

Rosatom and Russia's War in Ukraine

Background Paper

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Summary

This background paper shows how Russia uses its civil-military nuclear corporation Rosatom as a strategic tool and how Rosatom is involved in the war against Ukraine.

As a strategic tool of the Kremlin, Rosatom creates and perpetuates geopolitical dependencies. These dependencies are based on the promotion of nuclear power, but have implications far beyond the energy sector.

Rosatom is involved in the war against Ukraine, both directly and indirectly. For example, it played a key role in Russia's takeover of the Zaporizhzhia nuclear power plant and has offered to purchase weapons for Russian arms manufacturers under sanctions.

Despite this, the European nuclear industry continues to cooperate closely with Rosatom. For example, Rosatom supplies uranium to Framatome's nuclear fuel facility ANF in Lingen, Germany. It is also involved in the proposed expansion of the facility. This threatens the national interests of Germany and its partner states such as Ukraine. If the deal goes ahead, it will allow Russia to increase its political influence despite the war.

Rosatom as a civil-military state organization

- Rosatom is both a civil and a military corporation.¹ It is a state monopoly in all areas related to nuclear power and nuclear weapons. As the successor to the Ministry for Atomic Energy of the Russian Federation, Rosatom comprises over 350 companies involved in nuclear activities. It was established by decree of Russian President Vladimir Putin in 2007.
- Rosatom belongs directly to the Russian state. It is one of seven Russian "state corporations". Former Prime Minister Dmitry Medvedev explained in 2012 that Rosatom is a corporation "of its own kind", which not only strives to expand its business operations but also accomplishes "some ministerial tasks".²
- The corporation's main decision-making body is its Supervisory Board. Board members include Sergey Kiriyyenko, deputy head of the Russian presidential administration, who is under EU, UK and US sanctions, and Sergey Korolev, first deputy director of the Federal Security Service of the Russian Federation (the main successor to the Soviet Union's KGB). Korolev has been sanctioned due to the Russian invasion of Ukraine by the EU and several of its member states, as well as by Australia, Canada, New Zealand, Switzerland, the UK, and Ukraine. Furthermore, Rosatom's supervisory board includes two deputy prime ministers of Russia and two assistants to President Vladimir Putin.³

¹ <https://rosatom.ru/about/gosudarstvennye-funktsii/>

² <https://web.archive.org/web/20230720010409/http://archive.government.ru/eng/docs/21653/>

³ Russian president Vladimir Putin decree 25.01.2023 № 34 <http://www.kremlin.ru/acts/bank/41658>

- The European Parliament has repeatedly called for sanctions against Rosatom and for an end to any collaboration with Russia in the nuclear sector, including uranium imports and investments in critical infrastructure.⁴

Rosatom's involvement in the war in Ukraine

Ever since Russia invaded Ukraine last year, Rosatom has been involved in the war, both directly and indirectly.

- According to a letter obtained by Ukrainian intelligence, Rosatom has offered to assist the sanctioned Russian arms industry in obtaining goods necessary for the production of weapons, tanks and aircraft.⁵
- In an address to Rosatom on its 15th anniversary in December 2022, President Vladimir Putin praised the corporation for its “huge contribution ... to developing advanced weapons systems and military hardware and putting them on combat duty”.⁶
- In September 2023, Rosatom and Russian national airline Aeroflot announced that Rosatom will produce components for the maintenance of foreign aircraft, which cannot be imported due to sanctions.⁷
- Rosatom personnel helped Russian troops who occupied the Chernobyl exclusion zone in Ukraine in the early days of the invasion.⁸
- Rosatom facilitated Moscow's illegal seizure of Ukraine's Zaporizhzhia nuclear power plant (NPP). Rosatom employees have assumed key management roles on site.⁹ Following a Russian presidential decree¹⁰, Rosatom created a new subsidiary, JSC Operating Organization of Zaporizhzhia NPP, specifically for the purpose of taking over the power plant.¹¹
- Ukrainian nuclear power plant operator Energoatom reported in October 2023 that the safety culture was deteriorating under Rosatom's supervision, including improperly performed work, inadequate staffing and poor inspections. It claimed that this has led to major damage to important parts of Zaporizhzhia NPP, including leaks in the radioactive primary coolant circuit.¹²
- There is credible testimony that Rosatom personnel assisted the Russian army in selecting targets at Zaporizhzhia NPP. Rosatom employees appear “to have directed some of the Russian artillery targeting the plant”.¹³
- Rosatom officials in Zaporizhzhia NPP were aware of the capture and torture of Ukrainian employees and “may have been involved in the summary detentions of hundreds of the plant's Ukrainian workers.”¹⁴ According to a report by the Norwegian organisation Bellona, detentions

