

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

Title: Operational Tools and Best Practices for Risk Assessment and Management

The identification of tools and best practices on risk assessment and management helps providing an idea of the state of the art in the field. By completing this form, the best practice will be included in the knowledge repository platforms and available for the practitioner community to use. We encourage the user to complete as many fields as possible from the template in order to provide the most relevant information needed to apply the best practice to other practitioners. Instructions:

- Blue boxes are mandatory fields
- More than one item can be selected in multiple choice boxes

## Document classification

<b>Title</b>	<b>Operative exchanges to implement fire analyst methodologies</b>
<b>Description</b> <i>[1 sentence]</i>	<b>Exchanges of personnel to share knowledge on fire dynamics and fire weather analysis</b>
<b>Country, location</b>	<b>International (Portugal, France, Italy...)</b>
<b>Date</b>	<b>Since 2011</b>
<b>Contact e-mail</b>	<b>info@paucostafoundation.org</b>
<b>Institution</b>	<b>Pau Costa Foundation with partnership with Fire and Rescue Services from across Europe</b>
<b>Net Risk Work Partner</b>	<b>PCF</b>
<b>Document type</b>	<b>Best practice</b>
<b>Language</b>	<input type="checkbox"/> Catalan <input checked="" type="checkbox"/> English <input type="checkbox"/> French <input type="checkbox"/> German <input type="checkbox"/> Italian <input type="checkbox"/> Spanish <input type="checkbox"/> Other
<b>Source/origin</b>	<input checked="" type="checkbox"/> Partner's expertise <input type="checkbox"/> Expertise from the network <input type="checkbox"/> Other (internet)

## Topic

Area	<input checked="" type="checkbox"/> Risk assessment	<input checked="" type="checkbox"/> Risk Planning	<input checked="" type="checkbox"/> Risk Management
<b>Risk</b>	<input checked="" type="checkbox"/> <b>Wildfires</b>	<input checked="" type="checkbox"/> Fire behaviour patterns and typologies <input type="checkbox"/> Fire ignition and spread models <input type="checkbox"/> Wildland urban interface	<input type="checkbox"/> Fuel management <input checked="" type="checkbox"/> Fire service needs <input type="checkbox"/> Prescribed burning <input checked="" type="checkbox"/> Other <i>Fire weather analysis</i>
	<input type="checkbox"/> <b>Storms</b>	<input type="checkbox"/> First measures after storm <input type="checkbox"/> Work safety during salvage logging <input type="checkbox"/> Timber storage and cost containment <input type="checkbox"/> Forest protection and pest control	<input type="checkbox"/> Regeneration and afforestation <input type="checkbox"/> Preventive sylvicultural measures <input type="checkbox"/> Other <i>[Introduce which ones]</i>
	<input type="checkbox"/> <b>Avalanches</b>	<input type="checkbox"/> Technical protective measures <input type="checkbox"/> Maintenance of protection forests	<input type="checkbox"/> Other <i>[Introduce which ones]</i>
	<input type="checkbox"/> <b>Floods</b>	<input type="checkbox"/> Prevention through land use management <input type="checkbox"/> Technical protective measures	<input type="checkbox"/> Other <i>[Introduce which ones]</i>
	<input type="checkbox"/> <b>Other</b>	<i>[Introduce which ones]</i>	
<b>Cross-sectoral topics</b>	<input checked="" type="checkbox"/> Risk and vulnerability assessment and mitigation		<input type="checkbox"/> Risk planning, governance and policy framework

	<input type="checkbox"/> Cost-effectiveness assessment <input type="checkbox"/> Civil protection, emergency and post-disaster management	<input type="checkbox"/> Community involvement and risk communication <input type="checkbox"/> Other: [Introduce which ones]
<b>Level</b>	<input checked="" type="checkbox"/> Local <input checked="" type="checkbox"/> Regional <input checked="" type="checkbox"/> National <input checked="" type="checkbox"/> Cross-border <input type="checkbox"/> EU <input type="checkbox"/> Global	
<b>DRM cycle phase</b>	<input type="checkbox"/> Prevention <input checked="" type="checkbox"/> Preparedness <input checked="" type="checkbox"/> Response <input type="checkbox"/> Recovery	
<b>DRM domain</b>	<input type="checkbox"/> Policy making <input type="checkbox"/> Early warning system <input checked="" type="checkbox"/> Disaster response	
<b>Sendai priorities</b>	<input 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	
<b>Contribution to Sendai Targets</b>	<input type="checkbox"/> Reduce global disaster mortality <input type="checkbox"/> Reduce the number of affected people <input type="checkbox"/> Reduce the direct disaster economic loss <input type="checkbox"/> Reduce disaster damage to critical infrastructure <input checked="" type="checkbox"/> Increase the number of national and local disaster risk reduction strategies <input checked="" type="checkbox"/> Enhance international cooperation to developing countries <input type="checkbox"/> Increase availability of and access to multi-hazard early warning systems and disaster risk information and assessment	

