

# LEGAL AND POLITICAL ASPECTS OF SOVIET-GERMAN URANIUM MINING IN THE SOVIET OCCUPATION ZONE OF GERMANY (SBZ) AND THE GDR

**Dr. Reiner Brumme**

***Abstract:** The Soviet nuclear weapons programme, which escalated from 1945 onwards, necessitated a substantial supply of uranium. However, the Soviet Union's own reserves were limited to small deposits in the Central Asian Soviet republics. Consequently, the Soviet Union was compelled to rely on uranium from states within its sphere of influence. This included the Soviet-Occupied Zone of Germany, from which the Soviet Union was to receive reparations for war damage caused by Germany, according to the decisions of the three Allies. The Saxon Ore Mountains of the Soviet Occupation Zone contained presumed uranium-bearing formations, and along with deposits discovered in Thuringia, these emerged as the largest deposits in the entire socialist camp, with a total of 216,350 tonnes of enriched uranium delivered. The article addresses the legal and political dimensions of this uranium mining, which was under Soviet control from 1945 to 1953 and then under a Soviet-German cooperative arrangement from 1954 onwards.*

***Keywords:** atomic bomb, SAG Wismut, SDAG Wismut, Soviet-German uranium mining*

The status of uranium as a globally strategic resource was first established following the proof of nuclear fission by German nuclear physicists Otto Hahn and Fritz Straßmann, along with the subsequent interpretation by Lise Meitner. This was further solidified through the use of atomic bombs by the USA against Japan in August 1945, effectively establishing uranium as a geopolitical commodity of global strategic importance. This realisation was acknowledged by both the USA and the USSR in 1941; however, they initially showed reluctance to pursue research and development. In 1942, the USSR recognised the significant advancements made in nuclear physics for military applications by Great Britain and the USA. This recognition prompted the USSR to accelerate its own nuclear weapons research programme.

#### 1. Overview and details

At the 1939 All-Union Conference in Kharkov, USSR, discussions had already begun regarding the claim that “we are on the threshold of the practical utilisation of nuclear energy”. As a result, the USSR Academy of Sciences established a “uranium commission” in 1940. This research led to a secret invention application in October 1940, detailing the use of uranium as both an explosive and toxic material, thus paving the way for the development of a uranium bomb (Goncharov, Ryabev, 2001: 80 ff., with further references). The inventor’s examiner, V. G. Khlopin, noted in his assessment that this was not an immediate concern, pointing out that the amount of uranium mined worldwide at the time was very small, totalling 250 to 275 tonnes annually, with the USSR mining just 0.5 tonnes each year (Goncharov, Ryabev, 2001: 81). Although the Soviet nuclear weapons project lacked several crucial components, the most critical element was noticeably absent: uranium (Makhoul, 2017: 34). According to Order No. 2365 from the State Defence Committee, dated 28 September 1942 and confirmed by Stalin, the USSR Academy of Sciences was instructed to submit a report on the feasibility of constructing a uranium bomb by April 1943 (Goncharov, Ryabev, 2001: 84). This directive was issued just a month and a half after the start of the US Manhattan Project.

The radioactivity in the Ore Mountains gained international recognition, largely due to Marie Sklodowska-Curie’s publications from her research in St. Joachimsthal (now Jachymov), which earned her the Nobel Prize in 1903 and again in 1911. This acknowledgement was further bolstered by the world’s largest radium source at Radium-Bad Brambach, backed by significant studies published in 1906 and 1911 by Prof. Carl Schiffner of the Freiberg Mining Academy. His

work concentrated on radioactive waters and uranium minerals in Saxony, alongside Richard Jaffe's 1912 publication, "Die Uranpecherzlagertstätten des Sächsischen Edelleutstollen bei St. Joachimsthal, " and the article on uranium pitchblende in St. Joachimsthal, Bohemia, published in 1926.

Following indications of significant uranium mineralisation underground, the Soviet Union conducted a comprehensive geological and mining search, followed by further exploration for uranium in the Ore Mountains, immediately after the occupation of the German Ore Mountains by its troops at the end of the war in May 1945 (Müller, 2021: 2). The Soviet geological search group, designated field post number 27 304, was a uniformed unit of the Soviet secret service, NKVD, rather than the Soviet Army. It was not under the authority of the Soviet Military Administration of Germany (SMAD) but instead operated under the directives of Marshal Beriya, who was a deputy to Stalin and the chief of the Soviet intelligence service. The USA dropped its two atomic bombs on Japan on 6 and 9 August 1945. This action was perceived by Stalin as a potential threat to the Soviet Union's achievements in the Great Patriotic War, raising concerns about the nation's survival.

