ACTIVITY REPORT

Last update: February 2018
## Contents

I+D+i Projects......................................................................................................................... 3
Organisation of International & National Conferences ...................................................... 7
Exchanges of knowledge....................................................................................................... 8
National and International Meetings.................................................................................... 9
Child Education and Awareness Area.................................................................................. 10
Media and dissemination actions ....................................................................................... 11
PCF Members Opportunities.................................................................................................. 12
Awards.................................................................................................................................... 14
References .............................................................................................................................. 15
**HEIMDALL**

Multi-hazard cooperative management tool for data exchange; response planning and scenario building, 2017-2020

HORIZON 2020

Countries involved: Germany, Spain, Greece, Denmark, UK, France, Italy

HEIMDALL addresses the challenge of providing integrated tools for emergency planning and management, including the definition and sharing of multi-disciplinary scenarios, and addressing the needs of the involved first responders (firefighting units, police departments, medical emergency services, civil protection units and command and control centres) and relevant stakeholders in terms of interoperability, inter-organisational coordination and information sharing.

HEIMDALL aims at improving preparedness of societies to cope with complex crisis situations by providing a flexible platform for multi-hazard emergency planning and management, which makes use of innovative technologies for the definition of multi-disciplinary scenarios and response plans, providing integrated assets to support emergency management, such as monitoring, modelling, situation and risk assessment, decision support and communication tools. HEIMDALL fosters data and information sharing among the relevant stakeholders, maximises the accuracy of valuable information and improves population awareness.

---

**FIRE-IN**

Fire and Rescue Innovation Network, 2017-2022

HORIZON 2020

Countries involved: France, Germany, Italy, Spain, Poland, Sweden, Greece, Czech Republic

The main objective of FIRE-IN is to improve the national and European Fire & Rescue (F&R) capability development process by fostering innovation in this domain and providing cutting edge solutions that significantly increase the efficiency of EU first responders so as to raise the security level of EU citizens. In the present proposal this is addressed by four main areas of activity:

1. the identification and harmonisation of operational capability gaps based on the contribution provided by a significant and heterogeneous practitioner network,
2. the identification of promising solutions to address those gaps through monitoring and screening of research outcomes and the continuous involvement of research and industry representatives,
3. the definition of a F&R Strategic Research and Standardisation Agenda (SRSA) and the development of a concept for more efficient use of test & demonstration and training facilities to support innovation and joint skill development.
The overall aim of the GEO-SAFE project will be to push forward the development of innovative tools for fire management and to develop and assess global or semi-global dynamic tools for: fire suppression, lives/goods protection and implementation and training. This will be realised through an active RISE knowledge exchange scheme that will foster a shared culture of research and innovation and will accelerate the transformation of creative ideas into innovative products, services or processes. This includes:

1. Developing dynamic risk cartography of a region with regard to the possibility of a wildfire. The task will involve data collection (satellite and remote sensors), risk analysis and development of a tool enabling to forecast fire extension and in particular to predict fire and risk evolution during the response phase.

2. Designing and testing a resource allocation tool for the response phase using the dynamic risk cartography. One of the problems to consider will be the resource allocation for securing key places (such as schools and hospitals) given time dependent constraints. Problems will be identified through connections with final users, and the proposed solutions will be tested on simulated data.

3. Developing analyses of relevant management processes as well as training tools in order to facilitate the implementation of such solution to be completed.

NET RISK WORK wants to provide a platform of knowledge and best experience exchange dealing with different European forest risks and their interactions, delivering operational guidelines for natural risk disaster reduction meanwhile building regional/thematic networks of expertise. The project will perform a best practices capitalisation process on risk planning and management capabilities of wildfires, storms, avalanches and flood hazards, as well as a crosslink assessment on how are these hazards interacting in a changing climate context all across Europe, as well an informal and permanent multi-actor knowledge exchange platforms will be consolidated at local/regional level by the specific hazards supported by a European scope coordination.
eFIRECOM aims at enhancing the resilience of citizens to wildfires in interface areas from the Mediterranean region, through effectively promoting and increasing awareness and participation on the culture of risk with updated knowledge and best practices. The two main results are:

1. Development of a communication toolkit for the capacity building of citizens and communities towards wildfire risk prevention, adapted to three target audiences: i) Communities and municipalities (inhabitants and managers of wildland urban interface), ii) Scholars, youths and their teachers, iii) Journalists and media professionals.

