



EUROPEAN FOREST INSTITUTE  
ATLANTIC EUROPEAN REGIONAL OFFICE – EFIATLANTIC



# FORRISK Final conference

Bilbao – 9th September 2014

Institutional tools for risk management in the project regions

**Project partners** : EFI, ISA, CETEMAS, NEIKER, HAZI, INRA, CRPF, CNPF/IDF, FCBA, TRAGSA





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# FORRISK

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## Methodology





## Methodology overview

**Action 2.1 : Existing tools inventory and description for each region**



**Action 2.2 : Analysis and comparison of existing tools between project regions**



**Action 2.3 : Improvement proposals**

**Inventory and analysis of existing tools** for risk management, anticipation and monitoring:

- At a regional scale
- Efficiency observation
- Detection of the presence or lack of a multi risk integration

**Comparative analysis of systems**



**Proposals in order to improve risk management tools** in the South-west of Europe  
=> identification of possible cooperations between regions





## Methodology overview

- [1]** Risk general background: risk overview in the region, figures, risk history in the area
- [2]** Risk evolution and climate change regarding defence system
- [3]** Overview of risk management organisations and their main actions
- [4]** Overview of existing laws regarding the risk
- [5]** Detailed presentation of each organisation
- [6]** SWOT analysis of the general risk management system
- [7]** Diagram: stakeholders of risk management systems and their links

Fire risk's critical analysis		Stake importance / gravity			
		Low	Medium	High	Very High
Probability of risk's hazard in the area	Highly probable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Probable	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Unlikely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Very unlikely	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Fire's origin	%
Accident	19
Lightning	17
Malicious acts	4
Unknown	60

Time of year where the risk is the most likely to happen	Spring & Summer
Number of fire starts per year	1714
Average size of a fire (ha)	1.09
Percentage of forest cover burned per year	0.12%

**Organisation's name:**

**Organisation's juridical status:**

- Description of the structure of the organisation
- Description of the actions and functioning of the organisation to achieve them
- Inventory of equipment and means (human and technical) to achieve their actions
- Cooperation and partnership : partnership descriptions and nature of the partnerships
- Key issues and possible improvements
- Annual budget and estimation of the percentage allocated to forest protection

Insects and diseases present in the area	Concerned stands	Insects and diseases to be feared of in the future	Provenance	Concerned stands

Game present in the area	Concerned stands	Game introduction / increase to be feared of in the future	Provenance	Concerned stands

Time of the year where the risk is most likely to happen :	
Average losses (in forest) per year due to erosion:	
Geographical areas where erosion is most likely to generate losses in forest (ex: the coast border, the mountains):	

	Frost	Drought	Storm
Time of year where the risk is the most likely to happen			
Return period	-	-	
Average duration			
Average number of event per year			

	Positive (to reach the objective) Strengths	Negative (to reach the objective) Weaknesses
Internal origin (due to the general organization)		
	Opportunities	Threats
External origin (due to external factors, the environment...)		

What are the major events that led to decision regarding forest defence against Insects and diseases? Which measures were taken after the event?

Organisations / Institutions	Organisation type								Scale	Actions		Role
	Forecasting	Prevention	Fight	Surveillance / Monitoring	Communication	Research	Insurance / Compensation	Coordination	*Region, Department, District, Municipality...	*Main action led		*Prescriber Prîme contractor (Project manager), client, contracting authority
	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>				

	Niveau local	Niveau départemental	Niveau régional	Niveau central
LUTTE				
PREVISION				
PREVENTION				
AUTRES				





