



net risk work



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Networking for the European Forest Risk Facility Initiative

Minutes of the Risk Information Pre-Assessment Meeting

9th to-11th May 2017

Freiburg im Breisgau, Germany

Forest Research Institute of Baden-Wuerttemberg

(Forstliche Versuchs- und Forschungsanstalt Baden-Württemberg)





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The NET RISK WORK project

Thematic Background

Under several climate change scenarios, all European countries seem to undergo increased risk of different natural disasters. This expected trend will affect areas that historically have not experienced significant impact from a specific natural hazard; a large proportion of damage is likely to be related not only with high-severity events but also with new hazard interactions (new risks coming up and influencing existing ones as wildfires affecting mountain forests increasing avalanche risk). Actions encouraging the sharing of knowledge and good practices for natural hazards and local/regional expertise should improve the disaster risk reduction strategies, preparing the national civil protection systems to cope with the impact of climate change.

Nevertheless, pan-European exchange of experiences, lessons learnt and good practices guidance of forest risk management are also often lacking or may not be accessible or tailored to the needs of different operational actors. Numerous initiatives such as the EU Disaster Risk Management Knowledge Centre (DRMKC) seek for more transfer of scientific knowledge into practice, as well as an increased cooperation of risk assessment and disturbance management. Research knowledge is also required as input to policy development and implementation. In order to ensure effective interaction between research, policy and practice at European, national and local levels, it is essential to base collaboration on mutual understanding while allowing for a continuous and open exchange of corresponding needs.

The project

Networking for the European Forest Risk Facility Initiative (NET RISK WORK) is a two-years Project (2017-2018) funded by the EU Civil Protection Mechanism, promoting the knowledge exchange and networking around four major European forest risks and their interactions; wildfires, storms, floods and snow avalanches.

NET RISK WORK wants to perform a best practices capitalization and knowledge exchange process on risk planning and management capabilities for a better comprehension on how these hazards are interacting in a changing climate context all across Europe, and what can be used from lessons learned between regions and other risk experiences.

The project is also giving continuity to the Risk Facility Initiative started in 2014 (www.friskgo.org) encouraging networking under informal and permanent multi-actor platforms, seeking for a better transfer of knowledge into practices and policy making.

Further information of the project is available at the website: <http://netriskwork.ctfc.cat/>



Objectives of the Meeting

The main objective of the information pre-assessment preparation meeting was the organization of the information selected by each partner and risk to be able to define the knowledge status existing for each risk. Another core point was the initiation of the networking activities in the partners' home regions:

The meeting aimed to provide room to discuss the contents of the ongoing task "identification of risk assessment and management operational tools and best practices" (Action B1) and to discuss the methodology of the further tasks, especially the "crosscutting lessons learned and risk interaction assessment towards improving disaster management cycle" (Task C).

The initiation and organization of regional nodes was another core topic of the meeting. The exchange between the project partners on chances and barriers while building regional networks should be discussed in the light of the experience with the existing network initiative in Germany (KoNeKKTiW).

The meeting also gave room for two half-day fieldtrips on storm and flood risks.

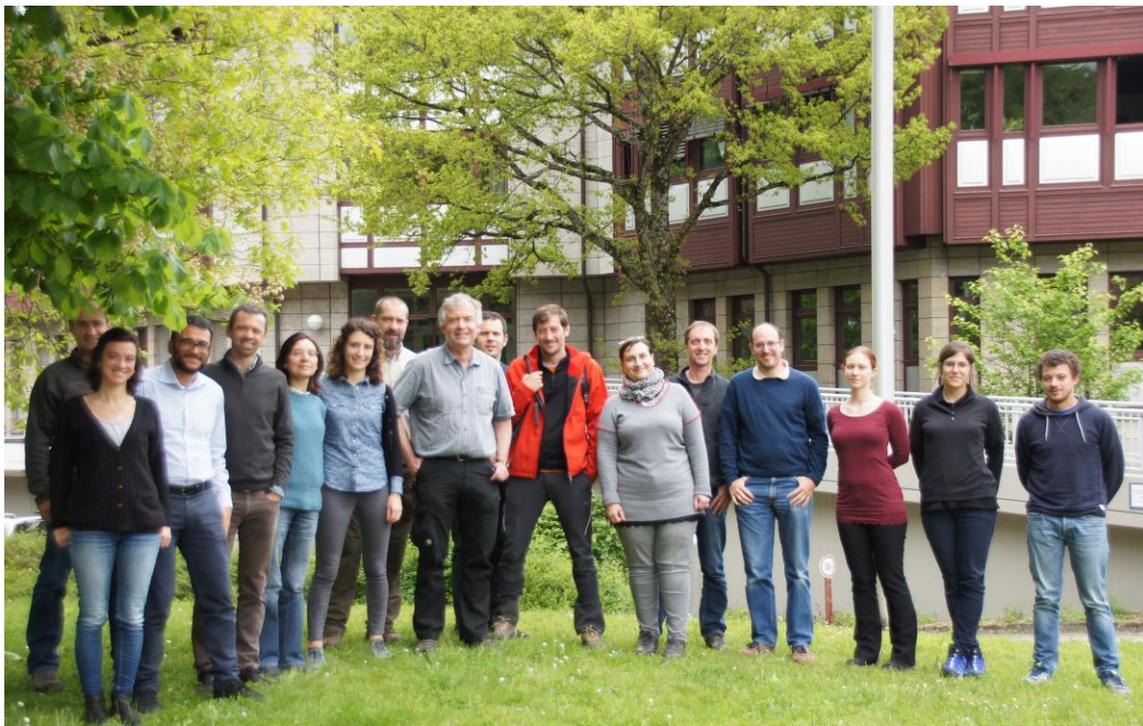


Image: Group picture with all participants

Venue

Forest Research Institute of Baden-Wuerttemberg

(Forstliche Versuchs- und Forschungsanstalt)

Wonnhaldestraße 4

79100 Freiburg (Germany)



Agenda of the Meeting

Tuesday, 9th May 2017: Pre -Excursion – Flood management in the Upper Rhine Region

10:00 – 12:00	Flood Prediction Office (HVZ) in Karlsruhe: Presentation of the work of the HVZ, decision-making after heavy precipitation
14:00 – 16:00	Rhine control/situation center near Kehl(D)/ Strasbourg(FR): Presentation of the control/situation center at the weir

Wednesday, 10th May 2017:

Session I: Networking in regional nodes

8:30 – 10:30	Presentation: Awareness-raising on risk in theory and practice (<i>Yvonne Hengst-Ehrhart</i>)
10:30 – 11:00	Presentation: Accordance with the targets and priorities of the Sendai Framework (<i>Yvonne Hengst-Ehrhart</i>)
11:30 – 13:00	Workshop: Structural components of running networks (<i>Christoph Hartebrodt</i>)
14:00 – 14:30	Presentation: Networking in the political arena (<i>Guido Schwichtenberg, KoNeKKTiW</i>)
15:00 – 17:00	Workshop: Development of regional nodes (<i>Christoph Hartebrodt</i>)

Thursday, 11th May 2017

Session II: Risk management and analysis

07:30 – 08:30	Presentation: Introduction and discussion of the joint template and presentation of the best practices / tools (Action B1) (<i>Alice Clemenceau, Núria Prat-Guitart</i>)
08:30 – 09:00	Presentation: Introduction risk interaction scheme (<i>Yvonne Hengst-Ehrhart, Christoph Hartebrodt</i>)
09:00 – 10:30	Workshop: Development of an analysis scheme for the analysis of cross-hazard risk and activity analysis (<i>Christoph Hartebrodt</i>)
11:00 – 12:00	Workshop: Development of a task schedule, planning of the upcoming workshop (<i>Eduard Plana</i>)
12:00 – 12:30	Project organization (<i>Eduard Plana</i>)
12:30 – 13:00	Presentation: Introduction of the RiskPlatform by Geotest (<i>Christoph Suter</i>)
13:00 – 13:30	Presentation: Introduction EFI FRISK Secretariat (<i>Alex Held, Andreas Schuck</i>)
14:00 – 17:00	Excursion: Impacts of major storm disturbances (Lothar path, black forest) (<i>Christoph Hartebrodt</i>)



Pre-Excursion: Flood management in the Upper Rhine Region

Background information

The pre-excursion focused on the unique situation of the flood management in the Upper Rhine Region. After the meandering river was straightened in the 19th century by Johann Gottfried Tulla, the Upper Rhine was reduced by 81 kilometers. During the 20th century, the Rhine between Basel and Iffezheim was almost entirely canalized. These massive interventions increased the flow velocity and took away crucial flood retention areas due to the loss of 123 square kilometers of flood plain. Floods from the Alps now reach the Middle Rhine area much faster.

Excursion

The first stop was at the **Flood Forecast Center (HVZ)** in Karlsruhe. The participants were informed about the information flow and procedures of the forecasts. A main topic was the risk management with regard to local heavy rainfall events.



Image 1: Presentation at the Flood Forecast Center (HVZ)

The second stop was at the **weir and control center near Kehl (D) / Strasbourg (F)**. The weir and nearby polder are two of several important elements of the “**Integrated Rhine Program**” (IRP) which was presented to the excursion group. The program focuses on flood control and the restoration of former floodplains along the Upper Rhine to prevent flood damages downstream by restoring the retention capacity of the area alongside with increasing ecosystem adaption to flooding stress in the affected polder areas.

Presentations shown during the field trip can be found on the [project website](#).



Image 2 and 3: The weir near Kehl (D) / Strasbourg (F) and the control center



Session I: Networking in regional nodes

Conclusion of session I:

The first day focused on factors of successful networks and risk awareness.

If people are supposed to act **risk-conscious or manage forests to minimize the risk of natural hazards, they must accept the circumstances of risk drivers** (like climate change, certain management regimes) and their own possibilities to adapt their behavior. This aspect calls for clear and reliable information but also for a well-informed risk communication, considering mental barriers to risk awareness.

Good and active networks develop this kind of communication alongside with other crucial factors. During a workshop phase, the **participants identified general indicators which have to be considered in the formation and maintenance of networks**. These factors touch the internal organization of a network, the scale of the whole, the status of members as official or private partners, social factors between members or member groups, benefits for the whole network and individual members, interactions and the role and rights of the network (members), especially those of the core group.

Those factors were later used to discuss the state of the art and potential barriers of the regional nodes planned to be established in the member regions. With further input on the political realm of networking, **participants discussed the important steps for the development of regional nodes**. The “status quo” of already existing initiatives and loose networks and their potential domains or topics was promoted. Potentially involved actors, priorities and task allocations were discussed intensively. The role of administrative structures and hierarchies and the importance of the political situation were highlighted.

The discussion revealed that the **project can be associated with several targets and priorities of the Sendai Framework for Disaster Risk Reduction 2015-2030 (Sendai Framework)**. It was agreed, that the Sendai Framework gives a clear frame and perspective for the project and therefore guides the language of the project output. A strong focus on civil protection was also emphasized as key target of the project. It was agreed to link the project deliverables with the priorities of the Sendai Framework.

Presentations shown during the session can be found on the [project website](#).



Session II: Risk management and analysis

Conclusion session II:

Session II developed methodological approaches to risk analysis and best practices in risk management. The jointly used template for the **collection of best practices and risk management tools** was discussed and adapted. Based on this work step, further tasks will focus on the **analysis of cross-hazard risks** (task C). A methodology to conduct the analysis was discussed and agreed on.

This methodology will lead to discussion points that will be addressed in the first project workshop held in Solsona (Catalonia) during the 3rd to 6th October 2017. This was followed by further planning and discussion of the agenda of the upcoming workshop.

The collection of best practices and management tools as well as the findings of the cross-cutting lessons learned and risk interaction assessments will feed into an open risk database. The **current state of the planned RISKPlatform** was presented with its own expert database and the focus on actively sharing the available knowledge and making new experts on the topic of interest easy to find.

All networking activities and shared risk information are aimed to be coordinated under a joint umbrella, the **EFI FRISK Secretariat**, which was presented. The activities of the former FRISK-GO project can be used to quickly install the FRISK secretariat located at EFI Bonn in July 2017.

Presentations shown during the session can be found on the [project website](#).



Images: Impressions from the session





Excursion: Impacts of major storm disturbances

Background information on the site:

In the afternoon, participants visited the Lothar Path, a natural reserve and educational trail left to recover unaided after a massive storm event in 1999.

Besides the natural development of the site it was intensively discussed how foresters reacted on the massive damage under the influence of emergency dynamics and psychological stress. It became clear that a well-coordinated first response is crucial after major damage events. Lessons learned from rare hazards are volatile and need to be imparted and embedded in prevention measures and emergency plans.

This point is especially true for human resources since knowledge from experience is rare.

Beyond that, the psychological stress caused by major damage events should not be underestimated: heavy workloads, economic losses but also the feeling of seeing a lifes' work destroyed are important factors that need to be addressed by crisis managers.



*Images:
Lothar path excursion*



Annex I: Results of sessions

Workshop 1:

Structural components of running networks

Based on the introductory presentation on social learning and the “Community of Practice” concept, the workshop aimed to identify general indicators which have to be considered in the formation and maintenance of networks.

Participants collected a variety of factors which can be grouped under the following headings:

Organization:

Time scales → there are often no fast decisions possible
Rating of experts and information
The networks decides about participation
Overcoming hierarchies
Non-exclusiveness
Step-by-step increment
Members need support/trust of their institution

Official vs. private:

Contacts are private but persons associated with public bodies
Definition of participants’ roles
Neutral to different objectives
Capacity to attend differs due to the employer (volunteers)
Permission to attend
→ Idea: Integrate public bodies if final decision is intended

Scale:

Language issues / language barriers between regions

Interaction between actors:

Role of competition between participants

Social Dimension:

Trust
Appropriate kind/language of communication
Personal reputation (leader role)

Benefits:

Benefits must be tangible
Value of shared information
Common benefits are visible
Need of a mission or perspective
Mutual benefits (no one-sided benefits)

Role and rights of the network:

Neutral broker or moderator
Need for self-defined rules
Just information or decision-making

Core of the network:

Trust
Reputation of the center
Pulling effect



Workshop 2:

Development of regional nodes

The factors developed and discussed on a general level in the previous workshops were considered as a starting point for the discussion on the implementation of regional nodes resp. regional networks in the project participants' home regions to determine the status quo of the evolving initiatives. The discussion and results are grouped under the following headings:

Actors: Potentially involved actors

Forest owners, forest managers, civil protection actors, research centers and scientists, municipalities and local level decision makers, environmental NGOs, policy makers, land planners, communication experts, media, companies providing vital infrastructure, beneficiaries of ecosystem services, education, insurance companies, people with special interest → hikers, hunters etc., forest associations, lawyers, emergency services. It was emphasized that special expertise and common benefit should be drivers for the involvement of actors.