In response, the NKVD secret service unit 27 304 was reorganised as the Saxon Uranium Search Group (SUPP) by order of August 13, 1945. The unit's work led to an estimate of uranium reserves in the Saxon Ore Mountains at 150 tonnes. The State Committee for Defence of the USSR outlined in Decree No. 9887 on August 20, 1945, the need for "broad development of geological investigations and the establishment of a raw material base of the USSR for uranium extraction and the exploitation of uranium deposits outside the USSR (in Bulgaria, Czechoslovakia, and other countries)". The Soviet Occupation Zone of Germany was designated as such an "other country". The German scientists involved by the Soviet secret service, namely Prof. Dr F. Schumacher and Prof. Dr G. Aeckerlein from the Freiberg Mining Academy and Dr Oscar W. Oelsner from the Freiberg Mining Authority, considered the uranium ores of the Saxon Ore Mountains to be unsuitable for mining (Pose, 2019: 460). The authors of this study hypothesise that this was due to the fundamentally different perspective on uranium held by the German scientists. For them, the profit potential was a crucial factor in assessing the viability of a deposit. Conversely, in 1945 and the years that followed, Soviet geologists were tasked with actively searching for uranium as this raw material had gained strategic significance for the survival of the Soviet Union, regardless of

economic considerations. They were directed to engage in immediate and thorough exploration, mining, and extraction of uranium, setting aside purely economic factors. This strategic viewpoint, shaped by the geopolitical context of the Cold War, particularly the nuclear arms race between the United States and the Soviet Union, was not fully recognized by German geologists due to their limited awareness of these issues.

The Potsdam Agreement of August 2, 1945, Part IV Points 1-3, addressed reparations claims by the victorious Allied powers, particularly concerning the Soviet Union and Poland. The agreement stipulated that these claims would be satisfied by withdrawing Allied forces from the German territories occupied by the USSR. Furthermore, according to Part IV, Point 9, German foreign assets in Bulgaria, Finland, Hungary, Romania, and eastern Austria were to be transferred to the USSR. This also included the German uranium mines near Schmiedeberg/Kowary in the Giant Mountains of Lower Silesia, which had become Polish, as well as the Bulgarian uranium mines in Buchovo near Sofia, which had been operated by Germans since 1938, and Romanian uranium facilities in western Romania near Baita in the Bihor Mountains (Sanokojew, Zybulewski, 1978: 422 f.).

In April 1946, the first Soviet-led extraction of uranium ore occurred in the Saxon Ore Mountains in Johanngeorgenstadt, followed by operations in August 1946 in the Oberschlema mining district, involving NKVD units and German contract workers.

The closure of the Saxon ore mines in Johanngeorgenstadt and the Oberschlema mining district was officially established by Order No. 128 of the SMAD Main Administration on 26 May 1947, and by Order No. 131 of the Soviet Military Administration of Saxony (SMA/Sachsen) on 30 May 1947. On the same date, Saxon mining operations in Johanngeorgenstadt, Schneeberg, Oberschlema, Annaberg, Lauter, and Marienberg, along with the Pechtelsgrün enrichment plant, were transferred to the ownership of the USSR for the German reparations account (document in Brumme, 2021: 159; Baar, Karlsch, Matschke, 1993: 937).

During its general meeting in Moscow on June 4, 1947, the Soviet State Joint-Stock Company of the Non-Ferrous Metals Industry “Wismut” made a decision through its shareholders, represented by the Main Administration for Soviet Property Abroad at the Council of Ministers of the USSR and the State Joint-Stock Company of the Non-Ferrous Metals Industry “Medj, ” to establish a branch in Germany. The capital allocated for this purpose was seven million

Reichsmarks, and the Chairman of the company's Board of Directors was granted powers of attorney to carry out actions related to the company's registration in Germany. This was done under the provisions of the Reich German Stock Corporation Act of January 30, 1937, which continued to apply to the entire territory of the German Reich, as outlined in Section 37 concerning branches of companies with foreign registered offices (document in Brumme, 2021: 160).

In a letter dated June 6, 1947, the Moscow-based State Joint-Stock Company of the Non-Ferrous Metals Industry "Wismut" registered its branch office in Germany under the name "State Joint-Stock Company of the Non-Ferrous Metals Industry' Wismut'" at the Aue/Erzgebirge Local Court (document in Brumme, 2021: 160). Under Section 37 of the German Reich Stock Corporation Act, the company's purpose was the extraction, mining, and sale of coloured metals within the USSR and abroad. The stated amount of share capital was fifty million roubles, divided into five thousand registered shares with a nominal value of ten thousand roubles each (document in Brumme, 2021: 161). The company was officially registered on July 2, 1947, in the Aue District Court Commercial Register under the designation HR B 33 (document in Brumme, 2021: 162). However, due to ongoing misinformation, even German federal authorities, numerous publications, and the Saxon Academy of Sciences clearly point out that a "Wismut AG" never existed. The company was also not referred to as "Sowjetische Aktiengesellschaft Wismut" but rather as "Staatliche Aktiengesellschaft Wismut". It is imperative to establish clarity on this matter, as stipulated in the relevant sections of the Reich German Stock Corporation Act. According to sections 1, 16 para. 3 no. 1, and 37 para. 5, the company name serves as the businessman's name – only under the correct company name can legal action be effectively initiated and shares acquired or sold. It is noteworthy that even a final judgement by a German court against "Wismut AG" was and remains unenforceable, as an obstacle exists to enforcement in the form of a company that did not exist.

