

Germany

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

Nuclear Weapons Storage Sites

Air Base	Number of Vaults	Operational Date	Base Operated by
Büchel Air Base	11	9 August 1990	German Air Force
Memmingen Air Base	11	9 August 1990	German Air Force
Noervenich Air Base	11	28 June 1991	German Air Force (caretaker status)
Ramstein Air Base	54	24 January 1992	U.S. Air Force

Nuclear Related Units in Germany

Air Base	Unit	Type of Aircraft	Aircraft operated by	US Units
Büchel Air Base	33 rd Fighter Bomber Wing	Tornado	Germany	852 nd MUNSS
Noervenich Air Base	31 st Fighter Bomber Wing	Tornado	Germany	none, 817 th MUNSS responsible
Ramstein Air Base	86 th Airlift Wing	C-130 Maintenance	USA, Theater Transport	86 th Munitions Flight
Spangdahlem Air Base	52 nd Fighter Wing H	F-16	USA	52 nd Logistics Group (HQ)

<http://www.bits.de/public/pressreleases/pr290501e.htm>

<http://www.bits.de/public/pdf/pr02-1.pdf>

Since the end of 1995, Germany maintains only its Tornado fighter bombers at Buechel Air Base fully trained and ready to undertake nuclear missions, while formerly “nuclear” units at Noervenich have been assigned reduced readiness status. Today, no nuclear weapons are stored at Noervenich. Germany continues to participate in NATO-nuclear sharing arrangements.

Closed Sites

Brüggen Air Base, 12 June 1996.

2. Location and Capability of Nuclear Facilities

Power Reactors (18)

Biblis-A (KWB A), Biblis-B (KWB B), Brokdorf (KBR), Brunsbuettel, Emsland (KKE), Grafenrheinfeld, Grohnde (KWG), Gundremmingen- B, Gundremmingen- C, Isar-1 (KKI 1), Isar-2 (KKI 2), Krümmel (KKK), Neckarawestheim-1, Neckarawestheim-2, Obrigheim (KWO), Philippsburg-1, Philippsburg-2, Unterweser.

<http://www.nei.org/documents/WorldNuclearPlantsinOperation.pdf>

On November 14, 2003, Germany shut down its largest and second-oldest nuclear power plant, Stade. The process of dismantling the plant is scheduled for completion in 2015.

Environment Minister Trittin announced that Obrigheim power plant will also be shut down in 2005.

http://www.bundesregierung.de/en/News-by-subject/Environment-,10979_559018/artikel/Stade-power-plant-shut-down-in.htm

The Federal Office for Radiation Protection (BfS) declared the following five plants most vulnerable in case of a terror attack: Biblis A in Hesse; Philippsburg 1 and Obrigheim in Baden-Württemberg; Isar 1 in Bavaria; and Brunsbüttel in Schleswig-Holstein.

Research Reactors

Operational: 12

Shut Down: 11

Decommissioned: 22

Under Construction: 1

Planned: 0

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

Uranium Mines

All mines have been decommissioned.

3. Fissile Material Holdings

Separated Civil Plutonium

- Holdings in country- 6.5 tonnes

Cumulative Plutonium Discharges from Civilian Power Reactors

- Plutonium discharges- 89 tonnes

<http://www.isis-online.org>

Estimated Amounts of Plutonium Contained in Spent Civil Reactor Fuel

- Plutonium contained in spent fuel at civil reactor- 17 metric tonnes (in 1999)

National reports were issued to the IAEA on 31 December 1996-2000

<http://www.ceip.org/files/projects/npp/resources/SpentPlutoniumChart.htm>

Radioactive Waste Management

Germany stores radioactive waste in nearly 50 locations, including 18 power plants, two off-site power plant waste storage facilities, medicine and industry collecting depots and at large research centers.

A planned repository for low-level radioactive waste at the abandoned Konrad iron ore mine was commissioned in 2001. The former mine may eventually hold low-heat-producing radioactive wastes, which account for more than 95 percent of Germany's radioactive waste.