Task allocation: Responsibilities of the involved actors

Media: dissemination and publicity
Policy makers: influencing the legal framework, funding
Forest practitioners and owners: peer to peer information
FRISK: providing a framework
Critical mass: Administration capabilities
Sponsorship: Ability to contact

Important tasks to allocate: skills, logistical aspect (venue etc.), communication, financing

Status quo: Current situation in the regions

Switzerland: Start-up project following PLANAT
Germany: KoNeKKTiW
Spain: fire node → PCF
Italy: cross-border project "Proterina 3 Evolution" [financed by the Programme Italy-France "Marittime" 2014-2020]

Essentials for building up a network:
Define lead, take your time → incremental approach, define scale (local to potentially multinational), sensible approach → cooperation, not replacement of existing structures,

Arguments for starting:
→ Involvement of neutral brokers (FRISK-GO stories as guide)
→ Small nodes can be a starting point for growth

Political situation and impact:

Acceptance as the key factor

Administrative structure and hierarchies:

Donors can make requirements
Lowest feasible level



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Annex II: Presentations

Presentation: Awareness-raising on risk in theory and practice



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Awareness-raising in theory and practice

Yvonne Hengst-Ehrhart

Forest Research Institute of Baden-Wuerttemberg
Department of Forest Economics

NET RISK WORK – PROJECT MEETING
Freiburg, 10th May 2017



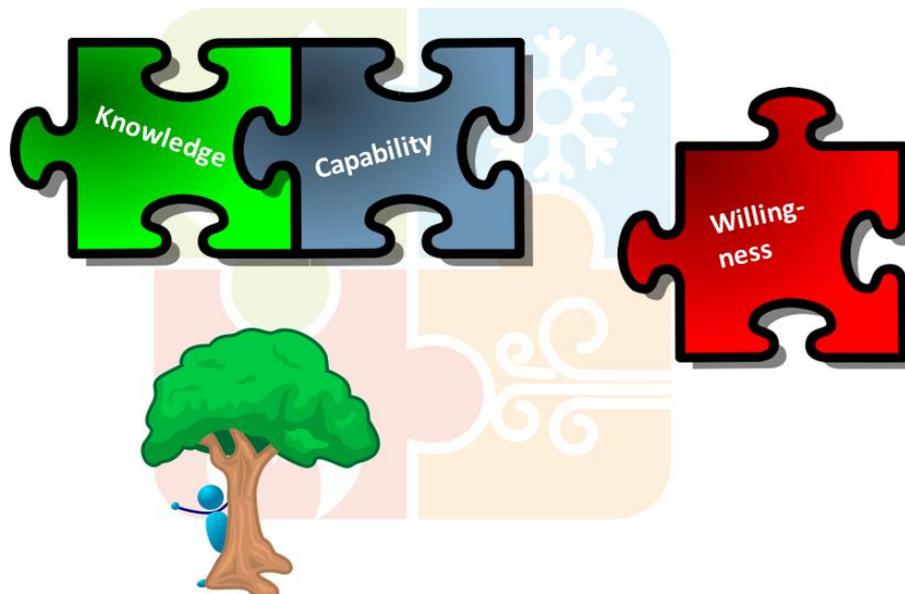
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Knowledge, Capability, Willingness

The missing piece of the puzzle?



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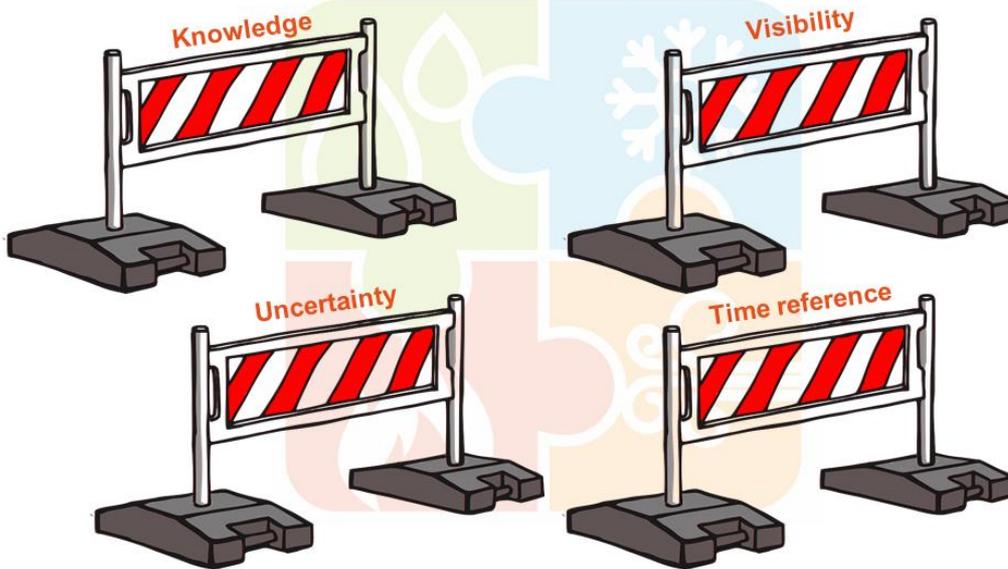


Raising risk awareness

What are the barriers?



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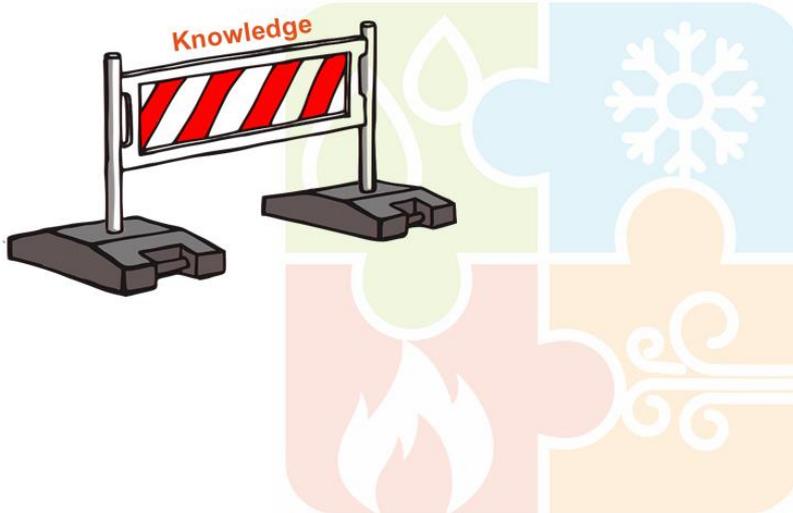


Raising risk awareness

What are the barriers?



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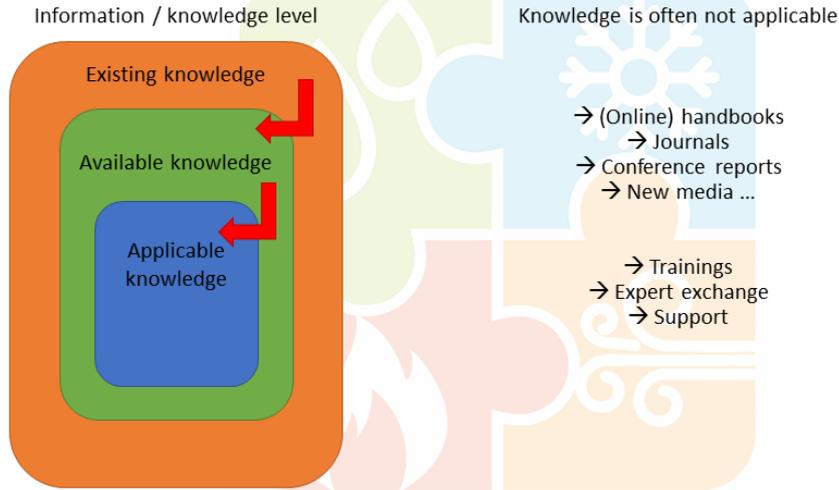


Access to knowledge

Barrier: Knowledge



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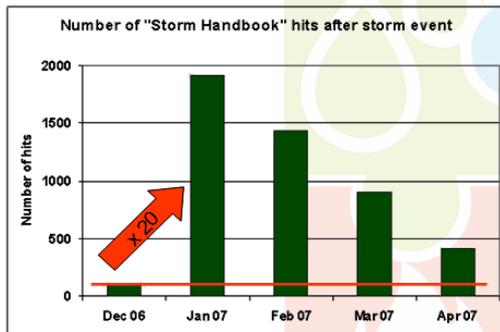


Use of knowledge

Barrier: Knowledge



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17./18. Jan 2007
Cyclone Kyrill in Germany

Knowledge on risk management

Low interest during normal operation
High interest after a hazard

Focus on the crisis management, not on prevention!

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Temporal and geographical distance

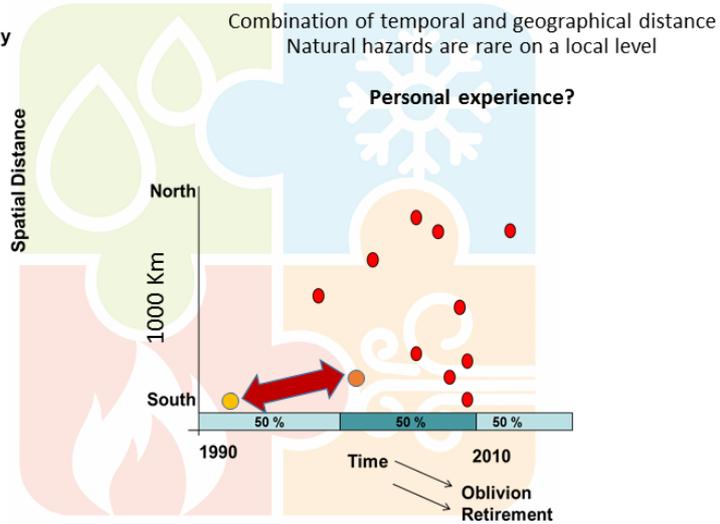


Barrier: Knowledge

Storm events in Germany



- 1990 (150 %) ca. 15 Mio. m³
- 1999/2000 (300 %) ca. 30 Mio. m³



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Experience as a problem?



Barrier: Knowledge



Change / Science

Knowledge development / Action

Uncertain risks:

→ Available knowledge becomes outdated quickly

Experience as adviser?

Decisions based on the personal experience of infrequent hazards:

→ People tend to **underrate** the probability of a rare event

If occurred very recently:

→ People tend to **overrate** the probability of a rare event

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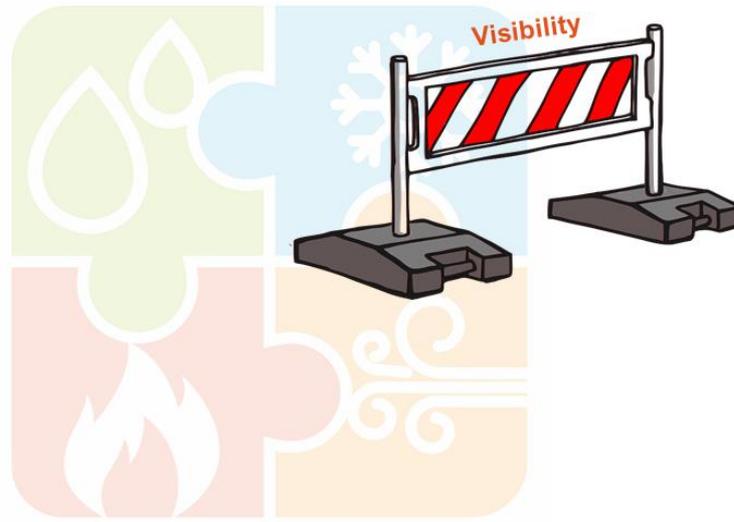


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What are the barriers?



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Visibility of changing conditions

Barrier: Visibility



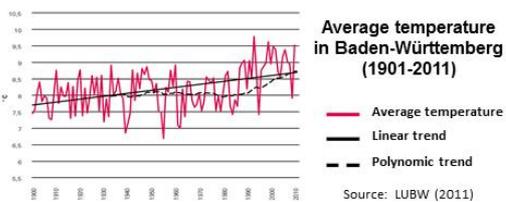
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Hazards have a strong impact
→ stimulus to action



Damage six months after storm Kyrill
Source: Wikipedia by Vincent Baas, 2007

Climate change influences the probability of hazards
→ No direct perception possible



→ Invisibility of gradual change: Creeping normalcy



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Visibility of protective measures



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Barrier: Visibility

Visible protection – crisis management



Preventive and adaptive measures have no direct rewarding effect

- No clear cause-effect relation
- Prevention can lower risk awareness

Preventive and adaptive measures cannot fully prevent hazards

- Success is reflected in lowered costs, damage, loss
- Perception still in negative effects

Invisible protection – risk management



Mobile flood protection wall in Dresden, Quelle: Wikipedia by MathiasDD, 2013
Polder landscape in the Netherlands, Quelle: Wikipedia by Ondernwijsgek, 2012

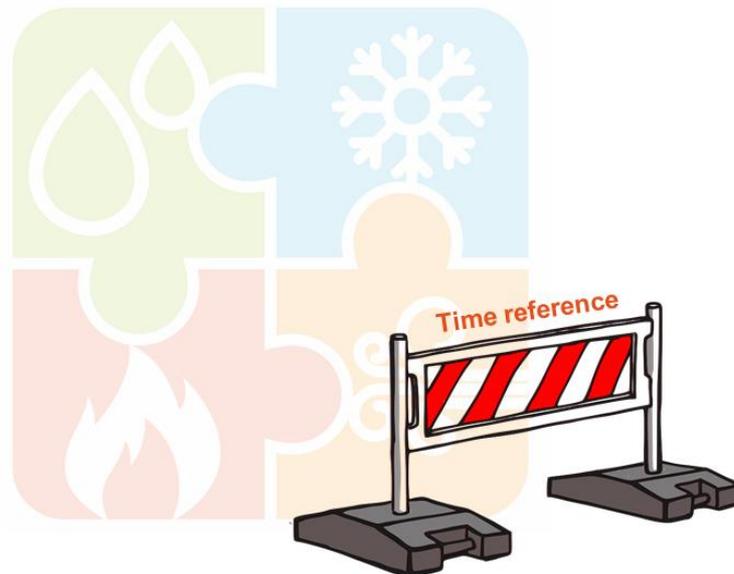


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What are the barriers?