The company was comparable to 213 other companies that were formed in 34 other state joint-stock companies (SAGs) regarding its corporate form, structure, and name on German soil. These included Agfa-Filmfabrik Wolfen, Hydrierwerke Zeitz, and Eisenacher Automobilwerke (SAG EAW). Companies like SAG Wismut were established to address the USSR and Poland's reparation claims against Germany, a decision made by the three Allied victorious powers. By Order No. 167 of the Soviet Military Administration Germany (SMAD) on 5 June 1946, titled "On

the Transfer of Companies in Germany to the Ownership of the USSR Based on Reparation Claims”, these SAGs completed the reparation work undertaken up to that point. This was achieved by dismantling entire companies and transporting them to the USSR for reconstruction, halting current production, and exporting products to the Soviet Union (Baar, Karlsch, Matschke, 1993, Volume II/2: 933). The legal structure of this SAG was based on the New Economic Policy (NEP) introduced in Soviet Russia by Lenin in 1921. The NEP aimed to encourage domestic private initiative in the economy and create incentives for foreign investment and capital participation. In the context of Soviet-German relations, the Treaty of Rapallo, signed in 1922, also facilitated the voluntary migration of thousands of skilled German workers, including foremen, engineers, and managers, to the USSR. In this capacity, they contributed to the planning and construction of new Soviet heavy industry, including complete armaments factories equipped with cutting-edge technology, utilizing substantial German capital and expertise. This was financially supported by the purchase of Vereinsbank Naundorf in the Grimma district in 1923 for a nominal sum of 100 million Reichsmarks by the State Bank of the USSR. This bank was subsequently transformed into Garantie- und Kreditbank AG, primarily to oversee export and import transactions between the USSR and the German Reich. The Soviet Union revived this bank on 7 February 1946 after it had been administered in trust by the German Reichskommissar für feindliches Vermögen (Reich Commissioner for Enemy Assets) in 1941. It resumed operations as a Soviet bank with a capital base of 150 million Reichsmarks and direct subordination to the SMAD Finance Department. The bank facilitated the settlement of financial foreign trade transactions in the Soviet Occupation Zone and served as the account-holding bank for all SAGs, including SAG Wismut, until its dissolution in 1953 (Sächsisches Staatsarchiv, Bestand 21046: 1, 3). The USA was the second-largest foreign investor in developing Soviet heavy industry, mechanical engineering, and the defense industry, while the participation of other Western European countries was negligible (Spohn, 1975: 233). The Soviet Union established a system of purely Soviet and mixed Soviet-foreign companies, including numerous joint-stock companies, to create its industrial foundations. This system was primarily utilized within the USSR until 1941 and, from 1945 to 1953, was also implemented internationally, including in the Soviet Occupation Zone, occupied Romania and Bulgaria, as well as Soviet-occupied Eastern Austria. Additionally, from 1941 to 1945, it operated via the Lend-Lease Programme with the USA and Great Britain (Spohn, 1975: 244 f.).

It is often overlooked that following 1945, the German Civil Code (BGB) of 18 August 1896 (excluding family law and certain aspects of labour law) remained in effect in the Soviet Occupation Zone of Germany and the GDR, which was established in 1949, until 1976. This was alongside the German Limited Liability Companies Act of 20 April 1892 and the German Commercial Code (HGB) of 10 May 1897, both valid from 1945 until 30 June 1990. In the GDR, MITROPA operated as Mitteleuropäische Schlaf- und Speisewagen AG, and the GDR airline Interflug GmbH functioned on a global scale. Additionally, several foreign trade companies existed in the GDR, including Forum Außenhandelsgesellschaft mbH, which managed the Intershop stores, as well as IMES GmbH, IMEX GmbH, and individual import-export GmbHs for each industry branch, such as Bergbau-Handel Gesellschaft für Ausfuhr und Einfuhr von Bergbauerzeugnissen mbH. The activities of SAG in the Soviet Occupation Zone, and later in the GDR from 1949 onward, were fundamentally based on the civil and commercial law of the Reich, which remained applicable. SAG Wismut and SDAG Wismut were also subject to German jurisdiction, where disputes with other companies were initially, as in the whole Soviet Occupation Zone and the GDR, under the purview of civil courts with district court and supreme court instances. With the establishment of the State Contract Court as an organ of the GDR Council of Ministers on 6 December 1951, the Karl-Marx-Stadt District Contract Court became the first-instance court for SAG Wismut and, from 1954, SDAG Wismut, while the Central Contract Court in Berlin served as the second and final instance court for disputes with other companies.

