



Państwowy Instytut Geologiczny
Państwowy Instytut Badawczy

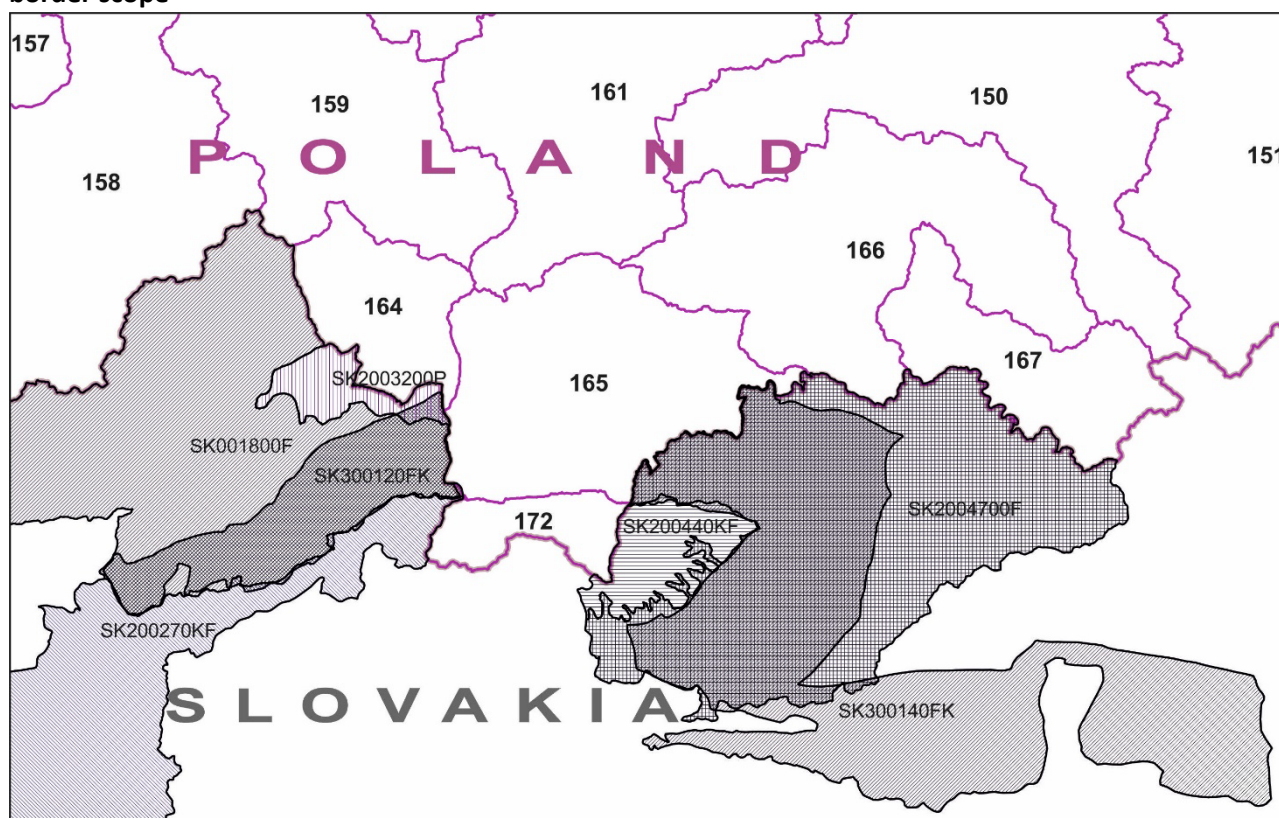
państwowa służba geologiczna
państwowa służba hydrogeologiczna

Designation of the transboundary groundwater body for the selected pilot part of the Polish - Slovakian border

Information provided by the National Geological Institute – National Research Institute of the Republic of Poland, to be presented as a Polish intervention under the item 5 of the 18 meeting of Working Party of Monitoring and Assessment of the Water Convention.

Cooperation on the designation of a common Polish – Slovakian groundwater body started with the exchange of data on the existing national groundwater bodies for the selected pilot part of the Polish - Slovakian border. In total, both countries have identified several national groundwater bodies, which will form a joint GW body with cross-border scope (Figure 1).

Figure 1: National Polish and Slovakian groundwater bodies, which will form a joint GW body with cross-border scope



The next step is to integrate the collected data into the information, which will allow for cross-border interpretation of groundwater recharge and circulation conditions. The analyses will include Polish and Slovak cartography materials. An essential element of data integration is the identification of aquifers with transboundary reach, in such a way, that the extent of individual aquifers can be graphically designated regardless

pgi.gov.pl

ul. Rakowiecka 4, 00-975 Warszawa
tel. (+48) 22 45 92 000, biuro@pgi.gov.pl

Sąd Rejonowy dla m. st. Warszawy w Warszawie
XIII Wydział Gospodarczy KRS, Nr 0000122099
NIP 525-000-80-40

the state border. It is necessary for further research, including the creation of transboundary numerical models of groundwater flows.

The implementation of works is difficult because of some formal and legal problems.

1. In the selected area, there are both: ordinary groundwater, intended to supply the population with water, as well as thermal waters. Slovakia treats thermal waters as groundwater, subject to the Water Framework Directive, which is not practiced in Poland. Thermal waters in Poland have been recognized as a minerals, and are subject to the Geological and Mining Law, which does not implement the Water Framework Directive. That is why Poland does not include thermal waters as groundwater bodies.
2. In addition, there is no uniform methodology for designation of the GWB in the EU Member States. It has consequences for the implementation of cross-border projects, and results in the lack of compatibility of GWB between Member States. Different methods cause problems of interpretation and exclude the use of already designated national GWB. One method takes into account the vertical division of GWB into aquifer complexes. In effect, one GWB contains several aquifer levels. The second method designates separate bodies for different aquifers, what resulting in overlapping national GWB (Figure 1).

Works to designate a common Polish – Slovakian transboundary body of groundwater (GWB) are conducted within the Polish – Slovakian Commission for transboundary waters - WDF Working Group. The works are carried out by the National Geological Institute – National Research Institute, Carpathian Branch in Cracow and the State Geological Institute of Dionýz Štúr in Bratislava.