Future oriented action

Barrier: time reference



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Closer goals are often much more present than consequences in terms of rare risks, hazards, climate change

Immediate benefit is often preferred over later benefits

- Uncertainty of benefits
- Fear of sacrifices



Problems to cope with distant time horizons

- 15 years max.
- Feasibility of long-range goals?

Sources: Hoogstra and Schanz 2009, Weber 2017

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Status-quo bias

Barrier: Time reference



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Focus "on actions or regimes that are already in place and makes us ignore available, but less salient, alternatives that could increase individual or public welfare" (Weber 2017)

→ First considered option: keeping the status-quo

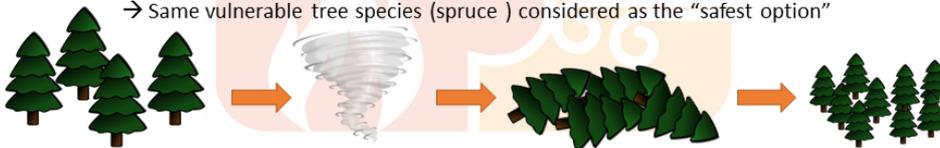
"better the devil you know than the devil you don't"
(idiom)

Study (Lidskog und Sjödin, 2014): after storm

Uncertainty about alternative strategies

→ familiar management practices

→ Same vulnerable tree species (spruce) considered as the "safest option"



Sources: Lidskog und Sjödin 2014, Weber 2017

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Time gap between cause and effect



Barrier: Time reference

Little short-term effects

Major long-term consequence

In forest management:
Actions aim to justify today's value conflicts, goals and interests.

→ justifying or legitimizing in advance of what can be judged as successful or efficient only in retrospect

Time gap between cause and effect
Source: New York magazine 1976

Sources: Detten 2013

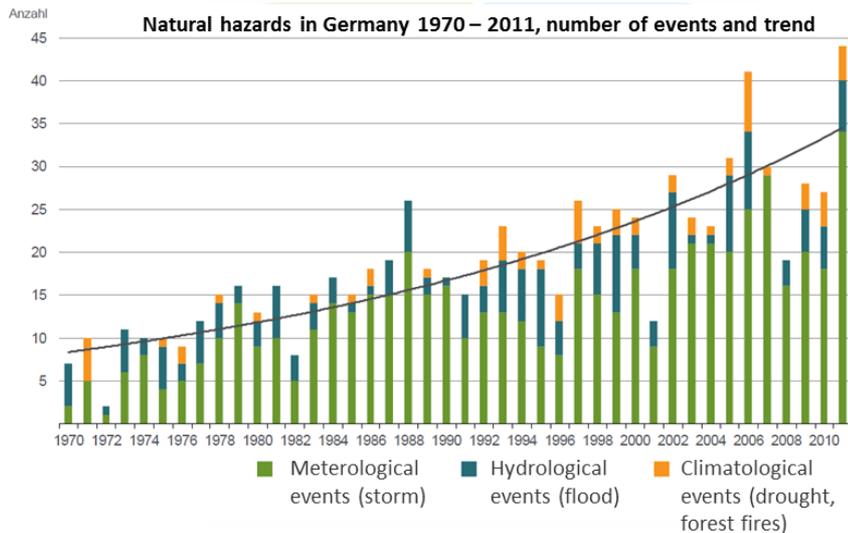
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Underestimation of naturally varying hazards



Barrier: Time reference



Source: NatCatSERVICE – July 2012

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What are the barriers?



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Conflicting goals

Barrier: Uncertainty



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Risk management goals can be in conflict to other management goals:



Sources: Hoogstra and Schanz 2009, Weber 2017

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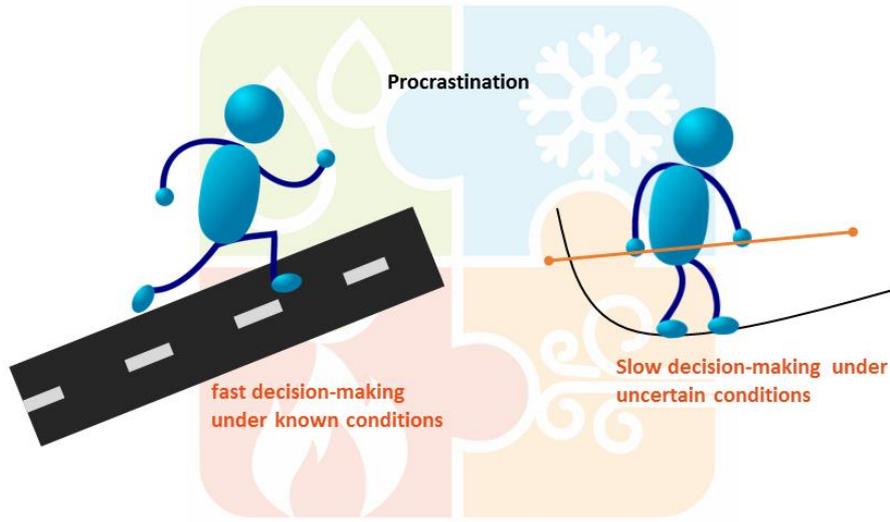


Decision-making under uncertainty



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Barrier: Uncertainty



Sources: Hoogstra and Schanz 2009, Weber 2017

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What is a risk?

Definition and meanings

Risk:
The combination of the probability of an event and its negative consequences.
 (UNISDR Terminology / ISO/IEC Guide 71)

Semantic images of risk refer to...

- Risk as a pending danger (fatal threat)
- Risk as a stroke of fate
- Risk as a personal thrill
- Risk as a gamble
- Risk as an indicator of insidious danger (slow agents)

Sources: Renn 2008

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Risk perception

RISK ≠ RISK PERCEPTION

Statistical risk does not meet risk perceptions of society

Why?

- Control (personal / institutional)
 - Voluntariness
 - Individual concern
 - Blame
 - Familiarity

Social amplification of risk
 Communicated risks interact with individual psychological, social and other cultural factors

→ Decrease
 → Increase

Statistical effects

Sources: Kasperton et al. 1988, Slovic 1996, Groß 2011, Detten et al. 2013, Brand 2014, Renn 2014

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Heuristics



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Coping with risk and uncertainty guided by intuition

Heuristic: Any approach to problem solving, learning, or discovery that employs a practical method not guaranteed to be optimal or perfect, but sufficient for the immediate goals.

Satisficing (from satisfy & suffice): choosing the first possible opportunity to meet the purpose in uncertain situations

Availability: Relevance determined by mental presence of a risk and previous experience

Anchoring effect: internal references determine risk information (e.g. mood, experience)

Intuitive inductive reasoning: generalized personal experience and perception

Emotional reasoning: emotional and affective processes guide risk perception

Sources: Tversky and Kahnemann 1974, Renn 2014

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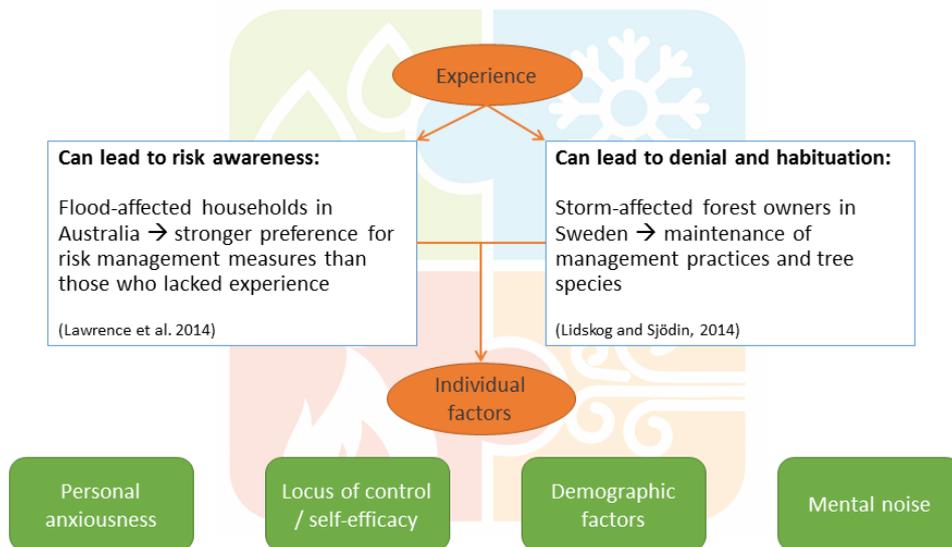


Individual experience



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Anchoring



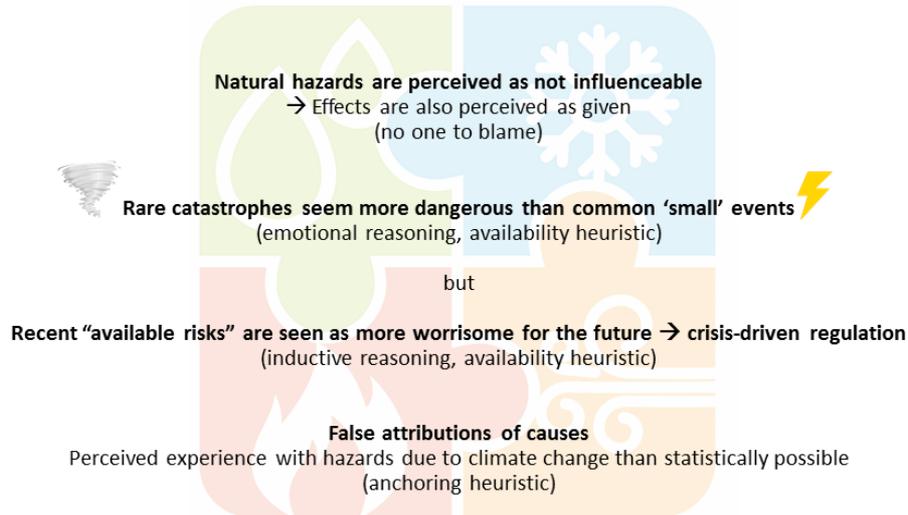
Sources: Baron et al. 2000, Grothmann 2005, Glik 2007, Heinrichs und Grunenberg 2009, Renn 2014

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Perception of natural hazards

Influence of heuristics and perception biases



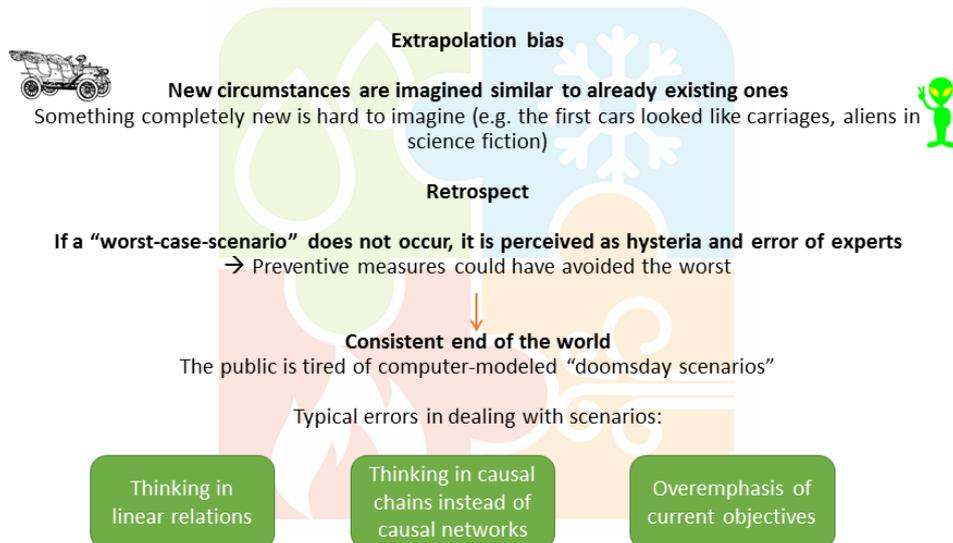
Sources: Grothmann 2005, Seidl et al. 2015, Wiener 2016

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The problem with scenarios

Extrapolation bias, causal connections and we are still alive



Sources: Dörner 2002, Funke 2008, Gesang 2011, Detten 2013

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The importance of trust

easy to loose - hard to earn



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How trust affects risk perception

- Lack of trusts leads to a distorted picture of a risk
- Trust influences the selection of information sources

Trust in science is crucial for risk assessment

Without trust, science can only encourage further suspicion because it reveals "bad news"



Sources: Slovic 1996, Schütz 2008,

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The importance of social situations

a social experiment



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Plausibility over accuracy

- Social situations are meaningful in themselves
- Even contradictions and complex situations are creatively interpreted



Sources: Weick 1995, Renn 2014

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The importance of social learning



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We are social beings

Learning theory:

- Direct learning from own experience
- Social learning from others
- Social learning with others

Influence on risk perception:

- Clear correlation between risk awareness of a person and its social environment
- Abstract risks are better understood when shared and discussed through own experiences

Controlled process of social learning

- Communities of Practice

Sources: Banduras 1977, Marx et al. 2007, Taddicken and Neverla 2011, Reser and Swim 2011

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Societal perspective on risk



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Framing effects

Frames:

"Frames are interpretive storylines that set a specific train of thought in motion, communicating why an issue might be a problem, who or what might be responsible for it, and what should be done about it" (Nisbet, 2009)

Function:

They organize experience – what counts as relevant for attention and assessment?
They bias for action – what style of decision or behavioural response is appropriate?