2. Edition and dissemination of operational and strategic recommendations for the improvement of the communication on risk and reduction of social vulnerability to wildfires in Mediterranean areas, transferred to the relevant authorities.

WUIWATCH is the European Observatory on prevention and defence against forest fires affecting urban areas and communities in the so called Wildland-Urban Interfaces (WUI) in Europe is assembling a permanent forum and a special interest group.

This project addresses the need for a common approach to the problem of forest fires in the WUI in Europe and to promote the adoption of common and appropriate European wide methods, protocols, regulations and tools amongst all involved actors and stakeholders in such civil protection emergencies.

To achieve this, interaction and experience interchange amongst all agents involved in such emergencies is required for the design and implementation of appropriate operational procedures and protocols.
FIREfficient
Operational tools for improving efficiency in wildfire risk reduction in EU landscapes, 2014-2015
DG ECHO Call
Countries involved: Spain, Germany, UK
http://firefficient.ctfc.cat/

The FIREfficient project (Operational tools for improving efficiency in wildfire risk reduction in EU landscapes) aims to establish a sustainable platform for efficient exchange of available knowledge in which "lessons-learned" can be made available to relevant stakeholders and public agencies at EU level, dealing with innovative operational tools and means to integrate the prediction of potential fire events into emergency strategies and land-use planning. The Project seeks to build capacity for planning developers to enhance the transfer of best practices and lessons-learned in wildfires to planning practices and processes. The main results of the projects will be:
(1) Capitalization of knowledge of innovative tools for a cost-effective wildfire risk management in the context of climate change.
(2) EU context adaptation of operational transfer tools for prior fire assessment and actor participatory processes.
(3) Development of a knowledge base and "lessons-learned" platform of innovative tools and means for wildfire hazard assessment.

PHAROS
Project on a Multi-Hazard Open Platform for Satellite Based Downstream Services, 2013-2016
FP7 Call
Countries involved: Germany, Spain, Greece, UK, France, The Netherlands
http://firefficient.ctfc.cat/

PHAROS focuses on developing a sustainable, pre-operational open service platform which integrates space-based observation, communications and navigation technologies to provide innovative services for a wide variety of users and application domains. Multi-hazard applications such as the prediction/early detection of emergencies, population alerting, environmental monitoring, crisis management and risk assessment are managed through a single, user friendly interface, targeting several users (crisis managers, operators of critical infrastructures, insurance companies, scientific/academic). Through a flexible, scalable and modular architecture, the platform will integrate the following services, which are broadly based on innovative technologies available within the consortium:
(1) Satellite EO data access and in-situ sensors and processing;
(2) Decision support services based on data fusion and situation assessment techniques;
(3) A simulation platform for hazard modelling and risk assessment;
(4) An alert message gateway to alert the population through a variety of communications means.
Organisation of International & National Conferences

- Human Factor in Wildfires Management (350 people), Toledo, November 2017
- World Conference of Natural Resource Modeling (150 people), in coordination with the Resource Modeling Association, June 2017
- International Congress on Prescribed Fires (250 people), in coordination with the International Association of Wildland Fires, the University of Barcelona and the Catalan Fire and Rescue Service, February 2017
- 14th Int’l Wildland Fire Safety Summit (200 people), in cooperation with the International Association of Wildland Fires and the Catalan Fire and Rescue Service, January 2017
- Putting in value the Mediterranean forest landscape, Toledo, April
- New Technologies applied to Wildfires Management, (350 people), Toledo, November 2016
- The use of fire for planning and managing the territory, November 2016
- Making visible the economic value of Forests. Natural Capital Accounting, (50 people), April 2016
- Wildfires Safety, (350 people), November 2015
- Human Factor in Wildfires Management, (100 people), October 2015
- Wildland urban-interface wildfires, (100 people), November 2014
- FuegoRED, in cooperation with the University of Barcelona, (80 people), May 2014
- Euromediterranean Conferences on Wildfire, (120 people) November 2013
- Wildfires Meteorology, (100 people), November 2012
Exchanges of knowledge

