

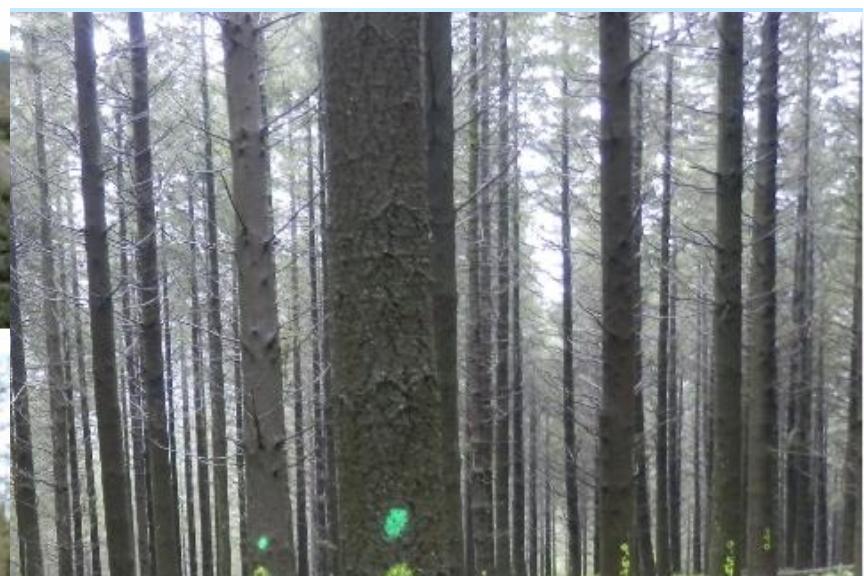
FORRISK and PLURIFOR: Innovative risk management in Basque forests

FORRISK et PLURIFOR: Gestion innovant des risques dans les forêts basques

Alejandro Cantero Amiano, HAZI Foundation

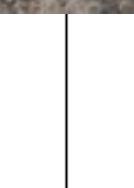
Atelier 6. Innovation dans la gestion des risques naturels
4 octobre 2016
X Assises européennes de la montagne, Bragança







