Let the dialogue begin

Firelogue

D7.2 STAKEHOLDER CLUSTERING REPORT

Project: Cross-sector dialogue for Wildfire Risk Management

Acronym: Firelogue

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List of Abbreviations

Abbreviation	Meaning
AB	Advisory Board
AP	Associated Partner
BFSI	Banking, Financial Services and Insurance
CAMS	Copernicus Atmosphere Monitoring Service
CB	Communication Booster
CEMPPR	Collaboration on Emergency Management, Policy, and Preparedness Research
CSS	Center for Security Studies
DRMC	Disaster Risk Management Cycle
DRYADS	A Holistic Fire Management Ecosystem for Prevention, Detection and Restoration of Environmental Disasters
DSS	Decision Support System
EAB	Ethics Advisory Board
ECMWF	European Centre for Medium-Range Weather Forecasts
EWE	Extreme Wildfire Events
ERWN	European Wildfire Risk Node
FIRE-RES	Innovative technologies and socio-ecological-economic solutions for fire resilient territories in Europe
FirEUrisk	Developing a holistic, risk-wise strategy for European wildfire management
HFS	Hellenic Fire Service
IA	Innovation Action
IoT	Internet of Things
RIA	Research and Innovation Action
SILVANUS	Integrated Technological and Information Platform for wildfire Management
SOP	Standard Operating Procedure
TRL	Technology Readiness Level
UAV	Unmanned Aerial Vehicles
UNDRR	United Nations Office for Disaster Risk Reduction
WFRM	Wildfire Risk Management
WG	Working Group
Consortium partners	
ADAI	Association for the Development of Industrial Aerodynamics
CMCC	Centro Euro-Mediterraneo sui Cambiamenti Climatici
CTFC	Forest Science and Technology Centre of Catalonia
EDGE	EDGE in Earth Observation sciences Monoprosopi IKE
FhG	Fraunhofer Gesellschaft für Angewandte Forschung e.V.
IIASA	International Institute of Applied System Analysis
INESTEC	Instituto de Engenharia de Sistemas e Computadores, Tecnologia e Ciência

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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	University of Alcalá
VOST	Virtual Operations Support Team from Portugal

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Executive Summary

This document is the first of the two versions of Deliverable D7.2 “Clustering Stakeholder Report” that aims to cluster all stakeholders involved in Firelogue, the related projects and their broader networks to develop a mechanism enabling synergies and interactions among them. This first version presents the preliminary stakeholder clustering made by the Green Deal (LC-GD-1-1) Innovation Actions DRYADS, FIRE-RES, and SILVANUS (IAs henceforth) and the Research and Innovation Action (RIA) FirEUrisk (funded under the call LC-CLA-15), proposes and integrative and holistic clustering accounting for the clustering individually made by the projects, and draws the initial plan to develop synergies among them through the so-called Firelogue network. The second version of this Deliverable, which is due for project month M24, will further elaborate on the stakeholder clustering and the mechanism to develop the Firelogue network, resulting from the project evolution and further requirements identified overtime.

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1 Introduction: Stakeholder management at the core of Firelogue

Firelogue has as a core objective the creation of a network for the discussion on the future of European Wildfire Risk Management (WFRM), identifying and engaging relevant stakeholders within the WFRM community. It thereby focuses mainly on the support of the Green Deal (LC-GD-1-1) Innovation Actions DRYADS, FIRE-RES, and SILVANUS (IAs henceforth) and the Research and Innovation Action (RIA) FirEUrisk (funded under the call LC-CLA-15), as well as other projects working on wildfire management. Thus, Firelogue will simultaneously coordinate the integration of stakeholders and findings into cross-sectoral WFRM recommendations as a roadmap towards meeting the 2030 impacts as expressed by the Green Deal call and beyond.

To achieve the above purpose, Firelogue presupposes that it is crucial to bring together the multitude of different WFRM stakeholders to uncover their potential synergistic and conflicting interests, aims and means to achieve those, in order to design holistically. To properly manage the interaction with all the stakeholders, the project promotes the design and implementation of discussion and knowledge sharing formats including an Annual digital conference, Peer Review, Joint Impact Assessment, webinars, or networking events. More specifically, these activities intend to facilitate multi-stakeholder networking, exchange, and continuous engagement, as well as collect and synthesise their voices across the whole spectrum of politics, economics, civil protection, and civil society. The respective formats will be specified further in Deliverables D2.1a, D2.1b, and D2.2.

1.1 Firelogue Connecting Dimension

Firelogue contributes with a Connecting Dimension that focuses on the collection of knowledge, insights, and solutions from the wildfire-related projects, its integration, upscaling, and wider dissemination, as well as the joint management of stakeholder engagement in the project. It will gather the measures and solutions from the projects and its case studies and enrich this knowledge. Results will be analysed in terms of consistency and relevance at the European level and feed into the Working Groups (see Section 1.2) for further discussion and integration (see Figure 1).

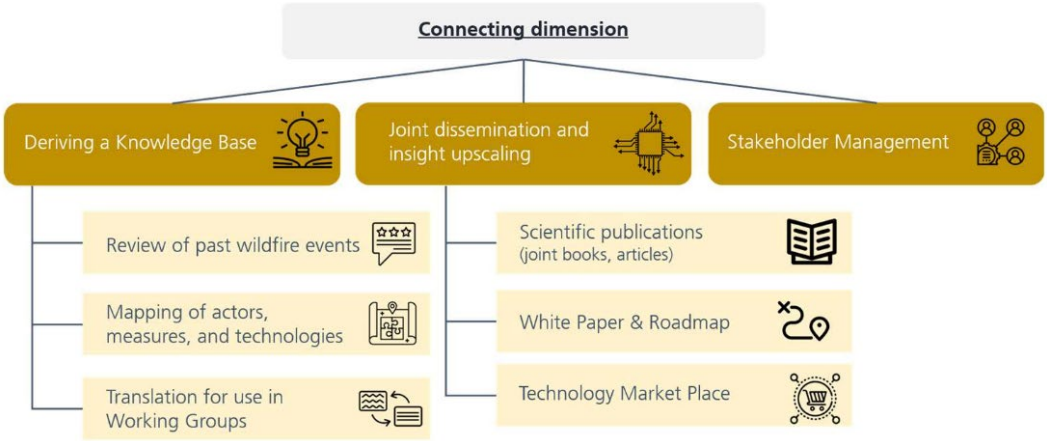

Figure 1: Activities under the FIRELOGUE connecting dimension.

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Firelogue activities will support the projects in disseminating their insights through joint dissemination activities which will be codesigned during the early stage of the projects. This involves the support of joint scientific publications, the development of a common White Paper and Roadmap towards 2030 and beyond (towards the ends of the projects), and a Technology Market Place that will combine a maturity assessment with an online exhibition space supported by the Firelogue Communication Booster (see section 3.2 for more details). The Booster combines different support services with a web-based platform. The platform is a tool for knowledge exchange and access that allows for the central communication of measures and solutions, publications, and policy papers. At the same time, it serves as a "single face to the customer" of the projects and showcases relevant technical solutions while interconnecting stakeholders from these projects and external parties in the WFRM domain.

