Let the dialogue begin

Firelogue

D4.3: SET-UP OF WORKING GROUPS

Project: Cross-sector dialogue for Wildfire Risk Management

Acronym: Firelogue

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Abbreviations

Abbreviation	Meaning
AB	Advisory Board
AP	Associated Partner
BFSI	Banking, Financial Services and Insurance
CB	Communication Booster
DoA	Description of Action
EAB	Ethics Advisory Board
EWE	Extreme Wildfire Events
IA	Innovation Actions
GA	Grant Agreement
JT	Just Transition
RIA	Research and Innovation Action
TS	Thematic Strands
WFRM	Wildfire Risk Management
WG(s)	Working Group(s)
Consortium partners	
ADAI	Association for the Development of Industrial Aerodynamics
CMCC	Centro Euro-Mediterraneo sui Cambiamenti Climatici
CTFC	Consorci Centre de Ciència i Tecnologia Forestal de Catalunya
EDGE	EDGE in Earth Observation sciences Monoprosopi IKE
FhG	Fraunhofer Gesellschaft für Angewandte Forschung e.V. (FhG)
IIASA	International Institute of Applied System Analysis
INESTEC	Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência
KEMEA	Centre for Security Studies
NOA	National Observatory of Athens
PCF	Pau Costa Foundation
SAFE	SAFE Cluster
TIEMS	The International Emergency Management Society
TRI	Trilateral Research
UAH	Universidad de Alcalá
VOST	Virtual Operations Support Team from Portugal

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Executive Summary

Thematic Working Groups (WGs) are a central part of the Firelogue project. They offer a space for experts of the three Innovation Actions (IAs) and the wider (European) Wildfire Risk Management (WFRM) community to exchange ideas and debate issues in order to come up with holistic and effective policy recommendations. Furthermore, they serve to integrate the IA and FirEURisk innovations and results into multi-stakeholder recommendations at EU level related for example with the EU Forestry Strategy, the Biodiversity Strategy but also civil protection policies.

Over the course of the project's lifetime, the five WGs will discuss a range of different topics within their field (Ecology/Economy, Societal, Insurance, Infrastructure and Civil Protection) during two Workshop Cycles, as well as in cross-WG meetings to discuss overarching issues in WFRM.

The deliverable outlines both the basic criteria for the WG composition, as well as a detailed timeline for the next and most important steps for all Working Groups.

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1 Introduction

The Working Groups (WGs) ensure the integration of innovations and findings across the IAs and FirEUrisk as well as the wider wildfire risk management (WFRM) community. Each of the groups will be led by a Firelogue partner but will be composed by experts from the afore-mentioned projects and their wider networks. This document details the Firelogue (WGs) set-up and initial steps of operation. The thematic scope for the five WGs was put into place during the initial proposal phase of the project and the overall focus was based on the expected impacts, set by the European Commission. Ecology/environmental, societal, infrastructure, insurance and civil protection aspects are important sectors reflecting key stakeholder groups that are to be involved in holistic WFRM approaches.[1] These actors are also reflected in the envisaged impacts of the call text relating for example to 50% of Natura 2000 protected areas to be fire-resilient, 50% reduction in building losses, or 90% reduction of losses from wildfires insured. Each WG will consist of experts from **science, policy and practice** working in the field of WFRM. They will be **"recruited" from the IAs** but also the wider network including the CLA-15 action (FirEUrisk) and other relevant projects.

In concert with the Firelogue partners and their relevant expertise, more concrete topic ideas for each WG were sketched out during the first months of the Firelogue project. They will serve as the foundation for discussion with the WG participants. In general, the individual WGs set out to identify broad topic ideas that will be used – in cooperation with the WG participants – to identify synergies and potential conflicts of existing and new WFRM measures between different stakeholders in order to shape and integrated policy recommendations at EU level.

As a Coordination and Support Action, Firelogue is depended on the cooperation and contributions of its three Innovation Actions (FIRE-RES[2], SILVANUS[3] and TREEADS[4]). Their experts are the primary source of expertise contributing to the WGs. However, WG leaders will make use of their own and the IA and FirEUrisk networks to diversify the perspectives on particular topics.

The following sections will provide a preliminary sketch for the creation and set up of Firelogue's five WGs. Over the course of the project, the WGs' composition and work-schedule might be subject to change and the focus of the individual identified topic might shift with the interest and expertise of the participants or due to unexpected, external circumstances.

The criteria outlined below shall, therefore, serve as an initial common denominator for all five Firelogue WGs.

[1] The Project 4 Policy Report: Faivre, N. (Ed.) (2018): "Forest Fires – Sparking firesmart policies" by the European Commission (Directorate-General for Research and Innovation Climate Action and Resource Efficiency), for example mentions, p. 19f: "The challenge is to develop integrated solutions which take into account the objectives of forestry, urban and rural development, agricultural, climate and energy policies"; similarly, Paton et. al (2015): Ensuring That We Can See the Wood and the Trees: Growing the Capacity for Ecological wildfire Risk Management, in: Paton et al. (Eds.): Wildfire, Hazards, Risks, and Disasters, Amsterdam, Elsevier, p. 263ff.
[2] https://fire-res.eu/ (25.10.2022)
[3] https://silvanus-project.eu/ (25.10.2022)
[4] https://treeads-project.eu/ (25.10.2022)

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2 Working Group set-up

2.1 Purpose and envisaged contributions

Wildfire risk and its management is characterised by **complex interdependencies** between **human behaviour, socioeconomic development, climate, and the vegetation resources**.[5] The interdependencies are closely connected with interests and intentions of different stakeholders. These interests and activities can unfold synergies but may also be subject to contradictions or even conflict. For example, new and evolving approaches in agriculture and forestry, energy production related infrastructure systems or the construction sector moving towards wood panel building[6] carry great potential for climate change adaptation and mitigation strategies while simultaneously enhancing WFRM. Forests provide a variety of products, help replace fossil resources in the bio-based economy, and offer spaces for recreation. However, these mentioned aspects are frequently addressed by several, individually designed policies neglecting potential conflicts between them, sometimes even rendering their targets unfeasible.[7]

In order to design effective multi-sectoral wildfire risk management (WFRM) policies, interrelations between different measures and policies need to be understood and assessed from different perspectives to ensure that they are integrated in a useful manner. Five thematic Firelogue Working Groups (Ecology/Environment, Citizens, Civil Protection, Infrastructure and Insurance) are hence created to contribute to policy recommendations at the European level from their specific point of view but also to discuss jointly existing synergies, potential conflicts and integrated policies.

Policy recommendation will feed among others into

- Common Agricultural Policy (CAP) (Farm to Fork)
- EU Forestry Strategy
- EU Bioeconomy Strategy
- EU Biodiversity Strategy
- Civil Protection Policy (rescEU, Sendai Framework)
- EU Cohesion Policy
- EU Climate Change Adaptation Strategy

2.2 Composition

2.2.1 General aspects

The Working Groups aim to bring together experts from different fields to discuss innovations in their field of expertise as developed by FirEUrisk and the Green Deal Innovation Actions but also related projects. The aim is to not only facilitate the peer learning among scientists and practitioners but to translate insights into integrated (cross-) sectoral policy recommendations at European level. Three aspects in composing the Working Groups are of crucial importance:

[5] Paton, D. et al (2014): Wildfires: International Perspectives on Their Social—Ecological Implications; in: Paton, D. (Ed.), Wildfire Hazards, Risks, and Disasters, pp. 1-14. European Science & Technology Advisory Group (E-STAG) (2020): Evolving Risk of Wildfires in Europe. The changing nature of wildfire risk calls for a shift in policy focus from suppression to prevention.

[6] See for example Green Deal-bolstered New European Bauhaus strategy, also backed by the recent EU Forest Strategy.