⁴ E.g. European Parliament (2/28/2022): Motion for a Resolution (B9-0123/2022)

https://www.europarl.europa.eu/doceo/document/B-9-2022-0123_EN.pdf and European Parliament (2/16/2023):

One year of Russia's invasion and war of aggression against Ukraine

https://www.europarl.europa.eu/doceo/document/TA-9-2023-0056_EN.html

⁵ <https://www.washingtonpost.com/world/2023/01/20/rosatom-ukraine-war-effort-sanctions/>

⁶ <https://www.washingtonpost.com/world/2022/12/30/putin-isolated-russia-ukraine-war/>

⁷ <https://www.aerotelegraph.com/aeroflot-will-mit-staatlicher-atomenergiebehoerde-kopierte-airbus-und-boeing-teile-bauen>

⁸ <https://belsat.eu/en/news/15-03-2022-rosatom-admits-helping-seize-zaporizhzhia-and-chernobyl-npps>

⁹ <https://belsat.eu/en/news/15-03-2022-rosatom-admits-helping-seize-zaporizhzhia-and-chernobyl-npps>

¹⁰ <http://publication.pravo.gov.ru/Document/View/0001202210050022?index=2&rangeSize=1>

¹¹ <https://www.rosatom.ru/journalist/news/zaporozhskoy-aes-budet-upravlyat-novaya-rossiyskayaekspluatiruyushchaya-organizatsiya/>

¹² <https://background.tagesspiegel.de/energie-klima/niemand-kennt-russlands-schwelle>

¹³ <https://background.tagesspiegel.de/energie-klima/niemand-kennt-russlands-schwelle>

¹³ <https://carnegieendowment.org/2023/02/21/ukraine-war-s-lingering-nuclear-power-danger-pub-89080>

¹⁴ <https://carnegieendowment.org/2023/02/21/ukraine-war-s-lingering-nuclear-power-danger-pub-89080>

were initially carried out because of the pro-Ukrainian sentiments of the plant workers, but were increasingly used to force them to sign contracts with Rosatom.¹⁵

- In December 2022, the International Atomic Energy Agency (IAEA) negotiated a possible protection zone around Zaporizhzhia NPP not with Russian government representatives, but with Rosatom Director General Alexey Likhachev.¹⁶ Likhachev – rather than military personnel – also announced the repulsion of alleged Ukrainian drone attacks on the nearby occupied city of Enerhodar.¹⁷

Rosatom as a geopolitical tool

Rosatom is a key element in the Russian regime's "geopolitics". It aims to create dependency on Russian nuclear technology, services and fuel in as many countries as possible. Rosatom purchases key equipment for its nuclear reactors under construction from European companies. It supplies raw and enriched uranium, fuel and other nuclear services to the EU. This collaboration provides funding and influence to the Putin regime in Russia, thus fuelling the war in Ukraine. It also sustains Europe's dependence on Russian nuclear fuel and services, which Russia uses to further gain political influence.