## Methodology overview

**Creation of the grid:** April-June 2013 – discussed with partners

**First test of the methodology (insects and diseases):** June-September 2013 – support for a master thesis

**Fill in of the other grids by all partners (transregional task):** December 2013-April 2014

**Data analysis:** April-May 2014



### Asturias

#### **CETEMAS:**

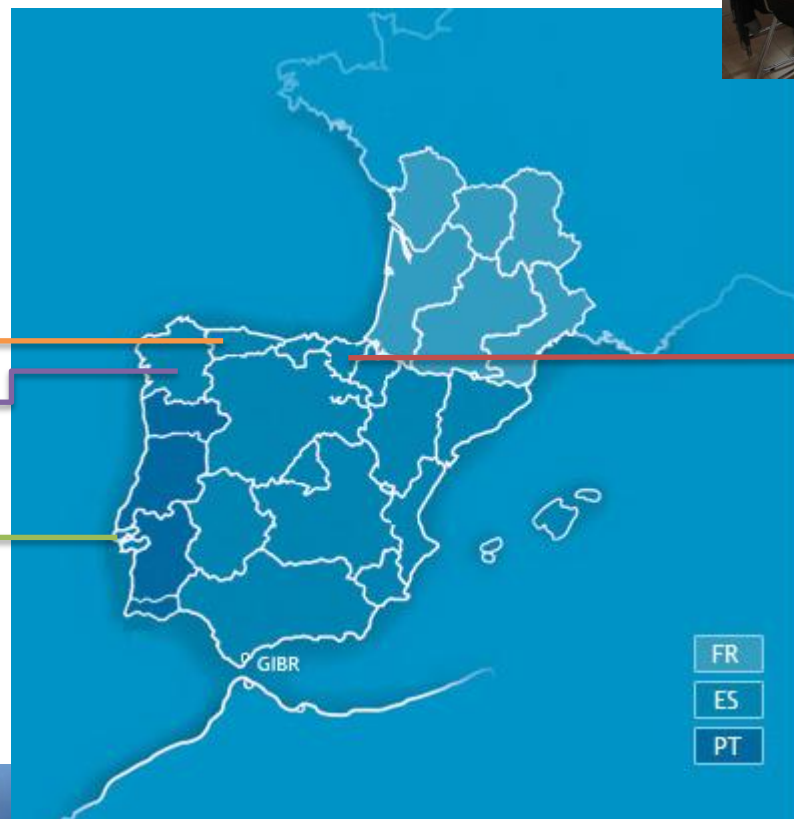
**Andrea Hevia &  
Juan Majada**

### Galicia

**TRAGSA: Francisco Lario  
& Laura Luquero**

### Portugal (Vale do Sousa)

**ISA: Manuela Branco  
& Liliana Vilas Boas**



### Basque Country

**NEIKER: Ander  
Gonzalez &  
Nahia Gartzia**

**HAZI: Alejandro  
Cantero**



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**Existing tools within FORRISK regions**



# Forest fire

## Fighting

## Forecasting

## Prevention

Fire fighting organisation  
(SDIS, GNR, BRIE, ...) and civil  
protection

Weather centre  
(Météo France,  
AEMET, DAEM, ...)

Forest organisations  
(ONF, CRPF, Provincial  
forest services, ...)

State institution for  
Agriculture & Forest  
(DRAAF, CMRM,  
MAGRAMA,  
Governments, ...)

Territorial  
communities and  
municipalities

Forest owners and  
forest owners  
associations (ASA  
DFCI, AFVS, ZIF, ...)

Research  
institutes  
(INDUROT,  
ICNF, ...)

Insurance  
companies  
(CCS.MEC,  
MISSO, ...)

Efficient prevention of forest fire = strong network of **day-to-day risk managers** + institutional or professional forest/fire organisation.

➤ Prevention of forest fires by managers linked to a **positive economical return from forest production**.

Efficient fighting operations = a chain of command and procedures similar to military ones + firemen specialised in forest fires

High proportion of **unknown origins of fire** in all regions: improve the investigation of causes of fire outbreaks (use the same classification) + index them in a common database (EFFIS?)

# Extreme climatic events

## Fighting

State institution for  
Agriculture & Forest  
(DRAAF, CMRM,  
MAGRAMA,  
Governments, ...)

State institution for  
civil protection  
(ANPC, DGPCE,  
EMZSO,...)

Weather centre  
(Météo France,  
AEMET, DAEM, ...)

## Forecasting

Forest organisations  
(ONF, CRPF,  
Provincial forest  
services, ...)

Plant/forest  
health  
department  
(DSF, LSV,...)