[7] See for example MultiForest project policy recommendations, https://jyx.jyu.fi/bitstream/handle/123456789/83309/URN_NBN_fi_jyu-202209224649.pdf?sequence=1&isAllowed=y

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i. FirEURisk and the IAs are the **primary source of expertise** and are asked to recommend experts from their consortium and wider network for participation in the Working Groups

ii. To develop valid and impactful recommendations, WG participants should reflect a **reasonable diversity of expertise and background**. The WGs should be designed having in mind the following aspects:
   a. variety of personal and institutional expertise,
   b. geographic distribution
   c. gender

iii. To ensure that experts are willing to contribute, it is essential to
   a. generate **added value** for them in terms of visibility in the policy recommendations and knowledge exchange
   b. **limit the effort** for WG participation (all admin and organisational aspects are hence covered by Firelogue). Therefore, two full-day workshops are planned to take place over the course of two years (one in person, one virtual). In between these WGs are free to continue working on developing and drafting the policy recommendations or to exchange ideas. Rather passive participation for example by commenting draft documents is always possible. The effort needed and frequency in which WG will conduct their work outside of the workshops will have to be agreed among the participants

Overall, we envision that the active participation in the meetings of about 10 key experts per WG can be a reasonable number to include different backgrounds and views while keeping the group manageable. However, this is an estimate and the number might vary between the WGs as well as during the WGs lifetime, depending on interest and existing networks.
The working groups can be expanded by any number of rather passive experts who want to comment on policy recommendations or exchange about innovations and research in their specific field of expertise. Overall, the WGs will hence consist of a core group of about 10 experts while the number of affiliated or rather loosely cooperating organisations and individuals might be much larger as detailed in the figure below.

2.2.2 Overview per WG

The following tables provide an overview of the composition, topics and envisaged fields of competence covered by the individual working groups. Furthermore, this overview briefly illustrates the WG-specific selection process under which the respective experts have been and will be recruited. Overall, the composition aims to do justice to the diversity dimensions mentioned in the previous session to the extent possible. However, the composition of the WGs follows a two-step process:

i. IAs and FirEURisk have been asked to suggest experts for the thematic WGs

ii. In line with the sketching of the more detailed topics of interest, WG leaders have thought about relevant experts from their wider networks.

The set-up also depends on the experts active in the IAs, FirEURisk and other relevant projects and the interest of individuals and organisations. To enhance the set-up and to ensure that all relevant

expertise will be considered, the WGs might be reshaped during the project lifetime and/or involve experts for particular topics only.

WG Title	Environmental/Ecology Working Group
Lead	Forest Science and Technology Centre of Catalonia (CTFC)
Size	15 permanent members + additional specific invited experts according to subtopics if the need arises (see concept note).
Experts' affiliated institutions	IAs and related projects: University of Girona (UdG), Spain, representing TREEADS Instituto Superior de Agronomia (ISA), Portugal, representing FIRE RES Forest Science and Technology Centre of Catalonia (CTFC), Spain, representing FIRE RES (contacted) AUA, representing SILVANUS Wageningen University (WUR), Pyrolife project (contacted) Representative of LIFE Taiga (to be contacted) Externals: European Forest Institute resilience program, Germany (contacted) University of Vigo, Spain (to be contacted) ForestEurope and coordinator of FoRISK, Germany (contacted) Rewilding Europe (to be contacted) Institut Européen de la Forêt Cultivée – IEFC, France (to be contacted) Expert on grazing (to be selected) Office fédéral de l'environnement (OFEV), Switzerland (pre-contacted) União da Floresta Mediterrânica (UNAC), Portugal or Rosario Alves, Forestis, Portugal (to be contacted) PEFC Spain (to be contacted)Forest Research Institute of Athens, Greece (to be contacted)
Key areas of expertise	Sustainable forest management; Wood mobilisation and commercialization; Forest Plantations; Biodiversity conservation; Landscape planning; Prescribed burns; Forest risks; Grazing; Forest ownership and associations; Mediterranean, Alpine, Center EU, Atlantic environments.
Potential topics to be discussed	Potential topics under the scope of WG Environment/Ecology Cross-sectoral implications of increasing fire-prone environments, with special attention to the value chain of forest products, other landscape related economic activities including tourism, nature conservation and ecosystem services provision. End-user oriented needs and challenges (technical, financial, legal, etc.) to adapt and manage fire-resilient landscapes across the EU. Cross-links between WFRM and: i) Agroforestry-based circular bio-economy, ii) Nature 2000 and biodiversity conservation, iii) Forest protection function and multi-risk cascade effects, iv) Fire-smart land use planning, v) Climate actions plans.

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	Framing smart and cost-efficient WFRM strategies addressing businesses (such as the tourist sector), communities and public bodies to drive climate change adaptation. Role of prescribed burns in WFRM strategies across EU landscapes. Adaptation of Nature base solutions (NbS) and payments for environmental services (PES) schemes to WFRM fuel management measures.
Diversity	List of experts from different professional domains related to forest and landscape management and WFRM, from applied science to practitioners, covering main biogeographic EU contexts.

Table 1: Environmental/Ecology Working Group

WG Title	**Societal Working Group**
Lead	VOLUNTÁRIOS DIGITAIS EM SITUAÇÕES DE EMERGÊNCIA (VOST Portugal)
Size	10 members
Experts' affiliated institutions	Laurea University of Applied Sciences Insitituto Superior Técnico ISCTE - Instituto Universitário de Lisboa ERGA - European Regulators Group for Audiovisual Media Services EDMO – European Digital Media Observatory VOST EUSKADI – Virtual Operations Support Team Euskadi, Spain ANEPC - Autoridade Nacional de Emergência e Protecção Civil SUM OF US – NGO
Key areas of expertise	Disaster and Risk Communication, Policy Communication, Science Communication, Citizen Science,
Potential topics to be discussed	The need for a more clear and concise communication strategy with citizens, and the importance of involving citizens in the decision-making process when designing new policies or structural behavioural changes.
Diversity	The selection of experts was made taking based Firelogue's ethical guidelines. They represent several geographical areas of the European Union and its diversity.

Table 2: Societal Working Group

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WG Title	Infrastructure Working Group
Lead	Center for Security Studies (KEMEA)
Size	Around 10 experts (from the IAs, FireEUrisk and external experts)
Experts' affiliated institutions	European Forest Institute (by FIRE-RES), EDP Portugal (by SILVANUS), STRESS Scarl (by TREEADS), Vassiliki Varela (consultant) University of Aegean (contacted-tbc) JRC (contacted-tbc) Hellenic Ministry of Civil Protection (contacted-tbc) Resilience Guard (contacted-tbc) UCL (contacted-tbc)
Key areas of expertise	wildfire risk, infrastructure resilience, civil protection,
Potential topics to be discussed	Measures for infrastructures to avoid fire ignition, role of risk assessment in forest and disaster management, role of infrastructures in fire management, measures by infrastructures for preparedness and ensuring business continuity and service provision in case impacted by wildfires
Diversity	Participants have relevant expertise on key areas of interest, they cover different geographical areas and gender equilibrium is also respected.

Table 3: Infrastructure Working Group

WG Title	Insurance Working Group
Lead	The International Institute for Applied Systems Analysis (IIASA)
Size	Estimated 10-15 experts drawn from Firelogue, the IAs (approx 3-5), insurance companies, fire ecologists and the NbS community
Experts' affiliated institutions	Experts in the following institutions will be approached for joining the WG Forest Science and Technology Centre of Catalonia (CTFC) (IA: Fire-RES) MITIGA (IA: FIRE-RES) Leitha (UNIPOL) Willis (partner of H-2020 project NATURANCE)

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	Technical University of Denmark (DTU) (IA: TREEADS) And possibly (depending on the selected case study) CNR, Italy CMCC Consorio (public insurance company, Spain) Teresa, maybe add from Florence meeting
Key areas of expertise	Fire-ecology, NbS, insurance
Potential topics to be discussed	• Novel insurance products for wildfire • Exploring the concept of NbS for wildfire • Insurance incentives/requirements for reducing wildfire risks, especially with NbS (possibly designed after the US National Flood Insurance Program 's Community Rating System) • Designing equitable wildfire insurance systems Possible focus on a community pilot project (on-going discussions with the Horizon Europe HuT project wildfire demonstration project)
Diversity	The selected participants will be drawn from different EU geographical regions; attention will be given to gender equity.

