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Establishment of data base for mechanical characteristics of the common rock materials used for aggregate construction

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This project is in part an answer to a combined enlarged knowledge about "best use" of rock materials, where purposeful rock quality categorization in close connection to engineering performance and the demands of the application is the core of the work effort. The results of the project should put forward a valuable tool which will aid authorities and entrepreneurs usage of natural resources. In order to improve a sustainable usage of natural resources a further understanding of rock characterisation tied to engineering performance has to be developed – a development with this focal point is the primary purpose of the project.

The project aims to: (i) identify crucial parameters for rock characterisation and engineering performance based on a literature review in connection to relevant data sources; (ii) develop a sharp survey program based on selection of rocks, rock characterisation and mapping of mechanical properties; (iii) establish a data base "*Petrological and Mechanical Properties of Aggregates*".

The end product, i.e. the data base, will comprise a multidisciplinary undertaking where the main constituent will be a genuine applied mineralogical and petrological comprehension of rock materials engineering performance. Some of the results can be also employed for the conservation purposes – e.g. for the formulation of artificial stone mixtures for conservation.