

# **BELGIUM**

## **1. LOCATION, AMOUNT AND DETAILS OF US NUCLEAR WEAPONS DEPLOYMENT/STORAGE**

Belgium hosts the NATO headquarters, near Brussels, where decisions about NATO nuclear strategy are taken. At SHAPE (Supreme Headquarters of the Allied Powers in Europe, the NATO military headquarters), located in Mons in south of Belgium, NATO nuclear strategy is translated into military plans.

Location	No. of Vaults	Maximum Capacity	No. of deployed weapons
Kleine Brogel	11	44	20
<b>TOTAL</b>			<b>20</b>

<http://www.nrdc.org/nuclear/euro/euro.pdf>

On March 22, 2005, the Commission of Foreign Affairs and Defense of the Belgian Senate voted a resolution requesting the Belgian government to broach the possibility of removal of American nuclear weapons from Europe within NATO. Further action by the Belgian Senate and the first chamber of Parliament is expected shortly thereafter.

## **2. LOCATION AND CAPABILITY OF NUCLEAR FACILITIES**

In March, 2002, the Council of Ministers decided to phase out the commercial production of nuclear power from Belgium. All open reactors will be closed when they reach the age of 40 years. The first reactor will be closed in 2014, and the process will be complete by 2024.

### **Power Reactors**

Operational: 7

Shut down: 1

Decommissioned: 0

Under construction: 0

Planned: 0

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

### **Research Reactors**

Operational: 4

Shut down: 2

Decommissioned: 0

Under Construction: 0

Planned: 0

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

### **Uranium Enrichment and Reprocessing**

There are no uranium enrichment facilities in Belgium. Enriched uranium is imported by Synatom, which retains ownership of it through its use by Electrabel to final disposal.

Fuel fabrication is at two plants at Mol-Dessel: a 400 t/yr uranium fuel plant operated by FBFC International (Framatome-ANP), and Belgonucleaire's 35 t/yr MOX plant.

The Eurochemic reprocessing plant at Dessel was built as a joint facility with 12 other OECD states. It operated 1966 to 1974 and after 12 years idle it is now being dismantled by Belgoprocess.

<http://www.world-nuclear.org/info/inf94.htm>

## **3. FISSILE MATERIAL HOLDINGS**

### **Unirradiated Civil Plutonium**

- 3.4 tons (in country)

- .4 tons (in other countries)

[http://www.isis-online.org/global\\_stocks/separated\\_civil\\_pu.html](http://www.isis-online.org/global_stocks/separated_civil_pu.html)

### Separated Civil Plutonium (in and out of country) - intended for civil MOX

end of 2002: 1.8 tons

estimated by 2010: 0

[http://www.isis-online.org/global\\_stocks/separated\\_civil\\_pu.html](http://www.isis-online.org/global_stocks/separated_civil_pu.html)

### Radioactive Waste Management

The national agency for radioactive waste and fissile materials management is responsible for the management of all radioactive materials in the country, including transport, treatment, conditioning, storage and disposal. Its main facility is at the Mol-Dessel site, run by its subsidiary Belgoprocess.

*Low-level waste:* There are proposals for low-level waste repositories at Mol and Dessel.

*Intermediate- and high-level waste:* A number of shipments of vitrified high-level waste from reprocessed Belgian fuel have taken place from La Hague in France. The wastes are stored at Dessel.

Research on deep geological disposal of intermediate and high-level wastes is underway and focused on the clays at Mol. In 1980-84 the Hades underground research laboratory was constructed 225 meters deep in the Boom clay. <http://www.world-nuclear.org/info/inf94.htm>

## 4. NUCLEAR ACTIVITIES

### Research Programs

AMOLF/FOM: Inst for Atomic & Molecular Physics

ECN: Energieonderzoek Centrum Nederland

FELIX

FOM: Fundamenteel Onderzoek der Materie

Interfacultair Reactor Instituut

National Inst for Nuclear Physics

NWO: Nederlandse Organisatie voor Wetenschappelijk Onderzoek / Organization for Scientific Research

TNO: Nederlandse Organisatie voor Toegest-Natuurwetenschappelijk Onderzoek

<http://www.radwaste.org/research.htm>

### Nuclear Cooperation

*US:* Belgium supplied the US's military program with uranium from the former Belgian Congo. In 1962, Belgium was rewarded with an American research reactor at Mol, the first pressurized water reactor built in Europe. <http://www.world-nuclear.org/info/inf94.htm>

