

# Preventing Trident Replacement

## A preliminary briefing

September 2005



Campaign for Nuclear Disarmament • 162 Holloway Rd, London N7 8DQ, UK  
Tel: +44 207 700 2393 • Fax: + 44 207 700 2357  
email: [information@cnduk.org](mailto:information@cnduk.org) • website: [www.cnduk.org](http://www.cnduk.org)

# Preventing Trident Replacement: a preliminary briefing

**A** decision to replace Britain's nuclear weapons system, which would cost billions of pounds of public money, may have already been secretly made by the government. If so, this is without any public or parliamentary consultation even though such a decision would have very serious implications – undermining international treaty obligations, global stability and peace.

## Why is replacement an issue now?

Trident, Britain's current nuclear weapon system, consists of four British-built Vanguard class nuclear powered submarines each carrying up to 16 US Trident II D5 missiles. There are around three British built nuclear warheads mounted on every missile making about 48 warheads carried by each submarine. Each warhead can be aimed at a different target and each has eight times the explosive power of the bomb which was dropped by the United States on Hiroshima in 1945 killing about 140,000 people.

Trident replaced a previous submarine-based nuclear weapon system called Polaris which also consisted of four British-built submarines armed with 16 US-built Polaris missiles mounted with British-built Chevaline warheads. The decision to replace the Polaris/Chevaline system with Trident was made, without any parliamentary discussion, in 1980 and the first Trident submarine entered service in 1994 with the other three commissioned into service successively over the following five years. Trident has an approximate lifespan of 30 years and so could remain operational until around 2025.

Any decision about whether or not Trident should be replaced is now due. Informed estimates, made by experts from anti-nuclear weapons groups, suggest that a replacement for Trident might take about 14 years to develop. It is worth noting that it also took 14 years from the decision to procure Trident until the first submarine entered into service.

Government sources have repeatedly said that a decision will be made within the current parliament. In the Defence White Paper 2003<sup>1</sup>, published in the last parliament, the government said that, "*Decisions on whether to replace Trident are not needed this Parliament but are likely to be required in the next one.*" On the 4th July 2005 in the House of Commons, the Secretary of State for Defence, John Reid, echoed this when he said, "*Decisions on any replacement of the United Kingdom's nuclear deterrent are likely to be necessary in the lifetime of the current parliament, which will of course last some years.*"<sup>2</sup>

## What comes after Trident?

There are three possible options facing the government:

1. Trident is not replaced with another nuclear weapons system and the UK takes the initiative towards fulfilling its obligations to disarm under Article VI of the Nuclear Non-Proliferation Treaty (NPT).<sup>1</sup>
2. The lifespan of the Trident system is extended in the short term.
3. A replacement of the Trident system is procured, encompassing various new technologies. Delivery is likely to be based on a nuclear powered submarine system.

Several newspaper reports<sup>3 4</sup> have suggested that the government has already made a decision in secret on a replacement and preparations may already have begun to procure new nuclear weapons capabilities, even though the government denies this.

CND believes that the first option is the only lawful and moral one. It is a path that has already been taken by other previously nuclear-armed states, including South Africa. It is also the one that is most likely to enable the UK to face the real security challenges of the 21st Century. At this time, this option may be the least likely for a number of reasons, most importantly the UK's current stance on nuclear weapons and the strong connection with the US on nuclear and other defence issues including the UK's membership of NATO.

## Extension of Trident's lifespan

In the short term the British government may delay making a decision on full replacement of Trident by funding a lifespan extension of the current system. This would then allow it, if necessary, to make a later decision on full replacement and to be involved in US Navy designs and plans to replace its own Trident system by 2029<sup>5</sup>.

The US is already taking steps in this direction with an extension of the hull life of its own Trident nuclear submarines and by putting a Trident II D5 Service Life Extension Programme (SLEP) into place. This programme aims to upgrade the Trident missile to a Trident II D5A by 2020.

