

Germany

1. Location, Amount and Details of U.S. Nuclear Weapons Deployment/storage

Germany houses the highest number of US nuclear weapons under the NATO nuclear sharing policy.

Nuclear Weapons Storage Sites

Location	Number of Vaults	Maximum Capacity	Number of deployed weapons
Büchel AB	11	44	20
Nörvenich AB	11	44	0
Ramstein AB	55	220	130
Total			150

The Memmingen Air Base, which also housed 11 vaults with a maximum capacity of 44 was closed in 2003. The weapons stored at Memmingen were moved to the Nörvenich Air Base and then to Ramstein Air Base. The Brüggen Air Base, with 10 vaults with a maximum capacity of 40 weapons, was closed on 12 June 1996. <http://www.nrdc.org/nuclear/euro/euro.pdf>

In April 2005, the Liberal Party in Germany proposed a resolution in Parliament asking the government to insist on the withdrawal of US nuclear weapons from German territory. The proposal was overwhelming supported by the German public and politicians. <http://www.armscontrolwonk.com/index.php?id=579>

In response, NATO Defense Ministers issued a communiqué in June 2005 that effectively rejected this proposal, stating, "the nuclear forces based in Europe and committed to NATO continue to provide an essential political and military link between the European and North American members of the Alliance," and, "the fundamental political purpose of NATO's nuclear forces: to preserve peace and prevent coercion." <http://www.nuclearfiles.org/menu/key-issues/nuclear-weapons/issues/nato-nuclear-policies/index.htm>

2. Location and Capability of Nuclear Facilities

Power Reactors

Operational: 17

Shut down: 19

Decommissioned: 0

Planned: 0

<http://www.iaea.or.at/programmes/a2/>

Research Reactors

Operational: 12

Shut down: 11

Decommissioned: 23

Planned: 0

<http://www.iaea.or.at/worldatom/rrdb/>

Germany's 17 reactors produce about one third of its energy. In June 2000, the German government officially announced its intention to phase out the use of nuclear energy, the first leading economic power to do so. Nuclear power plants will be shut down after a lifespan of 32 years, fulfilling a pledge by the Social Democrat-Green Party coalition government formed in 1998. http://www.bmu.de/english/nuclear_safety/doc/3420.php; <http://www.uic.com.au/nip46.htm>

Uranium Enrichment

Urenco, a joint venture between companies in Germany, the Netherlands, and the UK, operates the only uranium enrichment plant in Germany, at Gronau. On 14 February 2005, the Northrhine-Westphalia State Ministry of Energy (MVEL) issued a license for to increase capacity of Urenco's Gronau enrichment plant, including the construction of a second enrichment plant next to the existing one. <http://www.antenna.nl/wise/uranium/epeur.html>; <http://www.wise-uranium.org/epeur.html#UREGRONAU>

There is also a uranium fuel fabrication plant at Lingen, operated by Siemens AG.

Uranium Mines

From 1946 to 1990, some 220,000 tons of uranium was mined in the former East Germany, in Saxony and East Thuringia, with substantial environmental damage. Much of this was used in Soviet weapons programs, and for fuel in Eastern Europe. All Germany's uranium, a total of 3,800 tons per year, is now imported, largely from Canada, Australia, and Russia.

All of Germany's mines have been decommissioned. <http://www.uic.com.au/nip46.htm>

3. Fissile Material Holdings

Separated Civil Plutonium end 2003

In country: 12.5 tons

In other countries: ~13.5 tons

Total: 26 tons

Estimated by 2010: 22-31 tons

Estimated by 2015: 7-22 tons

Estimated by 2020: 0-13 tons

http://www.isis-online.org/global_stocks/end2003/plutonium_watch2005.pdf

http://www.isis-online.org/global_stocks/end2003/civil_heu_watch2005.pdf

Highly Enriched Uranium end 2003

In country: 1.4-2.7 tons

Supplied by: US, Russia

Thirteen German reactors are licensed to use Mixed Oxide (MOX) fuel, using plutonium recycled from spent fuel. A MOX plant at Hanau in Hesse has never been allowed to operate, so all MOX fuel is imported. <http://www.uic.com.au/nip46.htm>

Radioactive waste disposal

After 2005, all radioactive waste must be sent for direct disposal, halting all reprocessing (although firm contracts totalling US\$ 7.3 billion for reprocessing are in place with BNFL and Cogema). Spent fuel will be stored temporarily at off-site surface facilities in Ahaus and Gorleben; at the moment interim storage remains on site.

Low-level waste: Facility in Konrad will be operational in 2010, expected to take 95% of the waste volume. In the meantime, low-level waste is stored in nearly 50 locations, including two off-site power plant waste storage facilities, collecting depots for medicine, industry and universities, as well as at its larger research centers. <http://www.ocrwm.doe.gov/factsheets/doeymp0412.shtml>

Intermediate-level waste: Stored at Ahaus facility.

High-level waste: The salt dome at Gorleben, near an existing pilot conditioning plant, is being studied as a possible site for geological disposal of high-level wastes. The site could be available as a final repository in 2025.