A plan to effectively develop the Firelogue connecting dimension among WFRM stakeholders is presented in chapter 6.

1.2 Working Groups

In line with the sectors reflecting key stakeholder groups involved in holistic WFRM approaches, Firelogue establishes five sectorial Working Groups (WGs) on (1) Ecology/environment, (2) Societal aspects, (3) Infrastructures, (4) Insurance, and (5) Civil Protection aspects. WGs will be led by Firelogue Consortium members and will be a composite of representatives from the IAs, FirEUrisk, Firelogue as well as other invited experts, and their mission will be to foster transdisciplinary dialogues so as to review and analyse existing WFRM approaches, and innovations suggested by their members and other activities in the broader WFRM community. To ensure structured discussions and facilitate cross-working group exchange, WGs will work along four horizontal thematic strands, reflecting the main policy aspects (Socioeconomic aspects, Climate Change Mitigation & Adaptation) and facilitators (Technology, Earth Observation) in WFRM (see Figure 2).

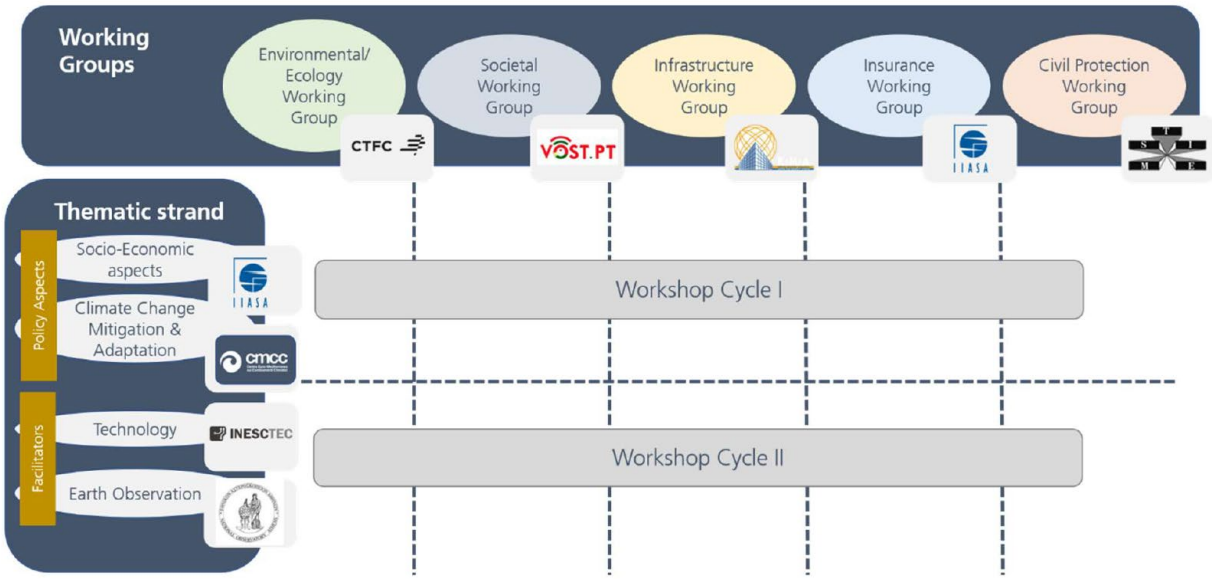

Figure 2: Firelogue Working Groups and Thematic Strands.

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In order to enable the purposeful dialogue and integration of these different disciplines during the course of the above spaces for discussion, Firelogue suggests as a preliminary exercise the **clustering of the multitude actors involved in the WFRM domain (e.g., emergency management organisations, scientific community, policy making bodies…)**. Firelogue will therefore capitalise key outputs and knowledge that builds upon the synergies of key disciplines across scientific, technological, operational, and political domains, among others. As a result, this approach will bring along a valuable blueprint for EU level multi-stakeholder processes for dealing holistically with complex wildfire-related risks at international level.

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2 Objectives

The work reported in this deliverable is grounded on three main objectives that are related with the tasks assigned to Pau Costa Foundation (PCF) as a stakeholder manager, but also with the overall project goal to facilitate networking, exchange, and continuous engagement of stakeholders from the WFRM domain.

1. **Identify the preliminary stakeholder clustering made by the three IAs and FirEUrisk.**
   The IAs and FirEUrisk will be approached through a survey conducted within WP1 "Consolidation of IA WFRM Knowledge", whose overall objective is to gain a first understanding about the scope of the IA projects and FirEUrisk, and to identify relevant areas for knowledge sharing and joint activities during the duration of the projects. The survey includes a section about stakeholder management and particularly a question about the stakeholder clustering established by each project, that is, the grouping of stakeholders they have identified as relevant target of the activities and beneficiaries of their outcomes. The inputs provided by representatives of these projects through the survey will provide the insight needed for this.
2. **Propose a comprehensive and holistic stakeholder clustering considering all relevant stakeholders identified by the three IAs and FirEUrisk.**
   The stakeholder clustering provided by each project individually will serve as a basis to propose a clustering that takes into consideration the stakeholders identified by them. While the projects may have similar aims in terms of providing integrated solutions to better manage wildfire risk in the future, they may approach it in different ways, which leads to the identification of different stakeholders in each case. Therefore, the proposed stakeholder clustering will be inclusive, in that it will take into consideration all relevant stakeholders identified by the projects, and will be holistic, in that the array of stakeholders clustered will cover all the facets related of WFRM.
3. **Set the basis to develop the connecting dimension of Firelogue.**
   Not only the relevant stakeholders in the WFRM domain need to be identified and clustered, but a mechanism to ensure their interaction needs to be created, which is in line with the Firelogue project overarching objective. Thus, the present deliverable sets the basis to create a Firelogue network involving the most relevant projects related to WFRM whose mission will be the development of a connecting dimension to enable the dialogue among the stakeholders associated with each of the projects.

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3 Stakeholder management goals

Stakeholder management is a central part of Firelogue, supporting the IAs as a whole, their interaction with the Firelogue Working Groups but also their integration across sectors and risk management phases and exchange with the broader WFRM community. To fulfil this responsibility, the position of a stakeholder manager has been created and has been appointed to the project partner PCF. The stakeholder manager has thus the mission to identify and cluster the broad variety of stakeholder involved across the different phases of the Disaster Risk Management Cycle (DRMC) (i.e., prevention, preparedness, response, and restoration), promote the dialogue between Firelogue, the IAs, FirEUrisk and other projects, and ensure that their knowledge is gathered and considered during the project duration.

