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From Information to Action: Standardizing and Harmonizing Warnings in Germany's Natural Hazards Portal for Effective Public Communication

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Abstract:

This presentation will explore the development and implementation of Germany's Naturgefahrenportal (NGP), a centralized platform providing the general public with authoritative information on natural hazards. The NGP aims to consolidate various sources of hazard-related data into a single accessible platform, enhancing public understanding and disaster response.

Designed for clarity and ease of use, the NGP offers real-time warnings and guidance on preventive measures and emergency actions. It serves as an entry point, linking to regional or single-hazard portals for deeper insights, and does not compete with existing warning apps, as it does not provide active alert features, such as push notifications. Warnings provided by warning apps should include links to the NGP and vice versa.

Key Aspects of the Presentation:

1. Challenges in Standardizing Data: A significant challenge in developing the NGP is the standardization of data sourced from various stakeholders. The presentation will delve into the strategies employed to harmonize these diverse data sets. This standardization is vital for presenting a unified and coherent picture of risks, which facilitates quicker and more effective public response.

2. Harmonization of Maps: The presentation will also address the efforts to harmonize map data, a critical component of the NGP. Different institutions often use varying map scales, symbols, and legends, leading to potential confusion among users. By standardizing these elements, the NGP ensures that risk information is presented clearly and consistently. This harmonization is essential for providing users with an intuitive and accurate understanding of geographic risks, thus enabling more informed decision-making.

3. Incorporation of Socio-Economic Research: A key innovation of the NGP is the integration of the latest socio-economic research to enhance public comprehension of natural hazards. The presentation will discuss how insights from socio-economic studies are being applied to tailor the portal's communication strategies to the diverse needs of the population. By understanding how different demographic groups perceive risk and respond to warnings, the NGP can present information in a manner that maximizes its effectiveness, ultimately leading to better public preparedness and response. This also includes the presentation of uncertainty information–if provided by the warning agency.

Added Value and Impact:

The integration of all relevant information into a single, unified platform significantly enhances the value of the data provided, offering a holistic view rather than isolated fragments of information.

The NGP represents a major step forward in the communication of natural hazards in Germany. By addressing the challenges of data standardization, map harmonization, and the incorporation of socio-economic research, the NGP sets a new benchmark for how risk and threat information is conveyed to the public. With its barrier-free design, it is a valuable

resource for users with various impairments or disabilities, while recognizing that individual needs may vary. This presentation will offer useful insights into the processes and strategies behind the development of this key public resource, illustrating how it can serve as a model for effective public communication in disaster preparedness and response.

In conclusion, the NGP is more than just a portal—it is a critical instrument for enhancing public safety and resilience.

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