Citizens had the right to initiate legal action against SAG Wismut and SDAG Wismut in civil courts, for instance, to claim compensation for land use. Regarding labour law, the German Civil Code (BGB), with its provisions on employment contracts, continued to prevail, as it had throughout the entire Soviet Occupation Zone. Consequently, the German workers of the initially active Soviet search and exploration group, the precursor to SAG Wismut, entered voluntary employment contracts in 1946. Obligations to work at SAG Wismut were issued by local labour offices in 1947 for a brief period of only six months. The Western Allies also adopted this based on occupation law for work in other companies and the Western zones. However, as early as 1948, due to the technical unsuitability and lack of motivation among the conscripted employees under the first General Director Malzew of SAG Wismut, only voluntary contractual arrangements were made with employees who were motivated by significantly higher earnings, better provisions of food, clothing, equipment, and Wismut's expanded healthcare system. In 1961, the new Labour

Code (GBA) was enacted in the GDR and at SDAG Wismut. In 1978, the Labour Code (AGB) came into effect, which was also fully applicable at SDAG Wismut. Long-term framework collective agreements (RKV) were established between the Wismut Industrial Union (IG Wismut), founded in 1950, and SDAG Wismut. These agreements delineated the terms of employment contracts, employee benefits, wage stimulation, tax-free Wismut surcharge, bonuses, holiday entitlements, and tax-free spirits ("Kumpeltod"). Despite some discrepancies with IG Bergbau, which operated within the framework of the GDR mining companies, these were not significant. SDAG Wismut was required to adhere strictly to the GDR's technical, health, and safety regulations for underground and surface operations and radiation protection protocols. Illustrative examples include continuous oversight of these regulations by the GDR's Supreme Mining Authority and the GDR's Radiation Protection Commission. In terms of labour law, SAG Wismut and SDAG Wismut were thus integrated into the prevailing legal system of the Soviet Occupation Zone and, from 1949, the GDR. In this regard, these two companies, SAG Wismut and SDAG Wismut, did not constitute a 'state within a state. "

In the realm of mining law, the fundamental mining laws of individual German states, stemming from their historical status as kingdoms, principalities, or counties, remained in effect until 1918. For instance, in Saxony, the General Mining Act for the Kingdom of Saxony, dated 31 August 1910, along with the General Mining Act for the Prussian States from 24 June 1865 (parts of today's Free State of Thuringia belonged to Prussia until 1918), continued to be in force until the GDR Mining Act took effect on 12 June 1969. Following the dissolution of the principalities, counties, and dioceses, and the establishment of new state borders in 1918, the GDR Mining Act of 12 May 1969 stipulated in Section 34 (2) (f), in conjunction with (1), that all other (unnamed) legal provisions conflicting with this Act would also cease to apply on 12 June 1969. This necessity arose from the confusion surrounding the new state borders established in 1918 and the unfamiliarity with numerous small-state mining regulations. The 1949 protocol between the GDR and the USSR, along with agreements in 1953 and 1962, granted SDAG Wismut the authority to conduct free geological search and exploration for "non-ferrous metals" throughout the entire territory of the GDR (Pose, 2019: 462 ff. with further references). In return, SDAG Wismut was required to provide the GDR with complimentary access to data regarding other raw materials discovered during its exploratory activities (Pose, 2019: 462 ff. with further references). This

requirement also applied to deposits of cobalt, nickel, tin, tungsten, silver, selenium, zinc, fluorite, and bismuth (Weinl et al., 2013: 40 ff., 57, 62, 64 f., 77).

The establishment of 35 SAGs in the Soviet Occupation Zone of Germany, including SAG Wismut, involved the USSR utilising Soviet laws from 1922 onwards. These laws aligned with the German legal situation in the Soviet Occupation Zone, which lasted until 1990, and in the GDR from 1949 onward. This fact was either unknown or only known in a highly rudimentary form to economic historians, mining historians, and military historians in their academic work on SAG Wismut and the Soviet-German Joint Stock Company Wismut (hereinafter SDAG Wismut) during GDR times until 1990, and it remains known today. Consequently, SDAG Wismut is currently described as a “state within a state, ” with self-created legal provisions that exist outside the GDR legal framework, which is grossly inaccurate.

Following the establishment of the GDR on October 7, 1949, the Council of Ministers of the USSR resolved, under No. 5252-2015 ss, to engage in negotiations with the GDR government regarding the operations of the Soviet State Joint Stock Company “Wismut” within German territory. The protocol drawn up for this purpose stated that the GDR government would take all necessary measures to ensure a first-class supply of “Wismut” and that “Wismut” had the right to export its entire production from Germany to the Soviet Union. Payment for the exported output was to be made using the revenues of the Soviet state joint-stock companies in Germany and partly from reparations deliveries from Germany (Pose, 2019: 462 with further references).