Table 4: Insurance Working Group

WG Title	**Civil Protection Working Group-**
Lead	The International Emergency Management Society (TIEMS)
Size	around 12 persons + occasionally some additional experts
Experts' affiliated institutions	1 Departament d'interior - Generalitat de Catalunya (ES) 2 Pau Costa foundation (ES) 3 Escola national de bombeiros (PT) 4 Autoridade nacional de emergencia e protecao civil (PT) 5 Pompiers de l'urgence internationale (FR) 6 Hrvatska Vatrogasna Zajednica (HR) 7 SAFE Cluster 8 Johanniter Österreich Ausbildung und Forschung gemeinnutzige GMBH 9 Formont centro alta Formazione AIB e Protezione civile 10 Pelastusopisto (FI) 11 Hellenic Fire Service 12 Fire service and civil protection city of Graz

Key areas of expertise	Wildfires management Prevention Planning Training Command and control Technologies
Potential topics to be discussed	Gaps and improvements for civil protection responders: Risk assessment at several stages/times Planning and training, knowledge circulation Contributing to build resilient society by sharing civil protection knowledge Organisation / command and control Logistics issues Critical infrastructures and urban interfaces protection Improvement of Interoperability for international joint deployment Communication towards citizens during the operation
Diversity	The selected participants will be equitably picked up from different IAs consortia, respecting nationalities and regional representativity; attention will be paid to gender equity, even if in the responding bodies gender representation is already misbalanced.

Table 5: Civil Protection Working Group

2.3 WG discussion topics

The WGs follow a two-fold approach in their topic selection. On the one hand side, they follow a matrix structure in the sense that each IA will be screened for interesting innovative technologies, services and WFRM measures (compare for example the approaches outlined in D1.2). These technologies, services and measures will be analysed with a particular focus on justice aspects[8]. However, the developments in the IAs as well as the screening and analytical process need some time while the WGs need to start compiling their experts and prepare their work as well. WG leads have hence screened topics that are currently under development and play a role from a WFRM as well as from a justice or equity perspective. For example, the insurance WG may address the role of nature-based solutions in WFRM insurance.

2.3.1 WGs and Thematic Strands: the Firelogue matrix structure

The review and analysis of existing WFRM approaches and innovations suggested by the IAs and other activities in the broader WFRM community will be organised along **four horizontal thematic strands** (TS) to ensure parallel processes and to facilitate cross-working group exchange (Figure 1). More precisely, all WGs will address the following aspects of WFRM within and across their respective foci: **socio-economic, climate policy (mitigation and adaptation), technology, and earth observation**. The thematic strands have been chosen to reflect main policy aspects (socio-economic aspects as well as aspects of climate policy, Workshop Cycle I) that are taken into consideration when designing WFRM

[8] For the conceptualisation of Just Transition and WFRM, have a look at deliverable D4.1 ,p. 8f.

strategies or approaches in and across the different WGs. In addition, facilitators of respective WFRM approaches such as technologies and earth observation have been selected (Workshop Cycle II).

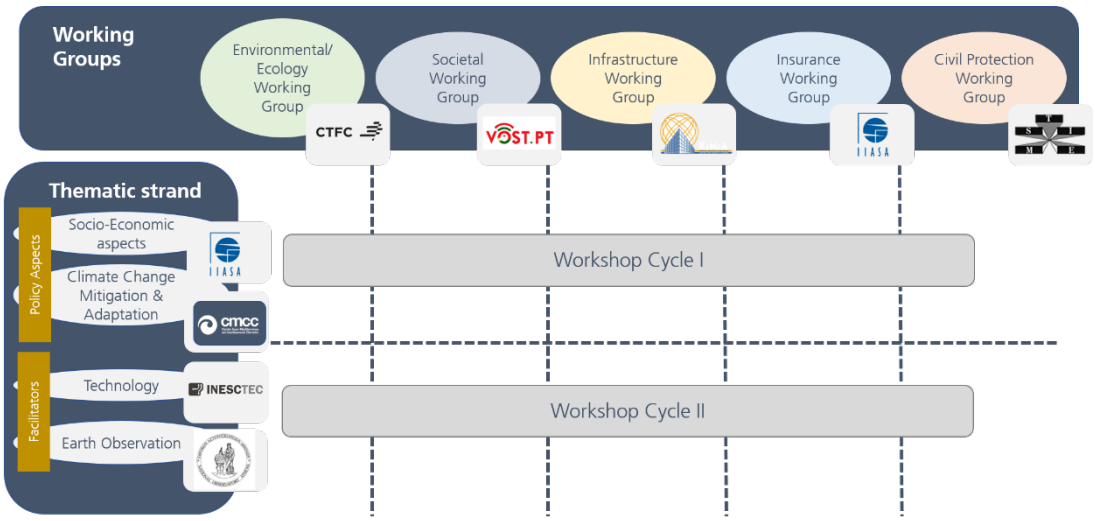

Figure 1: Matrix structure of the FIRELOGUE Coordination Dimension. Source: own figure.

The screening process is organised under WP1 and WGs will be informed about topics of interest for each workshop cycle by the thematic strands. The thematic strands will not only suggest topics but also prepare information templates about new technologies/measures to facilitate the discussion.

2.3.2 Pre-selection of topics

Since potential topics of interest that will result from the screening process are not yet known or might only generate limited potential, interest and challenges, WG leaders have also developed a short list of potential topics they consider to have relevant impact in the field of WFRM in the years to come. The potential topics to be discussed have been detailed in the table in Section 2.2.2 above.

2.3.3 Final selection of topics

Once the WGs have been set-up and the first screening has been implemented, WG leads will decide about the topics for their WG jointly with the experts selected. Strengths and weaknesses, opportunities and threats for the solutions as well as justice and equity aspects will then be discussed (see also D4.1 “Just Transition Concept Review and Adaptation for Firelogue”).

2.3.4 Interconnectedness of WGs

Building on the discussions within the WGs, the two workshop cycles will also include cross-WG discussion to debate and understand cross-links between different stakeholder groups in terms of synergies and conflicts that may arise from specific WFRM measures. The implementation and discussion in the cross-WG meetings can however only be facilitated, if the topics selected within the WGs also include such multi-stakeholder aspects. The final selection of the topics should hence be concluded jointly by the WGs and include multi-stakeholder topics with cross-links to other WGs. Respective considerations have already been considered for the pre-selected topics. Figure 2 displays

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a matrix that was designed to ensure the exchange of questions and issues between the WG and TS and to document it at the same time.

