Progressing towards a European Forest Risk Facility

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With support from
Federal Ministry of Food and Agriculture
by decision of the German Bundestag

Increasing risks to European forests






Variation of possible causes: climate change, forest management, intensified global trade.....
They don't stop at country borders

Increasingly acknowledged in policy and visible in media

European Commission › News ›

NEWS | 23 November 2017 | Brussels, Belgium

rescEU: a new European system to tackle natural disasters

Europe storm: Germany in huge clean-up as trains run again

19 January 2018 Share

…normal in Germany as trees and other debris …ere storm that claimed eight lives.

…herlands in accidents caused by hurricane-

…ll blocking many railway lines in Germany. Work

…nd. It was the most powerful storm to hit

…o firefighters and two lorry drivers whose

Portugal forest fires under control after more than 60 deaths

Officials say some fires could reignite after huge blaze ravaged tens of thousands of hectares around Pedrógão Grande

Wildfires that killed 64 people in Portugal have been brought under control, firefighters have said, as the government insisted it was still too early to say whether the disaster could have been handled better.

Research proposes to

- Emphasize **prevention and mitigation** measures and forest management instead of suppression
- further improve forest risk monitoring, **assessment** and reporting
- Strengthen knowledge **transfer** and **capacity building**
- Addresses **knowledge gaps**
- Expand **transboundary cooperation** in risk management
- Enhance **coordination**, **communication**, operational **assistance**
- Ensure **availability** of timely information
- Support **holistic approaches** across different risks

Forest disturbances under climate change

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Forest disturbances are sensitive to climate. However, our understanding of disturbance dynamics in response to climatic changes remains incomplete, particularly regarding large-scale patterns, interaction effects and dampening feedbacks. Here we provide a global synthesis of climate change effects on important abiotic (fire, drought, wind, snow and ice) and biotic (insects and pathogens) disturbance agents. Warmer and drier conditions particularly facilitate fire, drought and insect disturbances, while warmer and wetter conditions increase disturbances from wind and pathogens. Widespread interactions between agents are likely to amplify disturbances, while indirect climate effects such as vegetation changes can dampen long-term disturbance sensitivities to climate. Future changes in disturbance are likely to be most pronounced in coniferous forests and the boreal biome. We conclude that both ecosystems and society should be prepared for an increasingly disturbed future of forests.

Assessing risk and adaptation options to fires and windstorms in European forestry

Article (PDF Available) *in* Mitigation and Adaptation Strategies for Global Change 15(7):681-701 · October 2010 *with* 67 Reads

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Abstract

Risks can generally be described as the combination of hazard, exposure and vulnerability. Using this framework, we evaluated the historical and future development of risk of fire and wind damage in European forestry at the national level. Fire risk is expected to increase, mainly as a consequence of an increase in fire hazard, defined as the Fire Weather Index in summer. Exposure, defined as forest area, is expected to increase slightly as a consequence of active afforestation and abandonment of marginal agricultural areas. Adaptation options to fire risk should therefore aim to decrease the vulnerability, where a change in tree species from conifers to broadleaves had most effect. Risk for wind damage in forests is expected to increase mainly as a consequence of increase in exposure (total growing stock) and vulnerability (defined by age class and tree species distribution). Projections of future wind climate indicate an increase in hazard (storminess) mainly over Western Europe. Adaptation options should aim to limit the increase in exposure and vulnerability. Only an increase in harvest level can stop the current build-up of growing stock, while at the same time it will lower vulnerability through the reduction of the share of old and vulnerable stands. Changing species from conifers to broadleaves helps to reduce vulnerability as well. Lowering vulnerability by decreasing the rotation length is only effective in combination with a high demand for wood. Due to data limitations, no forecast of future fire area or damaged timber amount by storms was possible. KeywordsAdaptation-Climate change-Forest fire-Forestry-Natural disturbance-Windstorm-EFISCEN

Start-up project for a ‘European Forest Risk Facility’

(FRISK-GO) 2013 - 2015

Facilitating cooperation and exchange as an unbiased and neutral platform between existing communities that address or are affected by disturbances and risks to European forests.

