrum
- MLS needs more than only new rules and regulations
 - Attention to different frames
 - Processes
 - Keep some barriers, bridge others

More to come!



Thank you

For more information see:
<http://tinyurl.com/KfCgov>

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Consortium governance of
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