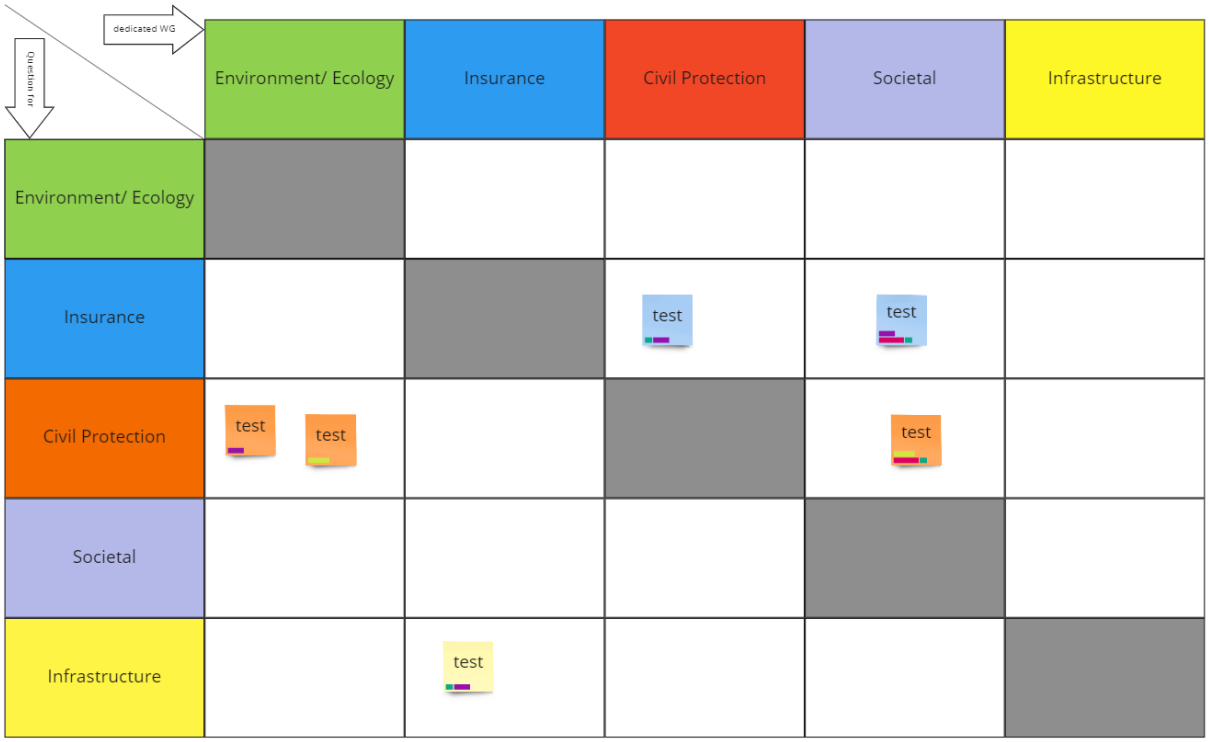

Figure 2: Multi-dimensional WG/TS exchange matrix

The upper rows of Figure 2 represent the leads' own working group. If questions or topics arise that fall within the focus area of one of the other groups, these are entered in the virtual matrix. Input from the Thematic Stands is also provided via this matrix. The TS can label existing topics and issues on the Post-its with their respective coloured tag and complement them by adding their own stimuli and ideas. It is intended that this matrix will be used throughout the duration of the Firelogue project in order to ultimately reflect on the few remaining, unconsolidated cross-WG/TS inputs.

2.4 WG development and implementation

In order not to limit their capabilities, the working groups are not constrained in their choice of topics and in the recruitment of their experts. Hence, it is considered advisable to provide **guidance for the formation phase** in order to ensure that the process is as uniform as possible. The steps shown in the table below are to be understood as practical recommendations that WG leads can refer to.

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2.4.1 Next steps

STEP	DATE	TASK	DETAILS
1	beginning of October 2022	**IA coordinators were asked to name the responsible experts/representatives.**	▪ General concept note was provided to IA coordinators via email
2	immediately after the coordinators' response	**WG-specific concept notes are sent to the (IA) experts**	▪ Firelogue will offer one on one counselling appointments for the potential experts of the IAs should the need arise
3	until end of October	**Integrate experts (suggested in survey or by IA coordinators)**	▪ Each working group will reach out to potential collaborators proposed by the IAs, additional stakeholders with expertise that matches the planned remit of the working groups, and strategic representation from organisations ▪ Potential participants may be asked to respond with basic information (e.g. their professional roles, areas of expertise, what they believe they can commit to the group and what they believe they will get out of it). This can help ensure that members have buy-in and understand their commitment to the group
4	beginning of November	**Mailing list and MS Teams channel for each WG serve as internal communication tool**	Fraunhofer INT will set up the respective lists and channels.
5	ideally within the first weeks of November		▪ Virtual kick-off for each individual WG ▪ General "Terms of Reference Document" provided for all WGs
6	organised individually	**(non-obligatory!) WG-internal organisational meeting(s)**	▪ Getting to know the experts, their profiles, skills, communicate objectives of the Working Group. Focus needs to be on administrative questions (i.e. how to organise the work, agree on workshop date etc.), thematic discussions should be avoided here!

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7	First quarter of 2023	**Planning the first workshop cycle**	▪ Briefing the workshop facilitators (train-the-trainer) ahead of the WS ▪ Determination of responsibilities (roles are assigned: organisation, moderation, documentation) ▪ Development of guiding questions/(fictional) case studies based on the envisaged (interest-based) discussion topics which are derived from the concept notes/factsheets/"Cross-WG-TS" Matrix (cf. 2.3.4 above)

Table 6: Guidance for the formation phase

2.4.2 Virtual and physical meetings

The two workshop cycles are intended to be implemented physically with potentially additional virtual preparatory and post-processing meetings if needed. WGs will plan and implement their workshops individually in close collaboration with the implementation support team[9]. Fraunhofer INT has budget available for the invitation of 2 experts per WG. During the proposal phase it was assumed that the IAs would provide larger amounts of experts whose travel costs would be covered by the respective projects. Since this is not the case but Firelogue considers the covering of travel costs for experts as essential for their involvement, budget shifts for additional 5 experts per WG are envisaged until the end of 2022.

To make best use of the travel budgets, each WG is encouraged to organise their workshops back-to-back with a conference or larger event relevant for the expert community which may be attended by "their" experts anyhow. In line with the development of the WGs and their potential focus topics, WG leads are currently scoping potential events and conferences in the year to come.

2.5 WG internal communication and documentation

Tailored mailing lists will be set up by Fraunhofer INT to reach out to potentially interested parties in addition to the invited experts. They consist of a short form of the WG's name and are therefore easy to recall:

- environ@firelogue.eu society@firelogue.eu
- infrastructure@firelogue.eu
- insurance@firelogue.eu
- Civil-protection@firelogue.eu

The mailing lists will be curated by the WG leaders together with Fraunhofer INT.

Beyond that, MS Teams channels are provided as a well-established and effective tool for consolidating and documenting the results of the individual WGs. As the working groups mainly meet via digital platforms, it might be useful to appoint an online facilitator to promote virtual knowledge sharing and

[9] D4.2 refers to the conceptual partners, mainly by FhG, TRI and IIASA who will support for example moderation, note-taking and evaluation.

collaboration and who takes notes in WG-internal organisational meetings. The Sharepoint folders included in MS Teams are a suitable option for the filing of these protocols.

Over the life of the Firelogue project, it is important to **capture key aspects and findings** that will subsequently contribute to policy recommendations. This is particularly important as the composition of the WGs may change over time. For this reason, every WG leader should strive for an effective and sustainable knowledge management. Keeping a record of the WG's ideas and decisions also serves to enable members to share progress with their respective networks and to act as advocates for the group. This increases acceptance and widens the circle of people invested in the success of the WG.

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3 Conclusion

The present Deliverable provides details on the purpose (Section 2.1), composition and focus of the Firelogue Working Groups (Section 2.2). It details the selection of topics and the recruitment of experts. Working Groups are diversified in order to achieve sustainable results with regard to the development of consistent WFRM strategies for dealing with and integrating the various potential stakeholder perspectives, and subsequent developing policy recommendations, from the envisaged workshop cycles. Section 2.3 explains the operationalisation of the Thematic Strands by the WGs (Firelogue matrix structure) and the parallel preparation of potential focus topics by the WG leads. It furthermore specified the cross-links between the WGs and how the connectedness of WFRM topics will be considered in the selection process. Finally, the next steps in operationalising the WGs are detailed (section 2.4) and the envisaged modes of communication are described (Section 2.5). In this way, the deliverable lays the foundation for systematic group formation while allowing the greatest possible leeway on the part of the group leaders. Both are enormously important to create a productive foundation for exchange within and beyond the boundaries of the WGs.

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5 Annex: WG Concept Notes

The concept notes presented below are to be understood as first drafts. During the next stage, they will be aligned with each other and further harmonised.