- Rosatom claims it is currently building 33 new reactors in 10 countries, and its subsidiaries exported about \$2.2 billion worth of nuclear-related goods and materials last year.¹⁸ Well over 90% of the cost of Rosatom's construction of new nuclear reactors around the world is covered by the Russian state budget.
- France's imports of enriched uranium from Russia almost tripled in 2022 compared to 2021.¹⁹ In 2022, Europe and the U.S. imported 17% and 12% of their uranium requirements from Russia, respectively.²⁰ This does not include the mining activities of the Rosatom company Uranium One in other countries.²¹ 30% of Europe's enriched uranium imports came from Russia.²² In the U.S., the share is of the same order of magnitude.²³ In total, EU countries spent more than €720 million to buy fuel and other nuclear power-related products from Rosatom last year.²⁴
- The cooperation between Russia and Hungary illustrates the way in which Rosatom garners political influence.²⁵ Russia controls the supply of nuclear fuel and the maintenance of existing Hungarian reactors, and has provided a €10 billion loan for the construction of a new nuclear power plant, Paks-2. It therefore comes as no surprise that Hungary opposes any EU war sanctions against Russia. Siemens Energy and Framatome are both involved in supplying key instrumentation and control systems for new Russian-built reactors in Hungary.
- In Africa, Rosatom has signed agreements with nearly 20 countries to build nuclear power plants or research reactors. To date, only one nuclear power plant is under construction – Al Dabaa in Egypt. Rosatom has also acquired a uranium mine in Tanzania. An earlier attempt to

¹⁵ <https://network.bellona.org/content/uploads/sites/3/2023/06/Rosatoms-role-in-the-war-in-Ukraine.pdf> p. 22

¹⁶ <https://world-nuclear-news.org/Articles/IAEA-and-Rosatom-hold-Zaporizhzhia-protection-zone>

¹⁷ <https://www.handelsblatt.com/dpa/russland-meldet-angeblichen-drohnenangriff-auf-akw-stadt-enerhodar/29385824.html>

¹⁸ <https://apnews.com/article/russia-ukraine-war-us-europe-nuclear-exports-4129cbea2aaa69b1da5d09a41804f745>

¹⁹ <https://www.greenpeace.fr/espace-presse/nucleaire-rosatom-livre-une-importante-cargaison-duranium-enrichi-a-la-france/>

²⁰ https://euratom-supply.ec.europa.eu/activities/market-observatory_en and <https://www.eia.gov/energyexplained/nuclear/where-our-uranium-comes-from.php>

²¹ <https://rosatom.ru/en/rosatom-group/uranium-mining/>

²² https://euratom-supply.ec.europa.eu/activities/market-observatory_en

²³ <https://www.nytimes.com/2023/06/14/climate/enriched-uranium-nuclear-russia-ohio.html>

²⁴ <https://apnews.com/article/russia-ukraine-war-us-europe-nuclear-exports-4129cbea2aaa69b1da5d09a41804f745>

²⁵ <https://apnews.com/article/putin-orban-russia-hungary-china-beijing-2265f08fcfa37e28f4b890d5ecce5d2e>, <https://www.neimagazine.com/news/newshungary-expects-france-and-germany-to-supply-ic-equipment-for-paks-ii-10086599> and <https://www.reuters.com/article/hungary-nuclear-siemens-idINL1N34U1M2>

build several nuclear power plants in South Africa failed due to opposition from local civil society.²⁶ In South America, Rosatom is involved in smaller-scale projects, such as a research reactor and lithium mining in Bolivia.²⁷

