



## General information

<b>Description</b>	Small Book with best practices concerning the risk components that should be taken in consideration when preparing a wildfire risk plan	
<b>Geographical area</b>	Portugal, Spain and other Mediterranean and Atlantic countries	
<b>Date</b>	2018	
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<b>Tool type</b>	Best practice guidelines	Case Studies
<b>Tool format</b>	Text	
<b>Language</b>	Portuguese	Spanish
<b>Risk management plans to which the tools can be added</b>	Fire Risk Plans in Portugal and Spain. Although this is mainly designed for these two countries and for atlantic forests, it can be used by other Mediterranean countries as well.	
<b>Risk management plans link</b>	<a href="https://plurifor.efi.int/wp-content/uploads/WP2/plans/Fire-risk-plan_1_ES.pdf">https://plurifor.efi.int/wp-content/uploads/WP2/plans/Fire-risk-plan_1_ES.pdf</a>	
<b>This tool is...</b>	<input checked="" type="checkbox"/> an improved tool	
<b>Original tool of which this one is an improvement</b>	The already existent forest fire risk plans from Portugal and Galicia, Asturias and País Vasco.	

## Topic

<b>Risk</b>	Forest fire		
<b>Risk component</b>	<input checked="" type="checkbox"/> hazard	<input type="checkbox"/> impact	<input type="checkbox"/> vulnerability
<b>Risk area</b>	Risk planning		
<b>Risk phase</b>	Prevention		
<b>Risk phase (alternative terms)</b>	Response		
<b>Level</b>	EU		
<b>Sendai priorities</b>	<input checked="" type="checkbox"/> Priority 1: Understanding disaster risk <input 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		



## Contribution to Sendai targets

- Reduce global disaster mortality
- Reduce the number of affected people
- Reduce the direct disaster economic loss
- Reduce disaster damage to critical infrastructure
- Increase the number of national and local disaster risk reduction strategies
- Enhance international cooperation to developing countries
- Increase availability of and access to multi-hazard early warning systems and disaster risk information and assessment

## Description and analysis

### Summary

This small book with guidelines for forest fire risk plans in Portugal and Spain, resulted from the identified gaps in the forest risk plans assessed through a survey in both countries. Its main purpose is to describe which are the topics and contents that should be part of the forest fire transnational risk plans in order that all the risk managers could speak the same technical language optimizing and enhancing the efficiency of the plans in both countries. The book contents are: Introduction; Typology of past fires using historical records; Meteorology; Fuel Maps; Simulation tools; Environmental education and fire risk awareness; 4 case studies; Final remarks.

### Place in national/regional policy

Partners from forestry research institutions in both countries developed the “Fire risk plans – a common language for the Iberian Peninsula” book, which is a tool for the forest fire risk line in the PLURIFOR project. This is a document where it was made a review of different information sources and available tools to fill the gaps identified on the different risk plans of Portugal and Spanish regions. This will focus in concrete tasks that are crucial to be present in the different plans.

### Goals and achievements

Our goal was to fill in the identified gaps writing in a simple and scientifically correct way the modules that should be included in a transnational forest fire risk plan. Since the team has several fields of expertise, the work was carried out with specific leaders by each topic, and reviewed by all the partners.

### Stakeholders involved

TBC (when it is finished we can mention the stakeholders that gave us their input).

### Implementation stage

Each topic leader will present until the middle of June the respective chapter. After that it will be reviewed by the rest of the partners plus some chosen key stakeholders.

### State of technical knowledge

The technical and scientific knowledge behind the best practices are mostly informed by the research already performed on each group and the historical data from wildfire events since the year 2000.



## Regulatory and/or socio-economic contexts

Climate changes increase the probability of bigger “fire season” and more intense and severe impacts. 2017 concerning wildfires was the worst year ever recorded in Portugal and one of the worst in Spain with more than 100 deaths, more than 500 injured people and economic impacts above one thousand million of euros. Prevention wildfire risk plans, focusing both in the social and technical aspects (eg. fuel, meteorology) can be a precious tool to diminish the risk, save lives and mitigate fire severity and economic damages. There are some laws in both countries that provides the framework for the risk plans (RCM nº65/2006 26 Maio 2006 – PNDFCI; Decreto-Lei n.º 124/2006 de 28 de Junho SNDFCI – PMDFCI; in Galicia Ley 3/2007; Ley 7/2012; Ley 9/2017); In Asturias Ley 3/2007; Resolución de 12 de abril de 2007. In Basque Country: Forestry regulations (“Normas Forales de Montes” for each Historic Territory) and “Resolución 80/2016, de 27 de diciembre. Acuerdo del Consejo de Gobierno de 27 de diciembre de 2016, por el que se aprueba el Plan Especial de Emergencia por riesgo de Incendios Forestales del País Vasco BOPV 7/2017, de 11 de enero”.