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5.1 Environment/Ecology WG

Firelogue project

Environmental/Ecology Working Group

Concept note

Background – Firelogue project

Wildfire risk and its management is characterised by **complex interdependencies** between **human behaviour, socioeconomic development, climate, and the vegetation resources** otherwise known as fuel (load).[1] The interdependencies are closely connected with interests and intentions of different stakeholders. These interests and activities can unfold synergies but may also be subject to contradictions or even conflict. For example, new and evolving approaches in agriculture and forestry, energy production related infrastructure systems or the construction sector moving towards wood panel building[2] carry great potential for climate change adaptation and mitigation strategies while simultaneously enhancing WFRM. Forests provide a variety of products, help replace fossil resources in the bio-based economy, and offer spaces for recreation. However, these mentioned aspects are frequently addressed by several, individually designed policies neglecting potential conflicts between them, sometimes even rendering their targets unfeasible.[3]

In order to design effective multi-sectoral wildfire risk management (WFRM) policies, interrelations between different measures and policies need to be understood and assessed from different perspectives to ensure that they are integrated in a useful manner. Five thematic Firelogue Working Groups (Environment/Ecology, Citizens, Civil Protection, Infrastructure and Insurance) are hence created to contribute to policy recommendations at the European level from their specific point of view but also to discuss jointly existing synergies, potential conflicts and integrated policies.

Policy recommendation will feed among others into

- Common Agricultural Policy (CAP) (Farm to Fork)
- EU Forestry Strategy
- EU Bioeconomy Strategy
- EU Biodiversity Strategy
- Civil Protection Policy (rescEU, Sendai Framework)
- EU Cohesion Policy
- EU Climate Adaptation Strategy

Firelogue

Firelogue is a four-years (2021-2025) European project funded by the Green Deal research funding. Whitin the same call, three large Innovation Actions (IA) research projects (FIRE-RES, SILVANUS and TREEADS) were funded to conduct research to develop solutions addressing wildfire risk management challenges over the next years. The **main objective** of **Firelogue is** to facilitate these three and other closely related projects (such as FirEUrisk) in integrating their findings and translating them into policy recommendations in a concerted manner, particularly at EU level.

[1] Paton, D. et al (2014): Wildfires: International Perspectives on Their Social—Ecological Implications; in: Paton, D. (Ed.), Wildfire Hazards, Risks, and Disasters, pp. 1-14. European Science & Technology Advisory Group (E-STAG) (2020): Evolving Risk of Wildfires in Europe. The changing nature of wildfire risk calls for a shift in policy focus from suppression to prevention.
[2] See for example Green Deal-bolstered New European Bauhaus strategy, also backed by the recent EU Forest Strategy.
[3] See for example MultiForest policy recommendations,
https://jyx.jyu.fi/bitstream/handle/123456789/83309/URN_NBN_fi_jyu-202209224649.pdf?sequence=1&isAllowed=y

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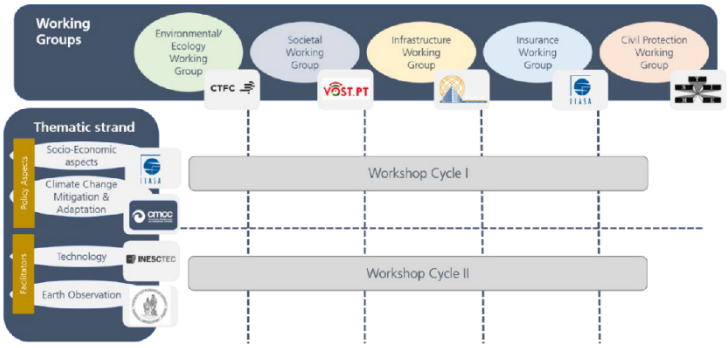
Working Groups approach and functioning

Firelogue project presupposes that it is crucial to bring together the multitude of different wildfire risk management (WFRM) stakeholder to uncover their different interests and aims in order to design holistic policies that address them including their synergies and trade-offs across different sectors and thematic strands. According the previous context, Firelogue aim to involve different key stakeholder groups (experts from science, policy and practice) in five defined sectoral Working Groups (WG): Environmental/Ecology, Societal, Infrastructure, Insurance and Civil Protection, in order to catch all perspectives to finally propose some policy recommendations for WFRM.



To ensure structured discussions and facilitate cross-working groups exchange, WGs will work along four horizontal thematic strands, reflecting the main policy aspects (socioeconomic, climate change mitigation and adaptation) and facilitators (technology and earth observation) in WFRM.

Based on the concept of *Just Transition*, each WG assesses suggested WFRM approaches and measures with respect to their impact and effect on different stakeholder groups, focusing on distributive, restorative and procedural aspects.

A common all across WGs process will be conducted as follow:

1. WGs will discuss internally which goals they envision for WFRM, and which opportunities, strength, weaknesses and threats are linked with the Environment/Ecology dimension of WFRM. At least two online inter-WG workshops will take place.
2. Cross-WG exchange on relevant measures and solutions will be facilitated. Each WG will elect two members to represent them in the cross-WG exchanges based on their previously identified problem scope, defined goals and suggested solutions. The first cycle workshop will be focussed on the policy aspects (socio-economic and climate policy). On the second cycle, the facilitators (technologies and earth observations services) will be majorly discussed as means to facilitate integrated WFRM approaches.

Moreover, additional meetings to approach specific topics may be organised along the main workshop cycle.

Each WG aims to create a policy recommendations document on the specific field of WFRM where the outcomes of the abovementioned workshops (and additional specific meetings) will be incorporated.

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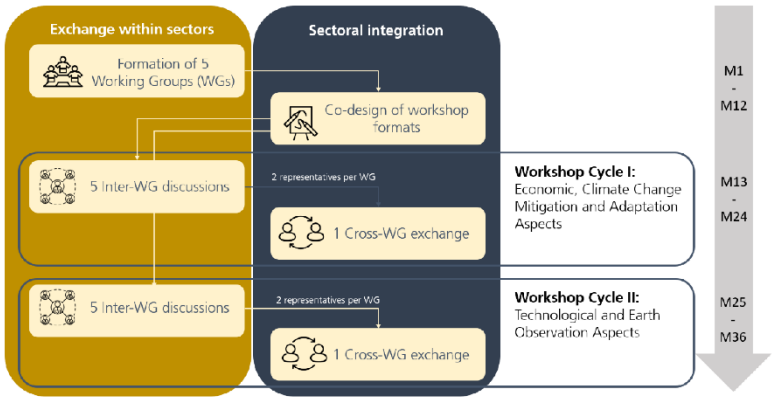

Why should I be part of it?

- Shaping policy development at EU level. A white paper will be submitted to the European Commission with targeted Working Group outcomes.
- Exchange with peers across and beyond projects.
- Development of thematic WFRM European communities.
- Exchange of lessons learned and best practices.
- Discuss and learn about topics of other WGs yet highly interrelated.
- Ultimate goal is to create an interested an active community in WFRM. This can also interact through the on-line platform "Lessons on fire – powered by Firelogue" which will support networking with posting of news and events, as well as knowledge management with publication of available technologies, case studies, proposed and applied WFRM measures.

Environmental/Ecology Working Group (WG_Environ) scope and functioning

A better understanding of **ecosystems' response to changing fire-prone conditions** and the influence of cross-sectoral policies to **landscape modulation** are two main pillars of the environmental dimension of WFRM. Novel knowledge and innovation actions should help managers in the current and future context of global change (i.e., considering climate change projections and the expected impacts of land use changes) **to adapt and manage fire resilient landscapes across EU** in a collaborative and cost-efficient manner. At forest stand level, for instance, in depth analysis of **fuel management** options to **provide forest structures resistant to wildfires** become imperative, maximizing synergies among sectoral policies such us bio-economy or biodiversity conservation and protecting both not only forest but also society against high intensity fires.

Nevertheless, to base the WFRM on achieving and maintaining wildfire resilient landscapes involve many questions to be focussed both, at operational and policy-making level, such as:

- **Landscape resilience**

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- Which are the capacities/actors/tools (e.g., innovation actions) to create and maintain fire resilient and resistant landscapes?
- Which aspects become fundamental, and which main barriers and constrains exist, to achieve fire resistant and resilient landscapes?
- What are the implications of the so called "living with fire" concept?

