

Nuclear weapon states Profile

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Ordered by total number of warheads possessed – largest to smallest

Russia

Number of warheads

13,000 nuclear weapons
(of which around 4,834 in operational stockpile – approximately 2,787 strategic and 2,047 non-strategic, with 8,166 in reserve or awaiting dismantlement)

Nuclear weapon system details

Submarines: 13 (five Delta III class, six Delta IV class, one Typhoon class, one new Borei class SSBNs) with intercontinental ballistic missiles (missiles can carry from three-four warheads)

Land-based: 383 intercontinental ballistic missiles of five different types with 1,355 nuclear warheads (two types of missile can carry more than one warhead)

Aircraft: Strategic bombers (Bear-H6, Bear-H16 and Blackjack) with free-fall bombs or nuclear-tipped cruise missiles

•Plus various non-strategic* capabilities including depth bombs, torpedoes and sea-launched nuclear-capable cruise missiles

Position on first-use

First use position has been indicated in previous military doctrines. Most recently, Russian first deputy minister of defence, General Baluyevsky said 'We do not intend to attack anyone, but consider it necessary that all our partners clearly understand ... that the Armed Forces will be used to protect the sovereignty and territorial integrity of Russia and its allies, including preventative action, and including the use of nuclear weapons.' (Jan 2007)

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<p>Modernisations</p>	<ul style="list-style-type: none"> • Modernising and testing the delivery systems • Deployment of newer, more capable land based intercontinental ballistic missiles (modified Topol-M) • Development of new intercontinental ballistic missile (Bulava class to carry up to six warheads) for use on new Borei class submarines (eight submarines planned for deployment by 2015)
<p>Disarmament initiatives</p>	<ul style="list-style-type: none"> • As part of a 2002 bilateral agreement with Russia (termed either the Strategic Offensive Reductions Treaty – SORT or the Moscow Treaty), numbers of operational strategic warheads deployed by each country are to be reduced to 2,200 by 2012 • President Medvedev is in talks with US President Obama to negotiate reductions of operational warheads
<p>Nuclear Non-Proliferation Treaty (NPT)</p>	<p>Signed and ratified</p>
<p>Comprehensive Test Ban Treaty</p>	<p>Signed and ratified</p>

United States

<p>Number of warheads</p>	<p>9,400 nuclear weapons 5,200 nuclear warheads in the military stockpile: (2,700 operational – approximately 2,200 strategic and 500 non-strategic, and 2,500 additional warheads in reserve stockpile)</p> <p>Plus 4,200 nuclear warheads which have been removed from the military stockpile with completed dismantlement due by 2023</p>
<p>Nuclear weapon system details</p>	<p>Submarines:</p> <ul style="list-style-type: none"> • 14 (Ohio class SSBNs) with Trident II (D-5) missiles and W76 and W88 warheads • Other submarines (some Los Angeles, Improved Los Angeles and Virginia class SSNs) with Tomahawk cruise missiles and W80-0 warheads (non-strategic) <p>Land-based: 450 Minuteman III intercontinental ballistic missiles with 550 W87 warheads</p> <p>Aircraft: B-52H and B-2 bombers with 500 nuclear weapons mainly free-fall bombs but also nuclear-tipped cruise missiles</p>

Position on first-use

- 2002 Nuclear Posture Review put more emphasis on the usability of nuclear weapons as part of a triad of offensive strike systems (nuclear and non-nuclear)
- Nuclear strike plans upgraded to be more flexible
- Defence Secretary Robert Gates said 'As long as other states have or seek nuclear weapons ... then we must have a deterrent capacity that makes it clear that challenging the US in the nuclear arena—or with other weapons of mass destruction – could result in an overwhelming, catastrophic response.' Oct 2008

Modernisations

- Reliable Replacement Warhead Program to produce new nuclear warheads started in 2006 (although funding withdrawn by Congress for 2007 and 2008). RRW may replace most other warheads
- Minuteman missiles being modernised and having their service life extended to 2030. The more powerful nuclear warhead W87 is replacing the W62 warhead
- Trident II (D-5) missiles being upgraded
- Modernised W76-1 warheads are beginning to be deployed on Trident missiles
- B-52 bomber capabilities modernised.
- Plans for new nuclear-tipped cruise missile and new aircraft
- Design studies started for new submarines (SSBN)

