

# Environmental Risk Governance of the Baltic Sea (RISKGOV)

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[www.sh.se/riskgov](http://www.sh.se/riskgov) (will be published Jan 31)

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# Introduction to RISKGOV

- ◆ Aims
- ◆ Background and assumptions
- ◆ Work plan and Deliverables
- ◆ Research questions
- ◆ Consortium and organisation



# Aims of RISKGOV

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- ◆ General aim:
  - Interdisciplinary and integrated scientific basis for improving environmental risk governance
- ◆ Descriptive:
  - Improved understanding of structures and processes that shape environmental risk governance.
- ◆ Normative
  - Normative framework for improving environmental risk governance

# Definition of Environmental Risk Governance

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## ◆ Governance

- ‘*...structures and processes for collective decision-making involving both state and non-state actors*’ (Nye & Donahue 2000)

## ◆ Environmental Risk Governance

- ‘*...translation of the substance and core principles of governance to the context of risk-related decision-making*’ (Gunningham 1998)
- expands beyond risk assessment, risk management and risk communication. (Renn, 2008)

# Multi-level and multi-actor governance

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	Governments /agencies	Industries	Science and academia	Civil society/ NGOs
Local				
National				
Regional				
Global				

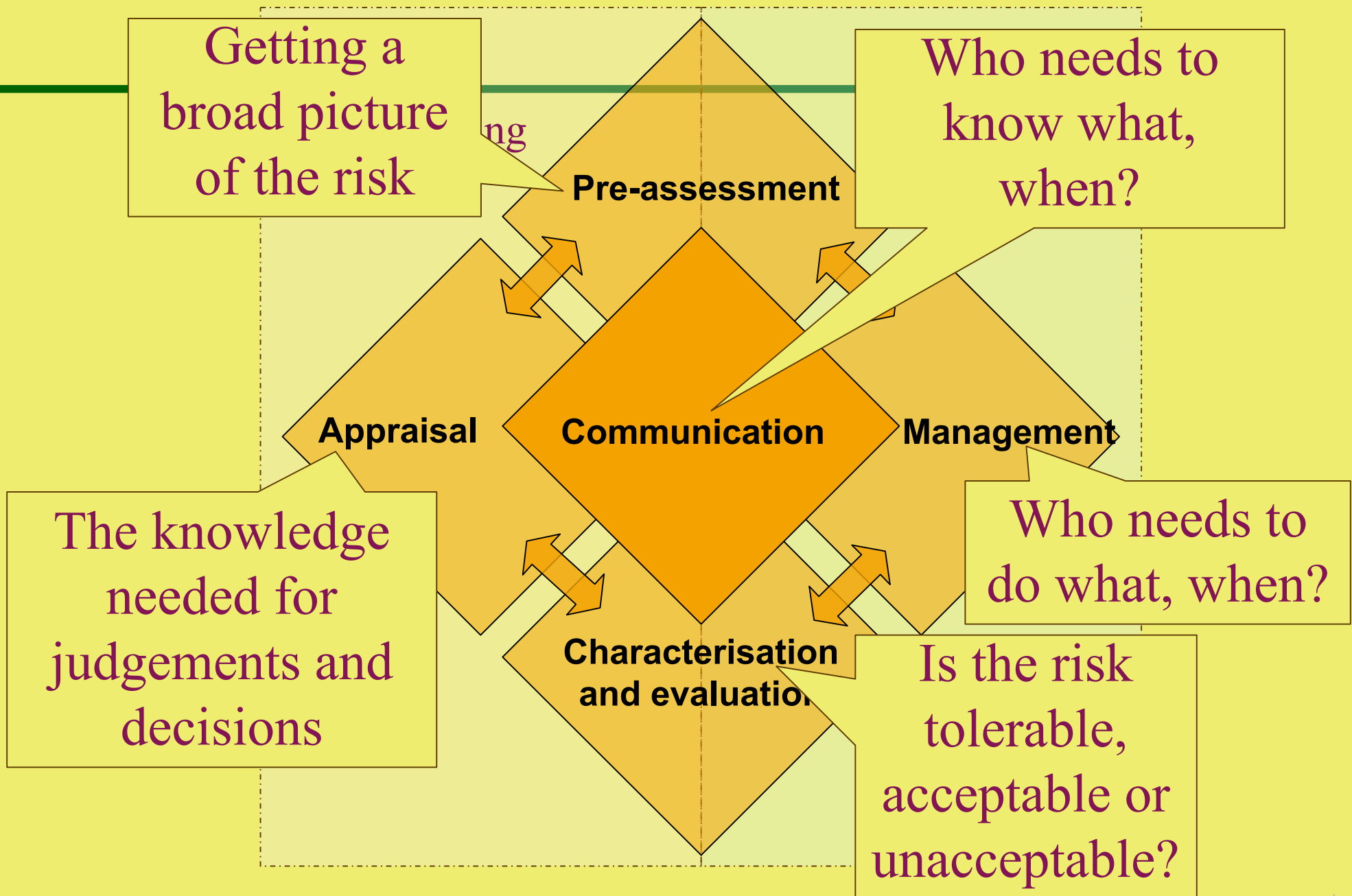
Based on Bunting et al 2007

# Multi-level and multi-actor governance

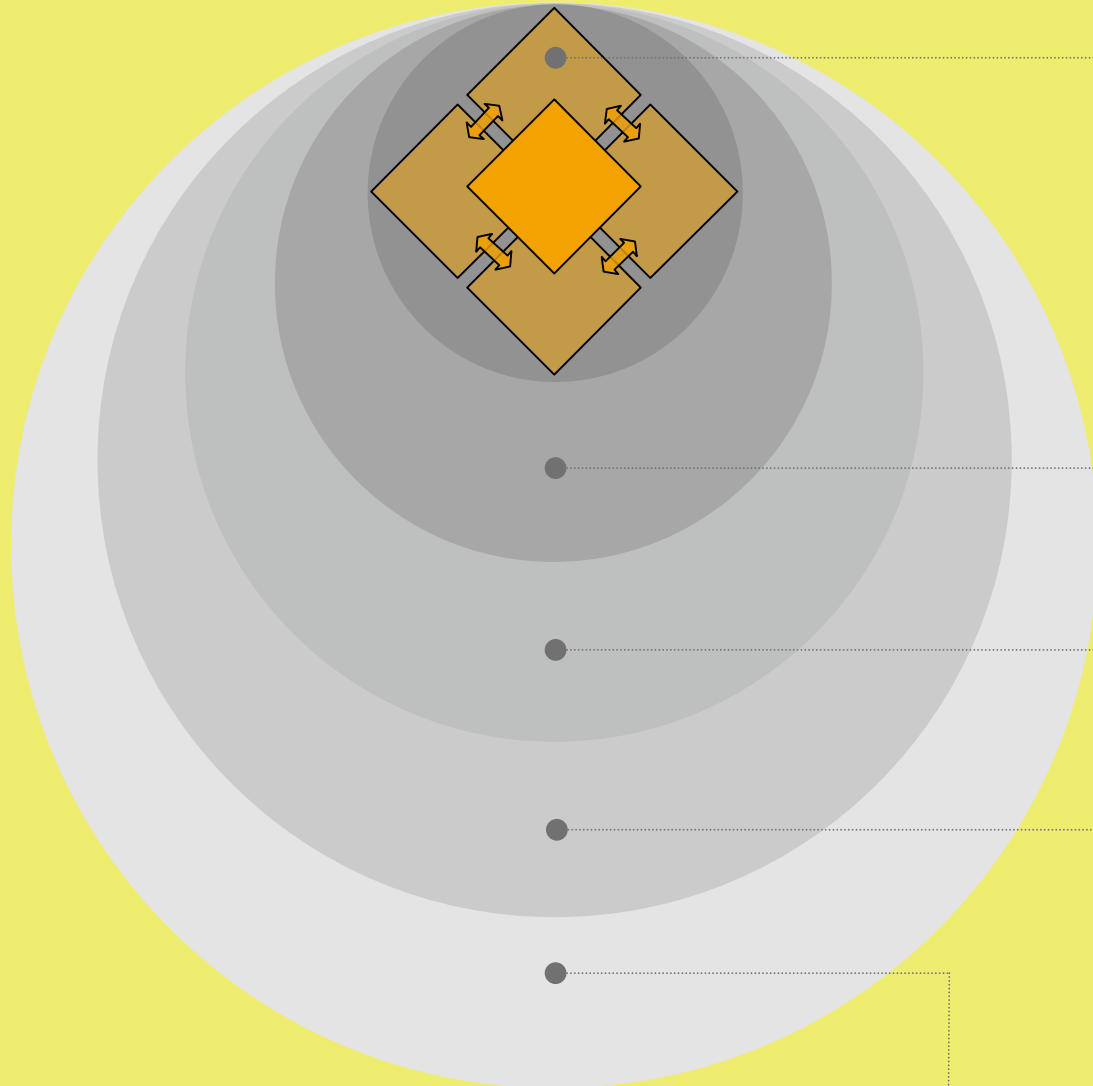
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Local				
National				
Regional	<b>RISKGOV focus</b>			
Global				