- **Sectoral policies influencing landscape modulation**
  - What synergies or conflicts should be anticipated between wildfire risk management and:
    - Forest management practices and forest sector
    - Nature conservation and ecosystem services provision
    - Green energy and other climate action policies
    - Recreation and touristic activities
    - Urban and land planning
    - Suppression centred strategies and civil protection policies
    - Others?

- **Framing policy coherence**
  - Are the needed policies to build fire-resilient landscapes in EU aligned? How could they be synergically better coordinated and potential and existing disfunctions avoided?
  - What do you see as the main contributions and synergies associated with wildfire risk management to climate change adaptation/mitigation and vice versa?
  - Do you identify other possible synergies between wildfire risk management and other sectoral policies?

On this regards, potential topics under the **scope of WG_Environ** could be, among others:

- Cross-sectoral implications of increasing fire-prone environments, with special attention to the value chain of forest products, other landscape related economic activities including tourism, nature conservation and ecosystem services provision.
- End-user oriented needs and challenges (technical, financial, legal, etc.) to adapt and manage fire-resilient landscapes across the EU.
- Cross-links between WFRM and: i) Agroforestry-based circular bio-economy, ii) Nature 2000 and biodiversity conservation, iii) Forest protection function and multi-risk cascade effects, iv) Fire-smart land use planning, v) Climate actions plans.
- Framing smart and cost-efficient WFRM strategies addressing businesses (such as the tourist sector), communities and public bodies to drive climate change adaptation.
- Role of prescribed burns in WFRM strategies across EU landscapes.
- Adaptation of Nature base solutions (NbS) and payments for environmental services (PES) schemes to WFRM fuel management measures.

WG_Environ functioning will include the following operational steps:

STEP 1.- Identification of potential participants, contact and confirmation (end of 2022).

STEP 2.- Initial online Kick-off, setting the WG composition, functioning, topic pre-selection, cross-link with other WGs, and first Workshop cycle organisation (early 2023).

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STEP 3.- Workshops celebration (online and/or physical, in this case expenses will be covered by the project). If the need arises, more meetings (including specific subtopic meetings) will be arranged, either at virtual mode either adjacent to another existing event of high participation. (2023-2025).

STEP 4.- Sum-up of outcomes and cross-fertilization with other WGs (2023-2025).

STEP 5.- Policy recommendations edition

All interested stakeholders after having communicated their interest to the WG leader will be included in the mailing list environ@firelogue.eu that will enable direct exchange of information related to logistics of the working group as well as interesting information to share and exchange.

Composition of the WG_Environ

The WGs are composed of experts (scientists and practitioners) from IAs and related projects' partners and from a broader stakeholder network. More concretely, IAs and other relevant projects were asked about which partners could be potentially interested in taking part in this WG (participating or following-up the progress) and which relevant stakeholders (at EU level) could be potentially interested in being involved in the WG.

Based on the survey conducted with the IAs and FirEUrisk, plus the selection done of external experts according to the relevance of their contribution to the WG scope, Table 1 summarize the potential participants to the WG_Environ.

Table 1: Individuals proposed for participation in the Firelogue WG_EnvEco

WG Title	Environmental/Ecology Working Group
Lead	Forest Science and Technology Centre of Catalonia (CTFC)
Size	15 permanent members + additional specific invited experts according to subtopics if the need arise.
Experts' affiliated institutions	IAs and related projects: Pere Pons, University of Girona (UdG), Spain, nominated byTREEADS Diego Gonzalez Aguilera, University of Salamanca (USAL), Spain, nominated by TREEADSSusete Marques, Instituto Superior de Agronomia (ISA), Portugal, nominated by FIRE RES Victor Sazatornil, Forest Science and Technology Centre of Catalonia (CTFC), Spain, nominated by FIRE RES Kostas Demestichas, Agricultural University of Athens (AUA), Greece nominated by SILVANUS (survey) Representative of FirEUriks (not yet)

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	Representative of Pyrolife project (tbc) Representative of RESONATE project (tbc) Representative of LIFE Taiga (tbc) Donatella Spano (CMCC)?? Externals: Selected experts covering different field of expertise and regional/international perspectives and capabilities for dialoguing, to reflect multi-aspects of environment/ecology dimension of WFRM.
Key areas of expertise	Sustainable forest management; Wood mobilisation and commercialization; Forest Plantations; Biodiversity conservation; Landscape planning; Prescribed burns; Forest risks; Grazing; Forest ownership and associations; Mediterranean, Apline, Center EU, Atlantic environments.
Topics to be discussed	See WG_Environ scope.
Diversity	List of experts from different professional domains related to forest and landscape management and WFRM, from applied science to practitioners, covering main biogeographic EU contexts.

WG_Environ Leader contact

CTFC

Eduard Plana Bach
eduard.plana@ctfc.cat

Marta Serra Davos
marta.serra@ctfc.cat

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5.2 Societal WG

Firelogue Societal Working Group

More and more citizens play an important, if not decisive, role during the different stages of disaster risk management as they are, not only the target, but also the driving force that is supposed to implement strategic policy and behavioural changes at local, regional, country and European level.

However, these changes still rely on top-down communication strategies, with little to none consultation of citizens in the process that leads to the establishment of new policies, and where implementation of such policies creates, by itself, a generational and technological divide. This divide often is observed when solutions are focused on new technologies and innovations, that are focused on the technology itself, instead of focusing on the target audience. One example is the use of SMS technology and/or a website for citizens to request authorization for land cleaning, mandatory in certain EU countries, neglecting the fact that the target audience is of an advanced age and, most of the times, lives in areas where cell reception, or internet connection, doesn't exist.

Lack of real knowledge of the target demographic often leaves out groups of citizens with low literacy, migrants that have established themselves in rural areas - among others aspects like disabilities - making these decisions not inclusive enough to reach to all of those that need to be reached.

This divide creates, as a result, low adoption within the target groups, identified above, that are fundamental for the success of such policies and behavioural changes. Additionally, legislation and policy are still communicated in a dense, and non-accessible, technical language that, more often than not, creates more questions than it answers citizens' doubts, leaving a space for disinformation to thrive with consequences that can be, sometimes, fatal.

The Firelogue Societal Working Group (WG) will bring together representatives from Innovation Actions (IAs), Firelogue partners, practitioners, policy experts and citizens to discuss, within the wildfires thematic, the need for a more clear and concise communication with citizens, and the importance of involving citizens in the decision-making process when designing new policies or structural behavioural changes.

The actions of the work group will start by identifying more general solutions to the identified problems, described above, and will then focus – at a later stage – on a hands-on strategic development of mechanisms that allow for the work of the other Firelogue WG to be communicated in line with the solutions previously identified.

From these discussions a policy paper will be published, on how to involve citizens in the process of defining strategies to effectively communicate policy and legislation decisions; a social media campaign will be produced, based on the conclusions of the Societal Working Group, to communicate FIrelogue's own results.