- Training for Argentina Volunteers of the Cordoba Region, November 2017
- Prescribed Burning Basic and Advanced Training for staff of several UK and Ireland agencies – agreement with the Catalan Emergencies School (2012-2017)
- Several trainings for DREAM in La Toscana region (Italy) (2015-2017)
- Several trainings for Canary Island Fire Suppression Units – agreement with Canary Island governments (2012-2017)
- Prescribed burn plans and prescribed burns for forest management, February 2016
- Drought and processionary effects in the forests of Catalunya, March 2016
- Course WUI & Extinction operations, 1st Edition. Escuela de Protección Ciudadana de Toledo, March 2016
- Fire prevention infrastructure in the framework of joint planning: implementation and maintenance instructions pasture, April 2016
- Course WUI & Extinction operations, 2nd Edition. Escuela de Protección Ciudadana de Toledo, May 2016
- Webinar: WUI Fires in Sardinia, September 2016
- Webinar: Prevention in the WUI, a trans-scalar approach, September 2016
- Course Analysis, Metheorology and WUI. Centro Regionale di Addestramento "La Pineta di Tocchi", Región de la Toscana (IT), October 2016
- Support on the organisation of the Course ‘Operations Chief and Extinction Chief’, October 2016
- ICS Course, La Palma, November 2016
- Webinar: Fire Smart Territory, an innovative and alternative approach to "coexist with fire", December 2016
- Cooperation with the Spanish Environment Ministry on wildfires training, October 2016
- Training for the Metropolitan College of New York, April 2015
- Prescribed burning exchange in Oregon (US) with USFS, April 2012
National and International Meetings

- The 7th AFE International Fire Congress, November-December 2017
- Pau Costa Foundation Presentation to several Australian Entities: AFAC, Bushfire CRC, CFA, October 2017
- Pau Costa Foundation Presentation in the United Nations with the OCHA and the ECC, January 2016
- ForestFire 2016 - Int. Conference on Forest Fires and WUI Fires, Aix-en-Provence (FR), May
- Wildfires; tools to plan and to manage the risk, June 2016
- International Conference of Forestry Training Centres, June 2016
- Seminar. Large Wildfires: modeling and prevention, August 2016
- Summer School Rome – H2020 AF3 Project (IT), September 2016
- Taller Cambio Climático y Global. Incendios y Usos del Fuego en Ecosistemas Mediterráneos, November 2016
- Criteris per a la millora de l'eficàcia de les mesures de prevenció d'incendis forestals, December 2016
- Incendis Forestals i percepció social: la comunicació com a eina de gestió, December 2016

For further information:
http://www.paucostafoundation.org/ing/llistat_agenda.php?categoria=Meetings
Child Education and Awareness Area

- MEFITU – Santa Eulalia School, October 2017 (80 children)
- Book Publication, 'Baby Burn and Fierce Flame', in five languages (SP, ENG, FR, AR, CAT) December 2016:
  https://issuu.com/paucostafoundation/docs/babyburn_and_fierceflame
- Video Wildfires explained by children: https://goo.gl/3z1qVo
- Flami Contest for kids, from June to December 2016
- MEFITU - Pals, November 2016 (50 children)
- MEFITU - 4 schools of Castilla La-Mancha (200 children), October 2016
- MEFITU - the Sant Miquel School, September 2016 (150 children)
- MEFITU - the School Puig i Cavaller, June 2016 (50 children)
- Debate with the students of the Center Montessori in Figueres about 'The Great Silence, Horta de Sant Joan' (20 children), June 2015
- MEFITU - Avinyonet de Puigventos after 3 years of Jonquera Fire (30 children), July 2015
- MEFITU La Branca School in Albons. Impact (30 children), June 2015
- Organisation of XXXII Sylvicultural Emili Garrolera Seminar: 'Windstorms and forest fires', April 2015
- MEFITU - Mura. Mura School (30 students), November 2014
- MEFITU - Monistrol de Calders. Esqueix School. (30 students), November 2014
- JC: The local economy as a basis for landscape management, (40 people) October 2014
- MEFITU - Alcublas (250 children), October 2014
- MEFITU - Collbato (40 people), October 2014
- MEFITU - Puigsoler School (50 children), October 2014
- MEFITU - Balsareny. CEIP Balsareny (50 students), October 2014
- JC: Economic initiatives in a burning landscape, (60 people) May 2014
- MEFITU - Sant Genis i Santa Agnes School, (50 children) February 2014
- Journal Club Vallirana: Wildland-urban interface wildfires, (70 people) October 2013
- Journal Club: Rasquera, one year later, (60 people) June 2013
- Journal Club: Fire ecology at Rasqueras' Wildfire, (80 people) June 2012
Media and dissemination actions

