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1. Introduction

The Czech Republic (Czechia) is situated in Central Europe, bordered by Germany in the west and northwest, Austria in the south, Poland in the northeast, and Slovakia in the east (Annex 11). The country covers approximately 79,000 km², and has a population of more than ten million. The capital of the Czech Republic is Prague (*Czech name*: Praha) with 1.2 million inhabitants.

The Czech Republic has no access to the sea and its elevation reaches 1,602 m a.s.l. at the highest point. The topography in the western part (Bohemia) is like a saucer, flat or gently undulating at the centre with mountains along its borders. The eastern part (Moravia and Silesia) is open to the south with the highest mountains situated to the north and northeast. The area lies within the temperate climatic zone: the mean long-term annual precipitation is 668 mm, with mean long-term monthly temperatures reaching their minimum in January (0.0 °C) and maximum in July (17.4 °C). The main rivers are the Vltava (Moldau) and the Labe (Elbe) in Bohemia and the Morava and the Odra (Oder) in Moravia and Silesia. The mean long-term total runoff of the rivers is 480 m³/s, representing 29% of the mean long-term precipitation. On average, groundwater contributes 43% of the total runoff.

The English translation of the titles and legend of Annexes 1–12 is given in Annex 13.

2. Geological setting

The territory of the Czech Republic is formed by **two primary geological units**: the Bohemian Massif and the Carpathians. These two units also determine the division of Czechia into the two **hydrogeological provinces** of the Bohemian Massif and the Carpathians. The geological position of the Czech territory in Europe is depicted in Annexes 11 and 12, and the main geological formations occurring in the Czech Republic are shown in Annex 1.

The majority of the country in the west (about 84% of the total area) belongs to the **Bohemian Massif**. The Bohemian Massif also extends beyond Czech territory into the neighbouring countries of Austria, Germany and Poland.

The Bohemian Massif is an old, geologically heterogeneous platform block. This block is composed predominantly of igneous and metamorphic rocks, together with highly-indurated and folded Proterozoic and Palaeozoic clastic sedimentary rocks (“hard rocks”), partly covered by sedimentary basins containing younger rocks (Annex 1). The tectonic development of the Bohemian Massif was influenced by the earlier Precambrian and Caledonian orogenic cycles but culminated in the formation of the Variscan mountain chain during the late Palaeozoic. As a result of the Variscan Orogeny, the Bohemian Massif was structurally consolidated to