



What Next for Trident?

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Introduction

By the end of the next decade, the Royal Navy will be facing difficulty in maintaining the current nuclear deterrent posture. The reason for this is that the submarine platforms (Vanguard class SSBNs) that house the Trident nuclear missile system – the UK's sole nuclear capability – will start to run out of operational life. The government has already acknowledged that decisions on the long-term future of the UK's nuclear capability will have to be taken during the next parliament. This article explores some of the key technical and policy issues that are likely to feature in the ensuing public debate.

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Deterrence and Nuclear Policy

There is a tendency in any discussion on deterrence to flip quickly to the nuclear dimension. However, deterring aggression can be achieved through a range of measures of which economic sanctions, diplomacy and conventional forces are other examples. Nuclear weapons represent the extreme and it is in this latter context that UK nuclear policy is set. The policy was included the 1998 Strategic Defence Review (SDR) and resulted in the concept of a minimum deterrent posture, with relaxation in alert status and targeting policy, together with a new openness and transparency over the detail of UK

nuclear capability. Furthermore, the government saw this more 'open' policy together with its signing of the Comprehensive Test Ban Treaty (CTBT) as contributing to the longer-term goal of multilateral global disarmament as prescribed by the Non Proliferation Treaty (NPT). Implicit in the review was the recognition of the special nature of nuclear weapons and their role in the deterrent equation as the ultimate guarantor of the nation's security.

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The policy makes it clear that the role of nuclear weapons is fundamentally political and that therefore any rationale for their retention is political. The UK does not possess nuclear weapons as part of the military inventory, they have no function as warfighting weapons or to achieve lesser military objectives. Indeed, even at the height of the Cold War – where nuclear weapons had a more central role in the flexible response strategy – they again represented the extreme option which merited political rather than military decision-making.

What is it then that makes nuclear weapons so 'special' that they strike such a strong chord with publics throughout the world? The truly awesome power demonstrated through the Hiroshima and Nagasaki detonations serve to remind us of the

devastating effects of nuclear weapons that sets them apart from other warfighting artillery. These images remind us that we all have a responsibility to do everything in our power to ensure such events do not happen again.

Such is their nature, that it is truly unhelpful to brigade nuclear weapons with chemical and biological under the collective title 'Weapons of Mass Destruction' or WMD – a term which, sadly, is now part of the political lexicon. They are of an entirely different order. Neither chemical, biological or indeed conventional weapons – dreadful though they might be – compare with the demonstrable power of nuclear weapons. Nor do the effects have the potential to cause such long-lasting devastation over such large areas of land, rendering them uninhabitable for a very long time indeed (I acknowledge some biological and chemical weapons do have some potential here but not of the same demonstrable scale). Furthermore, only nuclear weapons have been subject to such enormous levels of investment necessary to commission and maintain a capability that they remain the ultimate symbol of military power.

They are indeed 'special' and reason enough not to put them into the hands of generals and admirals for the achievement of military goals. Grave decisions on nuclear release can only rest with the highest echelons of the government of the day and indeed this is why there are special processes and control procedures in place for every aspect of nuclear weapons ownership from policy through to procurement and execution of the capability.

For the UK, the possession of nuclear weapons for the last fifty years has been entwined with Britain's perceived role in the world as a middle-ranking power, 'punching above its weight'. Politicians from all parties have been content to promote Britain as a nuclear power and major player on the European and transatlantic stage, originally as a bastion against the threat of communist domination but now in

the so called 'war on terror'.

Since the end of the Cold War, the salience of nuclear weapons has reduced and nuclear issues have not been paramount in the minds of the public and commentators alike. Indeed, there is no present desire within government to revive nuclear weapons as the subject of public debate. Nevertheless, the need to address technical issues related to maintaining Britain's nuclear capability will not go unnoticed by vociferous NGOs who may force the issue into the open. The debate will not be about capability alone; the key issue will be whether the UK should remain a 'Nuclear Weapon State' or unilaterally give up such status. We need to be clear that we are talking here about the continuance of a capability, which must be considered in its geo-political context, rather than starting anew (which is from where some will try to argue the case). The decision therefore will be a balance judgement, weighing up the cost and benefits of retention against those of relinquishment. What will be the key policy factors?

Perhaps we should, firstly, consider where nuclear weapons fit into today's security environment. Nuclear weapons only have a political function in preventing a major war between nation states. There is certainly no role against terrorism (where would you target a weapon?). Furthermore, consideration of utility in such tasks as 'bunker busting' – as advocated in some more extreme quarters in the US – represents highly dangerous thinking that disregards the strategic nature of nuclear weapons and gives misguided credence to the belief that use in a warfighting scenario could be justified. Indeed, it is difficult to present a realistic scenario where nuclear weapons might have a role today and this is recognized in recent NATO doctrine, which states that 'the circumstances in which their use might have to be contemplated is extremely remote'. However, the cliché that we live in an uncertain world holds very true and decisions on nuclear weapons capability – this decision – are very long term (e.g., twenty to thirty years). As Sir Michael

Quinlan observes:

History is full of profoundly unpleasant surprises and we need to be careful that we do not lead ourselves in a position of weakness in the future that we might regret.

The potential of proliferating states and failing states with nuclear weapons represent current scares. Is this therefore the right time to unilaterally give up our minimum capability?

Secondly, it must be understood that any decision to do away with our nuclear capability would be irrevocable. On relinquishing our capability, nuclear expertise and the supporting infrastructure would fritter away very quickly and the cost of re-establishing a capability would be astronomical such that it would be out of the question.