Separated high-level wastes from reprocessing are expected to be returned to Germany by 2022 and stored. A total of 166 large casks of glass canisters will be involved, 39 of these are already in storage at Gorleben. A further 300+ casks with canisters of compacted wastes from reprocessing could immediately go to a final repository, the canisters possibly in to boreholes. <http://www.uic.com.au/nip46.htm>

4. Nuclear Activities

Research Centers

AKR: Ausbildungskernreaktor

BESSY: Berliner Elektronenspeicherring-Gesellschaft für Synchrotronstrahlung

DESY: Deutsches Elektronen Synchrotron

DFG: Deutsche Forschungsgemeinschaft

DFN: Deutsches Forschungsnetz / German Research Network
EC-CND - Co-ordination Network on Decommissioning of Nuclear Installations
FIZ: Fachinformationszentrum Karlsruhe
Fraunhofer Gesellschaft
Forschungszentrum Rossendorf
FZJ: Forschungszentrum Jülich
FZK: Forschungszentrum Karlsruhe
 IKET: Institut für Kern- und Energietechnik
 IRS: Institut für Reaktorsicherheit
 PSF: Projekt Nukleare Sicherheitsforschung
GSF: Forschungszentrum für Umwelt und Gesundheit
GSI: Gesellschaft für Schwerionenforschung
HASYLAB: Hamburger Synchrotronstrahlungslabor
HMI: Hahn-Meitner-Institut
Institut für Kernphysik
ISTec: Institut für Sicherheitstechnologie
Max-Planck-Gesellschaft
Nuklearmedizin: Stiftung für Wissenschaft und Forschung
Oeko Institut
Otto Hug Strahleninstitut
<http://www.radwaste.org/research.htm>

Nuclear Cooperation

In 2002, the coalition between the Social Democrats and the Greens agreed to review all contracts with other states that support nuclear energy, though this agreement is not legally binding and non-governmental companies continue to work internationally.

Brazil: A 1970s agreement to construct 8 nuclear power plants was converted into an agreement on renewable energy, energy efficiency and reduction of energy consumption and emissions in 2004.

Russia: Between 1993 and 1995, Germany provided Russia with approximately \$13.8 million in disarmament assistance. Germany also provided technical assistance to increase physical protection of nuclear materials at Russian sites and to enhance safety at Russian nuclear power plants. Germany has also aided Russia in producing mixed-oxide fuel for Russian nuclear reactors, utilizing plutonium from dismantled Russian nuclear weapons, and in the training of operators of Russian nuclear reactors.
<http://www.nti.org/db/nisprofs/russia/forasst/intnatl/germany.htm>

Russia & France: As of 1995, Germany and France were cooperating to provide Russian nuclear regulators with a data communications network. In June 1998, France and Germany agreed to help Russia dismantle its nuclear weapons. Additionally, Germany is cooperating with France and Russia on the design of a pilot plant to fabricate MOX fuel from weapons-grade Russian plutonium.
<http://www.nti.org/db/nisprofs/russia/forasst/intnatl/germany.htm>; <http://www.fas.org/nuke/guide/france/nuke/index.html>

China: Agreement in April 1992 on Radiation Protection and Nuclear Safety; agreement in January 1989 on construction of reactors; agreement in April 1986 on scientific and technical cooperation.
<http://www.nti.org/db/China/nca.htm>

Nuclear cooperation agreements exist between Belgium, Germany, Italy, the Netherlands, and Turkey to enable their national air forces to deliver US nuclear bombs in times of war.
<http://www.nrdc.org/nuclear/euro/euro.pdf>

5. International Non-proliferation Efforts

Germany is also a participant in the G8 Global Partnership against the spread of weapons and materials

of mass destruction, launched in Kananaskis, Canada 2002.

Treaties Signed and Ratified, date of deposit

Antarctic Treaty, 5 February 1979
APM Convention, 23 July 1998
Biological Weapons Convention, 23 July 1998
Certain Conventional Weapons Convention, 25 November 1992
Chemical Weapons Convention, 12 August 1994
Comprehensive Nuclear Test-Ban Treaty, 20 August 1998
Convention on the Physical Protection of Nuclear Material, 5 February 1981
Nuclear Non-Proliferation Treaty, 2 May 1975
Outer Space Treaty, 10 February 1971
Seabed Treaty, 18 November 1975

Germany ratified the IAEA Additional Protocol on 30 April 2004.

Multilateral Groups

Australia Group
Conference on Disarmament
Hague Code of Conduct against Ballistic Missile Proliferation
Missile Technology Control Regime
Nuclear Suppliers Group
Proliferation Security Initiative
Wassenaar Arrangement
Zangger Committee

6. Positions Taken in International Fora on Various Issues of Nuclear Disarmament

Transparency: "Disarmament presupposes confidence. Confidence is the result of openness and predictability. It is therefore important to increase transparency of relevant activities. Confidence creates more security, which makes reductions possible. Arms reductions cannot by themselves guarantee peace and stability. Developing an exchange of views on security concepts, military strategies and doctrines and their relationship to existing potentials is equally essential." - **Statement by H.E. Ambassador Bernhard Brasack to the Conference on Disarmament, 7 March 2006.**

<http://www.reachingcriticalwill.org/political/cd/speeches06/7MarchGermany.pdf>

Nuclear disarmament: "The end of the East-West confrontation has brought with it new opportunities for disarmament. The end of the strategic rivalry between two opposed blocs allows nuclear arsenals to be further reduced. We should re-examine the existing arsenals of strategic and sub-strategic nuclear weapons and energetically work to further reduce them." - **Statement by Joschka Fischer, Minister of Foreign Affairs, to the Seventh Review Conference of the NPT, 2 May 2005.**

<http://www.reachingcriticalwill.org/legal/npt/RevCon05/GDstatements/Germany.pdf>

Thirteen Steps: "...setting out the conditions for achieving a nuclear weapon free world, the complete elimination of nuclear weapons can only be achieved by way of an incremental approach. Such an approach underlies the 13 practical steps for the systematic and progressive implementation of Article VI adopted by the 2000 NPT Review Conference. These 13 steps remain the performance benchmark for the disarmament process. As such they should not be called into question." - **Statement by Ambassador Volker Heinsberg to the Third Preparatory Committee of the 2005 Review Conference of the NPT, 30 April 2004.** <http://www.reachingcriticalwill.org/legal/npt/prepcom04/germanyCL1.pdf>