Rosatom's activities in Germany

- Despite Russia's war in Ukraine, France-based Framatome continues to cooperate with Rosatom. Since February 2022, at least 10 shipments of uranium have been sent from Russia to the nuclear fuel facility ANF in Lingen, a subsidiary of Framatome. According to government data, uranium shipments took place under two federal government licences in September, November and December 2022, and in April and May 2023. In August 2023, German authorities issued a new licence for up to 40 shipments. The first of these new shipments took place in September 2023, followed by two more in October.²⁸ Framatome has also applied for a licence to export enriched "nuclear fuel remnants" to Russia.²⁹
- Framatome has applied for permission to produce Russian-designed nuclear fuel in Lingen under licence from Rosatom.³⁰ Licensing is handled by a joint venture with Rosatom based in France, after Framatome failed to obtain a permit for a joint venture in Germany. According to Lower Saxony's Minister for the Environment Christian Meyer it is planned that Rosatom employees will provide support on site.³¹ Despite the fact that both Meyer and Federal Economics Minister Robert Habeck openly condemn nuclear cooperation with Russia, a decision on the Rosatom-Framatome fuel deal in Lingen is still pending.
- The decommissioning company "Nukem Technologies", based in Bavaria, also belongs to Rosatom. Rumours of a sale by mid-2023 have not yet been confirmed.³² Its CEO Thomas Seipolt is also head of the German nuclear lobbyist group KernD.³³
- These activities on the part of Rosatom run counter to German interests and allow the Russian government to increase its political influence in Europe, despite the ongoing war. They also enable Russia to participate in critical infrastructure projects and potentially evade sanctions.

Conclusion

More than 20 months after Russia started an unprovoked and unjustified war in Ukraine, the European nuclear industry continues to cooperate with the Russian corporation Rosatom. This state-owned nuclear corporation not only builds and operates nuclear power plants, but also constructs and maintains Russia's arsenal of nuclear weapons.

Rosatom is also one of Russia's most important tools for establishing dependence on Russian nuclear services and fuel around the world. In many cases, this also guarantees political influence. This is why the Russian state is financing new nuclear reactors built by Rosatom worldwide.

²⁶ <https://www.reuters.com/article/us-safrica-nuclear-court-idUSKBN17S25R> and <https://www.forum-energii.eu/en/blog/anatomia-zaleznosci-rosatom>

²⁷ <https://www.reuters.com/world/americas/bolivia-seals-14-bln-lithium-deals-with-russias-rosatom-chinas-guoa-2023-06-29/> and <https://rosatomnewsletter.com/2023/05/29/bolivia-awaiting-reactor-delivery/>

²⁸ [https://www.base.bund.de/SharedDocs/Downloads/BASE/DE/fachinfo/ne/transportgenehmigungen.pdf 11/1/2023](https://www.base.bund.de/SharedDocs/Downloads/BASE/DE/fachinfo/ne/transportgenehmigungen.pdf?__blob=publicationFile&v=1&ts=1681111111111)

²⁹ <https://fragenstaat.de/anfrage/ausfuhr-von-uran-schrott-nach-russland/>

³⁰ https://www.ndr.de/nachrichten/niedersachsen/osnabrueck_emsland/Fertigt-Fabrik-in-Lingen-bald-russische-Brennstaebe-fuer-AKW,lingen994.html

³¹ <https://taz.de/Deutsche-Brennstaebe-fuer-russische-AKW!/5928104/>

³² <https://de.finance.yahoo.com/nachrichten/akw-verschrotten-hat-ruft-immer-110310658.html>

³³ <https://green-planet-energy.de/blog/aktuelles/wie-deutsche-atomlobby-und-russische-atomwirtschaft-verflochten-sind/>

Rosatom is not currently sanctioned by the EU, but its Supervisory Board includes senior government officials sanctioned in numerous countries for their involvement in the war against Ukraine. The board also includes the deputy director of the Russian Federal Security Service (the successor to the Soviet KGB), deputy prime ministers, and assistants to Putin.

Rosatom is assisting the Russian army in the war by sending its staff to help occupy the Zaporizhzhia nuclear power plant and the Chernobyl exclusion zone in Ukraine. It has also offered to procure key goods needed by the Russian army to produce tanks and aircrafts, potentially bypassing existing sanctions.

Despite Rosatom's direct involvement in the war in Ukraine, the fuel fabrication facility ANF in Linggen, Germany, owned by the French company Framatome, continues to purchase uranium from Russia. It is even to be further expanded in direct cooperation with Rosatom. Money paid to Rosatom supports Russia's war on Ukraine and its efforts to gain political influence through nuclear projects. This represents a clear threat to the interests of Germany and its partner country Ukraine.

All cooperation with Rosatom and its affiliated companies must cease immediately. Europe must not provide funds for Russia's war on Ukraine!