Sources: 6 2005, Nisbet 2009,

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Societal perspective on risk

Framing effects: Typology of frames applicable to climate change

Frame	Defines science-related issue as . . .
Social progress	A means of improving quality of life or solving problems; alternative interpretation as a way to be in harmony with nature instead of mastering it.
Economic development and competitiveness	An economic investment; market benefit or risk; or a point of local, national, or global competitiveness.
Morality and ethics	A matter of right or wrong; or of respect or disrespect for limits, thresholds, or boundaries.
Scientific and technical uncertainty	A matter of expert understanding or consensus; a debate over what is known versus unknown; or peer-reviewed, confirmed knowledge versus hype or alarmism.
Pandora's box / Frankenstein's monster/runaway science	A need for precaution or action in face of possible catastrophe and out-of-control consequences; or alternatively as fatalism, where there is no way to avoid the consequences or chosen path.
Public accountability and governance	Research or policy either in the public interest or serving special interests, emphasizing issues of control, transparency, participation, responsiveness, or ownership; or debate over proper use of science and expertise in decision-making ("politicization").
Middle way / alternative path	A third way between conflicting or polarized views or options.
Conflict and strategy	A game among elites, such as who is winning or losing the debate; or a battle of personalities or groups (usually a journalist-driven interpretation).

Sources: Nisbet 2009, Reser et al. 2011, Neverla 2012

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Societal perspective on risk

Framing effects: an example

Movie – The Day after Tomorrow

the movies' influence on the public

public meetings and panel

→ Negative and improper framing

Sources: Hulme 2011

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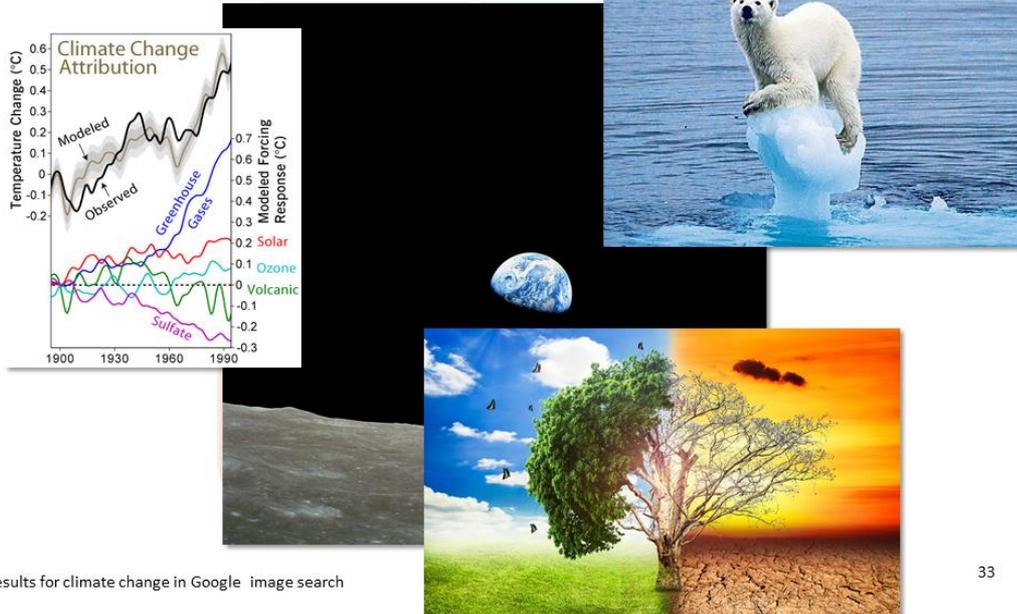


Societal perspective on risk



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The power of images



Sources: Results for climate change in Google image search

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Societal perspective on risk



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Influence of the media

Distortion of information

- Mass media influence sovereignty of interpretation
 - Experts dilemma
- generalization of information
- sensationalization of the science
 - Dominance of negative messages



Sources: Schäfer 2012, Boykoff 2013, Renn 2014

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Awareness and consciousness



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Idea and quality

The mind as an iceberg

The diagram shows an iceberg floating in water. The part above the water line is labeled 'conscious / aware' with a white arrow pointing to it. The part below the water line is labeled 'sub-conscious' with a black arrow pointing to it.

Awareness:

“Awareness is the **ability to directly know and perceive, to feel, or to be cognizant of events.** More broadly, it is the state or quality of being conscious of something” (Wikipedia)

→ “**awareness occurs at the interface between sensory processing and planning**” (Koch, 2004)

Consciousness raising /awareness raising:

“people attempting to focus the attention of a wider group of people on some cause or condition” (Wikipedia)

Sources: Koch 2004

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Knowledge = Awareness = Action?



Is knowing better enough?

Deficit model: Unaware people do not know enough

Information campaign of the 80s

Drastic presentation of environmental problems
Overuse in "catastrophe pedagogics"

→ "The catastrophe is faceless"

Knowledge and Action are not necessarily connected

Cognitive dissonance

Coping strategies:

- Denial
- Changing meaning
- Changing a little



The forest dies – German press 1981

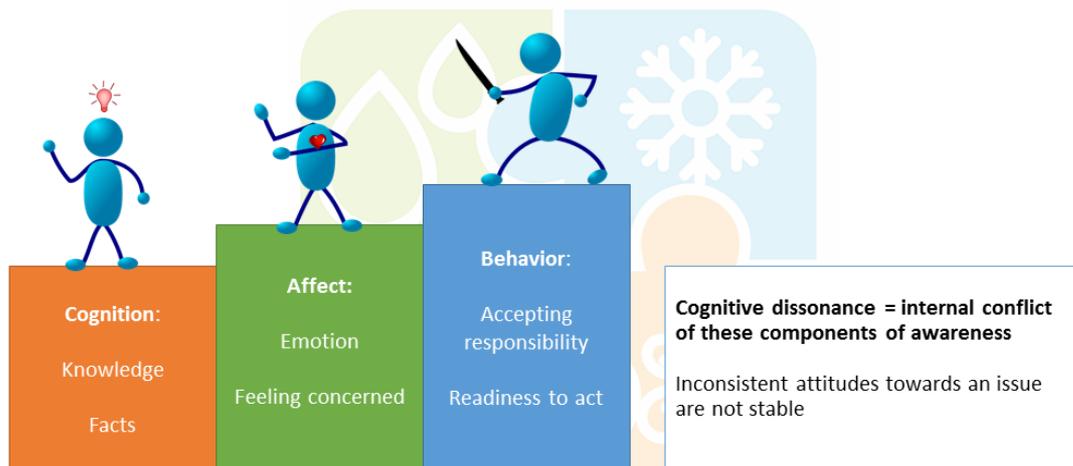
Sources: Wendisch 2004, Weber 2008, Hulme 2011, Stoknes 2014



Components of awareness



ABC-model



Sources: Stoknes 2014,



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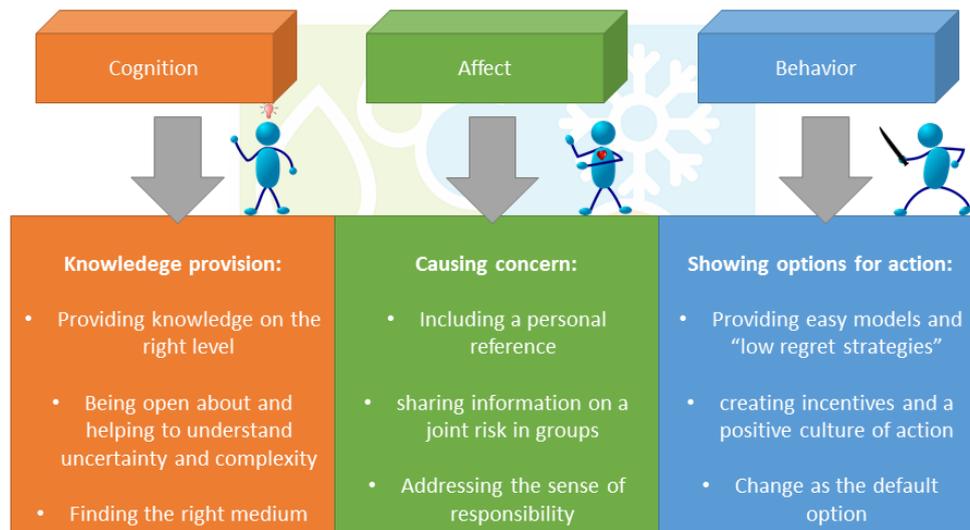


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Awareness-raising on all levels



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Sources: Wendisch 2004, Taddicken and Neverla 2011, IPCC 2011, Reser and Swim 2011, Stoknes 2014, Weber 2017

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Creating perspectives

The power of images (in our minds)



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Sources: Banduras 1977, Marx et al. 2007, Taddicken and Neverla 2011, Reser and Swim 2011

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Creating perspectives

Wording



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- Language is never neutral
“illegal immigrant” ↔ “humanitarian refugee”
- It creates associations (conscious and unconscious)
- It affects decisions
32 % patients died after operation
68% patients survived after operation
- It distorts communication

Terms that have different meanings for scientists and the public

Scientific term	Public meaning	Better choice
enhance	improve	intensify, increase
aerosol	spray can	tiny atmospheric particle
positive trend	good trend	upward trend
positive feedback	good response, praise	vicious cycle, self-reinforcing cycle
theory	hunch, speculation	scientific understanding
uncertainty	ignorance	range
error	mistake, wrong, incorrect	difference from exact true number
bias	distortion, political motive	offset from an observation
sign	indication, astrological sign	plus or minus sign
values	ethics, monetary value	numbers, quantity
manipulation	illicit tampering	scientific data processing
scheme	devious plot	systematic plan
anomaly	abnormal occurrence	change from long-term average

Sources: Slovic 1996, Hulme 2011, Somerville and Hassol 2011, Stoknes 2014,

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Creating perspectives

Framing



Pre-existing frames need to be matched with the argumentation

Which frames has my addressee?
Which frames activates readiness for action?

Triggering a new way of thinking

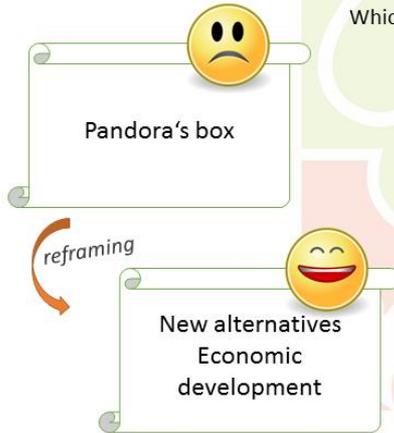


TABLE 7.1: Examples of ways of framing climate change, and the audiences most engaged.

Climate change frame	Audience engaged
Scientific uncertainty frame	Those who don't want to change
National security frame	As above, but now inspired to act
Polar bear frame	Wildlife lovers
Money frame	Politicians and the private sector
Catastrophe frame	Those who are worried about the future
Justice and equity frame	Those with strong ethical leanings

Source: Shanahan (2007).

Sources: Shanahan 2007, Nisbet 2009, Hulme 2011, Stoknes 2014

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Creating perspectives

Storytelling



Explanation of linkages (importance of plausibility)

Visualization of cause effect-relationships

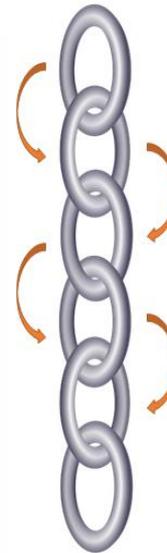
Danger of misuse!

Personal experience and development histories

How on earth did we get here?

Development of new ways

Offering future perspective



Sources: Renn 2014,

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Working with professionals



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Considering responsibility

(Risk related) uncertainty can challenge one's own expertise

- Importance of legitimacy over "right or wrong"
- decision makers tend to make widely accepted and established decisions

Advice from experts to professionals
 "textbook knowledge" vs. "practical realities"
 "expert-based knowledge" vs. "experience-based knowledge"



Framing advice:

In uncertain situations **professionals are guides**
 Creating the possibility for discussion and negotiation concerning the **optimal path**

Sources: Lidskog and Sjödin 2014, Detten and Hanewinkel 2017

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Thank you



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Presentation: Accordance with the targets and priorities of the Sendai



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Accordance with the targets and priorities of the Sendai Framework

Yvonne Hengst-Ehrhart

Forest Research Institute of Baden-Wuerttemberg Department of Forest Economics

NET RISK WORK – PROJECT MEETING Freiburg, 10th May 2017



Forest Research Institute Baden-Württemberg



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The Sendai Framework for Disaster Risk Reduction



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What it is?

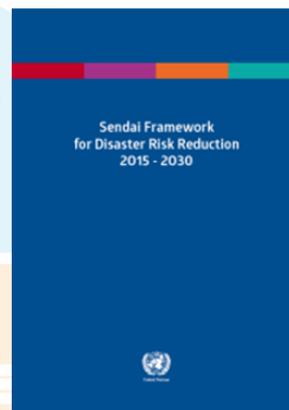
The Sendai Framework for Disaster Risk Reduction (2015-2030) is an international document which was adopted by UN member states between 14th and 18th of March 2015 at the World Conference on Disaster Risk Reduction held in Sendai, Japan and endorsed by the UN General Assembly in June 2015.

→ before: Hyogo Framework for Action (2005-2015)

- On EU-level: Action Plan on the Sendai Framework for Disaster Risk Reduction 2015-2030
• June 2016



European Commission





The Sendai Framework for Disaster Risk Reduction



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What is it about?

Scope and purpose

→ It aims to guide the multi-hazard management of disaster risk in development at all levels as well as within and across all sectors

Goal

Prevent new and reduce existing disaster risk through the implementation of integrated and inclusive economic, structural, legal, social, health, cultural, educational, environmental, technological, political and institutional **measures that prevent and reduce hazard exposure and vulnerability to disaster**, increase preparedness for response and recovery, and thus strengthen resilience



Sources: UNISDR / <http://www.preventionweb.net/drr-framework/sendai-framework>

4



The Sendai Framework for Disaster Risk Reduction



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Targets

- (1) Substantially **reduce global disaster mortality** by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005–2015;
- (2) Substantially **reduce the number of affected people** globally by 2030, aiming to lower the average global figure per 100,000 in the decade 2020–2030 compared to the period 2005–2015;
- (3) Reduce **direct disaster economic loss** in relation to global gross domestic product (GDP) by 2030;
- (4) Substantially **reduce disaster damage to critical infrastructure** and disruption of basic services, among them health and educational facilities, including through developing their resilience by 2030;
- (5) Substantially increase the number of countries with **national and local disaster risk reduction strategies** by 2020;
- (6) Substantially **enhance international cooperation to developing countries** through adequate and sustainable support to complement their national actions for implementation of the present Framework by 2030;
- (7) Substantially increase the **availability of and access to multi-hazard early warning systems and disaster risk information** and assessments to people by 2030.