Based on Bunting et al 2007

# IRGC's Risk Governance Framework



# Risk governance goes much further



## Core Risk Governance Process

- pre-assessment
- risk appraisal
  - risk assessment
  - concern assessment
- evaluation: tolerability / acceptability judgement
- risk management
- communication

## Organisational Capacity

- assets
- skills
- capabilities

## Actor Network

- politicians
- regulators
- industry/business
- NGOs
- media
- public at large

## Social Climate

- trust in regulatory institutions
- perceived authority of science
- degree of civil society involvement

## Political & Regulatory Culture

→ different regulatory styles

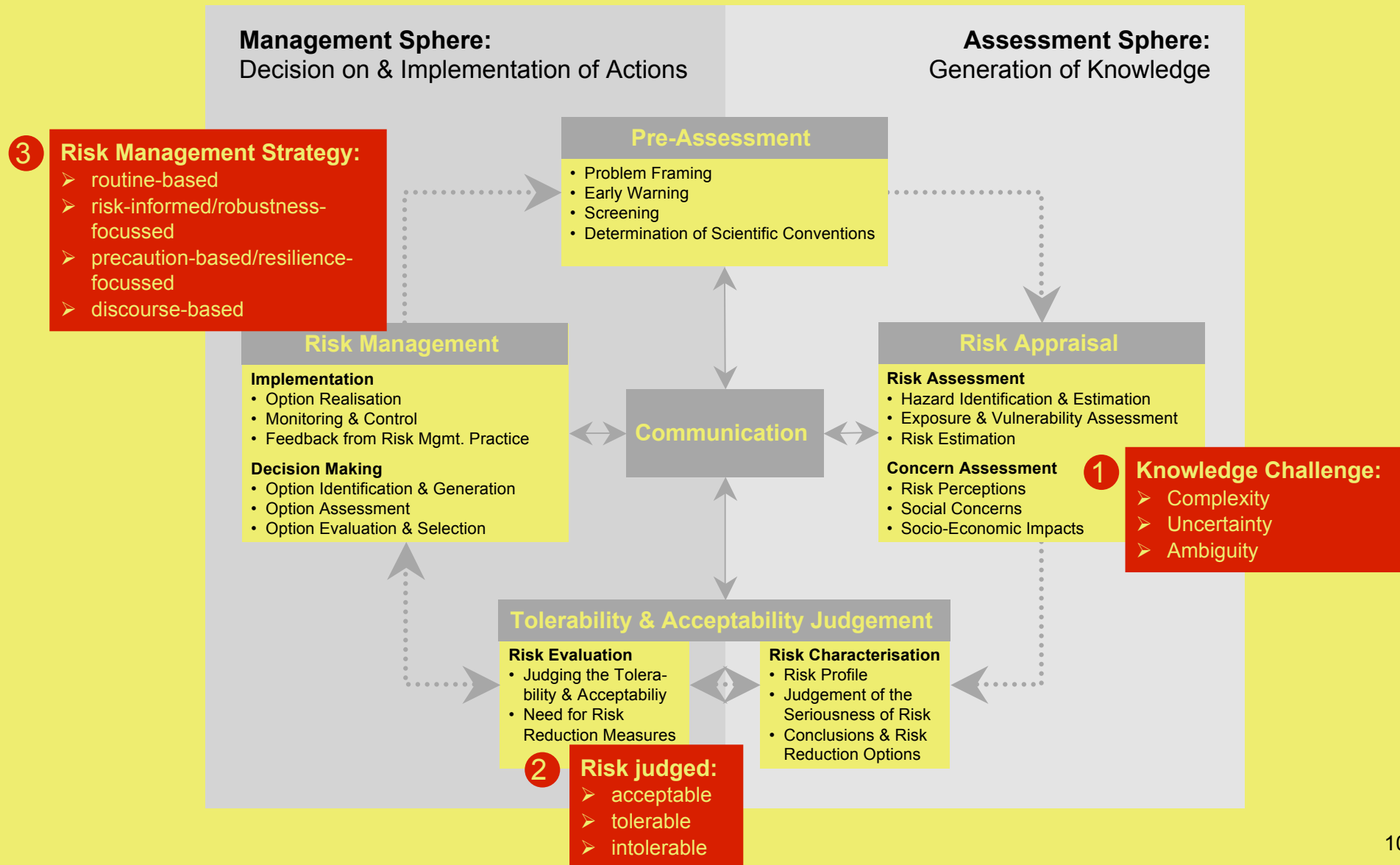
# Criteria for evaluating risks

(Klinke & Renn, 2006)

