



Engineering Geological Map of Bavaria 1 : 25 000

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The digital Geological Maps of Bavaria 1 : 25 000 (dGK25) implicitly contain information about engineering geological properties of the subsurface, but are difficult to interpret. The aim of this project is to make these existing data easily usable by providing a digital Engineering Geological Map (dIGK25). Though, the map cannot replace a geotechnical expertise, it can facilitate preliminary planning.



From dGK25 to dIGK25

Integrated mapping approach

Engineering geological attributes are linked to the geometries and attributes of the digital Geological Map of Bavaria 1 : 25 000 (dGK25).

Engineering geological classification

Each geological mapping unit of the dGK25 is classified into one of 35 determined types of foundation ground that represent the mapping units of the dIGK25.

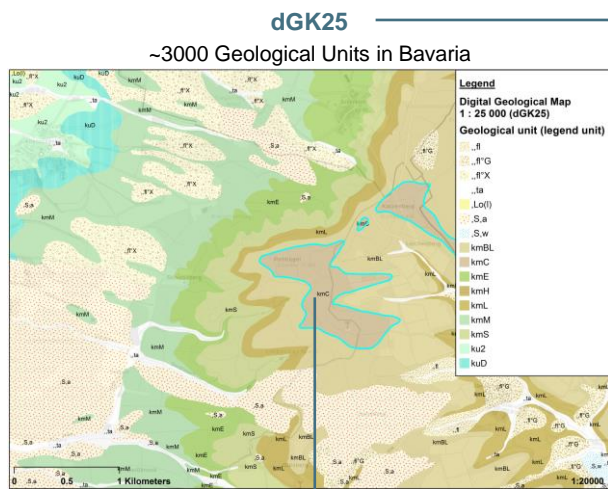


Fig. 1: Geological units

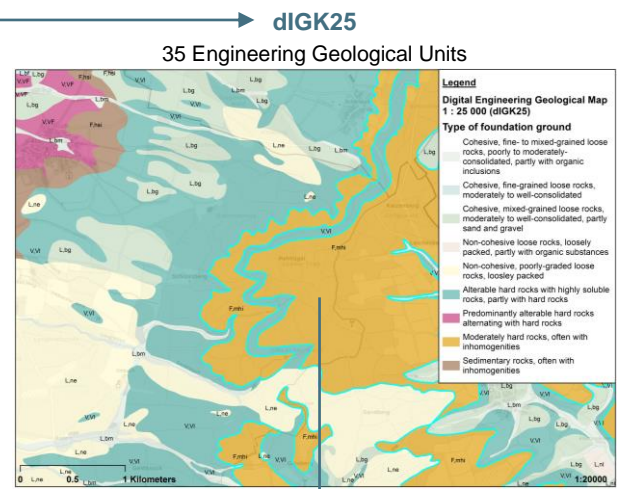


Fig. 2: Types of foundation ground

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- Geological unit:** Coburger Sandstein
- Characterisation:** Sandstone, fine to medium-grained, white-grey, beige-grey, green-grey, bedded, massive, rarely laminated; with clay-/siltstone, green-grey, red-brown, often containing mica; with clayey marlstone beds, grey, yellow-brown weathered
- Lithostratigraphy:** Obertrias → Mittlerer Keuper → Hassberge-Formation

F,mhi

- Foundation ground type:** Moderately hard rocks, often with inhomogenities
- Average bearing capacity:** high to very high
- General notes on the foundation ground:** often sensitive to weathering, partly differential settlements possible (q_u about 12.5 to 50 MN/m² in unweathered condition)

Already online

The Engineering Geological Map “dIGK25” is available at the UmweltAtlas Bayern:

- www.umweltatlas.bayern.de
→ Angewandte Geologie → Baugrund

In Progress

Digital foundation ground site report with additional information about the rock:

- Special information on the foundation ground in a single geological unit
- Organic substances/inclusions
- Enclosures

Planned

Analyses and evaluation of pedological maps of Bavaria:

- Diggability of the ground
- Groundwater and backwater in the uppermost 2 m

