

Memorandum from Scientists for Global Responsibility

About SGR

Scientists for Global Responsibility (SGR) is an independent UK membership organisation of approximately 850 science, design and technology professionals. Our main aim is to promote and support science, design and technology which contribute to social justice, environmental sustainability and the reduction of conflict. The issues raised by the potential replacement of UK nuclear weapons obviously have strong links with these concerns.

Executive Summary

SGR believes that the security of the UK - and the world - is best served by not replacing the Trident nuclear weapons system. We think that the case laid out in the White Paper is fundamentally flawed.

Our reasons are summarised as follows, with more detail in the subsequent sections:

1. The UK faces no current or short-term threats against which nuclear weapons could conceivably be effective
2. Trident replacement will undermine efforts to prevent proliferation of nuclear weapons thereby increasing both short- and long-term security threats
3. A decision not to replace Trident could be a stepping stone to a more defensive military and foreign policy
4. Security needs to be viewed in a broader context - threats such as climate change are far greater than conventional military threats
5. With shortages in science and technology skills, these need to be deployed to maximise the benefit to society

1. The UK faces no current or short-term threats against which nuclear weapons could conceivably be effective

Strategic nuclear weapons such as Trident had their origin in the Cold War where the aim was to counter a threat of nuclear devastation with an ability to respond in kind. This threat no

longer exists and thus the original justification given for deploying Trident has been removed. Indeed, it is widely believed that the UK does not face 'a direct or impending military threat from any of the established nuclear weapon

states' [1]. There are also no major threats from large conventional military forces. The only current, significant weapons-based threat to the UK is from non-state actors, i.e. terrorists, and it has been acknowledged by Tony Blair that nuclear weapons are ineffective against such threats [2].

The only argument left - which is the one used in the White Paper - is that of the 'unknown'. That is, at some stage in the next 50 years, the UK will again face a nuclear-armed foe with the ability and intention to hit its shores. However, this is an argument which can be used by each and every nation in the world (in many cases with rather more credibility than in this country) and hence this argument needs to be balanced against the likelihood that others will see the UK's actions as encouragement to pursue their own nuclear agenda - as discussed in the next section.

2. Trident replacement will undermine efforts to prevent proliferation of nuclear weapons thereby increasing both short- and long-term security threats

The White Paper argues that, despite the lack of a current major military threat, the UK needs to retain nuclear weapons for at least the next 50 years in case such a threat re-emerges. At the same time it denies that some other countries may use this argument to justify their interest in or acquisition of nuclear weapons. This hypocrisy has contributed to the stalling of the nuclear Non-Proliferation Treaty (NPT), which is currently the main instrument for controlling the spread of nuclear weapons. Under this treaty the UK (together with USA, Russia, China and France) is committed to pursuing negotiations towards complete nuclear disarmament. If the UK opts for Trident replacement, it will further undermine the treaty and increase the prospect of nuclear proliferation in the future. Indeed, recent legal opinion suggests that such action by the UK may actually be illegal [3]. Hence we believe Trident replacement will make the UK *less* secure.

SGR believes that the UK could and should use the opportunity afforded by considering the future of its nuclear weapons system to kick-start multilateral negotiations on the complete elimination of nuclear weapons. An important starting point would be to follow the recommendations of the Weapons of Mass Destruction Commission, chaired by Hans Blix, which were published in 2006 [4].

3. A decision not to replace Trident could be a stepping stone to a more defensive military and foreign policy

The UK is currently pursuing a heavily interventionist military and foreign policy which we strongly believe is failing to increase either UK or global security, not least in relation to Iraq. Such policies have undermined the UK's position on the world stage and arguably increased the threat from terrorism. They are also leading to huge spending on new military technology, such as aircraft carriers, destroyers, submarines, fighter aircraft etc [5].

The abandonment of Trident replacement could be the first step in a new policy which helps to restore the UK's moral authority and allows us to take the lead in effective negotiations on international arms control and disarmament. It would also free up valuable resources which could be used for sustainable development and hence support international security.

As part of the process of realigning our military policy, the UK also needs to open negotiations with the USA to remove the 110 nuclear weapons that they currently deploy on aircraft on UK soil.

4. Security needs to be viewed in a broader context - threats such as climate change are far greater than conventional military threats

The debate on nuclear weapons and military policy in general needs to be seen in a broader context, especially given the major resources that would be required to build a Trident successor.

Currently, as acknowledged by the government, climate change represents a huge threat to human society both in the UK and across the world. The potential scale of casualties, refugees, economic damage and wider impacts of 'business as usual' has been set out by many, not least the Intergovernmental Panel on Climate Change [6], the World Health Organisation [7] and the Stern Review [8]. However, the action being taken by government and society across the world does not come close to meeting that required. Even in the UK, which has championed the issue at an international level, carbon dioxide emissions are again on the rise [9]. It is disturbing that major resources are being considered for Trident replacement - to deal with such an unspecific threat - while resources devoted to tackling such a huge, scientifically well-established threat are still lacking.

SGR believes that the most effective security policy would give much greater urgency to reducing the UK's greenhouse gas emissions and moving to a low carbon economy, and that this example would catalyse other countries to follow suit. The resources - financial, material and technical - that would have been used on a Trident replacement could make a key difference to success of such a strategy.

5. With shortages in science and technology skills, these need to be deployed to maximise the benefit to society

The White Paper says that it is the dwindling level of skills related to submarine design and manufacture that have been a key factor leading to a decision on Trident replacement being needed sooner rather than later. It has also been argued that the construction of a new nuclear weapons capable submarine fleet would create or secure thousands of skilled jobs.

However, such arguments need to be considered in a broader context as we have discussed in a previous submission to the Defence Committee [10]. The number of graduates in physical sciences and engineering has fallen considerably in recent years, despite the number of students in higher education increasing [11, 12]. This puts pressure on all sectors of the economy which depend on such skills. For example, a recent report from the Department of Trade and Industry (DTI) highlighted that the civilian, as well as the military, nuclear sector is facing skills shortages. Even without new nuclear power stations or Trident replacement, the report argued that the whole sector requires about 30,000 new skilled recruits over a 15 year period simply to deal with existing and planned activities, not least decommissioning [13]. Added to that, some other key sectors are planning major expansions. For example, the number of jobs in the renewable energy sector could expand by as much as 27,000 by 2020 [14]. There is also major demand for skills in expanding energy efficiency measures. And there is also the huge programme on military technology planned for the conventional armed forces discussed in section 3.

SGR believes that it is essential that key expansions, such as that in the renewable energy sector, are not compromised in the rush to Trident replacement. As we have stated, climate change is much too serious a threat. Indeed, climate-related sectors are likely to provide job opportunities for those who would have to move if the UK decided not to retain nuclear weapons. For example, offshore wind, wave and tidal projects require marine engineering skills. Indeed, the government could initiate a comprehensive 'defence diversification' programme to ensure local communities dependent on military industry were properly supported during

transition. In this context, it is also important to bear in mind that many skilled staff will be retained in the military nuclear sector for many years even if a Trident successor is not built. For example, staff will be needed for submarine and warhead decommissioning and for the UK's role in contributing to the monitoring of international nuclear treaties.

SGR believes that an added benefit of pursuing the policies laid out in this paper is likely to be an increase in student interest in the physical sciences and engineering as they become less associated with technologies with destructive capabilities.

References

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