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- ◆ Traditional criteria
- ◆ Probability of occurrence
- ◆ Extent of damage
- ◆ Expanded list of criteria
- ◆ Uncertainty
- ◆ Ubiquity
- ◆ Persistence
- ◆ Reversibility
- ◆ Delay effects
- ◆ Violation of equity
- ◆ Potential of mobilisation

# Essential distinctions within the core process



# Classification of risks (Klinke&Renn)

Risk class	Effect	Probability	Example
<b>Damocles</b>	high	low	Nuclear energy, dams
<b>Cyclops</b>	high	uncertain	Earthquakes, Aids
<b>Pythia</b>	uncertain	uncertain	sudden climate change
<b>Pandora</b>	uncertain	uncertain	Hormone disruption
<b>Cassandra</b>	high	high	Climate change
<b>Medusa</b>	low	low	3G, EM-fields

# Risk management (Klinke&Renn)

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Risk class	Effect	Probability	Management
<b>Damocles</b>	high	low	Science-based
<b>Cyclops</b>	high	uncertain	
<b>Pythia</b>	uncertain	uncertain	Precautionary
<b>Pandora</b>	uncertain	uncertain	
<b>Cassandra</b>	high	high	Discursive
<b>Medusa</b>	low	low	

# General background to RISKGOV

- ◆ Good scientific basis (although substantial uncertainties remain)
- ◆ Much has been done by local, national, international and European actors
- ◆ Still – major disturbances remain
- ◆ Need for comprehensive, integrated management (EAM) and modified forms of environmental risk governance



# Specific background to RISKGOV

- ◆ Uncertainty, complexity and ambiguity will remain or even increase with EAM
- ◆ Science lags behind policy
- ◆ Need for systematic interdisciplinary research on the links between Baltic environmental risks, EAM and risk governance
- ◆ Thus motivating – RISKGOV