Wismut was integrated into the economic regime of the Soviet Occupation Zone of Germany (SBZ) and, from 1949, the GDR, based on existing German Reich’s laws. The company was granted certain privileges but did not operate as a “state within a state.” This situation was further reinforced by the GDR’s Vertragsgesetz (Treaty Act - VG) and the Lieferverordnung (Ordinance on Supplies and Services to the Armed Forces – Supply Ordinance LVO) of 1965, which aligned with the GDR’s Defence Act and stipulated preferential treatment for SDAG Wismut’s economic relations as a customer for supplies and services to GDR companies, as noted in Section 3 (1) and (2), based on parity with the armed forces, following the Ministry of National Defence, the Ministry of the Interior, and the Ministry of State Security. The same applied to the subsequent order from the GDR Council of Ministers on 25 November 1985, concerning the priority material and technical safeguarding of SDAG Wismut’s state tasks during the five-year

plan period from 1986 to 1990 under § 26 Paragraph 1 of the GDR Treaty Act. Due to the need for secrecy, SDAG Wismut was excluded from the GDR balance sheet regulations, which encompassed balance sheets for materials, equipment, and consumer goods production (MAK balance sheets). Instead, it was listed as “Technisches Kontor Karl-Marx-Stadt, Fondträger 7211” within the state-owned economy of the GDR and was represented as such in economic transactions (document in Brumme, 2021: 283). In the State Planning Commission of the GDR, the requirements submitted by SDAG Wismut were processed by a distinct structural unit (Metallurgy Department). During the balancing process, this was supervised by a responsible state secretary from the State Planning Commission after SDAG Wismut provided a detailed justification of its requirements. Consequently, the initial requests from SDAG Wismut were not subjected to exhaustive decision-making without review but instead mandated specific defense by SDAG Wismut. It is important to note that this accounting in the GDR regulated the state allocation of labor, materials, equipment, and raw materials to companies. This system differed from accounting under commercial law, which involved comparing assets and capital to debts and liabilities according to the German Commercial Code. To implement the order from the GDR Council of Ministers, an extralegal working group was established after 1985 under Günter Mittag as Secretary for Economics of the Central Committee of the SED. This working group prioritized extralegal allocation of materials and raw materials, often at the expense of SDAG Wismut, due to increasing shortages in the GDR economy. This was a response to the Strategic Arms Limitation Treaties (SALT I and SALT II) agreed upon between the USA and the USSR in 1972 and 1974, within the context of global political developments and the subsequent Strategic Arms Reduction Talks (START). Consequently, by 1985 at the latest, the uranium requirement for Soviet nuclear weapons could no longer be prioritized. To safeguard SDAG Wismut’s requirements outside the GDR’s balance sheet system, a new General Contract for Technical Assistance was established every five years based on the respective version of the USSR-GDR State Treaty regarding SDAG Wismut’s activities. This contract stipulated direct contractual relationships for SDAG Wismut concerning materials and equipment and the temporary deployment of Soviet specialists for specific projects and plans at SDAG Wismut, lasting weeks or months. The Technical Office Karl-Marx-Stadt of SDAG Wismut (Technisches Kontor Karl-Marx-Stadt, Fondträger 7211), representing the GDR shareholder side, and the 8th Administration of the Ministry of Medium Mechanical Engineering of the USSR were responsible for executing this contract, which required detailed justification and

examination by the appropriate state foreign trade companies (Prof. Freyer, 2024, interview with contemporary witnesses).

On 22 August 1953, the USSR and GDR governments agreed to establish the two-state SDAG Wismut. On 28 November 1953, the General Meeting of Shareholders of the State Joint-Stock Company of the Bismut Non-Ferrous Metals Industry reached the following decision: the division of the State Joint Stock Company Wismut in the German Democratic Republic would be liquidated (Document in Brumme, 2021: 163). Contrary to assertions made in numerous German and Russian scientific and official publications, including the book “Uran dlja mira” by former Soviet specialist NP Wismutyani in SDAG Wismut, there was no “reorganisation” of SAG Wismut into the Soviet-German joint stock company Wismut, which was subsequently founded on 21 December 1953. Furthermore, SDAG Wismut was not a legal successor to SAG Wismut. SDAG Wismut was entered into the list of state-owned companies on 21 December 1953 under commercial register number HRC 77 580 (document in Brumme, 2021, Chemnitz: 164). However, this entry in the commercial register was found to be grossly erroneous, as it merely continued the entry on the commercial register sheet of the liquidated SAG Wismut as “SDAG Wismut”. According to a CIA information report dated 31 March 1954, which was particularly strictly protected as “Secret Control – U.S. Officials Only”, the USA assumed that the foundation of the two-state “German-Russian company” (note: this refers to SDAG Wismut) would allow the activities of the previous “Wismut A.G.,” which was also incorrectly named there, to continue for the period after a peace treaty with Germany (CIA, 1954: 1). However, there is no publicly accessible Soviet or Russian source for this, nor any German-language source from the Soviet Union, Russia, the GDR, and/or the Federal Republic of Germany.

