

**From:** Madeleine Le Page

**To:** The Deputy Prime Minister

**Title:** Options concerning the renewal of Trident

### **Issue**

The four Vanguard-class submarines constitute the UK's strategic nuclear deterrent force, forming a Continuous At-Sea Deterrent (CASD). Each boat has the capacity to be armed with up to 16 Trident 2 D5 nuclear missiles. For safety reasons, these submarines were originally intended for a service life of 25 years. As the first boat became effective in 1994, it is now approaching the end of its planned service. Although it was decided that a new Dreadnought class of ballistic missile submarines would be constructed as a replacement, other options were available.

### **Recommendation**

Do not replace the *Vanguard*-class SSBNs, but rather engage in a policy of disarmament. Some deterrence will remain, while cutting costs and taking a step further towards reducing the direct possibility of nuclear annihilation.

### **Timing**

ROUTINE

### **Discussion**

The prospect of Mutually Assured Destruction offers a convincing argument towards the effectiveness of nuclear deterrence: one state will not deploy a nuclear attack on another by fear of equally destructive retaliation. In this sense, the UK needs a continuous nuclear deterrent, as an insurance against a widely uncertain future, notably seeing the growing threat from North-Korea and increasing tensions with Russia. A new class of submarines should therefore replace the Vanguard-class submarines to take over the mantle of CASD. The boats' global range and use of accurate ballistic missiles deliverable in under an hour, makes them an effective deterrent. Because they are continuously on patrol, they do not require political mobilisation decisions in times of crisis. This gives the UK a secure second-strike

retaliation capacity. Submarines have an advantage over other types of nuclear devices: their imperceptible underwater mobility. They are stealthy nuclear devices, almost undetectable, and therefore considered invulnerable to first strike. Yet, this system will not necessarily remain stealthy as detection technology progresses, and potential for cyber-attack grows.

The financial costs of Trident are high, given the price of the production and running of the warheads, the need to protect them, and the infrastructures required to store or launch them. One way to save money while retaining deterrence would be to reduce the number of submarines to 2 or 3. Other countries are able to generate deterrence using smaller arsenals. The UK's definition of "minimum" does not have to differ. This solution has the advantage of maintaining most jobs in the submarine industrial sector, while overall reducing financial costs. However, no longer having 4 submarines would end the possibility of always having at least one at sea. Although the UK may still have deterrence, it will no longer have CASD. Therefore, the credibility of its nuclear threat is weakened. The most compelling option to cut spending would rather be disarmament. This process would entail short-term costs, but in the long-term, the UK would be saving considerable amounts of money, which could instead be spent on the public sector.

The case against nuclear deterrence is prominent. It raises doubts as to the true utility of nuclear weapons and pushes for disarmament. Because detonating a nuclear weapon on a foreign territory would virtually mean national suicide, issues of credibility emerge. Doubts about one's resolve weaken the effectiveness of deterrence: a combination of a tradition of non-use, moral restraints and legal considerations lead us to question whether a rational state would ever actually initiate a nuclear attack, or even retaliate. Beyond self-deterrence, possibilities of inadvertent escalation, as well as accidental unintentional use, also undermine the theory. Lower levels of violence have not always been prevented by nuclear deterrence, as states with substantial nuclear capability, such as Israel, have still been involved conventional wars. Against terrorism or cyberwarfare, the thought of a nuclear response simply appears irrelevant. Excessive dependence on nuclear deterrence can even be dangerous when opposing aggressive states that may be stronger in other areas: the larger the gap between a country's conventional and nuclear deterrence capabilities, the more its nuclear threat is perceived as a disproportionate response and the more it risks being dismissed as a bluff. Disarmament provides the opportunity to improve conventional weapon build up to threaten the opponent on a more equal level, and thus more credibly.

Even if we concede the validity of nuclear deterrence, disarmament should not be rejected. Disarmament does not completely suppress deterrence. The UK, mostly through its NATO membership, still has the possibility to rely on its allies' extended deterrence. The UK's threshold status will also remain a relatively effective recessed deterrent, as it will maintain a long-term minimum capacity to reconstitute an

arsenal. Hostile states will therefore need to account for the possibility of a delayed response. First strike incentive against a disarmed UK is no higher than in other scenarios: although the counter-value incentive is suppressed because immediate retaliation is impossible, the absence of available arsenal to destroy takes away the counter-force incentive to attack first in order to render the opponent innocuous. Beyond issues of security, a renewal of Trident could back up the UK's status and influence in the world, especially in military issues. But similarly, a grand gesture from the UK leading the way towards disarmament is likely to give substance to its soft power aspirations, thus boosting its global status and fostering trust from non-nuclear states. Unilateral disarmament from the UK could overall set the example, and potentially induce multilateral disarmament.

## **Options**

- **Renewal:** A new class of submarines would replace the Vanguard-class submarines. Financial costs would be high, but deterrence would be effective and provide security.
- **Reduction:** The number of Vanguard-class submarines would be reduced. Costs would be lower, but CASD would be compromised and deterrence less credible.
- **Disarmament:** Restraining from any form of replacement, and embarking on a policy of disarmament. The Trident renewal project would be cancelled, current warheads would be dismantled, and dedicated nuclear facilities would undergo long-term decommissioning.