Hence, Firelogue will act as "Network Facilitator" providing the following support for the International Wildfire Risk Management Community networks:

- Support the IAs, FirEUrisk and other wildfire-related projects in connecting with their networks.
- Manage and connect the WFRM identified stakeholders.
- Involve additional WFRM stakeholders during the project lifetime.

Along these lines, Firelogue will support the IAs and FirEUrisk in managing a variety of stakeholders including representatives from other EU-funded projects, European agencies, and other International Stakeholders (see chapter 4). Their involvement of a diverse array of stakeholders will be highly valuable in that this will allow Firelogue to consolidate the WFRM **Knowledge Base** and will be made effective through their participation in **Joint Dissemination and Upscaling Activities**.

3.1 Knowledge Base

The involved stakeholders will be able to share their knowledge and experiences with the WFRM Community at European level. These inputs will build on the insights derived by or linked with the IAs and FirEUrisk, which will be conducted by means of survey (see section 5.1) and interviews addressed to project managers and representatives of these projects. The generated knowledge will be clustered according to (1) stakeholder group (e.g., emergency management organisations, scientific community, policy making bodies…), (2) disaster risk management phase, and (3) type of knowledge (e.g., hazard data, Standard Operating Procedure (SOP), etc.). All this information will be structured, stored, and made available via the Firelogue platform, which will disseminate the insights and technologies developed by the projects.

Firelogue will endeavour to collect and analyse data and information from former wildfire events, with a special focus on those exhibiting extreme fire behaviour. Currently, there are no standardised methods for data collection while there are guidelines and initiatives for collecting lessons learnt. Hence, Firelogue will build on these guidelines and compile and review information from past wildfire events.

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The various knowledge, data and information gathered from the interaction with the IAs, FirEUrisk, other related wildfire projects and stakeholders, will build the basis for discussion and inform the development of WFRM recommendations. With the assistance of technological partners, the Working Groups will perform a maturity assessment aimed to understand (in-)compatibilities across technologies of similar types (e.g., space-borne capacities; ground-based/in- situ monitoring networks/facilities; firefighters manned/unmanned ground/air vehicles' or modelling and computing processing capacities). As a result, a standardised visualisation will be developed in the form of a "maturity card" to highlight strengths and potentials, communicate on potential identified gaps, and guide future R&D activities.

3.2 Joint Dissemination and Upscaling Activities

Firelogue will ensure ongoing coordination of communication and dissemination activities across the IAs and FirEUrisk by co-developing a joint communication and dissemination strategy. This involves the development of appropriate tools leading to optimal traction with the various stakeholders and efficient communication of project outcomes to them. On one hand, Firelogue will create a Communication Booster (CB), which will make the results of the IAs and FirEUrisk available at a central place and link this service with an open line of communication to answer any question from stakeholders interested in the projects as well as WFRM related questions in general. On the other hand, Firelogue will create a Technology Market Place "TechMall" that will be integrated into the Firelogue platform and will facilitate the exchange of information related to the type of technological research that each project conducts. In addition to this, Firelogue will encourage common publications, as well as the publication of a White Paper and 2030 Roadmap around the CL-GD-1-1 findings and conclusions.

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4 Firelogue stakeholders

The network of stakeholders that Firelogue will endeavour to build throughout the project duration will engage multiple organisations from the WFRM domain. Some of these stakeholders were already identified at the proposal stage in order to guarantee sufficient commitment, whereas others are expected to join from existing networks where other stakeholders are involved thus expanding the Firelogue network and turning it into a network of networks (see chapter 6).

The Firelogue stakeholders that were previously identified consist of the Advisory Board members and Associated Partners.

4.1 Advisory Board

The Advisory Board (AB) is a permanent body and an ongoing source of expertise along the Firelogue project. It comprises individuals who are thought leaders within the wildfire management domain who are not partners in Firelogue. AB members will be invited to plenary meetings and consult the Project Coordinator and overall Consortium on main content related aspects arising during the project lifetime. It will give guidance on key stakeholders to involve and existing knowledge that should be considered by Firelogue. The members of the Firelogue AB are:

- Prof. Cathelijne Stoof, Associated Professor at the Department of Geography and Landscape, Wageningen University (UW)
- Mr. Marc Castellnou Chief of Forest Operations Group of Catalan Fire and Rescue Services (CFRS)
- Dr. Frédérique Grioud, Directrice de CEREN, Entente Valabre

An Ethics Advisory Board (EAB) will be likewise formed to deal with ethics concerns, particularly those arising from the collection of knowledge, data, and information from external sources. The EAB will be assisted by the project Ethics Manager, which has been appointed to the project partner Trilateral Research (TRI). The project Ethics Manager will flag potential issues and Deliverables that will be reviewed by the EAB. The members of the Firelogue EAB are:

- Ms. Solange S. Martinez Dimarco, Research Associate at the International Centre for Ethics in the Sciences and Humanities (IZEW, University of Tübingen)
- Dr. Dean Pierides Lecturer in Business and Management, University of Stirling

4.2 Associated partners

The Associated Partners (APs) are organisation with acknowledge expertise in the field of wildfire management that will be engaged in the activities during the project duration providing input and feedback to the project to the best of their ability. They will also participate in the Firelogue sectoral Working Groups where they can contribute with their expertise. The APs is formed by a compendium of organisations with different background such as research centres, policy or civil protection bodies. The current list of Firelogue APs is provided in Table 1:

Table 1: Firelogue Associated Partners

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PROFILE	ASSOCIATED PARTNER	COUNTRY
Research Entities	BNHCR – Bushfire and Natural Hazards Co-operative Research Centre of Australia	Australia
	SNS – Nordic Forest Research	Sweden
	URIFFM – Ukrainian Research Institute of Forestry and Forest Melioration	Ukraine
	UPC – MBLandArch- Master Barcelona in Landscape architecture of the Polytechnical University of Catalonia	Spain
Policy bodies	UNOOSA/UN-SPIDER – United Nations Office for Outer Space Affairs	Germany
	MITECO – Deputy-Directorate of Forest Policy and Desertification of the Ministry of Ecological Transition and Demographic Challenge of Spain	Spain
Civil Protection bodies	FEU – Federation of European Fire Officers	Belgium
	CFRS – Catalan Fire and Rescue Service	Spain
	AIB – FORMONT S.c.a.r.l. Centro Alta Formazione AIB e Protezione Civile	Italy
	CCMA – Croatian Crisis Management Association	Croatia
Foundation	FCLP – Fundació Catalunya La Pedrera	Spain
WFRM Networks and Projects	FIRElinks – Fire in the Earth System: Science & Society	EU COST Action
	AFAN – UCPM Network Partnership Advanced Fire Analysis Network	EU-funded project
	Pyrolife – PyroLife Innovative Training Network	EU-funded project
	MEDEA – Mediterranean practitioners' network for capacity building and effective response to emerging security challenges	EU-funded project
	IAWF – International Association of Wildland Fire	USA
	AFE – Association for Fire Ecology	USA

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Insurance Sector	AIR – AIR Worldwide	United Kingdom
	MCII – Munich Climate Insurance Initiative	Germany
Infrastructure Sector	EHO – Egnatia Highway Operator	Greece

4.3 Third parties

The only linked party in FIRELOGUE is the Hellenic Fire Service (HFS) which will participate in the project as a third party of one of the project partners, the National Observatory of Athens (NOA). A part of NOA's budget is reserved for refunding HFS for their provision of expertise in the Firelogue context.