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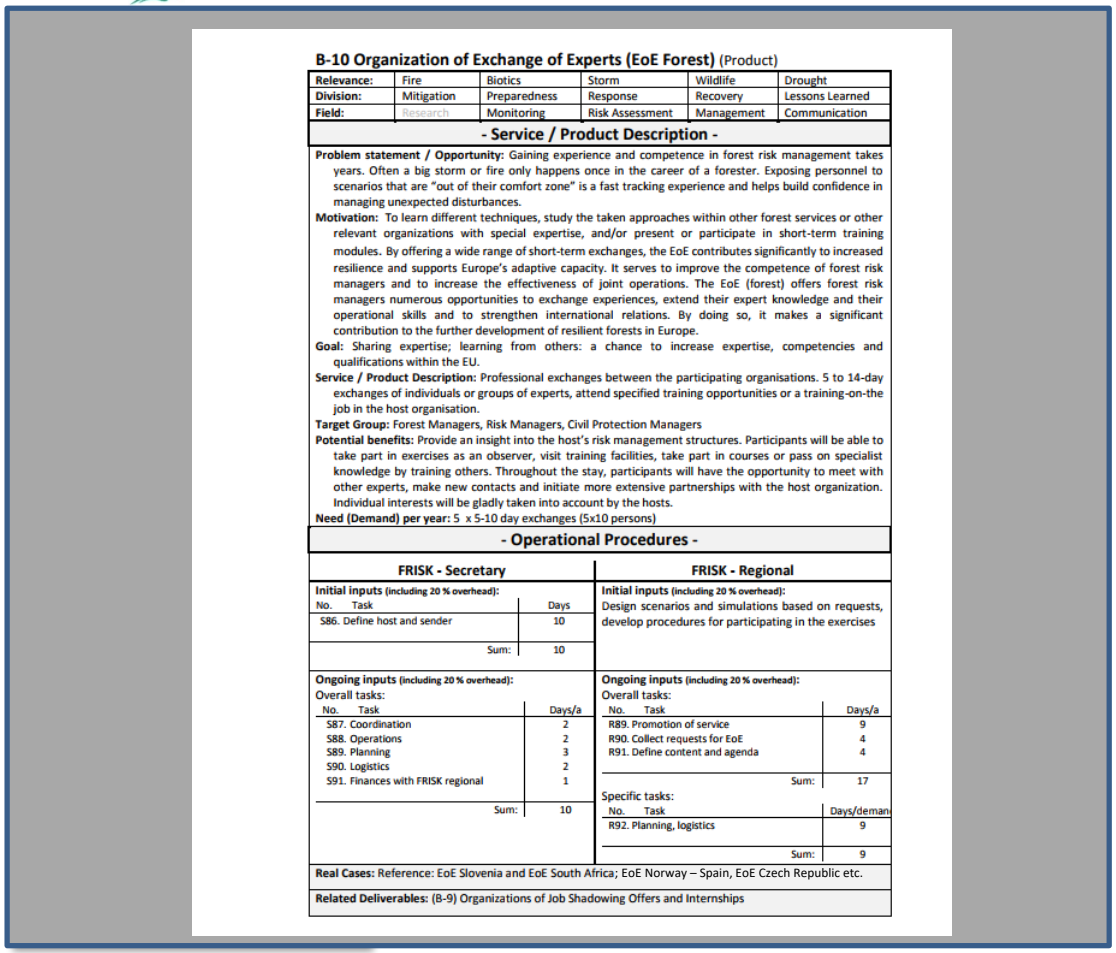
Outputs

- Elaborating Strategy and Business Plan
- Network facilitation
- Activities
  - Expert workshops
  - Exchange of experts
  - Case study compilation
- Development of tailored product and services fact sheets (> 50)



B-10 Organization of Exchange of Experts (EoE Forest) (Product)

Relevance:	Fire	Biotics	Storm	Wildlife	Drought
Division:	Mitigation	Preparedness	Response	Recovery	Lessons Learned
Field:	Research	Monitoring	Risk Assessment	Management	Communication

- Service / Product Description -

Problem statement / Opportunity: Gaining experience and competence in forest risk management takes years. Often a big storm or fire only happens once in the career of a forester. Exposing personnel to scenarios that are "out of their comfort zone" is a fast tracking experience and helps build confidence in managing unexpected disturbances.

Motivation: To learn different techniques, study the taken approaches within other forest services or other relevant organizations with special expertise, and/or present or participate in short-term training modules. By offering a wide range of short-term exchanges, the EoE contributes significantly to increased resilience and supports Europe's adaptive capacity. It serves to improve the competence of forest risk managers and to increase the effectiveness of joint operations. The EoE (forest) offers forest risk managers numerous opportunities to exchange experiences, extend their expert knowledge and their operational skills and to strengthen international relations. By doing so, it makes a significant contribution to the further development of resilient forests in Europe.

Goal: Sharing expertise; learning from others: a chance to increase expertise, competencies and qualifications within the EU.