- Trees are covering more of the land in rich countries, November 2017: [https://goo.gl/VEWP9A](https://goo.gl/VEWP9A)
- As Europe scorches, goats and sheep fight wildfires one bite at a time, Thomas Reuters Foundation, October 2017: [https://goo.gl/zGpffn](https://goo.gl/zGpffn)
- This Spanish fire brigade is fighting fire with goats, Al Jazeera English, October 2017: [https://goo.gl/RJCZCS](https://goo.gl/RJCZCS)
- Le SDIS de Haute-Corse partenaire du programme international GEO-SAFE, Corsenetinfos, September 2017: [https://goo.gl/Hsok74](https://goo.gl/Hsok74)
- Cuando el fuego regenera la naturaleza, La Vanguardia, July 2017: [https://goo.gl/iPfN9B](https://goo.gl/iPfN9B)
- Europa entra en una nueva era de incendios forestales, La Vanguardia, June 2017: [https://goo.gl/dEfrrS](https://goo.gl/dEfrrS)
- Bosques sin lágrimas, El Periódico, June 2017: [https://goo.gl/8HtBpc](https://goo.gl/8HtBpc)
- 100-min version of the Documentary 'The Big Silence' translation, December 2016: [https://vimeo.com/199663005](https://vimeo.com/199663005)

PCF Members Opportunities

- David Martin (Miembro PCF desde 2016) empezó su Doctorado en el mes de julio de 2016 en el Fire Safety Engineering Group de la University of Greenwich, junto al Professor Edwin Galea, sobre Modelización en evacuaciones durante incendios forestales.


- Juan Bautista Egido y Miguel Ángel Rodríguez (Miembros PCF desde 2015) participaron en el Intercambio de Expertos de Protección Civil Europeos, que se realizó en Austria del 12 al 14 de octubre. Presentaron la situación actual de los incendios forestales en España, ‘Wildland Fires in Spain. A Brief Review’.

- Jordi Monge (Miembro desde 2016) participó en el I Encuentro sobre Manejo Integral del Fuego en Chorotega (Costa Rica), país en el que representa a la Fundación y donde desarrolla su carrera profesional actualmente.

- El Dr. Raúl Quílez (Miembro PCF desde 2011) participó como experto en el Parlamento Europeo junto a la PASF el día 12 de octubre para presentar la situación actual de los incendios forestales en España.

- El Dr. Domingo Molina (Miembro desde 2011) formó parte del Jurado Premios ‘Batefuegos de Oro 2016’ representando a la Pau Costa Foundation. Este concurso que reconoce anualmente la tarea de profesionales y entidades dedicados a los incendios forestales.


- Los Miembros PCF Víctor Ubiedo, Cristina Montiel, Jordi López y Julián Cuevas González representaron a la Fundación en el II Encuentro Nacional de Bomberos Forestales (El Espinar, Segovia, del 12 al 14 de mayo).

- Javier Jiménez Caballero de Rodas (Miembro desde 2017) participó en la mesa redonda sobre riesgo natural en el Congreso Internacional de Prevención y Emergencias organizado por la APTB (Oviedo, del 17 al 19 de mayo).

- Santi Fuster (Miembro desde 2011) representó a la Fundación en la entrega del premio de Comunicación Corporativa en el Festival de terres Catalunya – INTERNATIONAL ECO & TOURISM FILM FESTIVAL.

- Voluntariado y participación durante el World Conference on Natural Resource Modeling 2017: Judit Lecina.

- Carla Vilarasau (Miembro desde 2014), que realizó el trabajo de fin de grado con el apoyo de la Pau Costa Foundation, realizó una estancia, gracias a las sinergias de la Fundación con entidades de Irlanda del Norte, para profundizar en el campo de la
ecología del fuego en ecosistemas temperados. Actualmente, Carla Vilarasau forma parte de la plantilla de la Fundación.