The HFS is the national agency of Greece for fire and rescue service, and it is part of the Ministry for Citizen Protection. They will contribute with experience and knowledge through the Civil Protection Working Group. It will also provide their requirements and feedback with respect to the assessment of wildfire impact as well as measures towards its reduction. Moreover, the HFS will support communication and user engagement activities along with the exploitation of relevant roadmap through their contacts around Europe.

4.4 Others

After the start of the project, a number of representatives of relevant international organisations have approach Firelogue expressing their interest to collaborate with the project, namely:

- CEMPPR Lab (Collaboration on Emergency Management, Policy, and Preparedness Research) at York University from the UK.
- Center for Security Studies (CSS) at ETH Zürich from Switzerland.
- Emergency Management Agency from Nigeria
- Copernicus Atmosphere Monitoring Service (CAMS) at the European Centre for Medium-Range Weather Forecasts (ECMWF) (European Organisation).

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5 Stakeholder clustering

The identification of all the stakeholders involved across the different phases of the DRMC (prevention, preparedness, response, and restoration) is paramount for the implementation of an integrated fire management approach. Increased interaction between them enables inclusive processes of knowledge co-creation, favours participatory and reflexive planning, and improves decision making based on dialogue and deliberation. Along these lines, Firelogue is committed to (1) fostering the interaction and promoting activities among the different stakeholder groups identified by the IAs and FirEUrisk, (2) monitoring and assessing the evolution of the information and networking needs and their fulfilment, and (3) coordinating their participation across the Firelogue Working Groups (see 1.2).

The stakeholder clustering presented herein builds on integrated fire management and links with the different stakeholder groups targeted by the IAs and FirEUrisk, taking into consideration the Firelogue stakeholders (AB members and AP; see chapter 4) and other networks. Hence, the stakeholder clustering draws from the preliminary clustering made by the IAs and FirEUrisk. This information has been obtained via the survey conducted within WP1 [1], which has been designed to better understand the scope of the IA projects and FirEUrisk, and to identify relevant areas for knowledge sharing and joint activities during the project duration and beyond.

5.1 Clustering by IAs and FirEUrisk

This section illustrates the clustering of stakeholders made by the 3 IAs (see sections 5.1.1, 5.1.2, and 5.1.4) and FirEUrisk (see section 5.1.3) individually, which has inspired the clustering proposed by Firelogue (see section 5.2). The clustering from each project do not necessarily reflect the organisations that are part of their consortiums, but organisation profiles they aim to get engaged throughout their project actions because they are crucial actors that can contribute to or get benefited from the design, development, testing and validation of their project solutions. It is worth stating that as of the date of this deliverable (March 2022), the three IAs are incipient projects that started between 1 and 3 months back, while FirEUrisk is a project that has been going on for a year. The clustering made by the projects is indicative but not exhaustive as it is a preliminary grouping made at the early stage of their projects, whereas the proposed clustering is holistic and integrative, taking into consideration the clustering made by the projects mentioned.

5.1.1 DRYADS

DRYADS [8] is one of the IAs funded under the Horizon Green Deal "LC-GD-1-1" call whose aim is to build upon state-of-the-art high Technology Readiness Level (TRL) products and unite them in a holistic fire management ecosystem. The project general objectives are outlined below to help understand the profile of stakeholders identified for their clustering.

For the prevention and preparedness DRYADS propose the use of a real-time risk evaluation tool and a new Risk factor indicator using the DRYADS decision-making supporting tools. To create a model of Fire adapted communities in parallel to insurance incentives, DRYADS will demonstrate alkali activated

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construction materials integrating post-wildfires wood ashes for fire-resilient buildings and Infrastructure. DRYADS also uses a variety of technological solutions such as Unmanned Aerial Vehicles (UAV) of different sizes, customised for accurate forest supervision at different heights.

In the area of Detection DRYADS proposes a variety of toolsets that will accommodate most needs. Stemming from Virtual Reality for the training, and wearables for the protection of the emergency responders, tools for hotspot detection, fire spread propagation and smoke cloud dispersion, to UAVs and aircraft for temporal and spatial analysis improvement, but also for aerial firefighting.

Last, DRYADS will develop a new land and field-based restoration initiative that will use all modern techniques such as agroforestry, UAVs for seed spread, a state-of-the-art restoration Decision Support System (DSS) and Internet of Things (IoT) sensors that will be able to adapt the seeding process based on the ground needs and on the same time to determine post-fire risks factors with the help of AI technology.

Their stakeholder clustering is illustrated in Figure 3.

Figure 3: DRYADS stakeholder clustering.

5.1.2 FIRE-RES

FIRE-RES [10] is one of the IAs funded under the Horizon Green Deal "LC-GD-1-1" call whose aim is to provide Europe with the necessary capacity to avoid it collapsing in front of Extreme Wildfire Events (EWE), and to support the transition towards more resilient landscapes and communities. The project general objectives are provided below to help understand the profile of stakeholders identified for their clustering.

FIRE-RES will endeavour to create a framework for EWE definition, understanding, which includes climate change influence and accounts for possible future scenarios that are influenced by current management decisions and agreements. To do so, a transdisciplinary process of co-creation will be created considering the different facets (social, economic, etc.).

In the social sphere, the project will undertake activities to increase community engagement in municipal-level fire preparedness and response, to strengthen community awareness and capacities to react in a fire event. This involves risk awareness campaigns both for fire-prone regions and for

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future fire-prone regions. During the response phase, the project will conceptualise a way to structure the communication with citizens focusing mainly to real-time information & warning messages. Furthermore, the project will create an educational database to better understand different European fire cultures, the traditional use of fire, etc.

Moreover, FIRE-RES will implement science-driven Alternative Risk Transfer solutions for wildfires, such as insurance parametric products, helping fill funding gaps by leveraging resources from capital markets. A regional policy clinic approach will be created to identify which bundles of policies work or not for coherent fire risk governance, support wildfire risk integration into urban and spatial planning.

A common framework will be generated for the implementation of a fire management model and the development of related capacity-building activities. The project will develop an evaluation tool monitoring operations when different countries are involved in an emergency. In the modelling domain, FIRE-RES will investigate the exposure of firefighters to smoke will be monitored to enhance their healthy levels of exposure. It also includes a new protocols of response measures towards the population in terms of smoke.

