



## **The H3O-project: towards sustainable use and management of the Flemish-Dutch subsurface**

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The collection and unambiguous interpretation and analysis of (hydro)geological information on both sides of the border are essential ingredients in the management of natural resources and use of the subsurface in the border region. The information currently available from the neighbouring countries often lacks compatibility and the same amount of detail. In 2012 the “H3O” project got under way which aims at a consistent interpretation of the subsurface in the Flemish-Dutch border region.

Parties in the Netherlands (Provinces of Limburg and Noord-Brabant and TNO) and Flanders (The Environment, Nature and Energy Department of the Flemish Government, the Flemish Environment Agency, VITO and the Geological Survey of Belgium) are cooperating to harmonise the geological and hydrogeological models of the Netherlands (DGM and REGIS II) and Flanders (Geological 3D model and HCOV). This project is called “H3O” which stands for “(Hydro)geologische 3d-modellering Ondergrond”.

The H3O project focuses on the Roer Valley Graben that runs from Germany in a north-westerly direction over the central part of Limburg, the north-easterly part of the Belgian province of Limburg to Noord-Brabant and is bordered by major fault zones along the north and south perimeters. The aim of the project is to make a cross-border, up-to-date, three-dimensional geological and hydrogeological model of the Quaternary and Tertiary deposits in the Limburg, Southeast Brabant and Flemish part of this region. This will help to identify, study and rectify the differences between the existing (hydro)geological interpretations.

The work is supervised by a committee of experts and carried out by VITO, the Belgian Geological Survey and the Geological Survey of the Netherlands of TNO. These organisations have extensive knowledge of the stratigraphy and regional geology as well as experience of creating 3D models of the subsurface (Geological 3D model of Flanders, DGM, REGIS, GeoTOP). Delivery and presentation of the final results are expected in the spring of 2014.