Under the agreement between the USSR and the GDR, signed in Moscow on 22 August 1953 to establish the Soviet-German joint stock company Wismut, the USSR transferred all SAG Wismut operations along with their essential and current assets at their balance sheet values as of 1 January 1954, totaling DM 2,000,000,000 (DM 2 billion) as specified in Article 3. According to Article 4, the GDR was required to compensate the USSR with an amount equivalent to DM 1 billion, payable in equal instalments over five years. This sum was intended to finance Wismut’s production (Boch, Karlsch, 2011, vol. 2: 195). From 1954 to 1956, the GDR paid 200 million marks annually, amounting to a total of 600 million marks for this share capital. In 1957, the USSR

subsequently waived the remaining 400 million marks to renegotiate uranium delivery prices (Karlsch, 1993: 22, citing the Selbmann estate).

Until 1990, SDAG Wismut actively searched for, explored, extracted, and processed uranium ore in the GDR. During this time, SAG Wismut and SDAG Wismut supplied approximately 216,350 tonnes of enriched metallic uranium derived from the mined and processed ore to the USSR without exception – more than all other Central and Eastern European uranium producers combined: Czechoslovakia (100,706 tonnes), Bulgaria (21,000 tonnes), Romania (17,288 tonnes), Hungary (20,298 tonnes), and Poland (1,000 tonnes). The total output of 216,350 tons enriched uranium in the SBZ and GDR at SAG Wismut and SDAG Wismut exceeded that of the Soviet Union at 176,986 tonnes (OECD, NEA, 2008: 39 in conjunction with OECD, NEA, 1994: 36; Norman, 1993: 1 means 160,000 MTU/355 MlbU total production of the Soviet Union). The average uranium content in the ore ranged from 0.1% to 0.2% in the western Erzgebirge region and was 0.1% in the Ronneburg ore field in eastern Thuringia.

Following the reunification of Germany, the USSR and the Federal Republic of Germany entered into the Transition Treaty of 9 October 1990, Article 8, which stipulated the discontinuation of business activities by SDAG Wismut as of 1 January 1991. The Soviet share of 50% of the company was transferred to the Federal Republic of Germany free of charge, and the Soviet side was released from the obligation to contribute to the costs of decommissioning, remediation, and recultivation work (document in Brumme, 2021: 291). By the end of 2023, the remediation costs had already accumulated to € 7.5 billion. Projections estimate that these costs will reach € 9 billion by 2050. In 1990, the Soviet side still intended to utilise SDAG Wismut, a complex encompassing a scientific and technical centre, a project planning company, a construction company, a motor vehicle and rationalisation plant, a transportation operation and two mechanical plants, as a foundation for its economic activities in Central and Western Europe (author's knowledge, exemplary document in Brumme, 2021: 286). These proposals, deemed impractical from the outset, materialised following the estimation of remediation costs by SDAG Wismut and the Federal German side at approximately DM 4-5 billion (equivalent to around € 2-2.5 billion). This estimate was followed by an even more conservative calculation of DM 15 billion (approximately € 7,5 billion) by scientist Robinson from the USA (Robinson, 1993: 14). The project's abandonment can be attributed to the failure of negotiations between SDAG Wismut and a French

nuclear energy company, COGEMA/Interuran AG, to secure the Königstein uranium mine in Saxon Switzerland and the Drosen mine in Eastern Thuringia. The Soviet Union lacked the necessary economic resources to contribute to the capital required for a stake in competitive parts of SDAG Wismut's non-mining activities. Furthermore, it could not assume 50% of the financial responsibility for the restructuring of SDAG Wismut.

Following this, SDAG Wismut was transformed into Wismut GmbH, with the Federal Republic of Germany as the sole shareholder, in accordance with Sections 1 and 6 of the Act signed on 16 May 1991 between the Government of the Federal Republic of Germany and the Government of the Union of Soviet Socialist Republics regarding the Termination of Activities of the Soviet-German Joint Stock Company Wismut (Commercial Register District Court Chemnitz/City, now Commercial Register B of the Local Court of Chemnitz, Commercial Register Number HR B 3912). The most recent entry, dated 27 February 2025, is also incorrect, as 20 December 1991 indicates "the company previously entered in VEB register no. 580". Given this information, the entry for SDAG Wismut as the successor to SAG Wismut in the "VEB Register 580" is considered grossly inaccurate. Consequently, the current Wismut GmbH is regarded as the involuntary and risky legal successor to SAG Wismut. The author finds it perplexing why SDAG Wismut did not amend the commercial register until 1991 and why Wismut GmbH did not take action from 1991 onwards despite repeated specific warnings about the associated risks.