Sources: UNISDR / <http://www.preventionweb.net/drr-framework/sendai-framework>

5



The Sendai Framework for Disaster Risk Reduction



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Priorities for Action

There is a need for focused action within and across sectors by States at local, national, regional and global levels in the following four priority areas



Sources: UNISDR / <http://www.preventionweb.net/drr-framework/sendai-framework>

6



The Sendai Framework for Disaster Risk Reduction



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Accordance NET RISK WORK - Targets

- (1) Substantially **reduce global disaster mortality** by 2030, aiming to lower the average per 100,000 global mortality rate in the decade 2020–2030 compared to the period 2005–2015;
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Sources: UNISDR / <http://www.preventionweb.net/drr-framework/sendai-framework>

7



The Sendai Framework for Disaster Risk Reduction



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Accordance NET RISK WORK - Priorities

- Priority 1:** Understanding risk in all its dimensions
- Priority 2:** Collaboration and partnership
- Priority 3:** Public and private investment in disaster risk prevention and reduction
- Priority 4:** Ensure capacities are in place for effective response and recovery at all levels

<input checked="" type="checkbox"/> Priority 1 Understanding disaster risk	<input checked="" type="checkbox"/> Priority 2 Strengthening disaster risk governance to manage disaster risk	<input type="checkbox"/> Priority 3 Investing in disaster risk reduction for resilience	<input checked="" type="checkbox"/> Priority 4 Enhancing disaster preparedness for effective response, and to «Build Back Better» in recovery, rehabilitation and reconstruction
---------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------	----------------------------------------------------------------------------------------------------------	---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Sources: UNISDR / <http://www.preventionweb.net/drr-framework/sendai-framework>



The Sendai Framework for Disaster Risk Reduction



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Contribution - NET RISK WORK

- Mentioning topic-related targets and priorities in our publications?
- Emphasizing one priority?
- Adopting the language?

Priority 1	X
Priority 2	
Priority 3	
Priority 4	X

Sources: UNISDR / <http://www.preventionweb.net/drr-framework/sendai-framework>



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Presentation: Structural components of running networks



net risk work



Funded by European Union Humanitarian Aid and Civil Protection

Workshop: structural components of running networks

Yvonne Hengst-Ehrhart

Forest Research Institute of Baden-Wuerttemberg
Department of Forest Economics

NET RISK WORK – PROJECT MEETING
Freiburg, 10th May 2017



net risk work

The importance social learning



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What makes the difference?

Learning is more than accumulating knowledge

1. Own Experience
2. Observation and adaptation
3. Development of shared meanings and practices

“Adults learn through everyday social practices rather than focusing on environments that are intentionally designed to support learning”. (Gray 2004)

Adults learn in social groups via

Conversation
Storytelling
Mentorship
Lessons learned through experience



Communities of Practice

The concept



Communities of practice are groups of people who share a concern or a passion for something they do and learn how to do it better as they interact regularly.

Differences from other communities



Domain
First, they focus on a domain of shared interest

Community
Second, they interact and learn together



Practice
Third, they develop a shared collection of experiences, stories, best practices etc.

Sources: Lave and Wenger 1991, <http://wenger-trayner.com>

3



Communities of Practice

A social learning concept



Differences from other communities

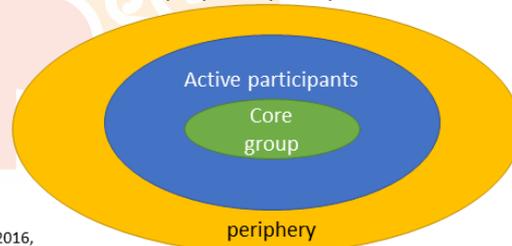
First, they focus on a domain of shared interest
Second, they interact and learn together
Third, they develop a shared collection of experiences, stories, best practices etc.

CoPs

Often develop own their own (sports clubs, local interest groups etc.)
Often are composed of members from different agencies, corporations, professions...

Basic requirements

Trusting relations in a voluntary network
Interplay between experienced members (and newcomers)
central participants maintaining the interaction with peripheral participants



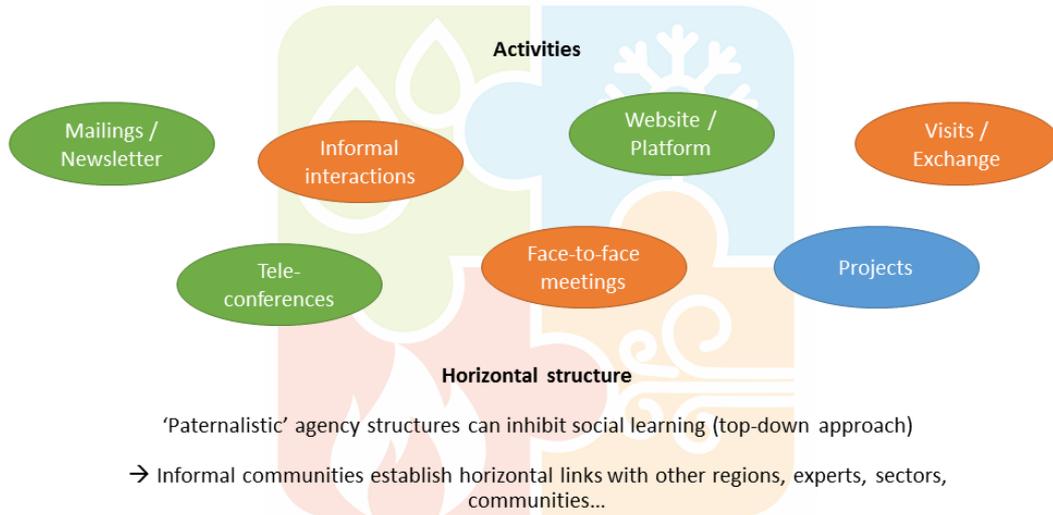
Sources: Gray 2004, Pahl-Wostl et al. 2007, Blackmore 2010, Benson et al. 2016,

4



Communities of Practice

How do they work?



Sources: Blackmore 2010, Benson et al. 2016

5

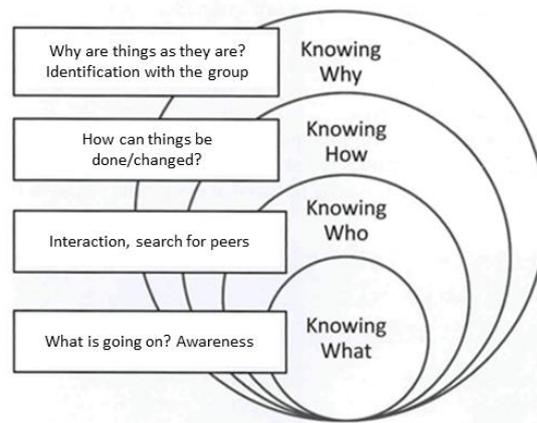


Communities of Practice

How do they evolve?



Development over time - levels of knowledge exchange



Sources: Lee-Kelley et al. 2014 (modified)

6



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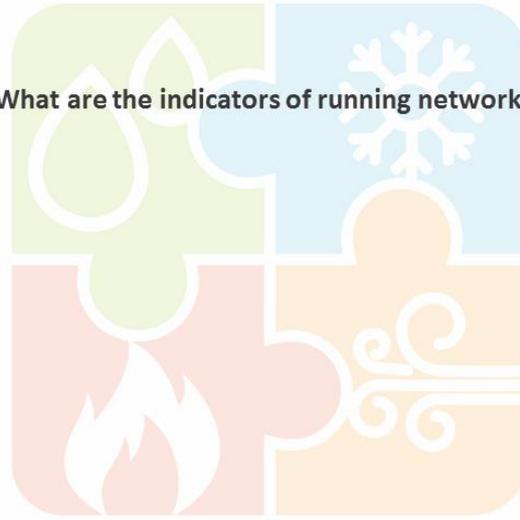
Workshop / Discussion

Question



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What are the indicators of running networks?



Sources: Wenger 1998, Lee-Kelley et al. 2014

7

Thank you



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net risk work





Presentation: Networking in the political arena

Networking in the political arena

NET RISK WORK-Workshop
Dr. Guido Schwichtenberg
Freiburg i. Br., 10th May 2017



1



Outline



- **Basic assumptions**
- **Background**
- **Situation in Germany**
- **Examples**
- **Take home messages**





Basic assumptions



- **Forest owner association should be member of the project (at least of the network)**
- **Forest owners/forestry related associations should have the possibility to join the political debate**
- **There are other forestry friendly associations (wood industry, chemical industry, other industry)**

Background



- **Kyoto Protocol**
- **Paris Agreement**
- **Climate protection efforts of the German government**
- **Proposal of the EC to include LULUCF into the 2030 climate and energy framework of the EU**

Picture from:
<https://www.mtholyoke.edu/~tiern201/classweb/climatechange/kyoto.html>



Situation in Germany



- **Associations have to be consulted in many legislative procedures**
- **Action Alliance Climate Protection 2020**
- **In the coalition agreement it is stated to adopt a Climate Protection Plan 2050**
- **The government decided to support it by a dialogue process (with associations and citizens)**

Action Alliance Climate Protection 2020



- **Basis: Action Plan Climate Protection 2020 of the government**
- **~ 60 associations**
- **Meetings 2 times per year**
- **Reviews yearly Climate Protection Report**
- **Shall support the government in it's efforts**
- **Will be continued after 2020**



LULUCF-Dinner at the EP



- All german speaking MEPs were invited
- Only a fraction (already forestry friendly) showed up
- Very productive evening
- Three presentations (CEPF, EUSTAFOR)
- Very lively discussion (1 h longer!)
- Feedback: „Thank's for facts!“
- Politicians now know about scientific state of the art and our interests

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Freiburg i. Br., 10th May 2017 7



Bundesministerium für Ernährung und Landwirtschaft

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit

EIP-AGRI focus group



- Focus Group on Forest practices & climate change
- Full name: *Focus Group (FG) on New forest practices and tools for adaptation and mitigation of climate change*
- one year
- 20 members
- 2 meetings
- Collaborative work in-between

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Bundesministerium für Ernährung und Landwirtschaft

Bundesministerium für Umwelt, Naturschutz, Bau und Reaktorsicherheit



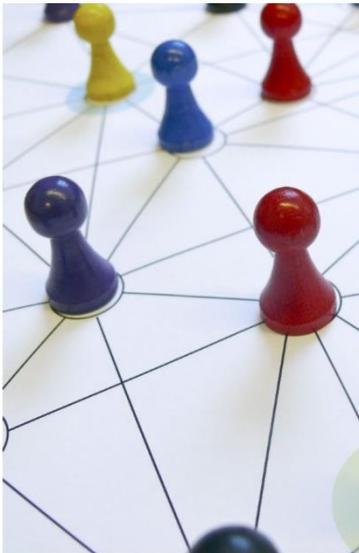
EIP-AGRI focus group



8 main tasks, i. a.:

- Identify the main challenges and opportunities
- Identify the needs of forest managers
- Identify new practices and tools
- Analyse possible synergies and trade-offs between mitigation and adaptation
- Propose potential innovative actions

Take-home messages – Part I

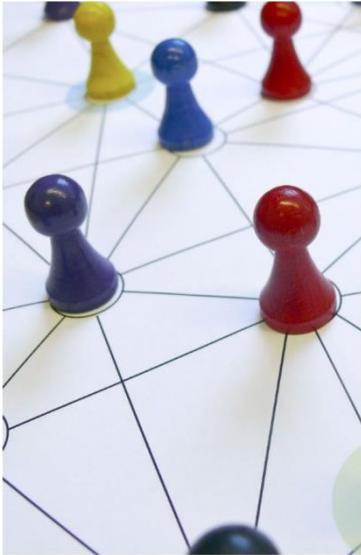


Picture licence: CC0 Public Domain (www.pixabay.com)

- Build up competence (dedicated employees!) in your field of interest
- Attend each and every conference/workshop etc. in your field of interest
- Forge alliances (e. g. with other land user associations, associations of the rural area or of the industry)



Take-home messages – Part II



- Sometimes it is better to call (esp. staff from ministries or secretariats of politicians)
- Stay in contact (national, international, cross-sectoral) – also in person!

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NET RISK WORK-Workshop

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Thank you for your attention





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Presentation: Introduction and discussion of the joint template (Action B1)



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ACTION B1: presentation of the joint template and discussions on best practices / tools

Alice Clémenceau
Nuria Prat

(Freiburg 11 May 2017)



Forest Research Institute
Baden-Württemberg



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Preparation of the common template

- Discussions EPLFM/PCF (early March)
- 1st proposal to partners (14th March)
- Implementation of comments and list of topics (flood, storm, avalanches)
- Final version sent 10th April

Objective of the common template

- Collect “case studies” (broad sense)
 - In a comparable way
 - To produce an *on line Report on tools and best practices on risk planning and management for wildfire, storms, floods and avalanches at European level*
 - Best cases and tools will have a detailed description
- The report will be available in the project website
- Revision of the report at the end of the project

Common template for risk assessment and management operational tools and best practices identification (Action B1)

Document classification

Title	Journals Club Programme
Description (one sentence)	Creation of free and open debate spaces for stakeholders and local communities on fire risk prevention and awareness
Country	Spain
Date	-
Partner	PCF
Document type	Best practice
Language	Catalan
Source/origin	Partner own expertise

Topic

Area	Risk assessment
Risk	Wildfires Perception, culture of risk and communication
	Storms Choisissez un élément.
	Avalanches Avalanches topics.
	Floods Floods topics.
Level	Local
Phase in the DRM cycle	Prevention
Domain of DRM	Policy making

Description and analysis

<p>Quick presentation of the Good Practice [Objective : summarize in a few lines the key elements of the good practice]</p> <p>Place in national/regional policy</p> <ul style="list-style-type: none"> Regional fire prevention policy <p>[free text – 5 lines max]</p> <p>Goals and achievements</p> <ul style="list-style-type: none"> To gather stakeholders To disseminate challenges of fire resilient landscapes among policy makers and land managers To foster fire risk awareness among population and land owners To engage local population <p>[free text – 3 lines max]</p> <p>Stakeholders involved</p> <ul style="list-style-type: none"> Land owners WUI residents Land managers Fire managers Fire emergency response system Policy makers <p>[free text – 5 lines max]</p> <p>Implementation stage</p> <ul style="list-style-type: none"> Fully implemented, after remarkable fire event. <p>[free text – 5 lines max]</p>

<p>Context and Issues [Objective : good knowledge of the context in which the good practice is implemented]</p> <p>Regulatory Context</p> <ul style="list-style-type: none"> Non-adapted fire prevention policies to fire behavior context and WUI areas Basic dissemination actions about fire risk awareness Lack of intersectorial discussion spaces among policy makers and technicians <p>[free text – 3 lines max]</p> <p>Socio-economic context</p> <ul style="list-style-type: none"> Abandonment of farmlands Loss of population in rural areas Lack of fire risk awareness WUI in high fire risk areas



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<i>[Free text – 5 lines max]</i>
Technical context (state of technical knowledge)
<i>[Free text – 5 lines max]</i>
Detailed Characteristics <i>[Objective : detail the conditions of the implementation of the good practice]</i>
Description of the implementation <ul style="list-style-type: none"> • To hold on field "after-fire" meetings among local and regional stakeholders on fire risk management • Free access and open debate among stakeholders • To open participation to population
History of establishment Meetings were created to give an answer to land owners and local land managers from the emergency managers point-of-view about recent fire event. This meetings focused in lessons learnt and needs from emergency managers and identification of land management challenges.
Priorities identified for a good implementation of the good practice <ul style="list-style-type: none"> • To engage local stakeholders: <ul style="list-style-type: none"> ◦ Land managers ◦ Land owners • To engage local councilors and mayors • To foster the participation of local population • Meetings conducted by impartial entity
Governance (responsible authority) <ul style="list-style-type: none"> • There's no responsible authority
Necessary means to implement the good practice (human, material, financial...) <ul style="list-style-type: none"> • Meeting leader
Problems / solutions incurred <i>[Free text – 5 lines max]</i>
Lessons learnt <i>[Objective : compare the results obtained to the objectives set at the establishing of the good practice and learn from experience]</i> Evaluation process (if exists) (internal or external) <i>[Free text – 5 lines max]</i>
Assessment of results (quantitative and qualitative) <ul style="list-style-type: none"> • Average of 50 attendees per meeting • Capitalization of lessons learnt, challenges and feedbacks from all stakeholders • To have created a free and open debate space for all stakeholders and population.