## A new nuclear weapons system

If the government pursues a full replacement option now, there are a number of types of replacement options that the government might choose from:

### a) delivery platform and missiles

An article in the *Scotsman* suggested that a more flexible multi-role submarine, able to fire both nuclear tipped long-range and conventionally armed Tomahawk missiles, could be procured<sup>6</sup>. This may be part of a Ministry of Defence project called the Maritime Future Underwater Capability (MFUC) which is researching a future generation of nuclear powered attack submarines.

Other suggestions have been made that perhaps the new Astute class nuclear powered submarines, being developed to replace Britain's conventionally armed nuclear submarines, might also be adapted to provide nuclear weapons capabilities.

<sup>1</sup>Although the UK might still continue to have US nuclear weapons based on its soil as part of its membership of NATO

## b) warheads

Britain could also become involved in US research programmes looking at newer tactical nuclear weapons.

### *Mini-nukes*

These could be lower-yield nuclear warheads, so called ‘mini-nukes’, of less than five kilotons with ‘tailored’ and ‘enhanced’-effect warheads<sup>7</sup>, which would no doubt allow improved targeting. ‘Mini-nukes’ could be used on the battlefield, for example against overground chemical and biological weapons facilities

### *Bunker-busters*

In July 2005 the US Senate approved funding of \$4million for the Robust Nuclear Earth Penetrator (RNEP) or ‘bunker buster’ research programme and it was reported that new tests on four prototypes would be carried out later in the year<sup>8</sup>. The ‘bunker buster’ penetrates the earth to reach more deeply buried targets such as nuclear bunkers and could be an upgrading on an existing US nuclear warhead, the B1.

## The nuclear postures of the UK and US

The Bush administration’s Congressionally-mandated US Nuclear Posture Review was released to Congress in January 2002. It demonstrated an increasingly aggressive US nuclear weapons stance which put more emphasis on the usability of nuclear weapons. The review established a so-called ‘New Triad’ of offensive strike systems – both nuclear and non-nuclear, strengthened the concept of the offensive strike system, reinforced the policy of nuclear first-use and encompassed the development of new nuclear weapons. In 2003, the US also overturned the Spratt Furse prohibition, a law made in 1994 to ban research and development leading to the production of a low-yield nuclear weapon of less than five kilotons. Overall, \$40 billion is said to be spent every year by the US on its nuclear forces and, according to the Middle Powers Initiative, there has been a ‘decade-long upsurge in funding for nuclear weapons’<sup>9</sup>.

The UK government’s stance has significantly reflected this more aggressive US posture. Principally the Labour government dropped its support for a ‘No first use’ policy after it was elected in 1997. In 2002, the then British Defence Secretary Geoff Hoon made several statements indicating that nuclear weapons might also actually be used not only in response to nuclear attacks but against chemical and biological weapon attacks too, that this might even be pre-emptive against a proportionate threat and that this could be against a non-nuclear weapon state<sup>10</sup>.

The government has also made repeated assertions that the UK needs to maintain a nuclear system of deterrence. The Labour Party Manifesto 2005 stated that “*We are also committed to retaining the independent nuclear deterrent*”. Later John Reid reiterated this in the House of Commons when he said, “*we pledged no longer than two months ago in our manifesto... that we would retain the minimum nuclear deterrent, so that is our position.*”<sup>11</sup> In April 2005, when questioned in a BBC interview about Trident replacement, Prime Minister Tony Blair responded, “*Well, we’ve got to retain our nuclear deterrent, and we’ve had an independent nuclear deterrent for a long time...in principle I believe it’s important to retain our own independent deterrent*”.

Of course this commitment to a nuclear ‘deterrent’ makes it highly likely that the Trident system will either be replaced or at least have its lifespan extended.