The clustering made by FIRE-RES is illustrated in Figure 4.

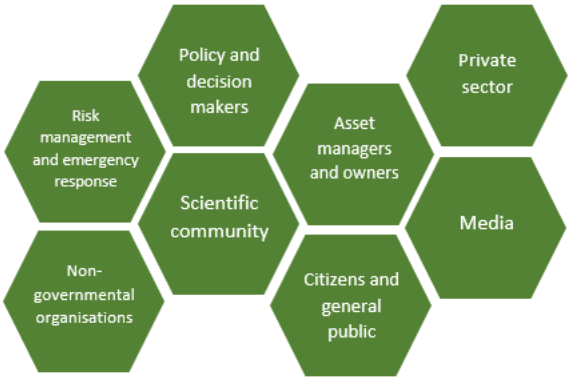

Figure 4: FIRE-RES stakeholder clustering.

5.1.3 FirEUrisk

FirEUrisk [11] is a Research and Innovation Action (RIA) project funded under the Horizon "LC-CLA-2020-2" call whose aim is to develop, test and disseminate an integrated and science-based strategy for wildfire risk management in Europe. FirEUrisk general objectives are provided below to help understand the profile of stakeholders identified for their clustering.

FirEUrisk is developing an integrated strategy that is grounded on three principal pillars:

1) Expand the capabilities of existing wildfire risk assessment systems, including critical factors and processes not currently addressed.
2) Use risk assessment to drive wildfire management and reduce current fire risk conditions.
3) Adapt fire management strategies to expected future climate and socio-economic changes.

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This new strategy will be co-designed and developed in close collaboration and interaction between researchers, practitioners, policymakers, and citizens. It includes technologies, tools, training materials, guidelines, and policy recommendations to improve wildfire management and reduce the most damaging effects of wildfires. The FirEUrisk project is particularly focused on extreme events (mega-fires), fires affecting the Wildland Urban Interface (WUI) and those impacting regions that were previously very rarely affected by wildfires (particularly in Central, Eastern and Northern Europe).

The clustering made by FirEUrisk is illustrated in Figure 5.

Figure 5: FirEUrisk stakeholder clustering.

5.1.4 SILVANUS

SILVANUS [19] is one of the IAs funded under the Horizon Green Deal "LC-GD-1-1" call whose aim is the release of a climate resilient forest management platform to prevent and suppress forest fire. SILVANUS relies on environmental, technical, and social sciences experts to support regional and national authorities responsible for wildfire management in their respective countries. The project general objectives are outlined below to help understand the profile of stakeholders identified for their clustering.

SILVANUS scientists and research engineers will aid the civil protection authorities to efficiently monitor forest resources, to evaluate biodiversity, to generate more accurate fire risk indicators. The project outputs will encompass wildfire prevention, early detection, efficient and quick response, and further recommendations for policy development contribute to climate change mitigation and environmental protection. Moreover, safety regulations will be promoted among the local population affected by wildfire through awareness campaigns, involving the development of a mobile application for citizen engagement.

The SILVANUS platform will encompass a large and diverse number of stakeholders and make significant socio-economic impacts by incorporating the needs and requirements of these stakeholder target groups in the fields of health, employment, infrastructure, natural and cultural heritage. Efficient, timely, and transparent information on wildfire prevention to important infrastructure-

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related stakeholders through the SILVANUS platform, and a quick and reliable exchange of on-site information to prevent wildfire to affect infrastructure, water supply, or energy transmission.

The clustering made by SILVANUS is illustrated in Figure 6.

Figure 6: SILVANUS Stakeholder clustering.

5.2 Proposed clustering

The stakeholders included in this the clustering resulting from the analysis of the individual clustering made by IAs and FirEURisk (Figure 7) have been grouped into 8 categories, each containing a number of stakeholder profiles involved —directly or indirectly— in fire management and wildfire risk reduction strategies. In the scope of the Working Groups discussions, the stakeholder clustering will serve to identify and invite additional actors other than the representatives of the project Consortiums; that is, external organisations and individuals matching with any of the key stakeholder groups identified. A detailed description of what stakeholder groups should join each of the Working Groups according to the survey respondents will be provided in D1.1, and the list of survey questions relevant to the Working Groups are provided in Annex 8.1.

(1) Emergency management organisations refer to operational practitioners involved in response operations at the forefront of wildfire incidents. On one hand, this involves firefighters, civil protection, medical services and police, whose personnel can hold the role of commanders/decision makers, working at strategical and tactical levels, or first responders performing operations in the field, working at the manoeuvre level. On the other hand, fire analysts are likewise grouped as emergency managers, whose role in emergency operations mainly occurs at the strategical and tactical levels.

(2) Scientific community encompasses research and academia institutions involved in diverse scientific areas related to wildfire risk management such as fire ecology, landscape management, risk governance, forest economy, rural policy, or civil protection. Fire safety engineers are also included in this group as the scientists providing engineering solutions to reduce vulnerability of people and infrastructures to wildfires.

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The group of **(3) Policy making bodies** involves those stakeholders who have a key role in influencing strategic choices for wildfire management and therefore become enshrined in territorial policies. This includes several administrations acting at different territorial levels, EU commissioners, and politicians in general. Effective communication with this group is essential for the successful exploitation of wildfire solutions provided across the projects.

(4) Land management groups refers to those stakeholders who have the capacity to conduct management actions on the territory, either because they own it or because they hold the rights to act on it. This involves landowner associations, land managers, farmers, and foresters, whose activity has direct implications over fuel load management through burning, cutting, grazing and other activities.

The group of **(5) Environmental associations** are devoted to the study of the natural environment, the protection of the landscape and ecosystems, and enforce society awareness of environmental issues via education. When it comes to wildfires, they may want to understand the functionality of fire in the ecosystems and minimise the negative impacts. Examples of these stakeholders are conservation organisations, environmental consultancies, and environmental educators.

(6) Media refers to journalists, communicators in the environmental field, and even social media influencers, whose importance in wildfire management strategies relies on their capacity to reach a large number of people and therefore to influence people's opinions, believes and attitudes towards wildfire management policies.

Representatives from the **(7) Society** encompasses several social groups including volunteer association that provide support in the wildfire management activities; civil society organisations that act as representatives and for certain citizen groups; vulnerable groups that may require special assistance in case of wildfire, such as disabled peopled, elderly, children, tourists or communities living in high-risk areas; and finally the general public as whole whose education on a fire risk culture is fundamental to improve the resilience of society to wildfires.