Forest owners and  
forest owners  
associations (AFVS, ...)

## Prevention

State institution for  
Agriculture & Forest  
(DRAAF, CMRM,  
MAGRAMA,  
Governments, ...)

Professionals of  
the forest and  
wood sector

Research  
institutes (INRA,  
EFI, SERIDA,  
CETEMAS,  
CIFORINIA, ...)

Insurance  
companies  
(CCS.MEC,  
MISSO, ...)

Efficient crisis management = **involvement of forest stakeholders** (as forest cooperatives, forest technicians...)

➤ Need for elaboration of **contingency plans** (to normalise role, cooperation and procedures of such stakeholders during a crisis, such plans may also integrate means to avoid the downfall of wood prices).





# Insects and diseases

## Fighting

State institution for  
Agriculture & Forest  
(DRAAF, DGAV,  
CMRM, MAGRAMA,  
Governments, ...)

Authorised  
companies for  
chemical and  
biological control

## Forecasting

Forest organisations  
(ONF, CRPF, Provincial  
forest services, ...)

Plant health and  
diseases monitoring  
organisations (DSF,  
ICNF, EFA, LAFG,  
LSV,...)

Forest owners and  
forest owners  
associations (AFVS, ...)

## Prevention

State institution for  
Agriculture & Forest  
(DRAAF, DGAV,  
CMRM, MAGRAMA,  
Governments, ...)

Research  
institutes (INRA,  
SERIDA,  
CETEMAS, INIAV,  
...)

Two main concerns about insects and diseases: their **spreading** between countries and their **increasing adaptation and evolution** of threats due to **global change**.

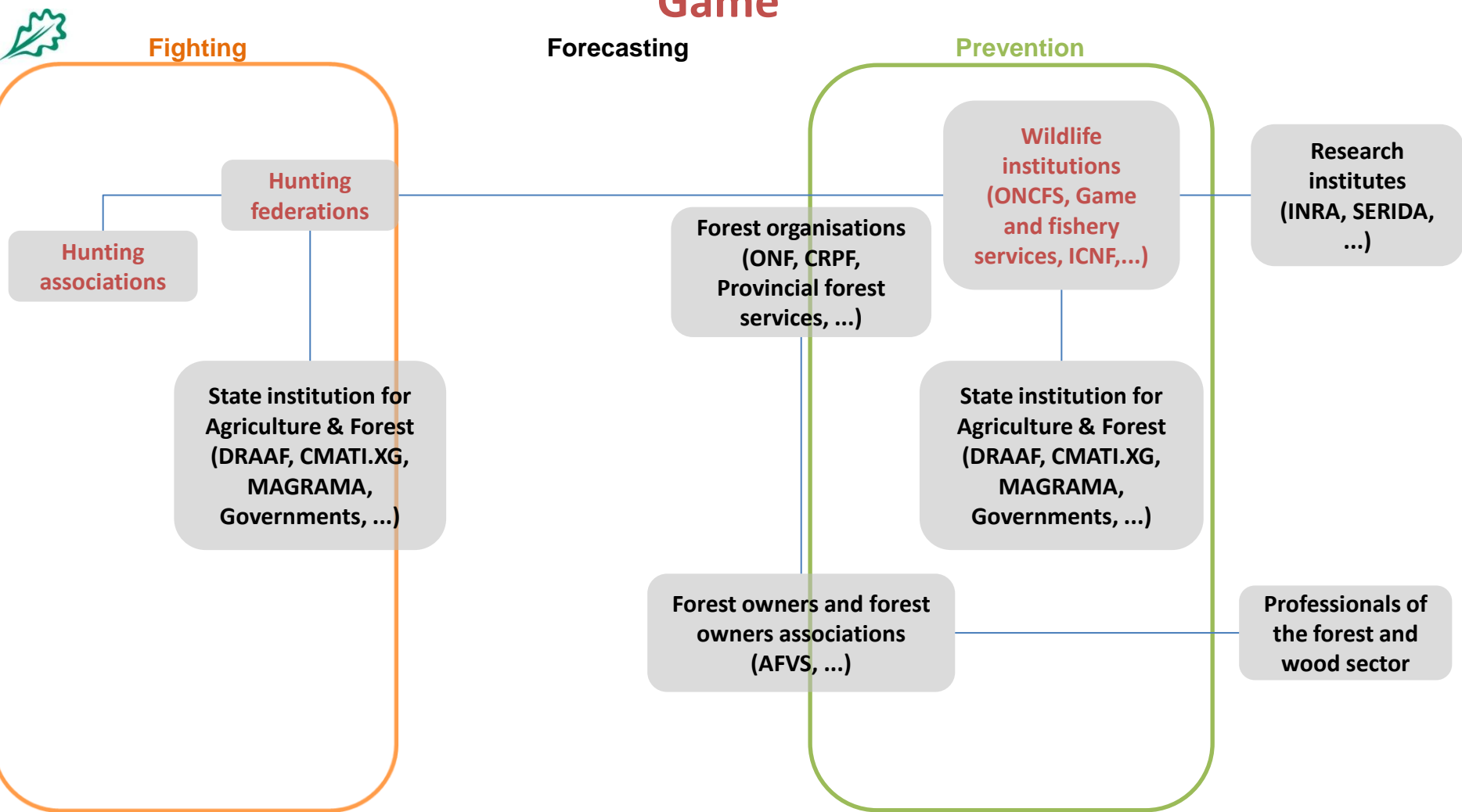
➤ Trade of plants with proven risks should be avoided; sanitary controls at the borders should be reinforced as well as **implication of forest industries** on healthy wood trade.