In addition, reports have been made about huge new government investments in the Atomic Weapons Establishment (AWE) at Aldermaston in Berkshire which produces and maintains Britain's nuclear warheads. This includes recruitment of new scientists and the acquisition of various new laboratories and equipment and a massive new laser plant called Orion which tests materials in the construction of nuclear warheads under conditions that replicate a nuclear explosion<sup>12 13</sup>. In July, John Reid also announced that an additional £1 billion is to be invested in the establishment over the next three years, purportedly to maintain the current system<sup>14</sup>. But these investments may be intended to make the infrastructure ready for new nuclear weapons development. AWE's annual report 2004/5 states that *"We must also retain a capability to produce a successor weapon if the Government requires this in the future."*<sup>15</sup>

### **The UK's close relationship with the US**

There has been a long and close relationship between the UK and US with regards to nuclear weapons testing and development. Trident II D5 missiles used by the British Trident system are manufactured, tested and serviced in the US and are leased from a US missile pool. The British-built Trident warhead, which was tested underground at the US Nuclear Test Site in Nevada, is widely thought to be based on the US W76 warhead used by the US Trident system.

In 2004 the UK and US renewed the 1958 Mutual Defence Agreement, a unique bilateral treaty which formally acknowledges this relationship and covers all aspects of nuclear weapons design, development and maintenance. Upon renewal, President Bush said,

*"The United Kingdom intends to continue to maintain viable nuclear forces. In light of our previous close cooperation and the fact that the United Kingdom has committed its nuclear forces to the North Atlantic Treaty Organization, I have concluded that it is in our interest to continue to assist them in maintaining a credible nuclear force."*<sup>16</sup>

### **NATO**

Further US influence on the UK's nuclear posture and thus on the decision of a replacement for Trident comes from the UK's membership of NATO, whose nuclear posture is predominantly determined by the US's own stance. The UK's nuclear weapons were initially committed to NATO under the sales agreement of Polaris missile in the 1960s and this commitment was then re-stated with the leasing of Trident missiles from the US.<sup>17</sup> NATO might also wish for further commitment of any new UK nuclear weapons.

### **Building widespread opposition to Trident replacement**

Calls for transparency on the issue have come from many sources and from across political parties. Michael Portillo, the former Conservative Defence Secretary, wrote in an article in *The Times* that, with the end of the Cold War, a replacement was not necessary and British nuclear weapons should be scrapped<sup>18</sup>.

Vast sums of money would also need to be spent on a replacement which would be much better spent on improving health, education and housing. For example, costs for the acquisition of the current Trident system have been given at £9.8 billion in 1991 figures.<sup>19</sup> Any replacement of this system therefore is certain to cost many billions of pounds. *The Times* has even suggested that this figure might be as high as £15 billion.<sup>20</sup> The annual UK defence budget is already around £6 billion per year.<sup>21</sup>

By replacing Trident or extending its lifespan the UK government would be failing to meet its obligations under Article VI of the Nuclear Non-Proliferation Treaty which states that: “*Each of the Parties to the Treaty undertakes to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control*”. The development of lower yield weapons would lower the threshold at which they might be used, as they are more versatile and useable, in situations of warfare and even where there is only a perceived threat such as in the invasion of Iraq.

In 1996, the International Court of Justice ruled that “*the threat or use of nuclear weapons would be generally contrary to the rules of international law applicable in armed conflict, and in particular the principles and rules of humanitarian law*”. In other words a nuclear attack would be illegal, unless it could be carried out within the confines of humanitarian law, a situation we find impossible to envisage. We know very well from bombs dropped at Hiroshima and Nagasaki that the effects of a nuclear attack are devastating to human life and the environment. Even ‘mini-nukes’ or low-yield bombs can have at least one third of the power of the Hiroshima bomb. A report by the US National Research Council<sup>22</sup> warned that nuclear ‘bunker busters’ could lead to more than a million civilian deaths if the target was in an urban area.