## 2. Basic Categorization of SAG Wismut and SDAG Wismut in German Law

With the establishment of the Soviet SAG Wismut as a branch of the State Joint-Stock Company Wismut of the USSR's non-ferrous metals industry in Saxony, Germany in 1947, a legally permissible combination of Soviet and German company law occurred, particularly the company law of its type. Consequently, uranium mining in Saxony transitioned from its previous status as a clandestine service organisation to that of a commercial entity governed by the prevailing corporate legislation. Nevertheless, the company continued to be managed in a military fashion due to the influence of the First Department of the Council of Ministers (the government) of the USSR and its ministries, who formally acted as legal shareholders. However, from 1953 onwards, the outward military appearance was softened by the civilian attire of the Soviet managers and specialists conscripted to SAG Wismut as officers.

Previous academic analyses of both SAG Wismut, which operated until 1953, and SDAG Wismut, which operated from 1954 onwards, have often overlooked the fact that this corporate structure was confined to the company's assets per Section 48 (2) of the German Reich Stock Corporation Act, which remained in force in the Soviet Occupation Zone as well as in the GDR until 1990. Consequently, the state- represented by the German Reich, the state of Saxony, the Soviet Occupation Zone of Germany, the USSR, and/or the GDR- did not assume liability risk for either existing or legacy liabilities. It is noteworthy that as early as 1977, the Federal German side recognised this as an advantage of establishing a corporation in another host country regarding uranium mining (Donndorf, 1977: 20). This fact, however, remains largely unacknowledged, yet it constituted the legal foundation for the corporate transfer of the two-state SDAG Wismut into the sole federal German entity, Wismut GmbH, as stipulated in the aforementioned federal German legislation of 16 May 1991.

It is also noted that in the mid-1950s, discussions about developing a nuclear energy industry in the GDR, with plans for up to 20 nuclear power plants on its territory, began politically and were later developed economically and scientifically. This initiative was seen as a replacement for the increasingly costly extraction and refinement of lignite. From the GDR's perspective, the country had the largest uranium ore deposits in Europe and boasted the world's most robust mechanical engineering industry (Siegmar-Schönau, a district of Chemnitz, was the largest mechanical engineering center in the world until 1938), along with a cadre of highly skilled specialists. In contrast, the Soviet Union maintained the scientific and technological advantage in power plant construction and had the means for uranium smelting. From this perspective, a two-state society could yield benefits for both sides, as the Soviet Union faced significant uranium demand but lacked sufficient reserves and stocks necessary for military and civilian purposes. Securing relatively trouble-free access to large quantities of uranium ore could not be achieved solely through long-term supply contracts with foreign producers. Such contracts are vulnerable to fluctuations in the uranium market, which affect both uranium prices and the essential security of supply. This issue is exemplified by the export restrictions imposed by Australia for political reasons, the consequences of the proliferation of the nuclear energy industry across multiple nations, and the resulting increase in demand and price surges that followed. Supplier countries have experienced—and continue to experience—general economic and infrastructure development related to this market, alongside access to technological expertise and investment capital.

Furthermore, uranium ore producers have gained the necessary market knowledge to facilitate the seamless sale of the jointly produced raw material products, initially as enriched uranium ore, progressing to the production of 75% yellow cake. This situation, while not exclusive to the relationship between the GDR and the Soviet Union, was regarded as a rational strategy by the Federal Republic of Germany to ensure its uranium security abroad. From the perspective of the Federal Republic of Germany, establishing a joint-stock company was considered advantageous, as it effectively limited liability to the company's assets. The internal reinforcement and continuity of cooperation satisfied security needs on both sides, and a company founded in the resource-producing country with significant national shareholding would be less susceptible to political pressure than a company with predominantly foreign funds (Donndorf, 1977: 2, 3, 19 - 21). However, in the GDR, the scientific debate concerning the procurement of fundamentally different nuclear reactor technologies—including pressurized water reactors, natural uranium plants, and fast breeder reactors—was relegated to the government's fluctuating agenda, which ultimately did not lead to a decisive outcome. Moreover, nuclear energy research was misdirected; it focused not on developing nuclear technologies for constructing and operating power plants, but rather on theoretical atomic physics. Consequently, the GDR did not devote sufficient attention to the development of nuclear energy, and ultimately, the lack of domestic capabilities, including those of GDR mechanical engineering, hindered its realization (Strauß, 2011: 488 f., 522 f., 621 with further references).