The last stakeholder group brings together representatives from the **(8) Industry, technology and innovation**. The array of stakeholders involved here is very varied and involves, firstly, several industrial sectors with a key role in providing safety and adaptive capacity resulting from wildfire events such as energy, construction, infrastructures, the timber industry, and companies supplying fire prevention and firefighting equipment. Moreover, the involvement of the Banking, Financial Services, and Insurance industry (BFSI) is also relevant so as to provide risk transfer solutions and products for the society and critical infrastructures in particular. Moreover, technology development coupled with emerging innovation, provided by IT technicians, software/hardware or the IoT supply chain industry, becomes for the design of innovative approaches and uses of technology to support the management of wildfires.

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Figure 7: Proposed Stakeholder clustering.

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6 Developing the connecting dimension among WRFM stakeholders

Currently in Europe there are many existing networks of stakeholders involved in the wildfire risk management domain. The motivation to create them may be territorial or may be thematic. For instance, some networks are formed by geographic location, where links are stablished due to similar landscape characteristics, level of risk, language, or culture, among others. But it is becoming more common that networks are created at a wider scope (i.e., international level) as stakeholders from different countries acknowledge the need to be united by common needs; for example, forest fires in Mediterranean ecosystems, global increased risk of wildfire due to climate change… Some networks are thematic, that is, they are particularly focused on specific aspects or areas of expertise within wildfire risk management such as firefighting operations, effective communications during wildfire emergencies, or research specialists studying fire impacts on biodiversity.

The aim of these networks is to formalise a group of actors of trust that can cooperate under a harmonised framework. Many of these networks are created by EU-funded projects that have an important function of initial push to establish links and carry out activities to gather together a broad and varied number of stakeholders. in Table 2 provides some of these networks which have been identified from the analysis of current or recent projects and initiatives. It should be noted that most of these networks are related to operational wildfire response, whereas Firelogue will endeavour to reach networks from other WFRM domains towards a more holistic approach.

Table 2: Existing networks of stakeholders.

NETWORK	TERRITORIAL SCOPE	DESCRIPTION/THEMATIC
@fire International Disaster Response Germany [2]	National (Germany)	German network of professional and volunteer firefighters which assists during natural disasters.
AFAN (Advanced Fire Analysis Network) [3]	European	EU project aimed to create a European wildfire expert knowledge-sharing network focused on fire risk analysis.
APTB (Asociación Profesional de Técnicos de Bomberos) [4]	National (Spain)	Specialists in the field of Citizen Protection, Extinction, Emergencies and Rescue Services.
CFOA (Chief Fire Officers Association) [5]	National (UK)	Network of Chief Fire Officers in Ireland aimed to expresses their professional opinion on matters related to fire service operations, fire safety and major emergency management.
Croatian Firefighting Association [6]	National (Croatia)	Head organization that integrates all firefighting organizations and units within Croatia.
CTIF (International Association of Fire and Rescue Services) [7]	International	Organisation that brings together the people and resources you need in a non-hierarchical setting where chief and firefighter, professional and volunteer are on equal footing,

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		appreciated by personal merits and achievements over title and rank.
England and Wales Wildfire Forum [14]	National (UK)	Voluntary strategic body, independent of government, created to expand knowledge and understanding of wildfire.
FAST (Forest Fires Assessment and Advisory Team) [9]	National (Spain)	Team of experts in forest fire assessment and advice that brings together all the experience and knowledge of our country to provide support to those countries that request it.
FRISK-GO [12]	European	EU project aimed to define and elaborate in detail the core work pillars of a European Forest Risk Facility and develop a corresponding operational business plan and structural framework for the implementation of such a facility.
FuegoRed [13]	National (Spanish) and International	Network of researchers aimed to review scientific knowledge developed to date and discuss and propose future developments in scientific research about the effects of wildfires on soils.
PCF (Pau Costa Foundation) [17]	International	Organisation that aims to facilitate the exchange between researchers, stakeholders and civil society with a vocation to disseminate knowledge and make projects real.
VOST (European Virtual Operations Support Teams) [20]	Regional, National, and International	Federation that is aimed to create a space to interexchange experiences, best practices, mitigate common problems with common solutions, as well as to search for opportunities as representatives of a large number of digital volunteers.

At the European level, these networks have substantially increased in members over the years, however the interconnections between them are limited and lacking the exchange of transversal knowledge and expertise. For instance, the acquired knowledge and expertise shared within the networks from southern European regions is hardly transferred to central or northern European regions. Even in regions with relatively similar fire episodes (Mediterranean regions) the transfer of knowledge and experiences is difficult to flow.

Stakeholders belonging to those networks have therefore recognised the need to create communication channels between them to expand and make knowledge flow as part of a more global network. Furthermore, this need has also been identified by several European institutions, which have provided the means and tools to build links between networks that apparently have little or no bonds. As an example of this intent, the Priorities of the Sendai Framework for risk reduction 2015-2030 managed by UNDRR [18] promote cooperation between emergency actors to face the current and upcoming challenges on emergency prevention and preparedness.

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Firelogue will develop its connecting dimension by closely following and interact with some of the most relevant projects working on WFRM and the networks of stakeholders around them, thereby contributing to fulfil the need to interconnect them (see section 1.1). While doing this, Firelogue will monitor the information produced by them, assess the networking needs, considering in the first place the needs identified by the IAs and FirEUrisk.

6.1 Promoting synergies for networking: the European Wildfire Risk Node

The approach presented herein builds on the **European Wildfire Risk Node (EWRN)** created in the scope of the FRISK-GO project [12] and developed Net Risk Work project [15]. While this first version of "D7.2 Clustering Stakeholder Report" merely presents this approach and draws a preliminary plan to undertake it, the second version of this Deliverable (due for project M24) will further elaborate on this, resulting from the project evolution and further requirements identified overtime. The EWRN is a continental scale initiative that proposes the creation of a space of interaction for the different European networks on the wildfire risk, linking the existing formal and informal networks and communities of stakeholders as the owners of the expert knowledge on wildfire risk across Europe. Along these lines, Firelogue will ambition to act as a node that facilitates the dialogue between the IAs, FirEUrisk as well as other projects and networking initiatives at the EU level, building the channels and spaces for knowledge exchange and access.

The term node is here understood as the intersection area between the existing networks where the knowledge domain and the information exchange are expected to occur. The node is conceived to capitalise and organise the knowledge on relevant topics, so as to make it easier for the networks themselves to establish links, accessing existing knowledge and develop new knowledge and capacities. Thus, the node can facilitate knowledge-sharing among participants, creating synergies between the different participant actors. Figure 8 shows an example of connectivity among stakeholder networks with and without a node that acts as an interconnector [15]. Where there is no interconnector node (scheme on the left), there are links missing between some of the networks. However, where the interconnector node is present (blue circle of the scheme on the right), it creates links with all existing networks, and provides services and function that help connecting all of them.