# Game

## Fighting

## Forecasting

## Prevention



Main challenges of hunting and wildlife management : **conciliate the stakeholders & their perception of the risk.**

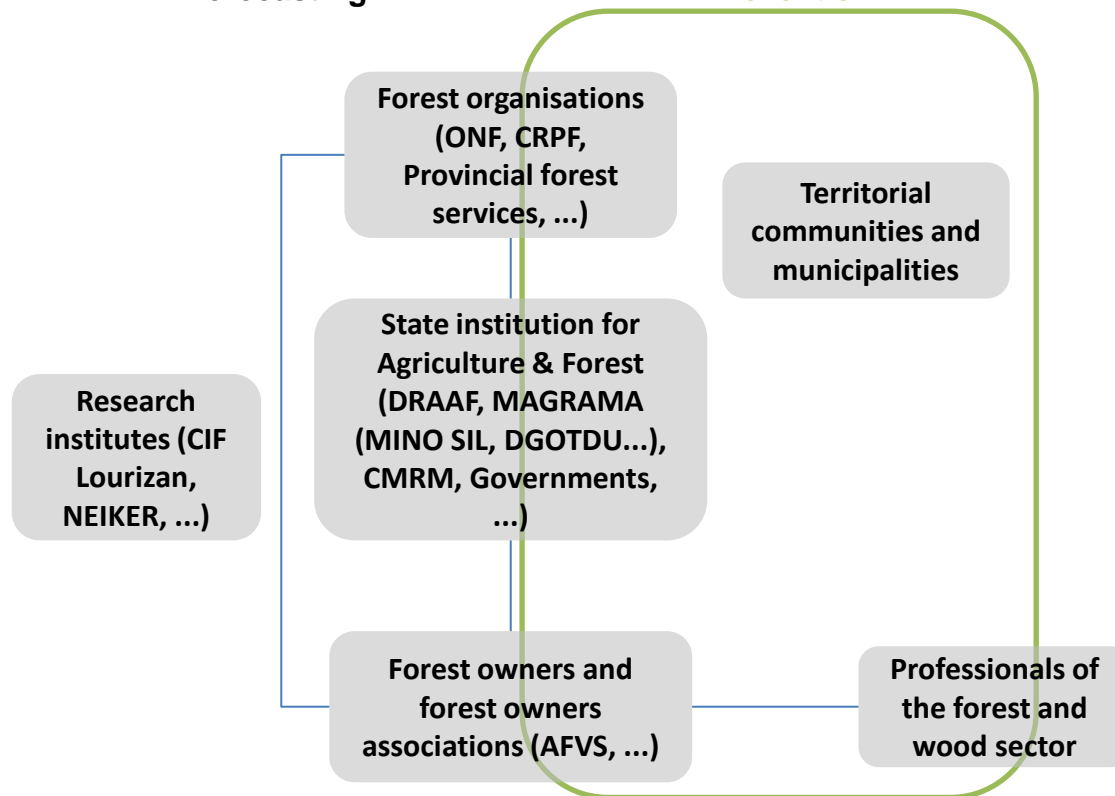
- set a dialogue between stakeholders thanks to **objective tools**, meetings, field visits, ...