Finally, there would be significant political fallout from such a unilateral decision with impact on friends, allies and potential aggressors. Any argument supporting a domino effect – that is that Russia, the US, India, Pakistan, etc., would all immediately give up their nuclear weapons too – remains unconvincing. Sadly, we live in an all-too-cynical age. Such nations would laud Britain's decision but argue that their nuclear weapons are for their own regional use and that therefore there is no logic that says that they should go too. Furthermore, relinquishing our capability would have profound implications for our key relationship with the United States, fuelling the unilateralists who have never believed that Europe is truly committed to its own defence and have for years only reluctantly provided the wider nuclear umbrella.

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More reason, then, for the US to disengage with Europe and operate freely and alone. Finally, would France wish to be the only European nuclear weapon state? Would Europe wish France to be the only nuclear weapon state? There are



real political risks here, all of which militate against Britain giving up its minimum capability unilaterally.

Indeed, with proliferation rife, the absence of impetus amongst the nuclear weapon states for new disarmament measures and a broad acceptance within the electorate regarding our nuclear capability, it would be surprising if the government did anything other than what it has implied in public statements – that is, to start spending some money to explore options for retaining a nuclear capability and identify future decision points. Let us turn now to some of the technical issues that will be central to the capability debate.

Capability

The UK's nuclear capability, both strategic and sub strategic, is vested solely in the Trident system, which is made up of the Trident missile, its launch system contained in the (four) Vanguard class nuclear submarines, a UK warhead and shore infrastructure providing support, training, communications, command and control. Whilst the Trident missiles and launch systems are purchased from the US, all the remaining elements are UK-procured. The US has underwritten the Trident missile and its launch systems for a very long time and there is no reason to suppose that there will be any change in the negotiated US/UK support arrangements for the foreseeable future. It is the UK elements – in particular limitations imposed by obsolescence in the submarines and possibly the missile warhead – that are driving the current activity.

That the debate has not taken off yet is due not only to political sensitivity over nuclear-related issues in general but also to Whitehall tactics regarding the funding of any replacement system. Traditionally, the Ministry of Defence has borne the cost of the nation's nuclear deterrent often at the expense of conventional capability. But in today's security environment, where defence spending remains tight and focused on expensive joint conventional

operations and fighting terrorism, the MoD will argue there is no 'military' requirement for nuclear weapons and thus the cost should not come out of the defence budget alone. The argument goes on: If the nation requires nuclear weapons as a political guarantee of its security then the funding should come from wider government sources. Until this largely internal issue is settled, the MoD will not be proactive in leading the debate, particularly in the formulation of any policy issues surrounding the need for Britain's continuing nuclear role and the capability requirement defining that role. Better this be led by the Foreign or Cabinet offices and debated in a wider security forum, hopefully attracting funding outside the defence budget.

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Whilst all this may be wishful thinking on the MoD's part, and whatever the outcome of Whitehall tactical manoeuvres, it will be necessary in the short term to commission some study to address at the very least the obsolescence issues. What are the options?

The sub-systems that require attention are the submarine platforms (in particular the nuclear steam raising plant) and the warhead. Both these will inevitably run out of operational life within the next twenty years or so and, assuming a minimum deterrent posture will still be required, decisions will be required to either replace the submarines and warheads or to design and procure an alternative method of delivering the capability.

The key factor will be cost. Whilst the electorate is probably comfortable with the relatively low

level of expenditure necessary to sustain our minimal capability (less than 3 per cent of the defence budget), that support could change if the costs spiral. Any replacement cost will be significant but the price is much more likely to rise steeply (to unacceptable levels) if we flirt with any new smart capability solutions. There is a real risk here in wasting much time and money exploring a wide range of capability options when there is only one realistic answer, and that is 'more of the same'. Indeed, any alternative to submarine-launched Trident carries with it difficulties of such severity not only in terms of cost – which would be enormous, involving purchase of a new missile system, a new design of warhead and support facilities – but in politics (where would any land or air facility be based? how many 'Greenham Commons' and related planning enquiries could the government stomach?) and our treaty obligations (for example the CTBT, which prohibits testing, meaning you could never prove a 'new' warhead) that they warrant only scant consideration.

'More of the same' has some compelling arguments to support it: firstly, the submarine has enormous operational advantages over any land- or air-based equivalent, primarily its stealth and invulnerability to attack, making it a true deterrent system. Secondly, much investment has already been made in the shore support infrastructure, training facilities and capital purchase of the Trident missiles, which would offset the capital cost of 'replacement'.

Finally – and perhaps most sensitive of all – the related warhead issues. Designed and produced in the UK, AWE Aldermarston will continue to exercise stewardship of the UK warhead stockpile for the short and medium term to ensure continuing deterrent effectiveness. However, history would suggest

that – rather like a car – at some time in the future it will be expeditious to procure a replacement model. Emphasis here is on the word 'replacement' rather than 'new' – that is, a warhead with similar capability and missile interfacing, utilizing up-to-date technology and safety sub-systems in its construction. Modern computer and laser techniques should enable this replacement warhead to be tested in the

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laboratory, thereby ensuring Britain remains within the prescription of the CTBT – a treaty crucial to the government's declared commitment to global disarmament through the NPT.

Conclusion

Nuclear issues are likely to become the subject of increasing public debate, precipitated by the need to explore options for a continuing minimum deterrent capability once the current Vanguard class submarines and the Trident missile warheads run out of operational life. The arguments for continuing a minimum deterrent capability remain sound and are likely to receive public support. That support will only

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remain provided our nuclear capability remains affordable. Any significant rise in costs due to inventing a new capability could change the political climate dramatically. 'More of the same' remains the only sensible option and studies should commence to define the nature of the UK's future deterrent requirements and in parallel investigate the cost and decision points for sustaining a submarine-based Trident system for the foreseeable future. ■