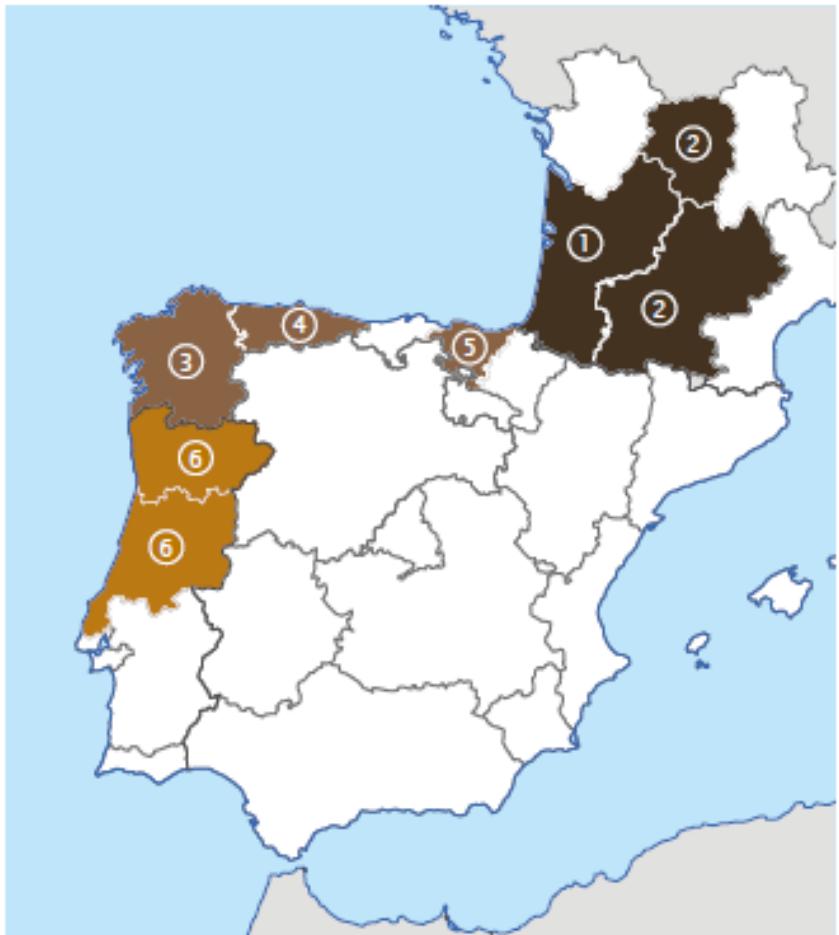
Forest Research





FORRISK: overview

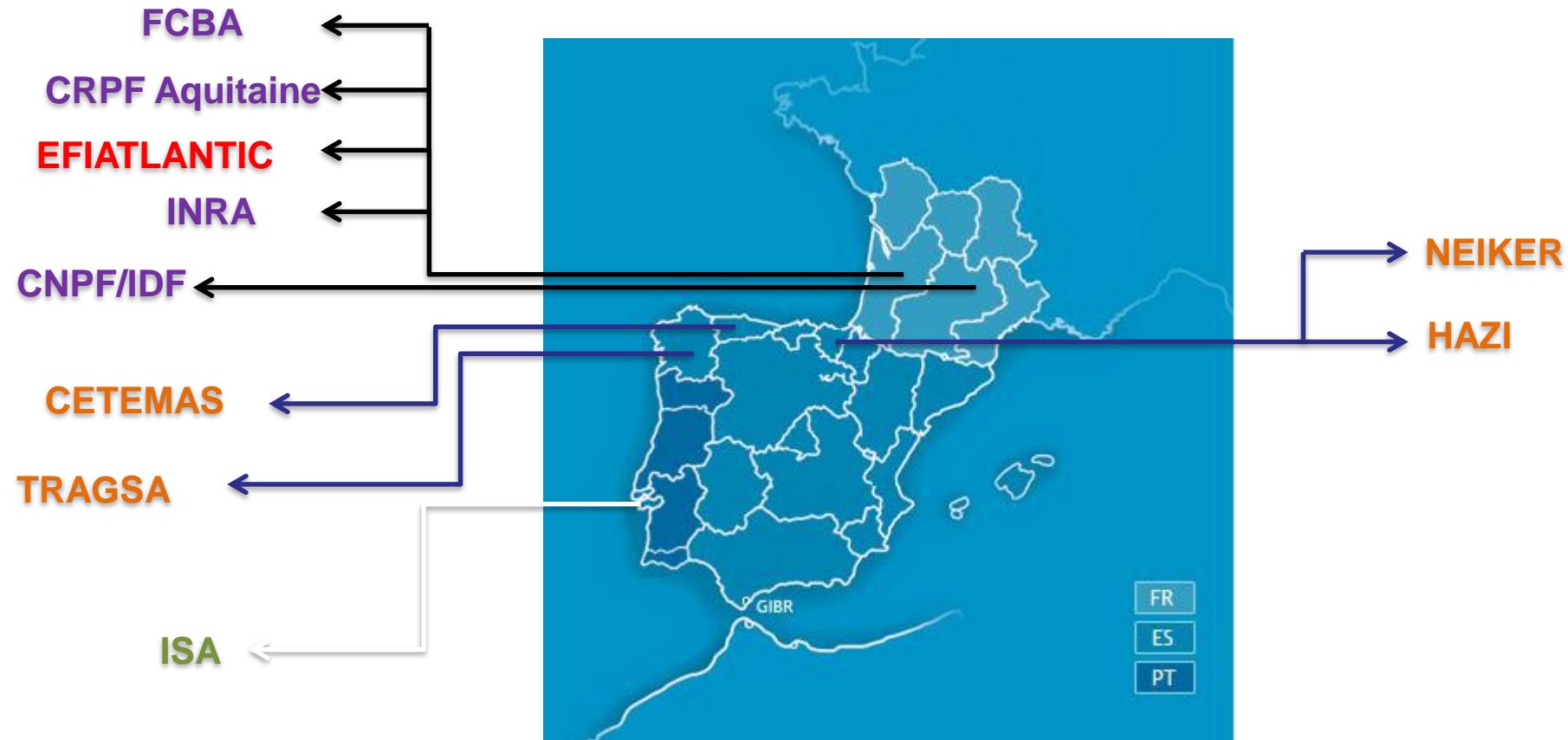
- ❖ **Interreg SUDOE** (southwestern Europe)
- ❖ **Theme:** Forest management
- ❖ **Duration:** more of 2 years (27 months), closed 31/12/2014
- ❖ **10 partners (coordinated by EFIATLANTIC)**
- ❖ **Total budget: 1.138.646,00 EUR**