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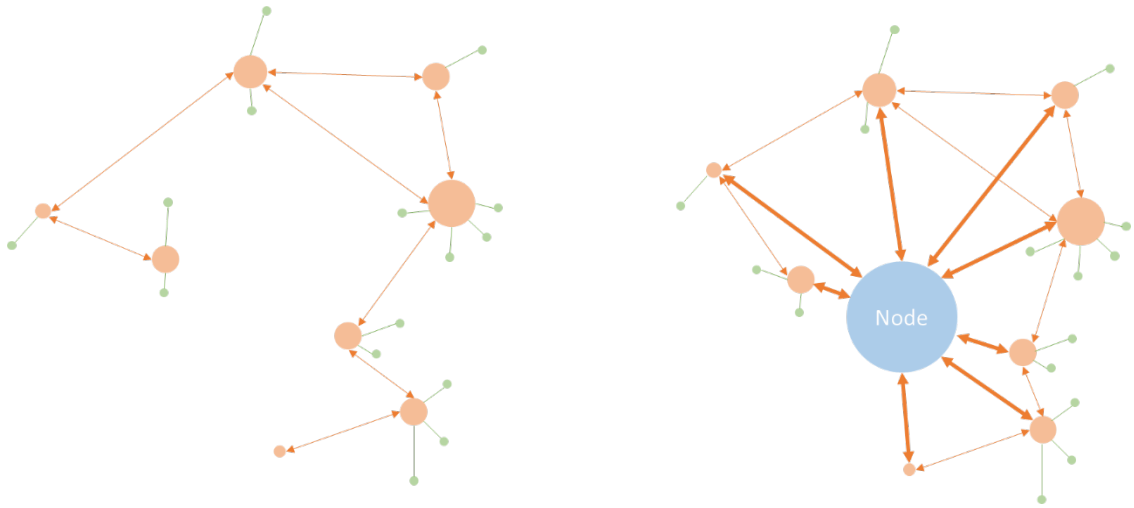

Figure 8: Example of connections among stakeholder networks with and without a node (left and right schemes respectively) as developed in the EWRN [15].

The Firelogue network intends to address the needs, challenges, and aspirations that Europe faces due to the increased risk of wildfires [15]:

1. The node shall facilitate the active exchange of information between the projects and their network of stakeholders. The knowledge belonging to a project or network on wildfire management is often in the form of publications in regional languages, management tools, regional or national events, etc.
2. The creation of the Firelogue network shall provide transfer of knowledge from regions more experience on managing the fire risk (e.g., southern Europe) to regions with little experience (e.g., central and northern Europe). Also, it shall provide guidance, and services to the regions that are less experienced. In general, the establishment of a node can also contribute to identify and face climate challenges more cooperatively.
3. The Firelogue network shall complement and support regional and national actions in Europe and provide the framework to share those experiences throughout the other networks.

6.2 Main challenges

The development of the Firelogue network will have to overcome some challenges so as to avoid that they become barriers for its implementation, namely:

- **Language.** While Firelogue uses English as a language for communication, part of the knowledge managed by the node will be in the language used in the network, which is not necessarily English. To address this challenge, the representative of each project involved in the network will need to lead the adaptation of the contents between the language of the network and English.
- **Effective engagement.** Existing projects or individuals joining the Firelogue network should understand it as a space of interaction with all the other fire risk networks in Europe and not as another network to join. To address this challenge, effective communication will be paramount to explain the benefits of joining the Firelogue network.

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- **Individual stakeholders not belonging to an existing EU project.** The opportunity to participate and contribute with knowledge and expertise in the Firelogue network should not be denied to those individuals who do not belong to an existing EU project. To address this challenge, individuals will be able to get engaged in the Firelogue network through the existing networks created by other projects undertaking similar tasks as them. The reason for this to avoid overlapping of contributions and to achieve complementarity among the projects connected with the Firelogue network.
- **Structural funding.** Given that the Firelogue network is conceived as a collaborative initiative from multiple networks of stakeholders, there is no specific funding allocated to implement the Firelogue network. To address this challenge, the networking activities organised in the scope of EU-funded like Firelogue will provide an opportunity for that. Moreover, beyond the scope of the Firelogue project, external funding will be pursued to keep operative the Firelogue network as well as the exchange activities among the projects involved.

6.3 Planning

The creation and the implementation of the Firelogue network is not an action exclusively linked with WP7, but it is transversal in that it is integrated into the lines of action of the project pursuing knowledge sharing opportunities for the exchange between wildfire related projects and the WFRM community of stakeholders in general.

Below are the actions that are part of the plan to implement the network, which starts with the kick-off of the FIRELOGUE project, but intends to continue beyond it:

1. **Network implementation design.** The design and definition of the main guidelines, resources and challenges required for successful implementation of the Firelogue network. This action will start at the beginning of the Firelogue project and will last until the end of the second year, coinciding with the submission of the final version of the deliverable D7.2 in which the implementation design will be finalised.
2. **Identification and mapping of opportunities for interaction.** Opportunities for interaction will be sought in the frame of existing conferences, congresses, or workshops relevant to WFRM, and activities organised by the EU project, such as pilot demonstrations or other project events. On top of this, the Firelogue project will likewise organised dedicated events and activities to foster this interaction; examples of this are the clustering event occurring on the 5th and 6th of April 2022 to start identifying high-level aspects of collaboration among EU projects related to WFRM, or the Working Groups initiative (see 1.2) to facilitate ongoing structured discussions around specific topics and facilitate cross-working group exchange. This action will start at the beginning of the Firelogue project, and comprehensive list of opportunities will be presented in the final version of D7.2 at the end of the second year; however, the identification of opportunities will continue throughout the rest of the project duration and beyond it.
3. **Identification and mapping existing networks of stakeholders.** Identification of all the stakeholder networks candidates to join the Firelogue network. The stakeholder clustering

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made in this deliverable will guide their identification and linkages with the EU projects, particularly the three IAs and FirEUrisk. This action will start at the beginning of the Firelogue project, and a comprehensive clustering of stakeholders will be presented in the final version of D7.2 at the end of the second year; however, the identification of stakeholders will continue throughout the rest of the project duration and beyond it.

4. **Creation of a platform.** Firelogue will create a web-based platform for the central communication and dissemination of measures and solutions, publications, and policy papers. At the same time, it can serve as a "single face to the customer" of the projects and showcase relevant technical solutions and put interested external parties in contact with experts for WFRM topics they might be interested in. The specific functions and of the platform will be reported in Deliverable D6.4. This action will start by the end of the first year of the Firelogue project, and a consolidated version of the platform will be finalised by the end of the second year; however, the update of the platform contents as well as the improvement of its functions will continue throughout the rest of the project duration and beyond it.
5. **Results and recommendations at the EU level.** Firelogue will bring together the project results and develop recommendations at the EU level. To do that, a holistic approach will be developed in collaboration with the EU projects and their networks. The project result will be presented in the form of an Open Access WFRM book, the joint publishing of a White Paper and a WFRM Roadmap for 2030 and beyond. This action will start at the end of the third year of the Firelogue project and will continue until the last of the project and beyond it.
6. **Ongoing participation in joint activities.** As a result of the previous actions ongoing activities will occur with the involvement of the projects that are part of the Firelogue network. This action will start during the first year of the Firelogue project and will continue until the last of the project and beyond it.