<i>[Free text – 5 lines max]</i>
Comparison with fixed objectives <ul style="list-style-type: none"> • Lack of active engagement of WUI residents in urban areas
Analysis of the differences <i>[Free text – 5 lines max]</i>
Negative points <i>[Free text – 5 lines max]</i>
Unexpected consequences (short / mid / long term) - <i>[Free text – 5 lines max]</i>
Consequences (corrections implemented) <i>[Free text – 5 lines max]</i>

Impact of the good practice <i>[Objective : evaluate the impact of the good practice. Examples: on decision processes, on national policies, on relationship with stakeholders, on the local population, etc]</i> Feedbacks, lessons learnt arose and challenges identified, have been translated and adapted into technical recommendations for EU projects (FireEfficient, eFirecom, Wulwatch) <i>[Free text – 5 lines max]</i>

Durability and transferability <i>[Objective : evaluate the integration of the good practice and its sustainability, give recommendations for the transfer]</i>			
Is this information: <table border="1"> <tr> <td>Replicable <input checked="" type="checkbox"/></td> <td>Measurable <input checked="" type="checkbox"/></td> <td>Notably successful <input checked="" type="checkbox"/></td> </tr> </table>	Replicable <input checked="" type="checkbox"/>	Measurable <input checked="" type="checkbox"/>	Notably successful <input checked="" type="checkbox"/>
Replicable <input checked="" type="checkbox"/>	Measurable <input checked="" type="checkbox"/>	Notably successful <input checked="" type="checkbox"/>	
Regulatory Framework - <i>[Free text – 5 lines max]</i>			
Stability of the human environment (partnership, structures, population) <ul style="list-style-type: none"> • Participation and engagement is opened 			
Financing modalities <ul style="list-style-type: none"> • No cost to attend 			
Success factors (political, technical, human, financial...) <i>[Free text – 5 lines max]</i>			
Risk factors <ul style="list-style-type: none"> • To become a discussion of constraints and claims to policy makers and technicians from land owners and residents. 			
<i>[Free text – 5 lines max]</i>			

<i>[Free text – 5 lines max]</i>
Technical context (state of technical knowledge)
<i>[Free text – 5 lines max]</i>
Detailed Characteristics <i>[Objective : detail the conditions of the implementation of the good practice]</i>
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Problems / solutions incurred <i>[Free text – 5 lines max]</i>
Lessons learnt <i>[Objective : compare the results obtained to the objectives set at the establishing of the good practice and learn from experience]</i> Evaluation process (if exists) (internal or external) <i>[Free text – 5 lines max]</i>
Assessment of results (quantitative and qualitative) <ul style="list-style-type: none"> • Average of 50 attendees per meeting • Capitalization of lessons learnt, challenges and feedbacks from all stakeholders • To have created a free and open debate space for all stakeholders and population.

<i>[Free text – 5 lines max]</i>
Comparison with fixed objectives <ul style="list-style-type: none"> • Lack of active engagement of WUI residents in urban areas
Analysis of the differences <i>[Free text – 5 lines max]</i>
Negative points <i>[Free text – 5 lines max]</i>
Unexpected consequences (short / mid / long term) - <i>[Free text – 5 lines max]</i>
Consequences (corrections implemented) <i>[Free text – 5 lines max]</i>

Impact of the good practice <i>[Objective : evaluate the impact of the good practice. Examples: on decision processes, on national policies, on relationship with stakeholders, on the local population, etc]</i> Feedbacks, lessons learnt arose and challenges identified, have been translated and adapted into technical recommendations for EU projects (FireEfficient, eFirecom, Wulwatch) <i>[Free text – 5 lines max]</i>

Durability and transferability <i>[Objective : evaluate the integration of the good practice and its sustainability, give recommendations for the transfer]</i>			
Is this information: <table border="1"> <tr> <td>Replicable <input checked="" type="checkbox"/></td> <td>Measurable <input checked="" type="checkbox"/></td> <td>Notably successful <input checked="" type="checkbox"/></td> </tr> </table>	Replicable <input checked="" type="checkbox"/>	Measurable <input checked="" type="checkbox"/>	Notably successful <input checked="" type="checkbox"/>
Replicable <input checked="" type="checkbox"/>	Measurable <input checked="" type="checkbox"/>	Notably successful <input checked="" type="checkbox"/>	
Regulatory Framework - <i>[Free text – 5 lines max]</i>			
Stability of the human environment (partnership, structures, population) <ul style="list-style-type: none"> • Participation and engagement is opened 			
Financing modalities <ul style="list-style-type: none"> • No cost to attend 			
Success factors (political, technical, human, financial...) <i>[Free text – 5 lines max]</i>			
Risk factors <ul style="list-style-type: none"> • To become a discussion of constraints and claims to policy makers and technicians from land owners and residents. 			
<i>[Free text – 5 lines max]</i>			

Additional and non-formal experiences to help the implementation of good practice
[free text – 5 lines max]

Additional elements, if any	
Documents joined	<i>[name of the file]</i>
Web links	
Contact facts	

Feedback / remarks on the template?

- No specific remarks provided when the template was proposed
- Are there new ones after you used it to fill in your cases?



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First results

- Distribution of risks : all risks are represented but unbalanced [forest fire (15); storm (5); flood (2); avalanche (2); cross-risks (6)]
- Distribution of area: Distribution in the DRM cycle – from prevention, reduction and preparedness to response and recovery : all are represented
- Distribution of levels – local, national, European and global : mainly national/regional
- Distribution of domains of disaster risk management: policy making, early warning systems and disaster response : not a lot on early warning systems



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Details by each partners (CTFC)

Already collected:

- Use and classification of the land according to flood risk (case of Catalonia)
- Use and classification of the land according to avalanche risk (case of Andorra)
- Communicative documents about forest fires risk (toolkit of eFirecom Project)
- CUIDAR Project: Cultures of Disaster Resilience among children and young people
- Avalanche risk mapping (case of Switzerland)

In many cases, we can't fill all boxes

Planned cases:

- IDEA Project: Improving Damage assessments to Enhance cost-benefit Analyses
- Flood/fire groups (case of UK)
- Forest management by natural risks (case of France)



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Details by each partners (EFICENT)

Already collected:

Planned cases:



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Details by each partners (FVA)

Being collected:

- Wind damage models as decision-support-tool for forest practitioners to assess storm damage risk
- State of the art collection on storm damage prevention, protection and damage management
- Goal oriented risk management with the ICE (Influence-Change-Exposure) method
- Review paper on natural hazards risk management in forestry (focus on storm)
- Stodafor Technical Guide on Harvesting and Conservation of Storm Damaged Timber
- Storm Handbook – Coping with Storm Damaged Timber (www.waldwissen.net)
- WALD-WIKI – Platform for Your Knowledge, Forest and Region
- Tree species suitability maps (Baumarteneignungskarten)



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Details by each partners (EPLFM)

Tools and best practices	Topic	Area	Phase	Domain
Brushing legal obligations	Fuel management	Planning, management,	Reduction	Policy making
PPRIF – wildfire risk prevention plans - municipality level (methodology)	Risk assessment and planning, Wildland-urban interface	Risk assessment, planning	Prevention, preparedness	Policy making
The use of various types of chemical additives in suppression operations	Emergency management	Management	Response	Disaster response
Personal protective equipment for wildfire fighting (testing & standardization)	Emergency management	Management	Response	Disaster response
State of the art and latest developments in restoration of burnt areas	Restoration of burnt areas	Management	Recovery	Policy making
The use of tactic fires in France	Emergency management	Management	Response	Disaster response
Calculation and use of Fire Weather Index by MétéoFrance	Risk assessment	Risk assessment	Preparedness	Policy making
Impact of climate change on the evolution of the Forest fire Risk in France	Risk assessment	Risk assessment	Preparedness	Policy making



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Details by each partners (DGPC RAS)

Already collected:

- Space-based Information Support for Prevention and Recovery of Forest Fires Emergency in the MediteRanean Area
- Classification of the risk of forest wildfires (Classification of regional and municipalities forest fire risk)
- Wildfire forecast bulletin

Planned cases:



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Details by each partners (PCF)

Already collected:

- Creation of free and open debate spaces for stakeholders and local communities on fire risk prevention and awareness

Planned cases:

- Post-fire data analysis to assess operational decision-taking.
- Communication workshops with children to raise awareness and prevention measures against wildfires.



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Next steps

- All partners continue to prepare their own cases (around 8 per partners)
- In the meantime: send the ones that are ready to Nuria and Alice
- By 29th May: send all the remaining ones
- June 19th : first sketch of the report
- By 30th June: finalisation of the report
- Question: review process?



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Presentation: Introduction risk interaction scheme



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Risk Interaction Scheme TASK B Action B2

Yvonne Hengst-Ehrhart, Christoph Hartebrodt Forest Research Institute of Baden-Wuerttemberg Department of Forest Economics

NET RISK WORK – PROJECT MEETING Freiburg, 11th May 2017



Risk Interaction Scheme

Risk Dimensions



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Background:

The Sendai Framework for Disaster Risk Reduction highlights that: "Policies and practices for disaster risk management should be based on an understanding of disaster risk in all its dimensions of vulnerability, capacity, exposure of persons and assets, hazard characteristics and the environment."



Sources: UNISDR 2009, SREX 2012, Komendantova et al. 2014, UNISDR 2016



Risk Interaction Scheme



Risk Dimensions

Risk is defined as the “**expected losses** of lives, persons injured, property damages and economic activities disrupted **due to a particular hazard** for a given area and reference period”. Another definition of risk is “the combination of the **probability of an event and its negative consequences**”

Exposure refers to the **inventory of elements in an area in which hazard events may occur**. Hence, if population and economic resources were not located in (exposed to) potentially dangerous settings, no problem of disaster risk would exist.

Vulnerability refers to the **propensity of exposed elements** such as human beings, their livelihoods, and assets **to suffer adverse effects when impacted by hazard events**



Sources: UNISDR 2009, SREX 2012, Komendantova et al. 2014, UNISDR 2016

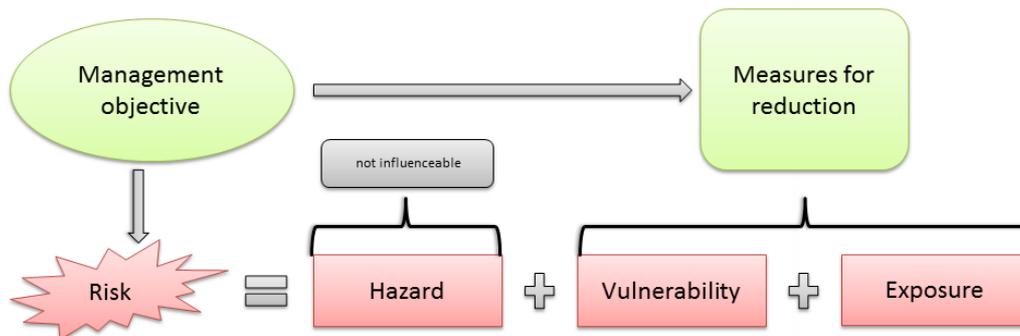
3



Risk Interaction Scheme



Relations between risk, its elements and management objectives



Sources: UNISDR 2009, SREX 2012, Komendantova et al. 2014, UNISDR 2016

4



Risk Interaction Scheme



Project Integration: Single risk assessment

Objective: e.g. income, biodiversity, infrastructure protection, recreation				
Hazard	Storm	Fire	Flood	Avalanche
Vulnerability	[grid]	[grid]	[grid]	[grid]
Exposure	[grid]	[grid]	[grid]	[grid]

Single risk assessment overview

Objective: INCOME		
Hazard: STORM		
Impact on Vulnerability	Natural influence	i/d
	Water logged soil (no deep roots)	↑
	...	
	...	
Yes No <input checked="" type="checkbox"/>	Human influence	i/d
	Thinning activities	↓
	DSS tool to assess the probability of wind damage	↓
	...	
Impact on Exposure	Measures	i/d
	Early harvesting of vulnerable stands	↓
	Storm damage insurance	↓
	...	
Yes No <input checked="" type="checkbox"/>	...	
	...	
	...	
	...	