## Fighting

## Forecasting

## Prevention



- **Identify the threats, pressures and risks of degradation to soils related to forest management**
- Create tools for policy makers (i.e.: **map identified sensitive areas for soil degradation**; map the potential risk of erosion, ...).
- Regulate the management operations on sensitive soils repressing the unsustainable management and subsidising sustainable management with incentives, for example, the **payment of environmental services** (PES).





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**Key points and recommendations for risk management in favour of forest protection**





**Gather forest owners** and **strengthen networks of stakeholders** of the forest protection responsible for day-to-day management, as well as for crisis management:

- To adopt **common and collective protection measures** regarding hazard, vulnerability and stakes
- To be **proactive**, represent and defend forestry interests in front of the public authorities



**Encourage the economy and the forestry development** in favour of forest management and protection

i.e., : forest owners associations against forest fire  
involvement of forest/wood sector professionals after the storm



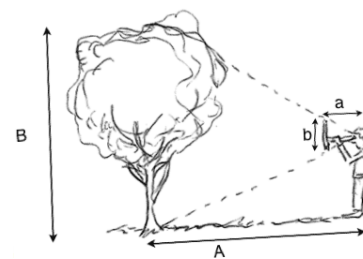




## Ensure the involvement of local elected officials in the system of protection

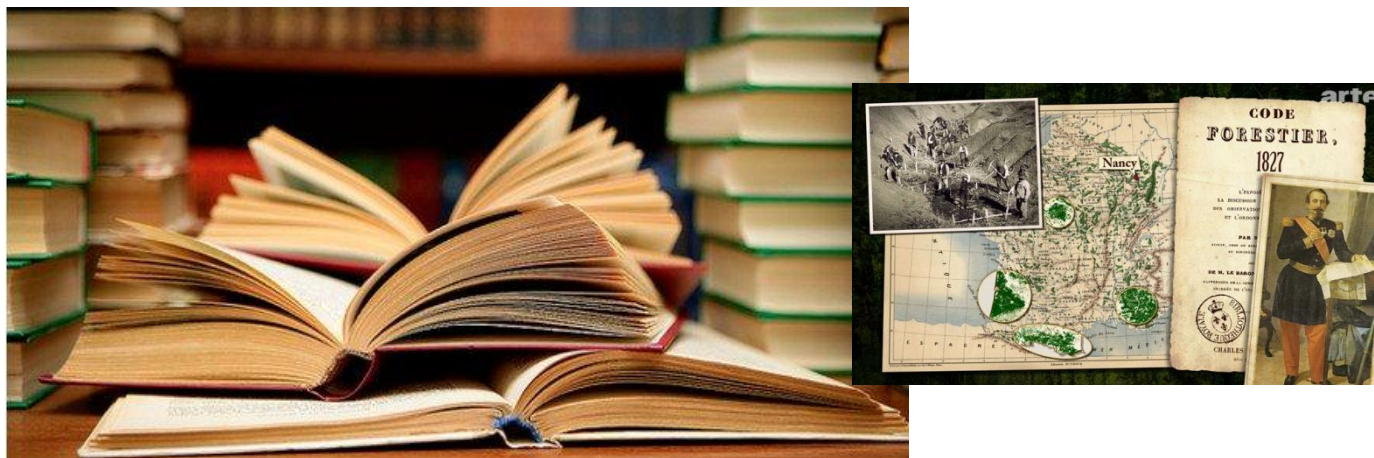


**Solidify and conciliate the perception of risk of the public, the elected officials and the forest owners:** by improving communication and raising awareness to the culture of risk; by gathering different types of territorial stakeholders (researchers, foresters, visitors, firemen, hunters, etc.)

