

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	No. of Vaults	Maximum Capacity	No. of deployed weapons
Büchel Air Base	11	44	20
Nöervenich Air Base	11	44	0
Ramstein Air Base	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 Nöervenich 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>

2. LOCATION AND CAPABILITY OF NUCLEAR FACILITIES

Power Reactors

Operational: 18

Shut down: 18

Decommissioned: 0

Planned: 0

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

Research Reactors

Operational: 13

Shut down: 11

Decommissioned: 22

Planned: 0

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

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.

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>

Uranium Enrichment

Urenco operates the only uranium enrichment plant 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/epcur.html>

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 uranium is now imported from Canada, Australia, Russia and elsewhere, a total of 3,800 tons per year.

All mines have been decommissioned.

<http://www.uic.com.au/nip+6.htm>

3. FISSILE MATERIAL HOLDINGS

Unirradiated Civil Plutonium

In country: 11.1 tons

In other countries: 14.5 tons

Total: 25.6 tons

Separated Civil Plutonium

end 2002: 47.9 tons

2010 (projected): 23-34 tons

2015 (projected): 8-25 tons

2020 (projected): 0-16 tons

http://www.isis-online.org/global_stocks/separated_civil_pu.html

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 LLW 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/nip+6.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

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 era agreement to construct eight nuclear power plants was converted into an agreement on renewable energy, energy efficiency and reduction of energy consumption and emissions in 2004.

Russia: In response to a request by the Russian Ministry of Atomic Energy (MINATOM), in June 2001 the German Federal Ministry for Economy and Technology (BMWi) and MINATOM agreed to enter into an R&D cooperation regarding radioactive waste disposal. In this context a first joint R&D project dealing with "Site Investigation Requirements for a HLW Repository in Hard Rock Formations" was launched in January 2002. http://www.eurosafe-forum.org/ipsn/pdf/euro2_3_10_russian_german_approach.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
Comprehensive Nuclear Test-Ban Treaty, 20 August 1998
Chemical Weapons Convention, 12 August 1994
Nuclear Non-Proliferation Treaty, 2 May 1975
Outer Space Treaty, 10 February 1971
Sea-Bed Treaty, 18 November 1975

Germany ratified the IAEA Additional Protocol 30 April 2004.

Multilateral Groups

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

Nuclear disarmament and non-proliferation: "...the firm relationship...was established by the treaty between non-proliferation and disarmament, and vice versa. These two goals can only effectively be pursued jointly and not at each others expense. It is particularly important to recall this in view of rising concerns not only regarding continuing proliferation and non-compliance with the non-proliferation obligations but also regarding the slow process in the field of nuclear disarmament and indications of a 'renaissance' of nuclear weapons." - **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>

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 Confernce. 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>

Non-proliferation and disarmament: "The community of states must do everything in its power to counter (threats to security) with a new push for non-proliferation and global disarmament. In the nuclear field, the commitment contained in the Non-Proliferation Treaty to complete nuclear disarmament remains crucial." - **Statement by Joschka Fischer, Minister for Foreign Affairs, to the Conference on Facilitating the Entry-into-force of the Comprehensive Nuclear Test Ban Treaty, 11 November 2001.** <http://www.un.org/webcast/ctbt/statements/germanyE.htm>