Figure 9 provides an overview of the approximate timeline expected to implement each of the above actions towards the creation the Firelogue network. The dark red lines depict the duration of the actions, whereas the light red lines depict the duration of those actions that will be further developed after the submission of deliverable D7.2, in which the final version of the Stakeholder Clustering will be presented. Finally, the dark and light red dashed lines indicate that the durations of those actions are expected to continue beyond the scope of the Firelogue project.

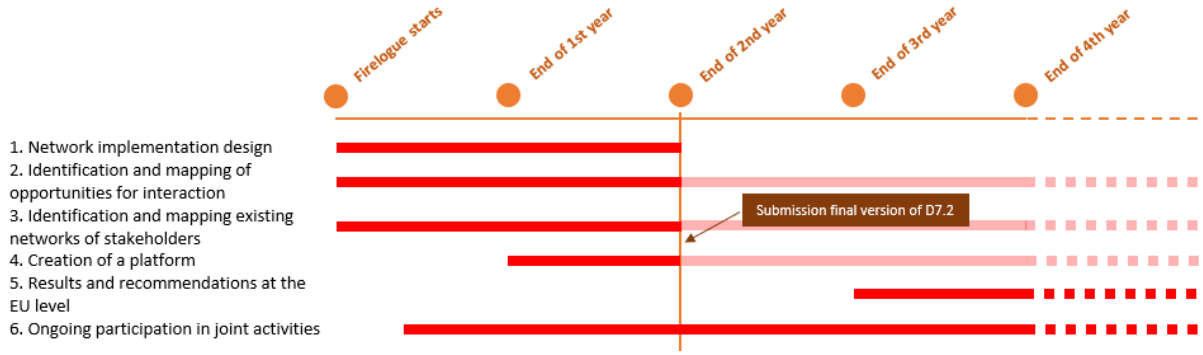

Figure 9: Timeline for the implementation of actions to create the Firelogue network.

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7 References

[1] Martín, D.; Juan, X.; Vendrell, J.; Borràs, M. (2022). Review report of IA case studies including wildfire events, actors, WFRM measures, technologies and SOPs. Deliverable D1.1 FIRELOGUE.

[2] @fire website: https://www.at-fire.de/.

[3] AFAN project website: https://fireanalysisnetwork.eu/.

[4] APTB website: https://www.aptb.org/.

[5] CFOA website: https://www.cfoa.ie/.

[6] Croatian Firefighting Association: http://vatrogastvo.hr/english/.

[7] CTIF website: https://www.ctif.org/.

[8] DRYADS project website: https://dryads-project.eu/.

[9] FAST technical sheet: https://www.miteco.gob.es/en/biodiversidad/temas/incendios-forestales/01_doc1_fact_sheet_fast_spain_20200218_tcm30-544296_tcm38-524541.pdf.

[10] FIRE-RES project website: https://fire-res.eu/about-fire-res/.

[11] FirEURisk project website: https://fireurisk.eu/.

[12] FRISK-GO project website: http://www.friskgo.org/.

[13] FuegoRed website: http://fuegored.weebly.com/.

[14] Grundy S., McMorrow J. (2015). Using the Incident Recording System to define wildfire in Great Britain. In Wildfires 2015, Cambuslang, Glasgow, 10–11 November 2015.

[15] Held, A.; Hengst-Ehrhart, Y.; Hörl, J.; Prat-Guitart, N.; Vendrell, J.; Borràs, M.; Ballart, H.; Conde, C.; Vilalta, O. (2018). Report with recommendations and experiences on facilitating cooperation and risk management and recommendations for enhancing network in risk management (referred to regional nodes). Deliverable 10 & 11. Networking for the European Forest Risk Facility initiative. ECHO/SUB/2016/740171/PREV10 Project. 25 pp.

[16] Net Risk Work wbsite: http://netriskwork.ctfc.cat/.

[17] PCF website: https://www.paucostafoundation.org/en/.

[18] Sendai Framework for Risk Reduction: Sendai Framework for Disaster Risk Reduction 2015-2030 | UNDRR.

[19] SILVANUS project website: https://cordis.europa.eu/project/id/101037247.

[20] VOST Europe website: https://vosteurope.org/.

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8 Annexes

8.1 Annex I: Survey question related to Working Groups

Please suggest one or more members of your Consortium to each WG indicating their name, email, organisation, and role in the project. *(Free text)*

Ecology / Environment:

Type here

Societal aspects:

Type here

Infrastructures:

Type here

Insurance:

Type here

Civil Protection:

Type here

Please name in the table below the main topics/questions related to the WGs and describe briefly the main intended contribution by your project. *(Free text)*

WORKING GROUP	Relevant topics	Project main contribution
Ecology / Environment	*Type here e.g., ecosystem services provision, climate action policies…*	*Type here*
Societal aspects	*Type here e.g., risk preparedness campaign, citizens' engagement in decision making…*	*Type here*
Infrastructures	*Type here e.g., measures for the protection of infrastructure assets,*	*Type here*

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	development of wildfire management policies…	
Insurance	*Type here e.g., financial compensation mechanisms, novel insurance instruments…*	*Type here*
Civil Protection	*Type here e.g., new approaches to assess wildfire danger and risk, new and existing SOPs…*	*Type here*

What stakeholder groups (from inside your Consortium or external) do you think should ideally join these Working Groups? *(Put an X mark on the blank boxes where appropriate)*

PARTICIPANT	**WORKING GROUPS**				
	Ecology / Environment	**Societal aspects**	**Infrastructures**	**Insurance**	**Civil Protection**
Security practitioners - Commanders/ Decision-makers	☐	☐	☐	☐	☐
Security practitioners - In-field first responders	☐	☐	☐	☐	☐
Forest Officials	☐	☐	☐	☐	☐
Land/property owners/ managers	☐	☐	☐	☐	☐
Representatives from volunteer associations	☐	☐	☐	☐	☐
Local administrations	☐	☐	☐	☐	☐
Researchers	☐	☐	☐	☐	☐

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Policy Makers	☐	☐	☐	☐	☐
Representatives from the BFSI Industry	☐	☐	☐	☐	☐
Fire prevention and firefighting equipment suppliers	☐	☐	☐	☐	☐
Representatives from environmental organisations	☐	☐	☐	☐	☐
Representatives of the media	☐	☐	☐	☐	☐
Representatives from community residents	☐	☐	☐	☐	☐
Others (please specify):	☐	☐	☐	☐	☐
Others (please specify):	☐	☐	☐	☐	☐
Others (please specify):	☐	☐	☐	☐	☐

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