*Contact Expert Group:* The CEG was established in September 1995 to enhance safety of waste management in Russia and to promote international cooperative efforts aimed at resolving radioactive waste management issues. Members include Belgium, Finland, France, Germany, Norway, Russia, Sweden, UK, USA, European Union, as well as the International Institute for Applied Systems Analysis (IIASA), and the International Science and Technology Centre (ISTC), with Japan and the Nordic Environment Finance Corp as observers. <http://www.world-nuclear.org/info/inf38.htm>

*Canada:* MOU signed November 2002 on data and information exchange, scientific cooperation, research and development. <http://www.hc-sc.gc.ca/hecs-sesc/hml/belgium.htm>

*Russia:* MOU signed April 2001 on delivery of nuclear fuel to Belgian nuclear power plants. [http://www.bellona.no/en/international/russia/nuke\\_industry/co-operation/channel15203n25s50.html](http://www.bellona.no/en/international/russia/nuke_industry/co-operation/channel15203n25s50.html)

### Nuclear bilateral agreements:

Luxembourg (1970)

Romania (1974)

USA-USNRC (1978)

Korea (1981)

France (1981 and 1984)

Egypt (1984)

The Netherlands (1984 and 1990)

China (1985)

*Scientific, industrial and technological agreements:*

France (1950)

USA (1950, 1951)

Kuwait (1974)

DR Germany (1974)

Poland (1974)

Bulgaria (1975)

Czechoslovakia (1975)

Hungary (1975 and 1986)

Romania (1976)

Cuba (1976)

Egypt (1979)

China (1979)

Algeria (1982 and 1983)

Tunisia (1983)

Germany (1980)

United Arab Republics (1984)

USSR (1984)

Mexico (1984)

Brazil (1985)

Kenya (1985)

Venezuela (1986)

India (1990)

<http://www.nea.fr/html/general/profiles/belgium-annex.html>

## 5. INTERNATIONAL NON-PROLIFERATION EFFORTS

### Treaties Signed and Ratified, date of deposit

Antarctic Treaty, 23 July 1960

APM Convention, 4 September 1998

Biological Weapons Convention, 15 March 1979

Certain Conventional Weapons Convention, 7 February 1995

Comprehensive Test Ban Treaty, 29 June 1999

Nuclear Non-Proliferation Treaty, 2 May 1975

Outer Space Treaty, 31 March 1973

Belgium ratified the IAEA Additional Protocol on 30 April 2004.

### Multilateral Groups

Conference on Disarmament

Hague Code of Conduct against Ballistic Missile Proliferation

Missile Technology Control Regime

Nuclear Suppliers Group

Wassenaar Arrangement

Zangger Committee

## 6. POSITIONS TAKEN IN INTERNATIONAL FORA ON VARIOUS ISSUES OF NUCLEAR DISARMAMENT

*Proliferation:* "The proliferation of weapons of mass destruction poses a serious threat to world security. The regime of non-proliferation is jeopardized. North Korea must regain its place within this regime without delay. The Islamic Republic of Iran is located in a region full of tension and its security concerns are legitimate... the Iranian Authorities must cooperate entirely with the IAEA and cease all activities linked to the enrichment of uranium." - **Statement to the General Assembly by H.E. Mr. Karel de Gucht, Minister of Foreign Affairs, September 14, 2004.**

<http://www.un.org/webcast/ga/59/statements/beleng040924.pdf>

*Nuclear Disarmament:* "We are firmly convinced that nuclear disarmament can only be realized through a gradual process. At the 6th Review Conference of the Non-Proliferation Treaty, the states parties agreed on a series of practical measures to this effect. The international community should concentrate on their implementation." - **Statement to the 57th session of the UN General Assembly First Committee on Disarmament and International Security by Belgium on behalf of Belgium, Netherlands, Luxembourg, in explanation of vote on draft resolution 57/L.53, Follow-up to the advisory opinion of the International Court of Justice on the Legality of the Threat or Use of Nuclear Weapons, October 21, 2002.**

[http://www.reachingcriticalwill.org/political/lcom/lcom02/res/EOV/belg\\_EOVL53.html](http://www.reachingcriticalwill.org/political/lcom/lcom02/res/EOV/belg_EOVL53.html)

*Universalization:* "I formulate the hope that the universalization of the NPT will continue. Four States remain outside of the Treaty. It is important that they are present during the meetings of the non-proliferation regime," -Statement by H.E. M. Jean De Ruyt, Director General for Political Affairs, Special Envoy of the Government of Belgium to the Sixth Review Conference of the NPT, New York, 25 April 2000. <http://www.un.int/belgium/NPTENG.html>