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## **PHUSICOS platform, dedicated to Nature-Based Solutions for Risk Reduction and Environmental Issues in Hilly and Mountainous Lands : presentation and qualitative NBS assessment**

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PHUSICOS platform aims at gathering nature-based solutions (NBS) relevant to reduce hydro-geological risks in mountain landscapes. The platform can be accessed directly through a web portal. It is based on an Open Source CMS website, including a filter to store documents and a map server to bring ergonomic and powerful access.

To design the platform, an in-depth review of 11 existing platforms has been performed. Furthermore, a list of metadata has been proposed to structure the information. These metadata have provided the baseline for database. The PHUSICOS platform currently references 176 NBS cases and 83 documents of interest (review articles, assessment papers...). It is continuously enriched through the contribution of NBS community.

For that, a questionnaire based on relevant data, necessary for the definition and identification of the NBS (metadata, to be used for searching the NBSs within the platform) has been defined to enter new entries. A preliminary analysis of the cases has been realized. To characterize and analyse the current 152 solutions, we have worked on the following four categories: The nature of impacted ecosystems, The hazard(s) concerned, The other challenges treated by the NBS, The type of exposed assets.

The platform also proposes a qualitative assessment of the NBSs collected according to 15 criteria related with five ambits: disaster risk reduction, technical and economical feasibility, environment, society, and local economy. The criteria level is sufficiently general to be analysed for the entire PHUSICOS platform NBSs whatever the type of work, the realized approaches, the problematic or the spatial or temporal scale.

The structure of the platform and a first analysis of the qualitative NBS assessment are presented in this work.