Disarmament initiatives

- As part of a 2002 bilateral agreement with Russia (termed either the Strategic Offensive Reductions Treaty – SORT or the Moscow Treaty), numbers of operational strategic warheads deployed by each country are to be reduced to 1,700-2,200 by 2012
- President Obama has renewed talks with Russia to reduce the numbers of operational warheads held by the US and Russia

Nuclear Non-Proliferation Treaty (NPT)

Signed and ratified

Comprehensive Test Ban Treaty

Signed not yet ratified

Note: As part of NATO's nuclear arsenal, approximately 150-240 US nuclear warheads (non-strategic B61 free-fall bombs) are kept at six bases in Europe (At the four national European bases in Belgium, Germany, The Netherlands and Italy the country's own airforce would carry out any bombing mission and at the US Air Force bases Aviano AB in Italy and Incirlik in Turkey US F-16 bombers would fly them to their destination).

France

Number of warheads

300 operational (no information on reserves)

Nuclear weapon system details

Submarines: Three new Triomphant class (SSBN) of a planned four, each equipped with up to 16 intercontinental ballistic missiles (Aérospatiale M45) and from 4 to 6 (TN-75) warheads on each missile

Aircraft: land-based (Mirage 2000N) and sea-based on aircraft carriers (Super Étendard) equipped with cruise missiles (ASMP) with (TN81) nuclear warheads

Position on first-use

In Jan 2006, the then President Jacques Chirac stated that France would respond with nuclear weapons against any state using terrorist means or considering using weapons of mass destruction against France

Modernisations

- Le Triomphant class of four submarines is in the process of replacing L'Inflexible class submarines. The fourth submarine 'Le Terrible' is to enter service in 2010
- A longer range (M51.1) missile is replacing the current ballistic missiles on the subs. A follow-on version of this missile (M51.2) may be equipped with a new generation warhead the Tête Nucléaire Océanique (TNO) after 2015
- Cruise missiles (ASMP) on aircraft being replaced with updated versions (ASMPA)
- A new Rafale aircraft may be used both as a land-based and sea-based fighter bomber equipped with the updated cruise missiles around 2010 and a new warhead the Tête Nucléaire Aero-portée (TNA)

Disarmament initiatives

President Sarkozy declared that France would reduce the number of warheads used by its aircraft by a third so reducing the overall number to 300 operational nuclear warheads (March 2008)

Nuclear Non-Proliferation Treaty (NPT)

Signed and ratified

Comprehensive Test Ban Treaty

Signed and ratified

China

Number of warheads

Approx **240**
(186 operational the rest in reserve)

Nuclear weapon system details

Submarines: one (Xia class SSBN) with 12 intermediate range ballistic missiles (JL-1) each with one nuclear warhead (but sub not believed to be fully operational)
Land based: intercontinental, intermediate and medium range ballistic missiles
Aircraft: likely to be H-6 bombers with small number of free-fall bombs or nuclear-tipped cruise missiles (DH-10)

Position on first-use

2008 Chinese Defence White Paper re-states 'no first use' policy

Modernisations

- Ongoing modernisation programme for development of new missiles and cruise missiles
- Up to 5 new submarines (Jin Class) being developed (two already launched) to be equipped with a longer range intercontinental ballistic missile (JL-2)

Disarmament initiatives

None specified

Nuclear Non-Proliferation Treaty (NPT)

Signed and ratified

Comprehensive Test Ban Treaty

Signed not yet ratified

United Kingdom

Number of warheads

160 operational (no information on reserves)

Nuclear weapon system details

Submarines: Four (Vanguard class SSBNs) each carrying up to 16 Trident II (D-5) intercontinental ballistic missiles ('lease-purchased from the US pool of Trident missiles). Up to three nuclear warheads on each missile

Position on first-use

In Sept 2008 the then Defence Secretary Des Browne re-stated a 2005 position that 'The UK does not rule in or out the first use of nuclear weapons. A policy of no first use of nuclear weapons would be incompatible with our and NATO's doctrine of deterrence.'