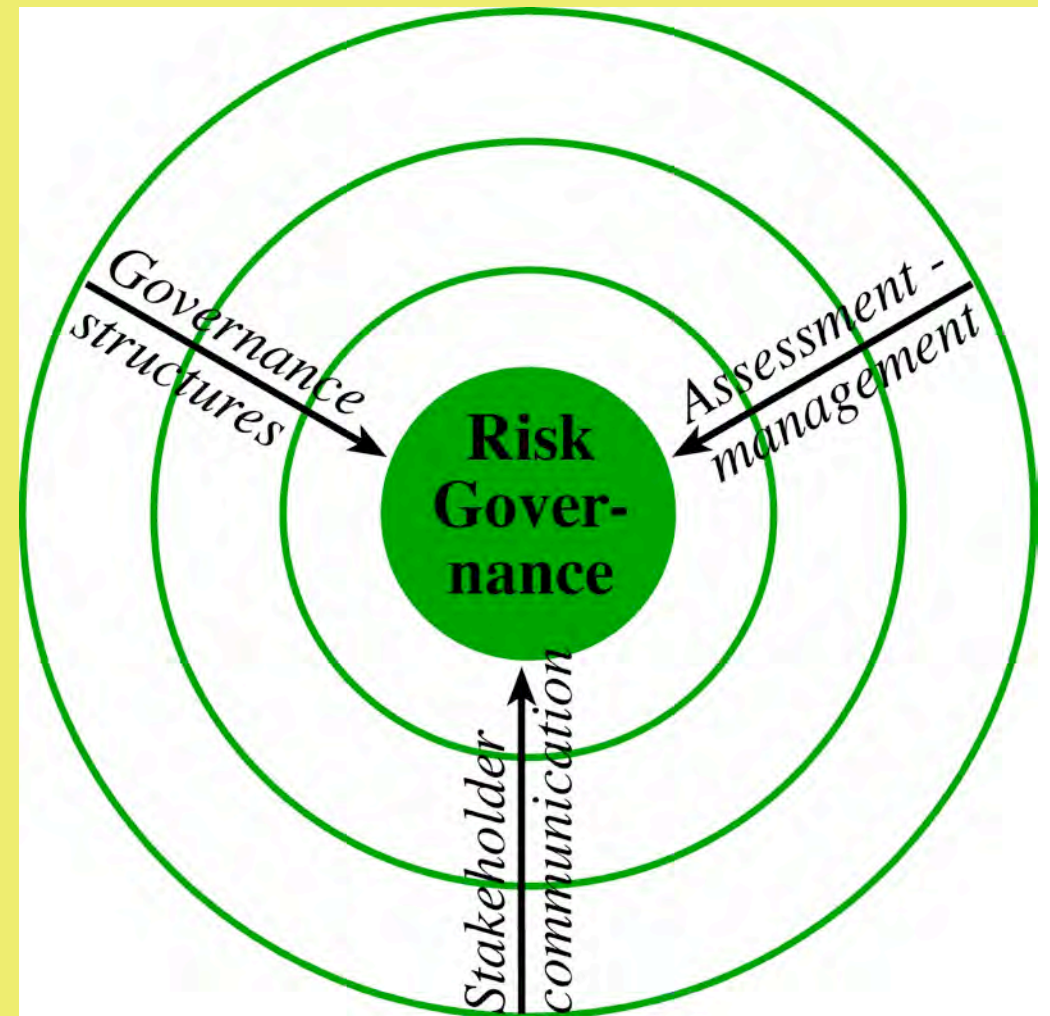


# Major fields of research in RISKGOV

## Case studies

- ◆ Over-fishing
- ◆ Eutrophication
- ◆ Chemical pollution
- ◆ Biodiversity impacts
- ◆ Oil discharges

## Cross-case analysis



# Work plan of RISKGOV

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- ◆ Stage I (M1-M6)
  - Joint analytical and methodological framework (interviews, roundtables, document studies)
- ◆ Stage II (M6-M15)
  - Case studies (D2-D6)
  - 3 roundtables
- ◆ Stage III (M16-M26)
  - Cross-case analysis (D8-D10)
- ◆ Stage IV (M27-M36)
  - Normative framework (D11) + Final conference

# Research questions: WP1

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## WP1: ‘Governance structures and conditions for collaboration’

- ◆ Regulatory institutions
- ◆ Collaboration and consultation
- ◆ Socio-political ambiguity
- ◆ Forms for decision-making
- ◆ Forms for stakeholder participation

# Research questions: WP2

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## WP2: ‘Risk assessment–risk management interactions’

- ◆ Organisation of risk assessment processes
- ◆ Weight of evidence and integration
- ◆ Informal and formal devices facilitating interactions
- ◆ Descriptions of uncertainties and complexities
- ◆ Management approaches to scientific uncertainties and disagreement

# Research questions: WP3

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## WP3: 'Stakeholder communication'

- ◆ Problem and media framing
- ◆ Communication strategies
- ◆ Communication responsiveness
- ◆ Indications of frame reflection
- ◆ Indications of constructive communication
- ◆ Indications of stalemates and other problem

# Researcher expertise in RISKGOV

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- ◆ 16 senior scientist + 5 PhDs / assistants
- ◆ Equal representation of social science and natural science training
- ◆ Expertise in all studied risks
- ◆ Environmental governance
- ◆ Risk governance
- ◆ Environmental and risk communication

# The RISKGOV consortium

	<b>SUC</b> Sweden	<b>ÅAU</b> Finland	<b>DIALOGIK</b> Germany	<b>DMEF</b> Poland
<b>Expertise</b>	<ul style="list-style-type: none"> <li>• Baltic Sea environmental risk governance</li> <li>• Environmental communication</li> <li>• Chemical risk</li> <li>• Maritime transportations</li> </ul>	<ul style="list-style-type: none"> <li>• Baltic Sea Ecology</li> <li>• Eutrophication</li> <li>• EU environmental policy</li> </ul>	<ul style="list-style-type: none"> <li>• Risk governance</li> <li>• Fisheries management</li> <li>• Stakeholder participation</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity</li> <li>• Ecosystem functioning</li> <li>• Chemical risk</li> <li>• EU implementation</li> </ul>
<b>Main tasks</b>	<ul style="list-style-type: none"> <li>• Coordination</li> <li>• WP 2</li> <li>• Roundtable 1</li> <li>• Chemical pollution</li> <li>• Maritime transportation</li> </ul>	<ul style="list-style-type: none"> <li>• WP 1</li> <li>• Roundtable 2</li> <li>• Eutrophication</li> </ul>	<ul style="list-style-type: none"> <li>• WP 3</li> <li>• Roundtable 3</li> <li>• Fisheries</li> </ul>	<ul style="list-style-type: none"> <li>• Biodiversity impacts</li> <li>• Final conference</li> </ul>

# Thank you !