## Description and analysis

### Summary: quick presentation of the Good Practice

- The exchange of lessons learnt, knowledge and methodologies through expert technicians have been proved as the most useful way to build an efficient network of end-users in Europe.
- Due to years of experience of forest firefighting, the methodologies for fire dynamics and fire weather analysis developed in Catalonia are internationally recognized and can help to building an integrated network of emergency services in Europe, through sharing methods and using same terminology in fire analysis, assessment of risk, etc.
- These knowledge and methodologies, after adapted and translated into each fire service, contribute to increase preparedness and efficiency of response phase, as well as to provide more accurate and efficient response to answer “request for assistance” situations or during cross-border events

### Place in national/regional policy

- No place in national or regional policies.

### Goals and achievements

- To implement existing, recognized and truthful methodologies for fire and weather analysis
- To share and implement tools for wildfire risk assessment, based on lessons learnt
- To define and implement strategies and tactics based on the forecasting of fire behaviour, as well as to be used as a tool to assess the needs of resources of an emergency and to size its response
- To implement a common framework of wildfire analysis for cross-border events and "request for assistance" situations

### Actors involved

- The exchange is made among end-users, usually fire services, but could be implemented through civil protection entities or forest services.

### Implementation stage

- Fully operational. PCF has done three main exchanges in Portugal, France and Italy. The experiences are implemented, fully operative and running, especially in France.

### State of technical knowledge

- Knowledge and methodologies are based on the experiences in Catalonia, developed by Catalan Fire Service and the Campbell Prediction System (CPS).

Context *[regulatory, socio-economic, political]*

*[free text – 5 lines max]*

**Detailed Characteristics** *[Objective: detail the implementation conditions of the Good Practice]*

Description of the implementation steps

1. Hosting. At least 1 experienced technician in fire dynamics and fire weather analysis will visit the fire service interested in implementing these methodologies. The technician will identify needs and particularities of the fire service and will adapt the methodologies to it. The technician should visit and participate in as many as possible wildfire emergency response situations, where will assist and asses fire officers during the emergency response
2. When. The exchange should be carried out during the fire season, or fire risk period
3. Duration. The duration should be, at least 1 month

Governance

- Responsible: fire chief officer from fire service that host the invited technician.

Necessary means to implement the Good Practice in efficient conditions

- 1 experienced technician, expert on the field of fire dynamics and fire weather analysis

Challenges encountered during implementation and solutions incurred

- The identification and the understanding of needs and particularities of each fire and emergency service, and adapt to them the fire analysis methodologies, the strategies and tactics

Priorities identified for successful implementation of the Good Practice

1. To assign a liaison officer between the fire service and the visiting technician who must speak both languages
2. To properly explain to the fire service the aim of hosting a technician from another emergency service

**Impact of the Good Practice** *[Objective: evaluate the impact of the Good Practice].*

- To provide new tools for the preparedness and response phase
- To share knowledge and lessons learnt
- To build and participate in the international network of end-users

**Future developments** *[Objective: understand the follow-up perspectives]*

- The best practice will continue to be implemented in other fire and rescues services
- The best practices shall be adapted to the needs of the hosting institution

**External resources** *[Objective: provide further information]*

Attached materials

*[include format (document, photo, video...) and name of the file]*

Web links

Contacts

**[Additional information - optional]**

**Lessons learnt** *[Objective: compare the results obtained to the objectives set at the start of the Good Practice]*



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and Civil Protection

Evaluation process, if exists (internal or external) <i>[free text – 5 lines max]</i>
Assessment of results (quantitative and qualitative) and comparison with main goals <i>[free text – 5 lines max]</i>
Negative aspects identified <i>[free text – 5 lines max]</i>
Unexpected consequences (short / mid / long term) and corrective measures implemented <i>[free text – 5 lines max]</i>

<b>Durability and transferability</b> <i>[Objective: evaluate the integration of the Good Practice and its sustainability, give recommendations for transferability]</i>			
<b>Is this information:</b>	<b>Replicable</b> <input checked="" type="checkbox"/>	<b>Measurable</b> <input type="checkbox"/>	
Regulatory Framework <i>[free text – 5 lines max]</i>			
Stability of the human environment <i>[Stability of partnership, structures, population enabling successful implementation and positive impact in the long term]</i>			
<ul style="list-style-type: none"> <li>The experts that can participate in the exchange shall be available</li> </ul>			
Financial requirements <i>[business model]</i>			
<ul style="list-style-type: none"> <li>The hosting institution will cover the expenses of the exchange</li> </ul>			
Success factors <i>[political, technical, human, financial...]</i> <i>[free text – 5 lines max]</i>			
Risk factors <i>[legal, financial, safety...]</i> <i>[free text – 5 lines max]</i>			
Additional and non-formal experiences contributing to the implementation of Good Practice <i>[free text – 5 lines max]</i>			