

BOX 1

At a Glance: 20 Major Nuclear Weapons Companies

These 20 companies, which are the focus of this report, are involved in the nuclear weapons programmes of the United States, the United Kingdom, France and India. The report examines which financial institutions around the world invest in these companies through shares, bonds and loans.

Alliant Techsystems

Alliant Techsystems, or ATK, is involved in the manufacture of US nuclear-tipped ballistic missiles. It produces rocket propulsion systems for Trident II submarine-launched ballistic missiles and Minuteman III intercontinental ballistic missiles.

Babcock & Wilcox

The Babcock & Wilcox Company supplies the US government with various nuclear components for its defence programmes. It operates the Pantex plant of the National Nuclear Security Administration, where it modernizes nuclear warheads.

Babcock International

Babcock International is involved in the development of a new class of nuclear-armed submarine for the United Kingdom. It also assists with the maintenance of the country's existing fleet of *Vanguard*-class nuclear-armed submarines.

BAE Systems

BAE Systems is involved in the development of a new class of nuclear-armed submarine for the United Kingdom to replace the *Vanguard* class. It is also part of a joint venture that is producing nuclear missiles for the French air force.

Bechtel

Bechtel manages the Los Alamos and Lawrence Livermore national laboratories in the United States, which research, design and develop nuclear weapons, and monitor the "safety and reliability" of the entire US nuclear weapons stockpile.

Boeing

Boeing is involved in the maintenance of the 500 or so Minuteman III nuclear intercontinental ballistic missiles in the US arsenal. It is responsible for guidance, flight controls, secure codes, weapons systems testing and engineering.

EADS

The European Aeronautic Defence and Space Company, or EADS, is a Dutch company that produces and maintains submarine-launched nuclear missiles for the French navy, and is part of a joint venture that is building nuclear missiles for the French air force.

Finmeccanica

Finmeccanica holds a one-quarter share in MBDA, a joint venture that is building nuclear missiles for the French air force. The missiles are capable of being launched from the *Mirage 2000N* fighter plane and the new *Rafale* fighter plane.

GenCorp

GenCorp is involved in the design, development and production of land- and sea-based nuclear ballistic missile systems for the United States. It is currently producing propulsion systems for Minuteman III and D5 Trident nuclear missiles.

General Dynamics

General Dynamics provides maintenance, engineering and technical support for US nuclear-armed submarines. It built the *Ohio*-class submarines for the US navy, many of which are equipped with Trident nuclear-tipped missiles.

Honeywell International

Honeywell International produces approximately 85 per cent of the non-nuclear components for US nuclear weapons. It is involved in simulated nuclear testing and the life-extension programme for the US navy's Trident II nuclear missiles.

Jacobs Engineering

Jacobs Engineering owns a one-third share in the Atomic Weapons Establishment, which designs, manufactures and maintains the nuclear warheads for the United Kingdom's submarine-launched intercontinental ballistic missiles.

Larsen & Toubro

Larsen & Toubro is involved in the design and construction of five nuclear-armed submarines for the Indian navy, each of which will be equipped with 12 missiles. The company has also tested a launch system for India's nuclear missiles.

Lockheed Martin

Lockheed Martin is involved in the production and maintenance of nuclear weapons for both the United States and United Kingdom. It is responsible for the construction of submarine-launched Trident II D5 nuclear missiles.

Northrop Grumman

Northrop Grumman leads a joint project responsible for producing and maintaining Minuteman III nuclear intercontinental ballistic missiles for the United States. Roughly 500 such missiles form the core of the US land-based nuclear arsenal.

Redhall Group

Redhall Group operates within the nuclear weapons industry via contracts with the British Ministry of Defence carrying out mechanical and electrical engineering activities at the Atomic Weapons Establishment in Aldermaston and Burghfield.

Rolls-Royce

Rolls-Royce is part of a joint venture in the United Kingdom to develop *Successor*, a new class of nuclear-armed submarine. It is also involved in the maintenance of the existing fleet of *Vanguard*-class nuclear-armed submarines.

Safran

Safran is part of a joint venture to build the new M51 submarine-launched nuclear missiles for the French navy, which each deliver multiple warheads. Its subsidiaries Snecma and Sagem provide the propulsion and navigation systems for these missiles.

Serco Group

Serco owns a one-third share in the joint venture AWE-ML, which runs the British Atomic Weapons Establishment. It is responsible for manufacturing and maintaining the nuclear warheads for the country's submarine fleet.

Thales

Thales is part of a joint venture to build the new M51 submarine-launched nuclear missiles for the French navy, which each deliver multiple warheads. EADS's subsidiary Astrium is the lead contractor, whereas Thales is a main subcontractor.