FORRISK: overview

Partners: 5 from France (including coordination), 4 from Spain, 1 from Portugal





FORRISK project general diagram

WP 2 : Institutional tools of risk management

Analysis of existing institutional tools for each region
Comparison of systems
Suggestions for improvements

WP 3 : Risk management

Installation and assessment of devices and analysis to identify ways to fight against risks (ecological, genetic and silvicultural)

WP 4 : Risk analysis and decision support tools

Risk analysis (mapping, vulnerability assessment..)
Development and adaptation of modelling tools and decision support tools

WP 6 : Advertising, information and capitalization of the project

Panel discussion on existing systems for risk prevention

Inter-regional workshops on risks

Publication of technical sheets, management manuals

Publication of records, summary documents and scientific articles

Website-Logotype

WP 1: Project coordination and management

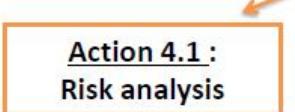
WP 5: Project monitoring and evaluation





Results, Innovative points

- **Collaboration:** Inside regions and among partners
- **Technology:** Use of new forest tools and transfer of results
- **Future:** New Plurifor project



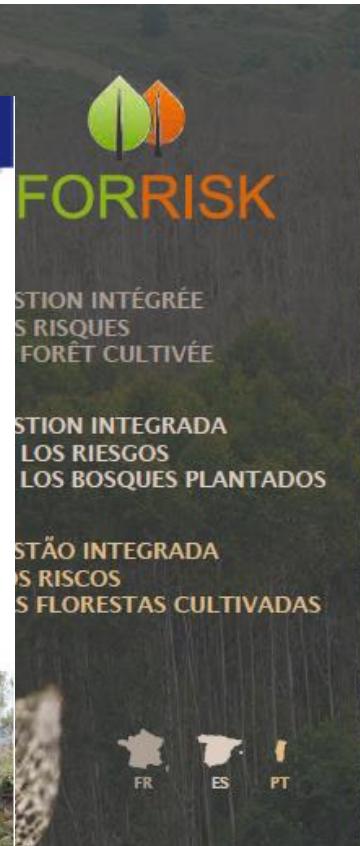
WP: Risk analysis and decision support tools

- Action 4.1 : Risk analysis
- Risks evaluation
- Cartographies
- Analyses using satellite data



Action 4.3 : Decision support tools

- Action 4.3 : Decision support tools
- Using expert systems and multicriteria risks analysis to compare different silvicultural practices (all risks, all regions)



INRA SCIENCE & IMPACT

SUDOE Integrating IVS

ForestGALES 2: A Wind Risk Management Model (WRMM)

Single stand predictions using field measurements

Stand Characteristics

- Stand ID: ForestGALES
- Soil type: Brown Earth
- Rooting depth: Medium (40 - 80 cm)
- Current Spacing (m):
- Current Stocking (N/ha): 350

Tree Characteristics

- Species: User-defined species 2
- Top height of stand (m): 33
- Mean DBH (cm): 45

DAMS

- Grid Reference: NH180150
- Calculation: DAMS Score 15

Wind Damage Risk

- Return period: OVERTURNING 25, BREAKAGE 200
- Wind Damage Risk Status: Status 4, Status 1
- Critical wind speed: 77 km/h, 100 km/h
- WHC: 3

Weibull-A calculated from DAMS.

Controls

- Run
- Print Form
- Report
- Help
- Open File
- Save File
- Defaults
- Close





Necessary conditions to successfully transfer the initiative

- Cluster/Team work among technological partners
- Good team coordination
- Common forest species and risks
- Rentability, forest owners interested for improving their management
- ... And public funds





Thank you very much for your attention !!!!