(The Trident nuclear weapons system is also assigned to the NATO alliance)

Modernisations	<ul style="list-style-type: none"> • In 2007 the UK government decided to replace Trident with a new nuclear weapons system after 2024 • Agreement with US to join in with its Trident missile upgrade • A decision to replace or refurbish the nuclear warheads is to be decided during the next parliament • Huge financial investments (new infrastructure and staff) at the UK facility which makes the nuclear warheads (AWE Aldermaston)
Disarmament initiatives	Defence White Paper 2006 stated a reduction in operational warheads by 20% to the current number of 160
Nuclear Non-Proliferation Treaty (NPT)	Signed and ratified
Comprehensive Test Ban Treaty	Signed and ratified
Israel	
Number of warheads	Approx 80-100 (Israel government's position remains ambiguous over its possession of nuclear weapons)
Nuclear weapon system details	<p>Submarines: 3 (Dolphin class) thought to be equipped with cruise missiles</p> <p>Land based: intermediate range (Jericho II) and intercontinental ballistic missiles (Jericho III)</p> <p>Aircraft: F-16</p>
Position on first-use	None specified
Modernisations	Contract with Germany for two more submarines (the first submarine to be ready by 2012)
Disarmament initiatives	None specified
Nuclear Non-Proliferation Treaty (NPT)	Not signed or ratified
Comprehensive Test Ban Treaty	Signed not yet ratified

India

Number of warheads

Approx **60-70**

Nuclear weapon system details

Land based: nuclear capable ballistic missiles – short range (Prithvi I and Agni I) and medium range (Agni II)
Aircraft: Mirage 2000H Vajra and possibly Jaguar IS Shamsher with free-fall bombs

Position on first use

1999 Nuclear doctrine based on principle of minimum credible deterrent and no first-use. But 2003 guidelines stated nuclear weapons would be used to deter chemical or biological weapons used against them

Modernisations

- Longer range land Agni III ballistic missile being developed with plans also announced for Agni IV
- Plans to develop naval capability with warship-based ballistic missiles (short range Dhanush)
- Submarines being developed for use with K-15 ballistic missiles

Disarmament initiatives

None specified

Nuclear Non-Proliferation Treaty (NPT)

Not signed or ratified

Comprehensive Test Ban Treaty

Not signed or ratified

Pakistan

Number of warheads

Approx **60 +**

Nuclear weapon system details

Land-based: short-range ballistic missiles (Ghaznavi, Shaheen I and possibly Abdali) and medium-range ballistic missiles (Ghauri I)
Aircraft: F-16, A-5 or Mirage V with free-fall bombs

Position on first use

President Zardari stated he was ready to commit to a 'no first-use' position (Nov 2008)

Modernisations/additions

- Shaheen ballistic missile being upgraded to make it intermediate-range
- Short-range land-based cruise missiles (Babur) being developed. Version is also being developed to be launched from aircraft and Agosta class submarines
- Short range nuclear-capable cruise missile being developed (Ra'ad) to be launched from aircraft

Disarmament initiatives

None specified

Nuclear Non-Proliferation Treaty (NPT)

Not signed or ratified

Comprehensive Test Ban Treaty

Not signed or ratified

North Korea

Number of warheads	North Korea exploded nuclear devices in October 2006 and in May 2009 but there are doubts about whether it has an operational nuclear weapons capability. It may have enough fissile material to produce 6-10 nuclear warheads. International negotiations are being held to ensure North Korea does not become a nuclear weapons capable state.
Platforms	North Korea has short-range and medium-range land-based ballistic missiles and is developing longer-range ones. It is thought unlikely to have developed nuclear warheads able to fit on its missiles.
Nuclear Non-Proliferation Treaty (NPT)	Withdrew from treaty in 2003
Comprehensive Test Ban Treaty	Not signed or ratified

*non-strategic or tactical nuclear weapons are widely defined as being more usable in the battlefield

These tables are compiled from more detailed information available from the Bulletin of Atomic Scientists' Nuclear Notebook series (<http://www.thebulletin.org>), the Nuclear Threat Initiative country profiles , (<http://www.nti.org>) and the Stockholm International Peace Research Yearbook (SIPRI) 2009.

Note: Not all information is publicly available for the different components of the different nuclear weapons systems.