Service / Product Description: Professional exchanges between the participating organisations. 5 to 14-day exchanges of individuals or groups of experts, attend specified training opportunities or a training-on-the job in the host organisation.

Target Group: Forest Managers, Risk Managers, Civil Protection Managers

Potential benefits: Provide an insight into the host's risk management structures. Participants will be able to take part in exercises as an observer, visit training facilities, take part in courses or pass on specialist knowledge by training others. Throughout the stay, participants will have the opportunity to meet with other experts, make new contacts and initiate more extensive partnerships with the host organization. Individual interests will be gladly taken into account by the hosts.

Need (Demand) per year: 5 x 5-10 day exchanges (5x10 persons)

- Operational Procedures -

FRISK - Secretary

Initial inputs (including 20 % overhead):

No.	Task	Days
S86.	Define host and sender	10
	Sum:	10

Ongoing inputs (including 20 % overhead):
Overall tasks:

No.	Task	Days/a
S87.	Coordination	2
S88.	Operations	2
S89.	Planning	3
S90.	Logistics	2
S91.	Finances with FRISK regional	1
	Sum:	10

FRISK - Regional

Initial inputs (including 20 % overhead):
Design scenarios and simulations based on requests, develop procedures for participating in the exercises

Ongoing inputs (including 20 % overhead):
Overall tasks:

No.	Task	Days/a
R89.	Promotion of service	9
R90.	Collect requests for EoE	4
R91.	Define content and agenda	4
	Sum:	17

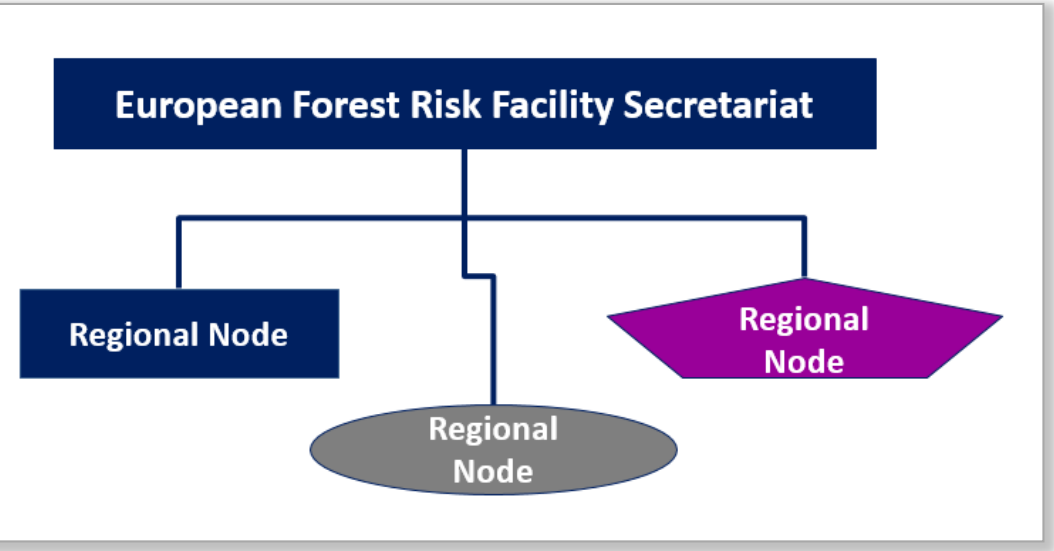
Specific tasks:

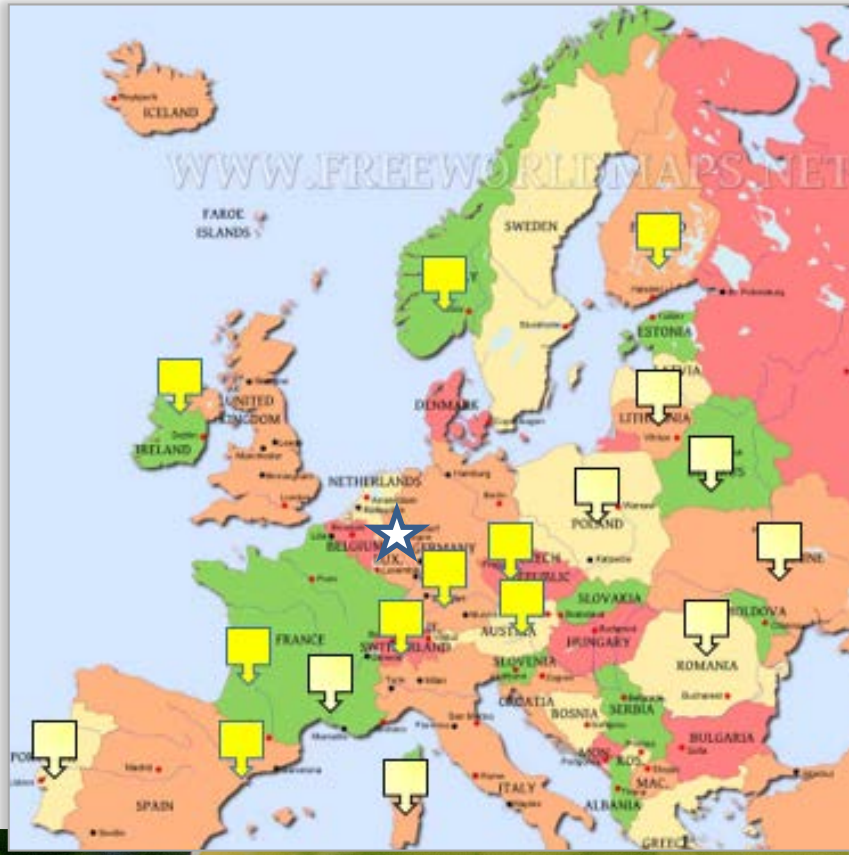
No.	Task	Days/deman
R92.	Planning, logistics	9
	Sum:	9

Real Cases: Reference: EoE Slovenia and EoE South Africa; EoE Norway – Spain, EoE Czech Republic etc.

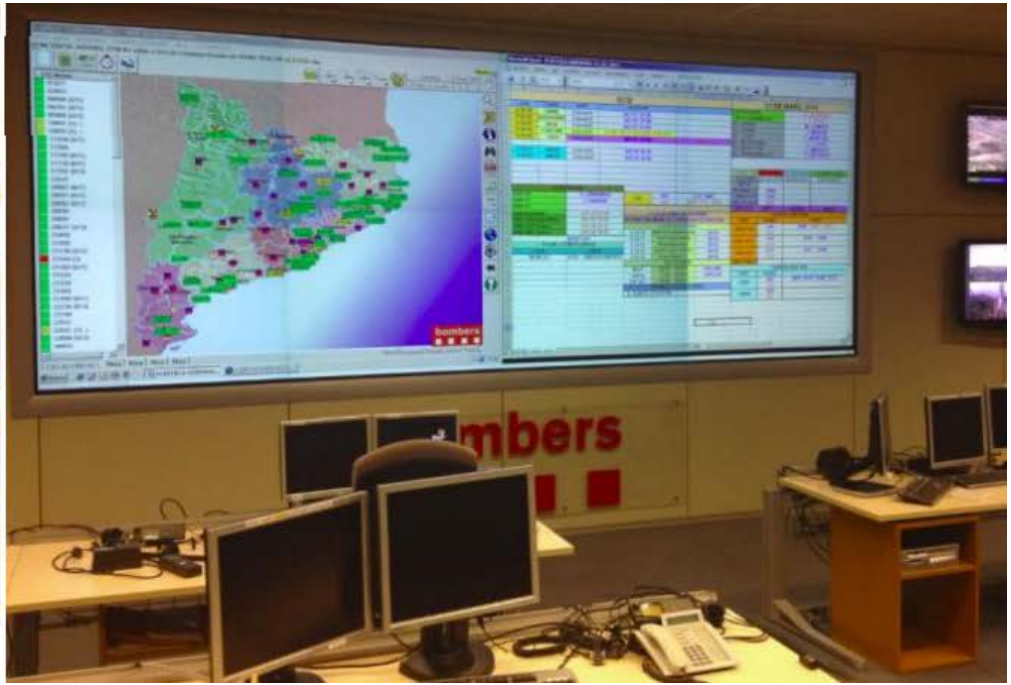
Related Deliverables: (B-9) Organizations of Job Shadowing Offers and Internships

European Forest Risk Facility - network nodes





Cases study examples



Ice storm Slovenia 2014

- Expert support and exchange -

Norway winter fires 2014

- Exchange of Experts Norway/Spain -

Windstorm in Catalonia December 2014

- *“Increased fuel loads for coming fire season”*
- *“Critical as build up has taken place in the Urban-Wildland-Interface”*
- *“Susceptibility of damaged stands to insect outbreaks”*

Windstorm in Belarus July 2016

Sharing lessons learned from the European Forest Risk Facility and facilitating knowledge exchange:

The RiskPlatform tool

Laura Nikinmaa

What is the RiskPlatform?

A web platform for sharing knowledge and experience

Open for everyone to register

https://www.riskplatform.org

Thank you

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