Single risk assessment in detail

5



Risk Interaction Scheme



Next step: risk interaction assessment

Risk interaction assessment, overview from single risk to risk interaction

Objective:					
Hazard					
	Storm	Fire	Flood	Avalanche	
Single risk	[grid]	[grid]	[grid]	[grid]	
	↓	↓	↓	↓	
	second hazard				
first hazard	Storm	Fire	Flood	Avalanche	
Storm	[grid]	[grid]	[grid]	[grid]	
Fire	[grid]	[grid]	[grid]	[grid]	
Flood	[grid]	[grid]	[grid]	[grid]	
Avalanches	[grid]	[grid]	[grid]	[grid]	

6

Risk Interaction Scheme

Next step: risk interaction assessment

Example:

Management
objective:
"Income"

Hazard:
"Storm" after
"Avalanche"

Objective: INCOME			
Hazard: AVALANCHE → STORM			
Impact on Vulnerability	Natural influence	i/d	
	Water logged soil (no deep roots)	↑	
	Destabilisation of stands through avalanche damage	↑	
Yes <input checked="" type="checkbox"/>	→		
No <input type="checkbox"/>			
Human influence	Thinning activities / salvage logging after avalanche	?	
	DSS tool to assess the probability of wind damage	↓	
	...		
Impact on Exposure	Measures	i/d	
	Early harvesting of vulnerable stands	↓	
	Storm damage insurance	↓	
Yes <input checked="" type="checkbox"/>	→		
No <input type="checkbox"/>			
	...		
	...		
	...		
	...		
	...		
	...		
	...		

7

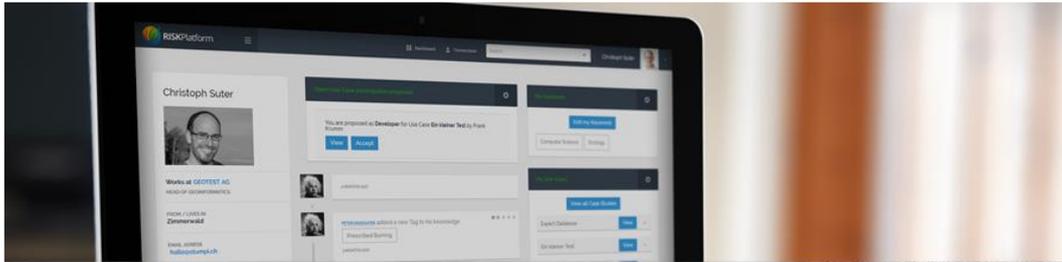
Thank you



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Presentation: Introduction of the RiskPlatform by Geotest



GEOTEST AG

RiskPlatform

An information exchange platform for experts and practitioners

1 11. Mai 2017 | Christoph Suter

GEOTEST

GEOTEST LTD

- Independent public limited company
- We employ 140 staff and are present in all parts of Switzerland.
- We operate internationally and have a branch office in Santiago de Chile.
- Over 50 years of experience
- Geology / Natural Hazards
- Environment
- Geotechnics
- Geophysics
- Geoinformatics
- Measuring and Monitoring
- Field and Laboratory Testing



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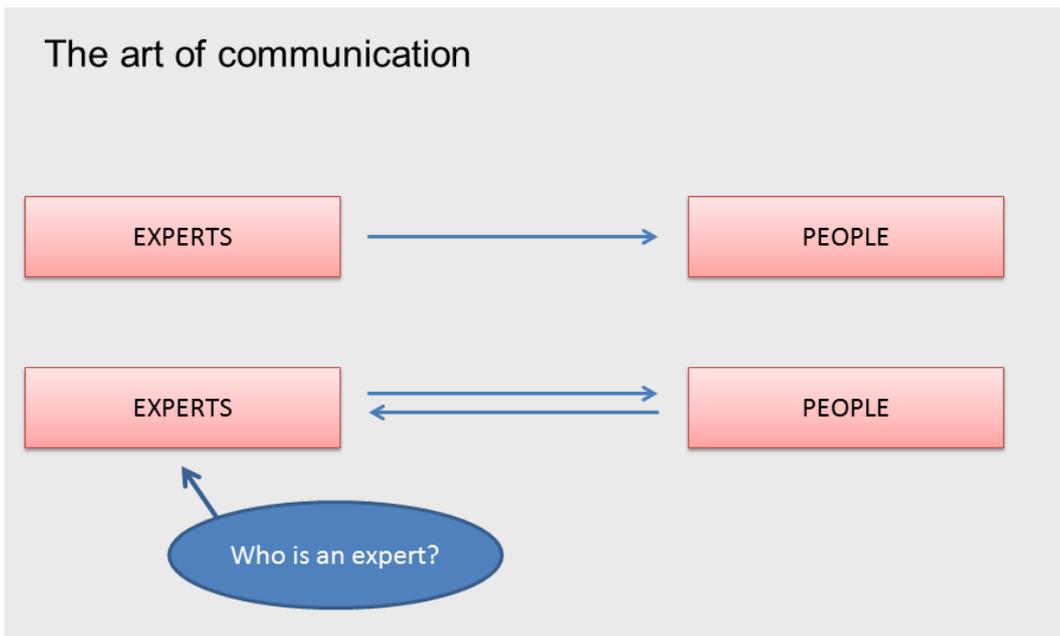
Geoinformatics

- Desktop - GIS
- Software Development
- Web - GIS
- Modelling natural hazard processes

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What's the problem?



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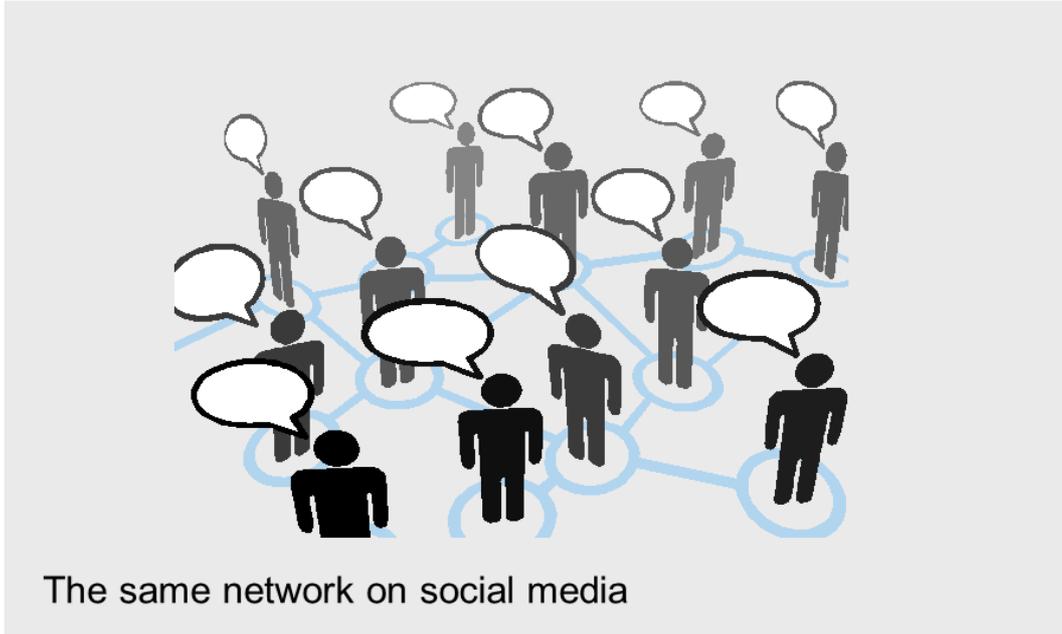


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Everybody has his own network



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What we need

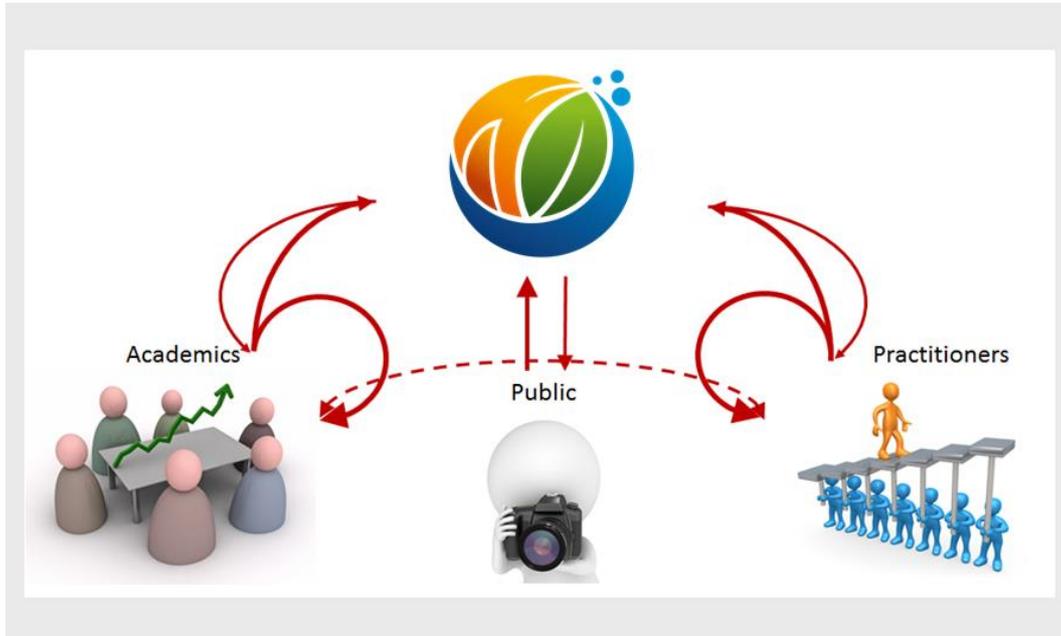


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RiskPlatform



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RiskPlatform

A social media platform

Share your

- «use cases»: e.g. your topic, a special event
- Documents: e.g. publications, presentations
- Observations, minds, feelings (from the field)
- Experience

Get

- Important information from experts and practitioners
- Expand your network with interacting in other «use cases»

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RiskPlatform

Questions for Risk Platform to address

- Who are the most effective contacts?
- How do I find the relevant information?
- Is anyone already working to mitigate this?

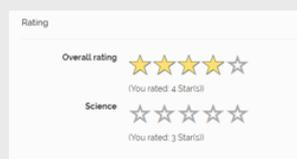
Possible users

- Everybody
 - Interested people
 - Involved victims
 - Practitioners
 - Government
 - Experts

Who is an expert?

Who is an expert?

- Users can rate other users, comments, documents,
...
- A user with a high rating (= expert) has bigger influence with his rating than others
- Observations with high rating are more important and will be showed on top





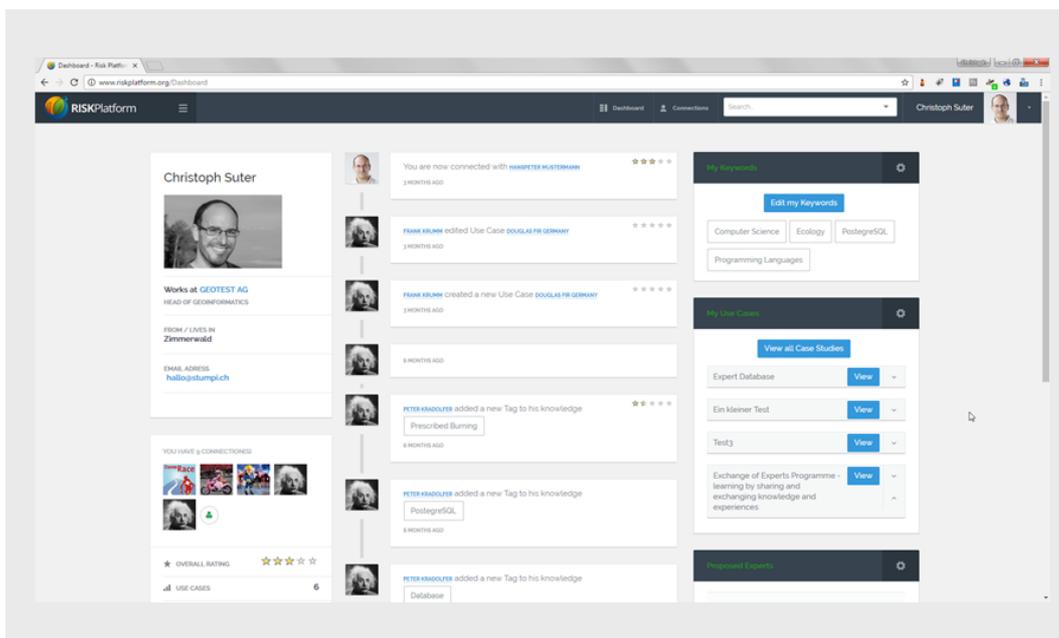
Schedule

- First prototype is online (<http://www.riskplatform.org>)
- Next steps:
 - Improve usability
 - Do tests / samples
 - Create your «use cases»
 - Invite other experts
 - Connect to other «use cases»
 - Profit
 - Bugfixing
 - Spread the world...