The world today needs the reaffirmation of a global security framework, based not on the threat of terrible weapons of mass destruction but on international law, the compliance with and respect for treaties and UN resolutions, and peaceful conflict prevention and resolution. CND believes that Britain’s nuclear weapons system is immoral and illegal and urges the government to comply with its obligations under Article VI of the NPT. CND calls on the government to decommission the Trident programme and rule out any plans for future nuclear weapon systems.

---

<sup>1</sup> *Delivering Security in a Changing World*, 3.11, Cm 6041, December 2003

<sup>2</sup> House of Commons Debate on Nuclear Deterrence, 4th July 2005, Vol.436 column 5

<sup>3</sup> Colin Brown, *Revealed: Blair to upgrade Britain’s nuclear weapons*, *The Independent*, 02 May 2005

<sup>4</sup> Tim Ripley, *Secret plans for Trident replacement*, *The Scotsman*, 9th June 2004

<sup>5</sup> Notes to Table of US Strategic Nuclear Forces 2002 on NRDC website at <http://www.nrdc.org/nuclear/nudb/datab11.asp>

<sup>6</sup> Tim Ripley, *Secret plans for Trident replacement*, *The Scotsman*, 9th June

<sup>7</sup> Andy Oppenheimer, *Her Majesty’s new nukes*, *Bulletin of the Atomic Scientists*, March/April 2003 pp. 16-18 (vol. 59, no. 02)

<sup>8</sup> David Hambling, *Novel Warhead may bust the deepest bunkers*, *New Scientist*, 14.7.05 Issue 258

<sup>9</sup> Hon. Douglas Roche, O.C., *Deadly Deadlock*, Middle Powers Initiative Briefing Paper, June 2005, p23 4.14

<sup>10</sup> Geoff Hoon explained this issue on LWT’s John Dimbleby’s programme 24th March 2002, see Yorkshire CND’s website at <http://www.cndyorks.gn.apc.org/news/articles/uknukpolicy.htm>

<sup>11</sup> House of Commons Debate on Nuclear Deterrence, 4th July 2005, Vol.436 column 6

<sup>12</sup> Jane’s Intelligence Digest, August 15, 2003.

<sup>13</sup> Aldermaston Women’s Peace Campaign, *Aldermaston Update: Next Generation Briefing*, September 2003; [www.aldermastonwpc.gn.apc.org/pdf/UPDATE\\_09\\_03.pdf](http://www.aldermastonwpc.gn.apc.org/pdf/UPDATE_09_03.pdf).

<sup>14</sup> House of Commons Written Statement, *Atomic Weapons Establishment*, 19th July 2005, Vol.436 column 60WS

<sup>15</sup> AWE Annual Report 2004/5, *Broadening our Horizons*, p2 para. 2

<sup>16</sup> White House website at <http://www.whitehouse.gov/news/releases/2004/06/20040614-16.html>

<sup>17</sup> Nicola Butler and Mark Bromley, *Secrecy and Dependence: The UK Trident System in the 21st Century*, British American Security Council, Research Report 2001.3 Ch.2 p 23

<sup>18</sup> Michael Portillo, *Does Britain need nuclear weapons? No, Scrap them*, *The Sunday Times* 19th June 2005

<sup>19</sup> Tim Youngs & Claire Taylor, *Trident and the future of the British Nuclear Deterrent*, House of Commons Standard Note: SN/1A/3706 5 July 2005

<sup>20</sup> Tom Baldwin & Michael Evans, *The hunt for a new nuclear option*, *The Times* 28th May 2005

<sup>21</sup> Tim Youngs & Claire Taylor, *Trident and the future of the British Nuclear Deterrent*, House of Commons Standard Note: SN/1A/3706 5 July 2005

<sup>22</sup> National Research Council, *Effects of Nuclear Earth-Penetrator and Other Weapon*, 2005, due for publication but also available at [http://books.nap.edu/catalog/11282.html?ponpi\\_newsdoc04272005](http://books.nap.edu/catalog/11282.html?ponpi_newsdoc04272005)