SAG Wismut and SDAG Wismut consistently benefited from subsidies provided by the state budgets of both the USSR and the GDR. The existence of these companies ensured that the USSR obtained most of the enriched uranium required for its nuclear weapons production. Legally, both companies adhered to the 1937 German Reich Stock Corporation Act, which remained in effect in the Soviet Occupation Zone and the GDR until 1990. However, due to insufficient financial provisions to cover uranium production costs, the Soviet Union effectively set the prices through its purchase agreements. Consequently, even according to Soviet estimates, nearly double the foreign trade price during the 1980s would have been necessary. However, the Soviet Union was neither willing nor able to pay this price. As a result, Erich Honecker, serving as General Secretary of the SED, made the following radical assessment during a meeting of the SED Politburo on December 10, 1985: "We will never again participate in joint ventures where we bear the financial burden." (Boch, Karlsch, 2011, vol. 2: 357). Thus, the GDR continued to bear its share of

the expenses related to uranium mining at SDAG Wismut. This commitment was not financed by revenues from the uranium concentrate sold to the Soviet Union, as this decision was made for purely political reasons, representing the GDR's independent contribution to the defence of the socialist camp until 1989.

## Bibliography

Baar, L., Karlsch, R., & Matschke, W. (1993). *Kriegsschäden, Demontagen und Reparationen [War damage, dismantling and reparations]*. Bundesstiftung zur Aufarbeitung der SED-Diktatur, Wahlperiode 12, Bd. II/2, 868–988. Berlin.

Boch, R., & Karlsch, R. (Eds.). (2011). *Uranbergbau im Kalten Krieg: Die Wismut im sowjetischen Atomkomplex [Uranium mining in the Cold War: The Wismut in the Soviet atomic complex]* (Vol. 1: Studien, Vol. 2: Dokumente). Berlin.

Brumme, R. (2021). *Zentraler Geologischer Betrieb der SDAG Wismut (ZGB): Sowjetisch-deutsche Uran-Geologie zwischen Prikas und Vertrag [Central Geological Operation of SDAG Wismut: Soviet-German uranium geology between directive and treaty]*. Chemnitz.

Central Intelligence Agency. (1954, March 31). *Information report: Planned new status of Wismut A.G.* CIA-RDP80S01540R005000110011-8. <https://www.cia.gov/readingroom>

Donndorf, H.-M. (1977). *Formen der internationalen Zusammenarbeit auf dem Energierohstoff-Sektor – Auf der Suche nach Uran [Forms of international cooperation in the energy raw materials sector – In search of uranium]*. Göttingen.

Freyer, B. (2024). *Interview with contemporary witnesses*, Gera

Goncharev, G., & Ryabev, L. (2001). *O создании первой отечественной атомной бомбы [On the creation of the first domestic atomic bomb]*. *Uspekhi fizicheskikh nauk*, 191(1), 79–104. Sarov/Moscow.

Karlsch, R. (1993). „Ein Staat im Staate“: Der Uranbergbau der Wismut AG in Sachsen und Thüringen [“A state within a state”: Uranium mining by Wismut AG in Saxony and Thuringia]. *Aus Politik und Zeitgeschichte*, B 49–50/93, 14–23. Bonn.

OECD Nuclear Energy Agency. (1994). *Uranium 1993: Resources, production and demand in perspective*. OECD Publishing. Paris.

OECD Nuclear Energy Agency. (2008). *Uranium 2007: Resources, production and demand* (NEA No. 6345). OECD Publishing. Paris/Vienna.

Pose, R. A. (2019). *Deutsche Wissenschaftler und Spezialisten im sowjetischen Atomprojekt: Dokumente, Kommentare, Erinnerungen [German scientists and specialists in the Soviet atomic project: Documents, commentaries, memories]*. Leipzig.

Makhoul, E. (2017). *The Czechoslovak-Soviet foreign trade relations, 1945–1953: The uranium as a case study* (Master's thesis, Charles University, Prague).  
<https://www.academia.edu/353911790>

Robinson, P., & Norman, R. E. (1993) Uranium production in Eastern Europe and its environmental impact. A literature survey by Norman, R. E. (Eds.), Tennessee.

Sächsisches Staatsarchiv. (2025). *Bestand 21046 Garantie- und Kreditbank AG [Collection 21046 Guarantee and Credit Bank AG]* (StA-L, 21046). Dresden.

Sanokojew, Sch. P., & Zybulewski, B. L. (1978). *Teheran, Jalta, Potsdam: Sbornik Dokumentow [Tehran, Yalta, Potsdam: Collection of documents]*. Moscow.

Spohn, W. (1975). *Die technologische Abhängigkeit der Sowjetunion vom Weltmarkt [The technological dependence of the Soviet Union on the world market]*. *PROKLA: Zeitschrift für kritische Sozialwissenschaft*, 5(10), 225–247. <https://www.prokla.de/article/download/pdf>

Strauß, O. (2011). *Die Kernforschung und Kerntechnologieentwicklung in der DDR 1945–1965: Rahmenbedingungen, Politik der Staatspartei und Umsetzung [Nuclear research and nuclear technology development in the GDR 1945–1965: Framework, party politics, and implementation]* (Doctoral dissertation, University of Greifswald).

Weinl, H., et al. (2013). *Geschichte der Uranerzaufbereitung 101, Teil 2 – Zeitraum 1971–1989 [History of uranium ore processing 101, Part 2 – Period 1971–1989]*. Oberrothenbach.