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Demo



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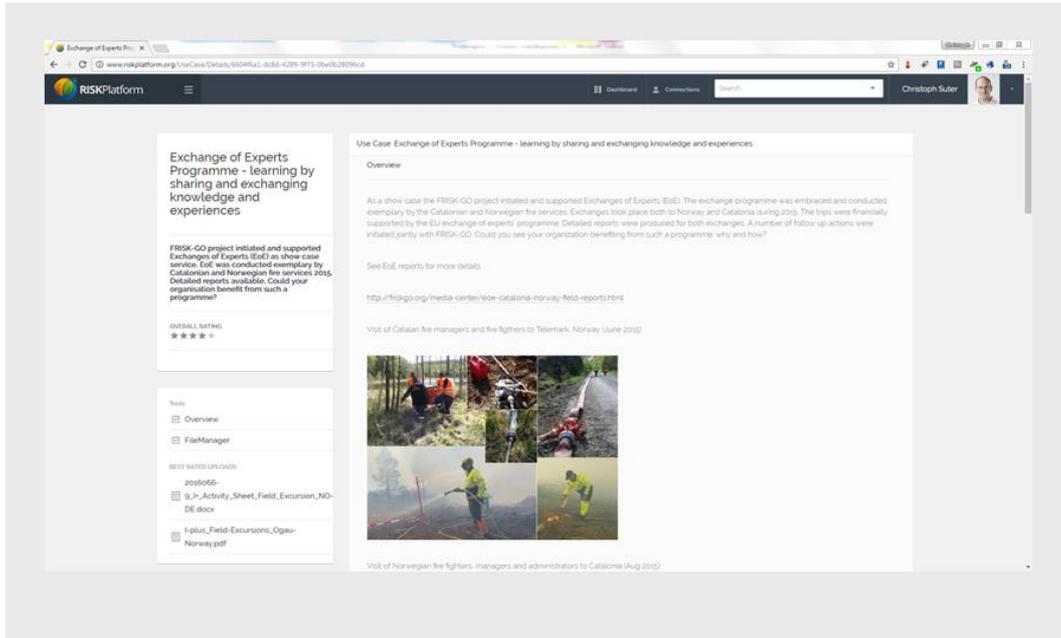


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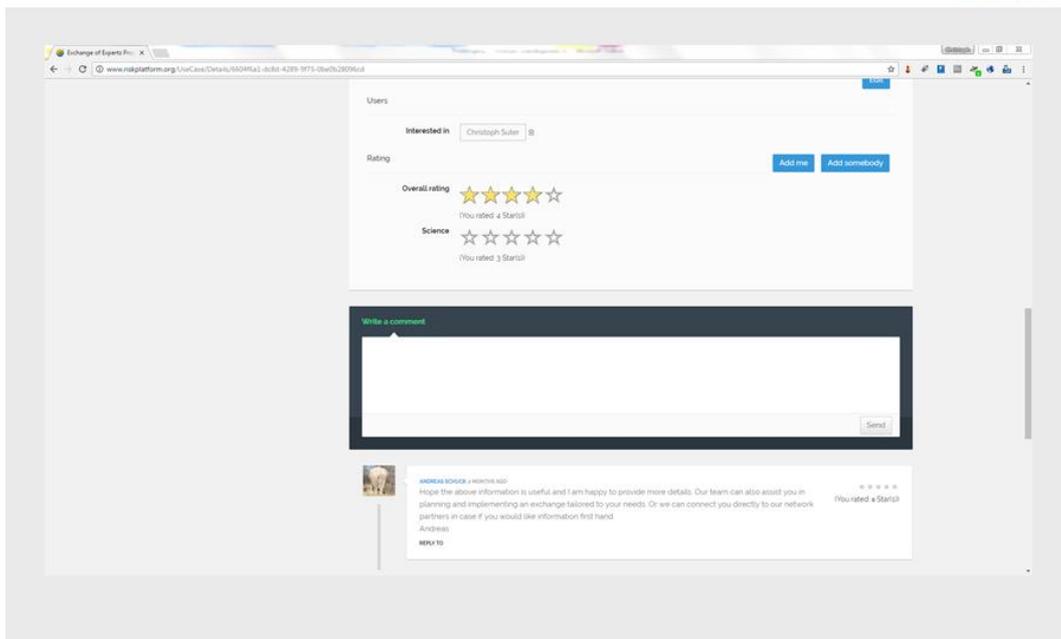
Demo



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Demo



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Demo

The screenshot shows the RISKPlatform interface. On the left, there is a sidebar with the following sections:

- Expert Database**: "Expert Database is cool", "OVERALL RATING ★★★★★"
- Tools**: Overview, FileManager
- BEST RATED UPLOADS**: Balmhorn und Albens, Riskplatform Flyer
- UPLOADED FILES**: 2
- PARTICIPANTS**
- COMMENTS**

The main content area is titled "Files for Expert Database" and contains a table:

TITLE	DESCRIPTION	AUTHOR	RATING	ACTION
Balmhorn und Albens		Peter Kradoberl	★★★★★	Edit Delete
Riskplatform Flyer	A short description about the project	Christoph Suter	★★★★★	Edit Delete

Below the table is an "Upload new Files" section with a dashed box and the text "Drop files here to upload".

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Thank you
for your attention

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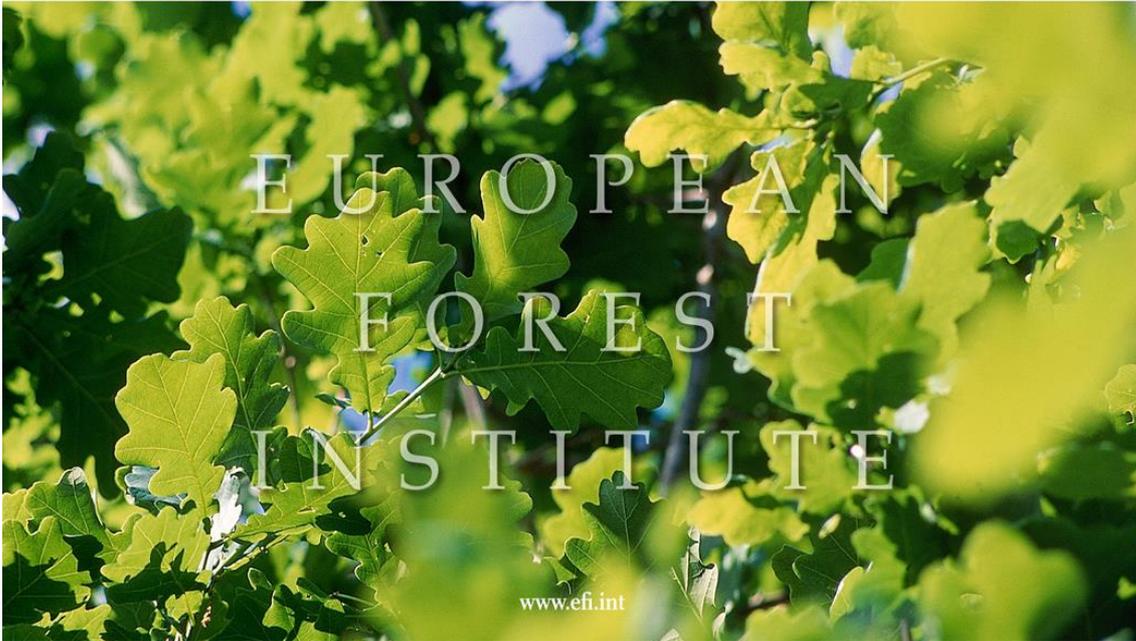


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Presentation: Introduction EFI FRISK Secretariat



EUROPEAN FOREST INSTITUTE



EUROPEAN FOREST INSTITUTE





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by decision of the
German Bundestag

Investigate the need, role and niche for a future “European Forest Risk Facility”

“FRISK-GO” project (Dec 2013 – July 2015)

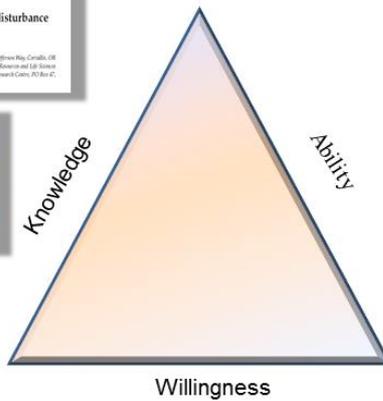


From research knowledge to implementation

Global Change Biology
 Global Change Biology (2015) 21, 240–252. doi: 10.1111/gcb.12912

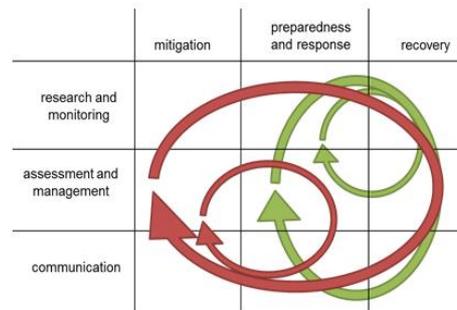
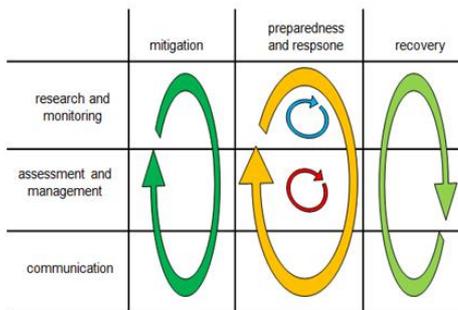
Unraveling the drivers of intensifying forest disturbance regimes in Europe

ROBERT BRIDEN¹, MARTIJN SCHELMANS² and MANFRED J. LIEBER³
¹Department of Forest, Ecosystem and Society, College of Forestry, Oregon State University, 3200 SW Jefferson Way, Corvallis, OR 97331, USA; ²Department of Forest and Soil Science, Institute of Silviculture, University of Natural Resources and Life Sciences (BOKU) Vienna, Peter Jordan Straße 42, 1190 Vienna, Austria; ³Forest, Wageningen University and Research Centre, PO Box 32, NL-3720 AA Wageningen, The Netherlands





The Forest Risk Management Matrix



Breaking the small loops - increasing understanding through bridging into the big, interconnected loops with lessons learned and sharing knowledge



European Forest Risk Facility objectives

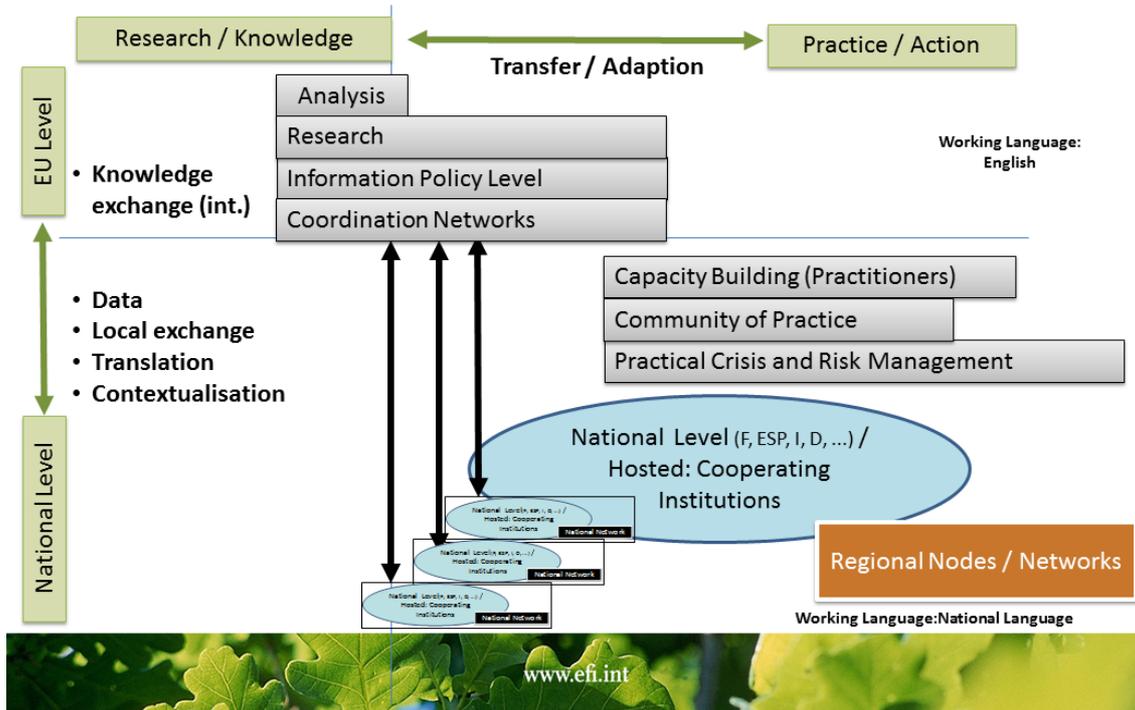
- Facilitate international networking of practitioners, scientists and policy makers relating to forest risks, their prevention and risk responses
- increase their capacities to mitigate and manage forest related risks and increase forest resilience.
- This includes networking activities and events as well as fast-track sharing of experiences and knowledge during forest risk related crisis

Resilient Forests – Adapted Communities – Adequate Response





FRISK – Regional nodes



Activities and Outputs

- Conducts thematic workshops relating to specific forest risks
- Provides risk response assistance and does fact finding missions
- Facilitates EoE and job shadowing
- Provides a platform to connect science, practice and policy
- Connects to scientific reviews of knowledge relating to risks and investigates and promotes best practices studies



www.friskgo.org





FRISK Secretariat

- Vision, Strategy, Direction, Support, Coordination,
- Pan-European, multi-lingual
- Facilitate “Connect-Collect-Exchange”
- Create political support
- Create TRUST to lubricate the network
- Provide Frame, Hope and sense of belonging

FRISK Regional Nodes

- Use the FRISK umbrella
- Network within and for the FRISK
- Be a Focal Point, one-stop-shop
- Identify network of expertise
- Regional to National
- Local Language, translate
- Implement “Connect-Collect-Exchange”

www.efi.int



FRISK Regional nodes continued

Tasks (examples):

- Guidelines (manuals) risk - reduction
- Emergency management tools
- Development of regional networking infrastructure
- Regional knowledge repositories
- Databases (Best practices, tools, contacts, access to specialists)
- Record case studies in RiskPlatform, etc.





Secretariat – Regional nodes examples of action 2014 - 2015

Slovenia:

- Snow break

Ireland:

- Fire,
- Wildlife

Czech Republic:

- Forest Conversion
- Wildlife

Norway:

- Fire

Spain:

- Storm



FRISK Regional Nodes and Nuclei

Activities towards establishment of FRISK Structures:

- **Germany:** FVA and network
- **Czech Republic:** Ministry / Forest Administration / University
- **France:** EFI-Atlantic / Valabre-Ceren?
- **Ireland:** Forest Service
- **Northern Ireland:** Department of Environment
- **Spain (Catalunya):** PCF / CTFC
- **Switzerland:** WSL and BAFU
- **Norway:** Senior Adviser to the Minister (Forestry/Agri)
- **Ukraine:** University / Forest Service
- **South Africa:** Department of Forestry / Working on Fire
- **USA:** FEMA Region X, US Forest Service

NOTE: these examples are in different development levels!





Outlook

Projects:

- NETRISKWORK Project at CTFC (FRISK continuation at EFI and FVA)
- SURE Project at EFI Bonn: Establish FRISK Secretariat (July 2017)

Policy and Lobby:

- FRISK Kick-off events, EFI lobby in member countries and EU.
- Opening Ceremony EFI Bonn Office, policy makers
- Formulate and distribute Pan-European Strategy Paper

Capacity, training, policy development:

- *EoE's 2017 / 2018* (CZ, Switzerland, Ireland, Norway, South Africa...)
- Training Workshops



Thank you for your
time!!

