



Semantic web tools for risk management and communications in emergency

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Communication is one of the most important issues in risk management in emergency. The rescuers often come from different geographic areas, they have different risk management cultures and they work in critical conditions. Web platforms can help to share geographic information, but the problem of an intrinsically heterogeneous language still remains. We discuss here the problem of emergency management at the border between Italy and Switzerland, both involving the Ticino river watershed. Both countries in that area share the same language (Italian), but with strong semantic differences.

The paper presents a project of a web platform where strong attention is poured in a glossary of civil protection terms, released in the formats of the semantic web. The character of interdisciplinarity, geographic and cultural heterogeneity of the domain induces problems related to the languages both to specialists and citizens. The implementation of tools that facilitate disambiguation of terminology will therefore guarantee and optimize not only the effectiveness of emergency planning and management, but also the spread of civil protection knowledge and of the related documentation resources. We propose a metaglossary organized as a linguistic database that locates and organizes terminological resources available on the web, without altering their specificity, knowledge heritage and semantic depth. The metaglossary, containing about 3000 entries, allows the management of relationships among the entities identified as the most functional ones. The tool will also allow interoperability with other knowledge organization systems, in particular with thesauri, also in a multilingual perspective.