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Authors:

Finnish pilot

Filip Sever, Project Manager at Kajaani University of Applied Sciences, Finland

Jaakko Schroderus, Fire Chief at Kainuu Rescue Department, Finland

The four pilots

The purpose of the pilots is to trial the DECIDO approach through four use case scenarios in the participating partner countries. Pilots are facilitated through regional stakeholder organizations, and in close cooperation with public authorities and civil organizations.

The Finnish pilot focuses on forest fires and improving communications to citizens. Forest fires in Finland are relatively small compared to southern Europe. However, Climate change estimates show an increase in both the number of fires and their size. The Kainuu Rescue Department works with other stakeholders in the civil security sector to examine current practices and engage with citizens to propose and adopt the chosen guidelines. The Italian pilot addresses three emergency areas: 1) Floods, 2) Food distribution, and 3) Ukrainian refugees. Vol-to, KPRF, and the Municipality of Turin work with the local community to assess and improve the policies or management, preparedness, and response to these emergencies. The Greek pilot focuses on the management of power outages that occur in rural areas and islands. The Sustainable City Network and municipality of Halki work to collect and examine GIS and energy data of Halki island in order to formulate energy-efficient policies, as well as a roadmap for specifying parameters for power outages, develop prognostic measures, and co-create emergency response mechanisms. The Spanish pilot focuses on wildfire policies in the region of Aragon. Ibercivis collects and presents wildfire evolution data and engages citizens, firefighters, and policy makers. The stakeholders participate to workshops to contribute towards the designing of information and policies for evacuation.

Finnish pilot

Description of the problem

Forests in Finland cover more than 70 percent of the land surface area (The World Bank, 2020). Forest fires in the region are common, but small in comparison with southern Europe. Large scale forest fires in neighboring Sweden in 2014 and 2018 showed that northern countries need to prepare for the future. With increasing temperatures and longer drought periods due to climate change, forest fire occurrences will increase and become more severe. As most of the fires are caused through human actions, efforts to mitigate and minimize damages are done through forest management, cooperation with forestry operators, forest owners and rescue services (Finnish Meteorological Institute et al., 2021). Data from the Finnish resource and statistics system highlighted that most forest fires in Finland are caused by human actions (*PRONTONET.FI*, 2023). The Kainuu Rescue Services, the local end users and pilot hosts of the Finnish pilot chose to examine how human-caused incidents could be reduced.

Reaction with DECIDO project

At the start of the project, time was devoted to examining the statistics surrounding forest fires as well as current research in the domain. From the findings, the pilot working group chose the working title of "Risk mitigation and preparedness for fires" for the policy work. Next a stakeholder group was selected to steer and contribute to the policy development process. The regional stakeholder organizations were the Kainuu Rescue Department (host), City of Kajaani, and the Kainuu Social Welfare Authority (social and healthcare services), while national organizations included the Finnish Forestry Centre, Emergency Services College, and the Finnish National Rescue Association. To facilitate collaboration among the stakeholders, the four-stage policy process was used to account for the wide range of expertise and actors involved (Quevauviller et al., 2005). The DECIDO portal was used throughout the policy development process, resulting in the development of an internal working model, as well as three objectives addressed in the created policy.

Challenges and achievements

In the early stages of development, the stakeholders agreed on two principles to guide the policy development work: 1) organizational needs, and 2) civilian needs (Figure 1). The principle refers to means that the organization and citizens require to contribute towards the policy goal of mitigating risk and improve preparedness for forest fire. Following the model, the group worked through a four-phase policy development process: 1) agenda setting 2) policy formulation, 3) implementation, 4) evaluation. A wide range of publicly available data on weather, awareness campaigns, past and current research, incidents, as well as classified data were used to identify and prioritize ideas. The ideas were then reviewed and sorted into three objectives addressing the identified shortcomings of the current policies: 1) Resourcing, the identification and sharing of available resource information among direct emergency actors and support organizations, 2) Citizen Safety During Emergencies, the means to evacuate, shelter, and keep track of citizens for a limited amount of time during emergencies, and 3) Prevention and preparedness planning, mitigation strategies to reduce forest fire risk and educate citizens (formal and informal ways) on emergency actions.

The needs of the organization		
Prevention and preparedness		During emergencies
Means to raise awareness and educate citizens on risks and preventions.	Information on resources for forest fire actions.	Plans to act in emergencies, how to use resources, and protect civilians.

The needs of the citizens		
Prevention and preparedness		During emergencies
Have timely and precise information to prevent unnecessary risks.	How to act in case of incidents: mitigating damage and safety procedures.	How to act during emergencies and where to seek shelter.

Figure 1 Organization needs and civilian needs.

As a result, a four-phase policy making process was used, emphasizing evidence-based policy making and collaboration of a diverse group of stakeholders. This methodology was facilitated through the DECIDO portal, allowing all stakeholders to contribute and co-create the policy in real time. Prior policies were uploaded into the portal with data used to identify and guide policy decisions, while the most recent research was used to estimate future needs and shape the final policy. The stakeholders had a positive reception towards the methodology and the DECIDO portal. The policy development process in Finland includes space for citizens to review the policy draft and comment on it. However, in the first phase of the policy creation process, only a limited number of citizens participated. The second iteration of the policy development will look into ways to involve citizens.

References

- Finnish Meteorological Institute, Aalto, J., & Venäläinen, A. (2021). *Climate change and forest management affect forest fire risk in Fennoscandia*. Finnish Meteorological Institute. <https://doi.org/10.35614/isbn.9789523361355>
- The World Bank. (2020). *Forest area (% of land area) Finland*. World Bank Open Data. <https://data.worldbank.org>
- PRONTONET.FI. (2023). Retrieved August 23, 2023, from <https://prontonet.fi/>
- Quevauviller, P., Balabanis, P., Fragakis, C., Weydert, M., Oliver, M., Kaschl, A., Arnold, G., Kroll, A., Galbiati, L., Zaldivar, J. M., & Bidoglio, G. (2005). Science-policy integration needs in support of the implementation of the EU Water Framework Directive. *Environmental Science & Policy*, 8(3), 203–211. <https://doi.org/10.1016/j.envsci.2005.02.003>