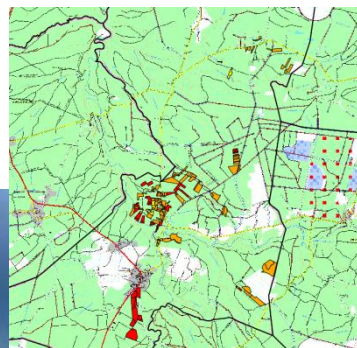




**Adapt and simplify the legislative tool** to the singularity of the forest sector, without impedition to the development of activities of protection.

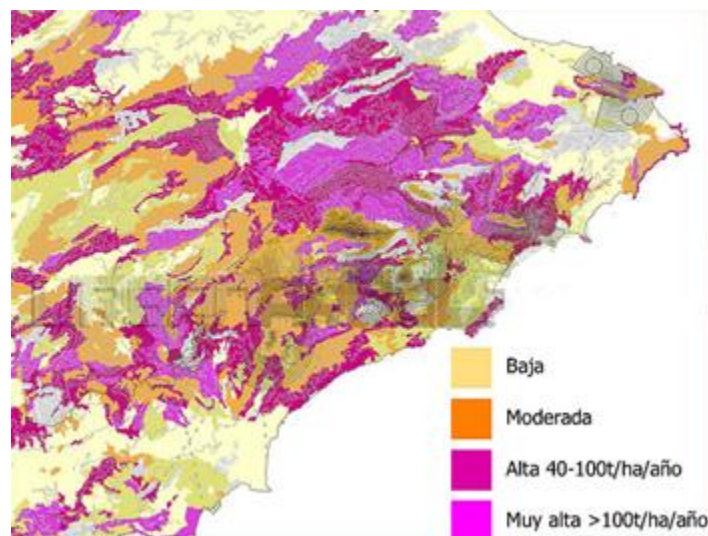


**Develop the multirisk management approach by creating multirisks and regionalised decision support tools** for forest owners in order to help them integrating risks more easily in their forest management practices.





**Share protection measures at the level of the risk area** being the most relevant level for risk management and which varies according to the hazard.



**Implement a system of assessment of the efficiency** of the protection measures taken, independant of the risk management system



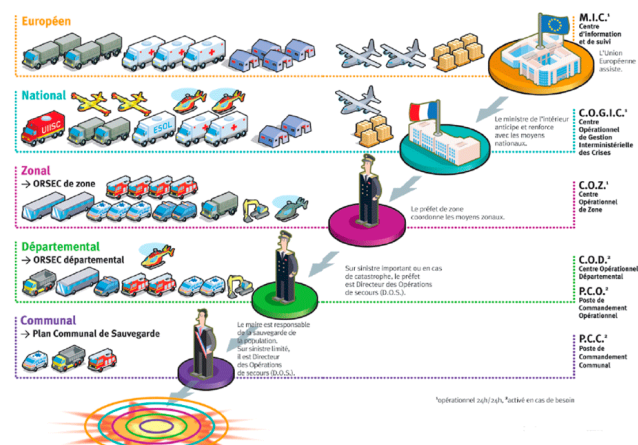




**Develop and make durable the monitoring tools to:** launch alerts and engage fighting operations; monitor the evolution of hazards and thus adapt methods of prevention, forecast and fight to the level of risks, the global changes; and improve the knowledge about the risks

### Anticipate crisis management with contingency plans:

these plans should define the role of forest stakeholders and may also integrate procedures to avoid major market disruption.





**Develop and share knowledge about the risks** in order to have reference data, to alert, to advise and **improve risk management. Facilitate the access and readability** of the results to the end users. **Make use of the available data** collected.

**Develop training about risk management** within forest management training networks: risk management could be added to the existing training programs in forest universities or other training centres for forest owners and professionals.







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**Merci! Gracias! Obrigado!**