## Impacts of the tool

- The online book provides an overview of the topics that a wildfire risk plan should contain.
- It provides information about fuel maps and fuel management in a wildfire preventive and extinction point of view (utilidade para a resposta na extinção).
- It includes the social dimension in the prevention risk plans giving guidelines for fire prevention concerning ignitions (causes, meteorology and environmental education) as well as risk education for the increase of population resilience.

## Implementation requirements and durability

### Description of the implementation steps

The book is oriented to help managers improve their previous plans. From the point of view of planification is important that managers understand what is missing in their previous plans and improve it fillin the gaps.

### Governance

This book is public and can be used in a municipal level (Municipal Plan of Forest Defence in Portugal) or in a regional level (Spain)

### Regulatory framework

- Portugal - Decreto-Lei n.º 124/2006 de 28 de Junho (SNDFCI - PMDFCI); RCM nº65/2006 26 Maio 2006 – PNDFCI.
- In Galicia Ley 3/2007; Ley 7/2012; Ley 9/2017.
- In Asturias Ley 3/2007; Resolución de 12 de abril de 2007
- In Basque Country “Resolución 80/2016, de 27 de diciembre. Acuerdo del Consejo de Gobierno de 27 de diciembre de 2016, por el que se aprueba el Plan Especial de Emergencia por riesgo de Incendios Forestales del País Vasco BOPV 7/2017, de 11 de enero”, but without declaring “Zonas de Alto Riesgo de Incendio (ZAR)”

### Human resources requirements

The book aims to provide knowledge to improve the already existing fire risk plans. No special resources are needed to use handbook. The target public are the forest and fire technicians in both countries.

### Financial requirements

No

### Technical requirements

No



## **Priorities identified for successful implementation of the tool (political, technical, human, financial...)**

This book provides knowledge and some practical examples. Each reader can decide the module that is more suitable and interesting to implement on his territory. For instance, within the PLURIFOR framework, the region of Asturias is looking to this product to see how it can improve their own plan.

## **Challenges or risk factors (legal, financial, safety...) expected during the implementation and solutions proposed**

There are several challenges since some of the proposed models are new to the forest and fire technicians. For instance, the creation of the fuel map requires knowledge and updated data about forest inventory and modelling. The use of simulators need people to have knowledge on the simulator and on GIS. Working on the social dimension requires educational and social competences that not all the forest technicians have. (escrever algo mais sobre os outros capítulos).

## **Additional and non-formal experiences to help the implementation of good practice**

To face the previous challenges, the PLURIFOR project will prepare specific training on different subjects mentioned in the book.

## SWOT analysis

<b>Strengths</b>	<b>Weaknesses</b>
Integration of a sound knowledge resulting from the experience and of the previous fire risk plans qualitative assessment	The book only reports to the topics that we consider essential to be present in a fire risk plan. However it is not exhaustive and some other points that are already in the existing plans and are important will not be mentioned in this book. Asturias is the only partner region of the project that has not a fire risk plan. For that the review and the indepth was bigger for them.
<b>Opportunities</b>	<b>Threats</b>
2017 wildfires had the most social, ecologic and economic impact ever recorded. As a result, there is a bigger motivation and willing to change and improve the prior actions. New technologies favor the taking of data referring to fire risk and the modeling of fires. After a small technicians inquiry for all the partners regions, there is a will to learn more about new tools to improve their work.	The forest and fire managers don't consider useful this different approach and don't implement it. They consider it is very demanding in knowledge and decide not to use it. The head of the municipality don't consider it is pertinent to implement it. Forest and fire managers don't trust the accuracy and efficiency of the discussed tools and approaches.

## Lessons learnt

### **Evaluation process, if exists (internal or external)**

There will be an internal evaluation within the training sessions to be prepared.

### **Assessment of results (quantitative and qualitative) and comparison with main goals**

Not yet available.

### **Negative aspects identified**

Not yet available

### **Unexpected consequences (short- / mid- / long-term) and corrective measures implemented**

Not yet available



## Access to complete tool

<b>Files</b>	Planes de riesgo de incendio: un lenguaje común para la Península Ibérica.
<b>Web links</b>	<a href="https://plurifor.efi.int/wp-content/uploads/WP2/tools/Forest-fire-tool_Good-practices-guide_2_2.pdf">https://plurifor.efi.int/wp-content/uploads/WP2/tools/Forest-fire-tool_Good-practices-guide_2_2.pdf</a>

