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A Geospatial Information Knowledge Platform for NBS tackling hydro-meteorological hazards: key features and innovative aspects

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As part of H2020 OPERANDUM project, a multi-dimensional, open and user-friendly platform is being developed, named OPERANDUM Geospatial Information Knowledge Platform (GeoIKP), which enables stakeholders and end-users to improve their knowledge of nature-based solutions (NBS) as a long-term and sustainable measure for mitigation and reduction of flooding, coastal erosion, landslide and other hydro-meteorological hazards.

This contribution offers an overview of GeoIKP and discusses in detail some of the innovative aspects of the platform, such as the integration of a NBS data management portal with a web application offering advanced webGIS tools, a comprehensive catalogue of NBS, as well as analytical algorithms to demonstrate the effectiveness of NBS in reducing hydro-meteorological risks.

The platform design is being based on intuitive techniques, ease of access, dynamic navigability, interactive knowledge management, and multiple format compatibility. It empowers the multiple and diverse actors involved in the NBS co-design/co-development process (policymakers, citizens, enterprises, scientists, etc.) to visualize and query geo-referenced data for the specific area of interest.

In its first - yet preliminary - release, GeoIKP already offers a variety of functionalities and geo-referenced data of relevance for NBS, while at the same time it provides more standardized ways for NBS data (and metadata) management and cataloging.

We conclude by reflecting on some of the current challenges associated with NBS data, such as adequacy and discoverability.