

Evidence Submitted by Commodore Tim Hare

Q1 – Should the UK remain a nuclear weapon state?

In short YES. Government policy remains one of high visibility participation in meeting our perceived “ global responsibilities and global ambitions”ⁱ. With broad support across the political spectrum, Britain continues to “punch above its weight” through leadership, diplomacy, military engagement and participation in core institutions such as the UN, NATO and EU. The price we pay for undertaking these roles is that we are perhaps more susceptible to global threats than other European nations who adopt a lower profile. It remains the first duty of government to provide security for its citizens and, whilst there is no evidence of a nuclear threat to the UK today, it cannot be ruled out in the future. There are four broad areas of concern:

- Firstly, nuclear proliferation. Despite reductions since the Cold War, large nuclear arsenals remain. Furthermore measures to control the proliferation of nuclear know how and materials have failed to prevent an expanding number of nations pursuing Nuclear ambitions. Whilst a world without nuclear weapons remains a laudable goal, evidence today suggests that the number of nations possessing a nuclear capability will rise by mid century bringing a corresponding increase in the risk of a nuclear threat.
- Second, global warming will generate tensions and potential conflict between nation states as competition for natural energy resources – oil, gas, water etc. – becomes more acute. Some of those states will possess nuclear weapons.
- Third, there will be significant shifts in major power relationships between now and mid century introducing new tensions. Whilst the US will remain a major superpower, it remains questionable whether she will continue to engage globally as she has done in the past. Competition from China and an unpredictable Russia – both of whom have ongoing major Nuclear weapon modernisation programmes – and emerging powers such as India and Brazil have the potential to herald new areas of tension and potential conflict which could generate specific threats to the UK.
- Fourth, the enduring threat of nuclear terrorism will remain.

In short, we live in a highly volatile, uncertain world where the security environment is extremely difficult to predict and we can be sure that there will be surprises and shocks, some of them with a nuclear dimension. These are reason enough to maintain a minimum independent nuclear deterrent capability until conflict resolution and trust between nations lead to a level of strategic stability commensurate with a more active disarmament agenda.

But we cannot address our independent nuclear deterrent capability in isolation. As well as providing the ultimate guarantee of our national security, our nuclear weapons are declared to NATO and provide the European pillar that offers an extended deterrent capability to friends and allies. In the post cold war era, the current NATO structure remains somewhat fragile and it is important that Europe is seen to be contributing to its security objectives. Giving up our nuclear deterrent capability would introduce unwelcome stresses in the

Atlantic alliance and could put pressure on future US commitment to NATO and the defence of Europe.

Q2-If it should, is Trident renewal the only and best option that the UK can and should pursue

Yes, because the Trident system, underpinned by a posture of Continuous at Sea Deterrence (CASD), is by far the most effective and cheapest deterrent option open to the UK.

It is recognised that a CASD based Trident system represents the status quo and warrants review. However, it has been scrutinised for efficacy and potential savings time and time again and analysis has always shown it to be the optimum option for the UK. If there were a cheaper one, the UK would adopt it. The 2006 White Paper studied alternatives and negated them on grounds of cost and/or effectiveness. Indeed, any alternative system must meet three core criteria. It must:

1. Provide a credible and effective nuclear deterrent capability for the UK.
2. Realise real savings over the Trident solution.
3. Not jeopardise the UK's disarmament agenda and NPT treaty obligations.

Alternatives such as a "a part time" Trident and Cruise Missiles fail these criteria:

- "Part time" Trident, whereby nuclear submarines sometimes operate in their nuclear deterrent role but at other times are deployed on conventional operations. This option would not provide a credible deterrent capability – a half hearted, part time approach would not deter a potential aggressor - nor would it realise savings. Perhaps the biggest penalty lies in crisis management which would be put at serious risk by the need to make a political decision to activate a deterrent capability at a time of tension thereby sending an aggressive signal which could initiate a pre-emptive attack. The option is also impractical. The cost and effort required to sustain a virtual capability whilst the Nuclear submarine force is employed on conventional tasks would be significant and very difficult to manage. Such a policy would lack the necessary motivation to attract the highly trained and skilled personnel required to operate Trident. Notwithstanding this, the academic papers arguing for this option have not taken into account operational and engineering reality such that it would take a much longer time to regenerate the deterrent capability than has been assumed. By the time the capability was effective, the crisis would be over!
- Cruise Missiles. It is questionable whether cruise missiles can represent a true nuclear deterrent capability. Notwithstanding this the cost of generating such a capability in the UK would be prohibitive and much more expensive than sustaining Trident, which benefits from a very favourable cost share with the US. Such benefit would not be realised with a cruise missile option as the US has "retired" its 1980s cruise missile design (it has not been operational since the 1990s) and has no plans to replace it. Indeed no other nuclear weapon state is developing a nuclear cruise missile capability. Thus the UK would have to develop a missile with the range, reliability and penetrability

required of a deterrent weapon by itself. This would be expensive and time consuming. Furthermore a new cruise missile warhead would be much more expensive than a Trident equivalent as the latter would be evolutionary, and essentially the same as the current warhead with updated technology, whereas the former would be a complex, brand new design which could not be tested as the UK has ratified the CTBT ! Redesign of Astute Class submarines and nuclear weapon certification would be non trivial and require major expense. Also more Astute submarines would be required. Cruise missiles are not as reliable as Trident and sometimes go astray – a very serious deficiency for a weapon with a nuclear warhead. They are also very vulnerable to missile defence systems. In short a cruise missile option would be more expensive than maintaining Trident and would not provide an effective deterrent capability.

Q3-What more can and should the UK do more effectively promote global disarmament, non proliferation and nuclear security.

The UK should promote its disarmament and security record and that is all. Little recognition is given to the UK's exemplary disarmament record – by far the most active and positive amongst the recognised Nuclear Weapon States. Since the end of the cold war we have:

- Reduced our nuclear arsenal to one system only and our firepower by 75%.
- Ratified the CTBT.
- Implemented the “13 actions” recommended by the NPT 2000 Review Conference
- Reduced alert status of the submarine capability
- Missiles de-targeted
- Increased transparency of nuclear issues and materials
- Put fissile materials under international control.

The UK has now reduced its capability to an absolute minimum. Any further reductions would have no impact on global disarmament and have the potential to jeopardise the minimum level of firepower required for an effective deterrent. Energy should therefore be focussed on:

- a. Persuasion other NWS to do what we have done.
- b. Promotion of non proliferation measures and continue to develop verification capabilities.
- c. Persuading Russia to reduce their “tactical” Nuclear weapon numbers.

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ⁱ HM Government “securing Britain in an Age of Uncertainty” October 2010