

Workshop H

GUIDELINES FOR THE DEVELOPMENT AND APPLICATION OF ENGINEERING GEOLOGICAL MODELS ON MINING PROJECTS

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Language: English

Brief Description:

An **Engineering Geological Model (EGM)** constitutes a comprehensive and systematic knowledge framework that underpins the characterization, interpretation, and evaluation of geological–geotechnical conditions of the rock mass, and enables the analysis of their interaction with the proposed engineering project. This approach supports informed technical decision-making throughout the entire project life cycle, from the conceptual stage through to decommissioning or closure.

Under this definition, the traditional concept of a “model” as a simplified and static three-dimensional representation of ground conditions is transcended, recognizing instead that the EGM is a dynamic, iterative, and continuous process of information integration and updating. This process provides a framework for control and feedback in ground engineering throughout all phases of a project.

These **Guidelines** have been developed by members of the **IAEG C25 – Commission for the Use of Engineering Geological Models**, with the objective of providing technical guidance to practitioners on the “EGM approach,” including the use of advanced three-dimensional digital modeling techniques. In addition, they aim to inform consultants, clients, owners, governmental bodies, and regulatory agencies on the application and implementation of Engineering Geological Models in projects.

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