- Paco Senra (Miembro desde 2016) participó en un caso de estudio del proyecto Life Pinassa en Sundsvall (Suecia) representando a la Fundación como experto en quemas prescritas (del 24 al 28 de octubre 2017)

- A lo largo de estos años, hemos realizado diversos intercambios de conocimiento con varias entidades europeas en los que han participado como instructores o colaboradores algunos de los Miembros de la PCF:
  - Regionale di Addestramento “La Pineta di Tocchi” (Toscana): Giuseppe Delogu, Ricard Expósito, Ramon Valls, Juan Caamaño, Emili Dalmau
  - Intercambio de conocimiento en las Islas Canarias: Javier Cimarra, Ramón Octavio, Felipe Borderas, Federico Grillo, Juan Caamaño, Jorge García Rivera
  - Potenciar y promocionar el conocimiento de quemas prescritas: Edgar Nebot, Asier Larrañaga, Xavi Úbeda, Étel Arilla, Ricard Baqués, Aniol Ferragut, Ruth Domènech, Teresa Valor, Jordi Pagès, Anna Sanitjas, Miriam Piqué

- Varios Miembros de la PCF han colaborado en impulsar el programa de sensibilización ‘El Bosque Mediterráneo, el Fuego y Tú’: Montserrat Cabré, Núria Giménez, Carla Vilarasau, Santi Fuster, Moisés Galán, Raúl Quílez

- Los Miembros de la PCF también han participado como expertos promoviendo el conocimiento en gestión del territorio:
  - Quemas realizadas en Extremadura: Alejandro García, Santi Fuster, Jordi Pagès, Pepe Pallàs
  - Asesoramiento en el Plan Integral de Riesgo de IF en el Mourne Heritage Trust (UK): Llorenç Castell, Jordi Castellví
  - Asesoramiento técnico en incendios forestales en la zona del Alto Minho (Portugal): Jordi Vendrell, Llorenç Castell
  - Colaboración con empresas privadas, que han creado sinergias de trabajo: Sílvia Busquet

- Los Miembros de la PCF han sido invitados a participar en el panel de expertos del proyecto Europeo H2020 FIREIN, para dar voz a la comunidad de incendios forestales en los nuevos retos europeos.

- Juan Caamaño, Plácido Benito, Emili Dalmau, Ricard Exposito, Joan Herrera y Asier Larrañaga ejecutaron el programa de capacitación e intercambio de conocimiento en la provincia de Córdoba, Argentina.
Awards

- Promotion and organisation of the II International Award on Wildfires 2016, November 2017
- Second place on the Int'l Film Festival Eco&Turism Terres de Catalunya, June 2017
- Reception of the Award Institut de Seguretat Pública de Catalunya in Wildfires, November 2016
- Promotion and organisation of the I International Award on Wildfires 2016, November 2016
- NASA Award - Word Wind Europe Challenge
- Marc Castellnou, Advisory Board President: Wildland Safety Award 2015 - IAWF
- Award 'ProDocs 2014' for the documentary 'The Great Silence, Horta de Sant Joan'
Toda la actividad de la Fundación se publica en la Agenda, disponible en la página web de la entidad: 

http://www.paucostafoundation.org/agenda-FPC.php

*Newsletters* con información de la actividad de la Fundación:

- 2017 Resumen de Actividad:  
  http://mailchi.mp/6c5e361b1ad5/resumen-actividad-2017
- 2017 Noviembre:  
  https://mailchi.mp/b2dea08d7466/resumen-de-la-actividad-del-mes-de-noviembre?e=[UNIQID]
- 2017 Octubre:  
  https://mailchi.mp/c51e5b9065d7/actividad-del-mes-de-octubre?e=[UNIQID]
- 2017 Septiembre:  
  https://mailchi.mp/acf8eb3760aa/actividad-del-mes-de-septiembre?e=[UNIQID]
- 2017 Agosto:  
  https://mailchi.mp/6c5e361b1ad5/resumen-actividad-2017
- 2017 Enero – Julio:  
  https://mailchi.mp/paucostafoundation/resumen-de-actividad-de-la-primera-mitad-del-año?e=[UNIQID]
- 2015 Abril – Junio:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=09581f7a5d
- 2014 Septiembre – 2015 Marzo:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=cf37a251c1
- 2014 Abril – Agosto:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=171328414e
- 2014 Enero – Marzo:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=ec11e848af
- 2013 Septiembre – Diciembre:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=817ea3c940
- 2013 Junio – Agosto:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=aac4433191
- 2013 Enero – Mayo:  
  https://us7.campaign-archive.com/?u=7b8213c746c1de93edf9617a5&id=dd427e315e