If you are interested in participating in this working group, please reach out to:

Jorge Gomes (VOST Portugal)

Jorge.gomes@vost.pt

+351 933 940 547

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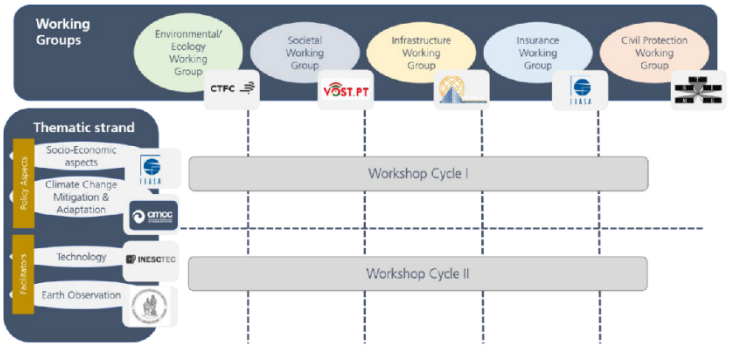
5.3 Infrastructure WG

Firelogue - Infrastructure Working Group Concept Note

Background – Firelogue project

Wildfire risk and its management is characterised by **complex interdependencies** between human behaviour, socioeconomic development, climate, and the vegetation resources otherwise known as fuel (load).[1] These interdependencies are closely connected with interests and intentions of different stakeholders. These interests and activities can unfold synergies but may also be subject to contradictions or even conflict. For example, new and evolving approaches in agriculture and forestry, energy production related infrastructure systems or the construction sector moving towards wood panel building[2] carry great potential for climate change adaptation and mitigation strategies while simulatenously enhancing Wildfire Risk Management (WFRM). However, respective interrelations need to be understood and assessed from different perspectives to ensure that they are understood and integrated in a useful manner. Similarly, citizens' views need to be included in preventive measures such as cleaning perimeters or response activities such as evacuations to be effective. Land and forest owners have a stake when it comes to certain land planning and management strategies, just as infrastructure operators do. Finally, insurance schemes might be developed by private or public stakeholders and can for example be related with building or information requirements. However, the related pre-conditions and implications from different WFRM perspectives need to be included to develop sustainable approaches.

Against this background, Firelogue presupposes that it is crucial to bring together the multitude of different WFRM stakeholder to uncover their conflicting interests and aims in order to design holistic policies that address them including their synergies and trade-offs across different sectors and stakeholder groups. Firelogue, therefore, suggests clustering this multitude of different WFRM actors and will bring together experts in five thematic working groups (WGs) on (i) ecology/environmental aspects, (ii) society, (iii) infrastructure, (iv) insurance and (v) civil protection. In order to structure the working group discussions in a comparable way, each working group will work along the following four thematic strands under which WFRM innovations can be grouped: society-economy, climate policy, technology and earth observation.



[1] Paton, D. et al (2014): Wildfires: International Perspectives on Their Social—Ecological Implications; in: Paton, D. (Ed.), Wildfire Hazards, Risks, and Disasters, pp. 1-14. European Science & Technology Advisory Group (E-STAG) (2020): Evolving Risk of Wildfires in Europe. The changing nature of wildfire risk calls for a shift in policy focus from suppression to prevention.

[2] See for example Green Deal-bolstered New European Bauhaus strategy, also backed by the recent EU Forest Strategy.

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Context:

Research funding under the European Green Deal addressed several thematic areas including "Increasing climate ambition: cross sectoral challenges" under which the call to "Preventing and fighting extreme wildfires with the integration and demonstration of innovative means" was published. Three large research projects of about 20 Mio. € funding each (FIRE-RES, SILVANUS and TREEADS) are conducting research to develop solutions addressing WFRM challenges over the next years. Firelogue has been funded to facilitate these three and other closely related research projects in the field, such as FirEUrisk in integrating their findings and translating them into policy recommendations in a concerted manner, particularly at EU level.

Purpose of the Working Group

- To ensure the **integration of innovative technologies, measures, strategies and governance approaches** across the projects **into holistic recommendations** and to identify their synergies and trade-offs across different sectors and stakeholder groups.
- To exchange about remaining challenges and innovative opportunities within each WG theme and to reflect about integrating them into holistic WFRM strategies
- Each working group will work along the four strands under which WFRM innovations can be grouped, in the following discussion formats.
- During Workshop Cycle I, focus will be given to the thematic strands that will reflect main policy aspects (socio-economic and climate policy).
- During Workshop Cycle II, technologies and Earth Observations services will be majorly discussed as means to facilitate integrated WFRM approaches.
- **Each WG aims to create a policy recommendations document on the specific field of WFRM.**
- Cross-thematic working groups will enable the exchange on relevant measures and solutions at cross-sectoral level, taking into consideration that integrated WFRM encompasses multiple dimensions, stakeholders and approaches.

❖ Objectives of *Infrastructure* Working Group

Critical infrastructure is "an asset, system or part thereof which is essential for the maintenance of vital societal functions, health, safety, security, economic or social well-being of people and the disruption or destruction of which would have a significant impact in the country as a result of the failure to maintain those functions" (Dir. 2008/114/EC). Experience from recent disasters affecting assets of critical service provision has revealed evidence of the dependencies between infrastructures and the societal function and resilience in different dimensions (e.g. power outage in areas affected by forest fires and traffic disruption)[3]. On the other hand, the operation of infrastructures with inadequacies or failures has been often proven driving factor for wildfires and especially in the wild-urban interface (WUI) (e.g. power-line caused wildfires). The 2018 report of EU[4] recognizes that the imperative need in WFRM has been shifted from request of suppression resources to timely and effective prevention and preparedness measures and strategies. Infrastructures can have an active role in this direction, from preparedness and early detection

[3] Sfetsos, A.; Giroud, F.; Clemencau, A.; Varela, V.; Freissinet, C.; LeCroart, J.; Vlachogiannis, D.; Politi, N.; Karozis, S.; Gkotsis, I. et al (2021). Assessing the Effects of Forest Fires on Interconnected Critical Infrastructures under Climate Change. Evidence from South France. Infrastructures, 6 (2) 16.

[4] European Union (2018b): Forest fires – Sparking firesmart policies in the EU, Publications Office of the European Union, doi:10.2777/181450

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with measures and activities that can reduce wildfire hazard and risk and may also support a more efficient response and the restoration, in relation with the local communities. Moreover, the overall wildfire risk reduction measures to infrastructures may lead to reduced maintenance costs. In this respect, the working group will discuss, create insights and recommendations on the following topics, based on the mutual cause-effect relationship:

- **Infrastructure as a driving factor in fire regime.**
  - How can infrastructure's malfunction, failure or misuse may lead to wildfire ignition. Measures that infrastructure operators may take to avoid these phenomena (e.g., undergrounding of cables) or education of users for conscientious, environmentally friendly and sustainable use of infrastructure assets (e.g., road network users to avoid throwing cigarettes). How can risk assessment approaches and outcomes, for the forest or the Wildland Urban Interface (WUI) environment at risk due to the infrastructure's operation, assist short and long-term planning in forest and disaster management.
  - The impact that the infrastructure can have to the evolution and management of the fire, positive (e.g. road network works as a fire break, allowing also access to the fire brigade) or negative (e.g. a refinery on the fire path) effects. Infrastructure assets can be also used as a tool for prediction and early warning: the heat of a wildfire is capable of affecting the electric current transmission and thus being used as a detector of a wildfire[5]. How can the positive effects be protected and the negative be mitigated.
- **Impact of wildfires to infrastructure.** Wildfires can adversely affect the operation of infrastructure assets and networks exposed due to their geographic location, causing disruption of the service provided. This tendency has increased due to the expansion of human settlements and industrial activity into the wildland.
  - Planning, training and operational procedures of infrastructure operators for anticipating response in case of extreme weather forecasting as well as in case of fire propagation in the proximity of the infrastructure, for ensuring business continuity and minimizing cascading effects.
  - Protection measures following risk assessment at infrastructure level.
  - The role of land management.
- **Common topics with other WGs** and thematic strands will be investigated, such as (i) the nature-based solutions infrastructures may adopt for their protection against wildfires; (ii) the necessary societal awareness and preparedness in case of an emergency caused by service disruption; (iii) the insurance claims in case of an infrastructure-ignited fire; (iv) the impact the infrastructure service disruption may have to the response of civil protection agencies; (v) climate change projections and EU CC adaptation policies regarding infrastructures and WFRM .

[5] E. Erickson, R. Slobodin, M. Poshtan, T. Taufik and J. Callenes, "Using Power Infrastructures for Wildfire Detection in California," 2020 IEEE Power & Energy Society Innovative Smart Grid Technologies Conference (ISGT), 2020, pp. 1-5, doi: 10.1109/ISGT45199.2020.9087666.

