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PP82 - A GLOBAL PERSPECTIVE ON THE WILDLAND-URBAN INTERFACE (WUI) WILDFIRE TOPIC

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A primary focus of integrated fire management is to reduce the impacts of wildfires on people. Communities in fire-prone areas must be aware of the impacts wildfires may have on lives, livelihoods, properties and infrastructure to reduce risks, prepare for, respond to, and recover from wildfires.

This study aims to assess the profile of the WUI wildfire topic in European Union (EU) and non-EU countries characterised by dry vegetation environments. It analysed different fire-prone areas worldwide to assess similarities and differences in the number of wildfires affecting human settlements, the intensity of the wildfires at the WUI and the types of built-up areas affected by them.

The work used the datasets on built-up areas provided by the European JRC GHSL - Global Human Settlement Layer and the datasets on wildfires provided by the JRC GWIS - Global Wildfire Information System. The analyses were run using the GHSL Data Package datasets for the period 2017 – 2020, which adopt a 10m spatial resolution and the INSPIRE definitions of building, allowing the research to be inclusive to rural domain settlements and temporary settlements as associated with informal settlements, rapid migratory patterns, or people displaced by natural disasters.

Framing the impacts of WUI wildfires in different fire-prone areas allows for evaluating the global perspective of the WUI wildfires topic and facilitates the identification of common solutions to increase awareness, preparedness and mitigation capacity in local authorities and communities.

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PO72 - THE CHALLENGE OF WILDFIRE MANAGEMENT THROUGH SPATIAL PLANNING: LESSONS ACROSS THE WORLD

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Objectives

Wildfire management based on the spatial planning approach is crucial, especially in countries with high exposure to wildfires, such as Portugal.

Given the herculean effort that the current Portuguese Integrated Management System for Rural Fires (IMSRF in English; SGIFR in Portuguese) has made in order to articulate these two policies, the present communication aims to benchmark the best practices across the world in order to help the IMSRF to effectively address the utmost needs regarding the wildfire management through spatial planning.

Methods

The research to find the best practices worldwide, using several case studies insights (Australia, Chile, USA, Canada) that may be applicable to the Portuguese case, was done through the legal document analysis regarding the alignment of wildfire management and spatial planning, namely focused on defensible space dimension and on building permit constraints in respect to the wildfire hazard.

Results

In this context, the great challenge of the Portuguese system is to address the need for adaptive management, where these case studies can contribute to assist its implementation by IMSRF.

Conclusions

Since it was legislated that the Portuguese wildfire management system and spatial plans must be reviewed in the light of their full alignment, this communication presents lessons and recommendations that constitute cosmopolitan opportunities for the congruent implementation of this alignment.