Another option is to store both low- and possibly high-level radioactive wastes in the Asse salt mine. Since 1965, this mine has been an area of intense research and development of the characteristics of a salt repository. Low-level radioactive wastes have been disposed of in the salt mine since 1967 as a demonstration of underground disposal.

Spent nuclear fuel is stored in reactor pools for 3-10 years. Some reactors also have on-site dry cask storage.

After a 1999 parliamentary election, the twenty-year long exploration of the Gorleben salt dome as a potential permanent radioactive waste repository was temporarily stopped, pending further study of other types of geologic environments and to clarify conceptual and safety issues. A new site will be selected based on comparison with Gorleben, which may yet be an interim storage site. Steel canisters are being considered for radioactive waste containment.

<http://www.ocrwm.doe.gov/factsheets/doeymp0412.shtml>

4. Nuclear Activities

Research Programs

A ban on sending spent nuclear fuel abroad for reprocessing will go into effect in 2005, as part of Germany's nuclear energy phase out plan. The legislation also phases out shipments of nuclear waste to reprocessing centers in France and Britain, although it sets no fixed deadline for waste being returned to the country.

<http://www.world-nuclear.org/info/inf43.htm>

Nuclear Cooperation Programs

From 1946-1990, ~220,000 tons of uranium was mined in the former East Germany. Much of this uranium was used in Soviet weapons programs and for fuel in Eastern Europe. Now all uranium is imported from Canada, Russia and elsewhere.

Germany had reprocessing contracts with other countries until 1989. Vitrified (solidified) high-level radioactive waste from France and Britain are temporarily stored at facilities in Gorleben and Ahaus. High-level radioactive wastes from reprocessing are stored at the facilities where they were created. <http://www.ocrwm.doe.gov/factsheets/doeymp0412.shtml>

5. International Nonproliferation Efforts

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 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
Partial Test Ban Treaty, 1 December 1964
Sea-Bed Treaty, 18 November 1975

Multilateral Groups

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

Germany has signed and ratified the IAEA Additional Protocol; however, as the Protocols for all E.U. countries enter-into-force through an IAEA-EURATOM arrangement, the Protocol has yet to enter-into-force. (See reference 43, page 18.)

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

The Thirteen Steps: “The thirteen practical steps for the systematic and progressive implementation of Article VI adopted by the 2000 NPT Review Conference...remain the performance benchmark for the disarmament process... (The NWS) are called upon to unequivocally demonstrate that they do not intend to retain nuclear weapons indefinitely but are fully committed to making progress toward irreversible and verifiable nuclear disarmament.” –**Mr. Rüdiger Lüdeking, Director, Nuclear Arms Control and Non-Proliferation Federal Foreign Office, Berlin, addressing the States Parties to the NPT PrepCom, 2002.**

Disarmament and nonproliferation: “We have to recognize that the (NPT) has established a firm relationship between disarmament and non-proliferation. Indeed these are two goals which can only be pursued jointly and not at each other’s expense.”

PAROS: “I hasten to add that we would not understand why an open discussion about the weaponization of outer space should be categorically refused. It is a concern that has been raised by a number of delegations and as such it cannot simply be ignored or ruled out of order.”

Radiological materials: “(Radiological weapons convention) could also help to legitimize, revalue and give an impetus to international efforts aimed at providing for more effective protection and control of radiological materials. It could establish a legal obligation to secure radioactive materials...a radiological weapons convention could be an expression of the fact that the issue of protecting radioactive materials is not a national matter but a joint responsibility of the international community.”

Unless otherwise noted, all of these are excerpts of a statement by Mr. Rüdiger Lüdeking, Director, Nuclear Arms Control and Non-Proliferation Federal Foreign Office, Berlin, addressing the States Parties to the NPT PrepCom, 2003, Geneva and can be found at: <http://www.reachingcriticalwill.org/legal/npt/2003statements/GERMANY.pdf>