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Composition and work of *Infrastructure* Working Group

- ✓ Partners from the IAs and related projects
- ✓ Infrastructure operators
- ✓ Representatives from emergency organizations at decision making and at operational level
- ✓ Experts from the fields of land and forest management
- ✓ Researchers, scientists, professionals related with WFRM and infrastructure protection/resilience

At least two inter-WG workshops will take place, one physical and one virtual, and 2 intra-WG meetings. The inter-WG workshops will be moderated by the WG Leader and a team from KEMEA organization. All interested stakeholders after having communicated their interest to the WG leader will be included in the mailing list infrastructure@firelogue.eu and into the dedicated MS TEAMS channel that will enable direct exchange of information related to logistics of the working group as well as interesting information to share and exchange. Should the need arise, more meetings will be arranged, either at virtual mode or within the framework of relevant highly recognized events..

Why should I be part of it?

- Shaping policy development at EU level. A white paper will be submitted to the European Commission with targeted Working Group outcomes
- Exchange with peers across and beyond projects
- Development of thematic WFRM European communities
- Exchange lessons learnt and best practices
- Discuss and learn about topics of other WGs yet highly interrelated
- Ultimate goal is to create an interested and active community in WFRM. This can also interact through the on-line platform "Lessons on fire – powered by Firelogue" which will support networking with posting of news and events, as well as knowledge management with publication of available technologies, case studies, proposed and applied WFRM measures.

Working Group Leader: Danai Kazantzidou-Firtinidou
Organization: Center for Security Studies (KEMEA), Ministry of Citizen Protection, Greece
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5.4 Insurance WG

Firelogue

Firelogue Insurance Working Group

Insurance WG Set Up	
Mailing list	insurance@firelogue.eu
Lead	IIASA: JoAnne Linnerooth-Bayer, Teresa M. Deubelli-Hwang
Participants (*potential*)	CMCC: Jaroslav Mysiak (*contacted)*
	Marsh McLennan/*MCII:* Swenja Surminski (*contacted)*
	InsuResilience: Lea Kulic (*contacted)*
	Zurich Insurance: Michael Szoenyi
	FIRE-RES: Sven Wunder (EFI) & Luis Sousa (Mitiga Solutions) (*contacted)*
	CTFC: Eduard Plana
	Global Quake Model: Vitor Silva (*contacted)*
	Guy Carpenter: Guillermo Franco (*contacted)*
	SwissRe: Cherie Gray (*contacted)*
	Representatives from Firelogue Partners and IAs as interested

Firelogue *(intro)*

Firelogue Insurance Working Group concept

Across Europe, wildfire risk is mounting, threatening forest vegetation, soil and water quality in affected areas, depleting resources, impacting public health and increasing the financial burden on public authorities, forest owners, residents, businesses and other stakeholders in the wildland urban interface (WUI). Extreme events, such as the wildfires in Portugal in 2017, in Greece in 2018 or in Spain in 2012 and 2021, which led to high fatalities and substantial economic costs, illustrate the increasing burden caused by wildfires across Europe. Access to insurance and other risk transfer mechanisms can help ease the financial burden of wildfires on private households, farmers and businesses, as well as infrastructure providers and public authorities and offer opportunities for incentivizing wildfire risk management, but not without costs to the clients and in many cases taxpayers. In line with the stipulations of the Sendai Framework on Disaster Risk Reduction and the Just Transition Mechanism of the European Green Deal, it is crucial to reflect on the design and implementation of insurance and other risk transfer mechanisms (market-based, parametric, public-private arrangements, subsidized schemes, regional insurance pools, micro insurance) with special attention to risk-reduction and equity considerations.

The Firelogue Insurance Working Group (IWG) brings together representatives from Innovation Actions (IAs), Firelogue partners and insurance experts to exchange on equitable insurance and other risk transfer options for mounting wildfire risk in Europe. In particular, the IWG will focus on two

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themes: i) exploring options for equitable wildfire insurance and risk transfer; and ii) insurance and risk transfer incentives and requirements for wildfire risk reduction, notably also through nature-based solutions (NBS). 'Equity' in this context involves aspects of accessibility and affordability, including with a view to the availability of safety nets for low-income households and vulnerable businesses in wildfire risk areas. As a second aspect, equity involves responsibility for reducing wildfire risks through measures, including nature-based solutions (NBS) such as restoring degraded ecosystems or controlled burns and other cost-effective solutions that are inspired and supported by nature; insurance can play an important role in promoting wildfire risk reduction among its customers.

Under theme I, the WG will explore questions such as "Who pays post-wildfire compensation and restoration - private persons (private insurance) or public (taxpayers), or cross subsidies in insurance pools – or a mix, and how can trade-offs be managed towards (more) equitable financial safety nets for wildfire risk"?, leading to questions under theme II such as "What are trade-offs between incentives and requirements for wildfire risk reduction (private responsibility) vs solidarity (public responsibility) and how can these be overcome harnessing insurance and risk transfer mechanisms?".

Following a pre-launch with a roundtable on equitable wildfire risk-sharing at the "Fire Ecology across Boundaries: Connecting Science and Management" Conference in Florence, October 4-7, 2022, the WG will organise dedicated deep-dives into the two suggested themes, starting with a contribution to the Understanding Risk Global Forum (UR22) focus days, November 28-December 2 (*pending acceptance*) in collaboration with NATURANCE (Nature for insurance, and insurance for nature). The insights from the WG will feed into a Firelogue White Paper, as well as a policy brief on equitable wildfire insurance in Europe and a policy brief on insurance for wildfire risk management through NBS, each of which will be distributed widely. With sufficient interest, the WG will also contribute to journal articles and reports.

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5.5 Civil Protection WG

Civil protection working group, constitution

Management: TIEMS, JP Monet and Xavier Joseph

I. Proposal for core participants of CPWG

The members have been chosen in reviewing the composition of all projects consortia. This work enhances a lack of real responders in Sylvanus and Dryads. That's the reason why, for these two projects, it is proposed a specific liaison mechanism. For FireEUrisk and Fire-res, the existence of common members with Firelogue will be a real help. The participants have to be nominated by their respective related agency. The attendance to the CPWG is to be personal.

Bodies, to be represented, picked-up in Fire-Res project members

1. Departament d'interior - Generalitat de Catalunya (ES)
2. Pau Costa foundation (ES)
3. Escola national de bombeiros (PT)
4. Autoridade nacional de emergencia e protecao civil (PT)
5. European Forest Institute (FI)

Bodies, to be represented, picked-up in Sylvanus project members

6. Pompiers de l'urgence internationale (FR)
7. Hrvatska Vatrogasna Zajednica (HR)

Bodies, to be represented, picked-up in FireEUrisk project members

8. Controleur General E. Flores (FR)
9. Safe cluster (FR)

Bodies, to be represented, picked-up in Dryads project members

10. Johanniter Österreich Ausbildung und Forschung gemeinnutzige GMBH
11. Freiwillige Feuerwehr Gumpoldskirchen

Additional members with specific mission

12. Sergio Pirone, Formont centro alta Formazione AIB e Protezione civile (IT), as responder with a support letter to Firelogue, intended to be a kind of "liaison officer" with Sylvanus project
13. Laura Hokkanen, Pelastusopisto (FI) as CP body servant, with a representation of Scandinavian area, intended to be a kind of "liaison officer" with Dryads project
14. Greek fire department, suggested individual Christos Lampris or Zisoula Ndasiou

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II. Proposal for a "second circle" of participants to CPWG

Persons representative of extra or others European civil protection bodies, to be associated on some specific topics or meetings, mainly remotely (inability to support transportation costs)

i. Bushfires and natural hazards CRC limited (AU) representative, from FireEURisk
ii. Poland fire department, suggested individual Tomasz Grelak
iii. German fire department, suggested individual Christoph Lamers (NRW fire academy) or Sebastian Vries (Hamburg FD)
iv. South Africa fire department, suggested individual Andries Jordaan
v. US, California Fire department representative
vi. Middle east, Lebanon fire department representative
vii. North Africa, Algeria or Tunisia fire department representative

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Firelogue

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