

## Trident, deterrence and UK security

**Philip Webber, SGR, summarises the flaws in the theory and practice of nuclear deterrence for the UK.**

Despite recently uncovered historical evidence of nuclear 'near misses' and growing scientific evidence of the devastating global consequences of the use of only a few nuclear weapons, there is still a widespread belief in the value of these weapons among senior policy-makers in the nuclear-armed nations. In the UK, this manifests itself in a cross-party parliamentary majority in favour of replacing the Trident system. This is largely because of a widespread belief in nuclear deterrence. Here I highlight the numerous flaws in the arguments made in support of deterrence, in the hope that some of them may help campaigners more effectively challenge their political representatives as the parliamentary vote on the replacement of Trident approaches in early 2016.

Some key arguments are repeatedly put forward by the Government – most recently as part of the Strategic Defence and Security Review (SDSR)<sup>1</sup> in November 2015 – as well as by other supporters of nuclear weapons:

- UK weapons are at a “minimum, credible” level;<sup>2</sup>
- The nuclear deterrence effect works “every day”;<sup>3</sup>
- They have kept the UK out of conflicts for the last six decades;<sup>3,4</sup>

I will take these points in turn and also address other deficiencies in nuclear weapons policy in the SDSR.

### Are UK weapons at a “minimum, credible” level?

We have shown in SGR briefings and other publications, based on the latest scientific modelling, that the launch of the missiles from a single British Trident submarine would directly cause 10 million civilian casualties and also lead to a decade of climatic cooling and drought severely affecting global food supplies.<sup>5</sup> Use of Trident would be completely disproportionate: both genocidal and suicidal. This level of destructive capability is very far above any reasonable criterion of “minimum”.

The Government asserts that Trident is “minimum” on the basis that: “we possess only approximately 1% of the total global stockpile of nuclear weapons”.<sup>6</sup> The correct implication to draw from this is that global stockpiles represent the ability to destroy civilisation many times over and that international efforts to dramatically reduce warhead numbers need to be stepped up urgently.

There is also an implication for the credibility of nuclear deterrence. As nuclear use would have such terrible consequences for the nation that launches nuclear weapons – as well as for the target nation – any threat of nuclear use becomes much less credible and arguably not credible at all.

As it is, the Government and the Ministry of Defence refuse to acknowledge or engage with the latest evidence on the destructiveness of nuclear weapons.<sup>7</sup> One can presume this is because admitting these facts would undermine the repeated assertion of nuclear deterrence that is held up as so vital for the UK's security.

### Does nuclear deterrence work every day and has it done so for six decades?

It may be the case that nuclear weapons have had some deterrent effect, but it is deeply flawed to argue that it is reliable. The absence of nuclear war doesn't give clear proof of the effectiveness of nuclear deterrence in the same way that habitual smokers cannot claim that smoking is safe because they are still alive and well. One thing we do know is that we have not had a nuclear war despite nuclear weapons. The evidence from six decades without nuclear war is that we have come perilously close to nuclear destruction on many occasions. This has arisen due to a range of causes: false alarms; military exercises that became too realistic; faulty equipment; human error; and political brinkmanship.<sup>8</sup> There are numerous examples from history showing when nuclear deterrence has failed, not least the Argentinean invasion of the Falkland Islands in 1982.<sup>9</sup>

The simplest explanation for the lack of an attack by the Soviet Union on NATO countries is that there was no intention to do so and that the large nuclear deployments on both sides are symptoms of a political failure to demilitarise. Large non-nuclear military forces were more credible as a deterrent to conflict as is the memory of massive Russian casualties during the two previous world wars. Sometimes, diplomacy worked.

To the historical near misses, we now have to add an ongoing and growing risk of cyber-attack or hacking. A former commander of US strategic nuclear forces urges that the 1,800 Russian and US weapons currently deployed on high alert and kept ready-to-fire should immediately be de-alerted and physical measures be taken to lengthen the time needed to launch a weapon. This is to avoid the risk of hacking leading to an unintended launch due to the very short

decision times of as little as 10 minutes if incoming attack is suspected to be in progress.<sup>10</sup> Hacking is also a risk for UK nuclear forces. The UK Government asserts that there is no hacking risk on the basis that systems are 'air-gapped', i.e. not connected to the internet. However, sophisticated methods can bypass the internet via smart-phones, memory sticks or apparently innocent industrial components, as shown by the case of the Stuxnet virus infection of Iranian nuclear facilities.<sup>11</sup> Nuclear deterrence whether effective or not cannot possibly deter miscalculations or accidents.

### Ignoring the threats created by nuclear weapons

The latest SDSR does not consider or even mention a whole set of threats that arise from the continued stockpiling and deployment of nuclear weapons around the world, including in the UK. These include:

- an intercontinental nuclear conflict – involving the arsenals of the US, Russia or China;
- a regional nuclear conflict – for example India and Pakistan;
- the global, disproportionate impact of the sole use of the UK Trident system;
- the possibility of any of the above scenarios arising due to miscalculation, accident or hacking;
- the increased dangers of weapons deployed on 'high alert' status.

These are major omissions.

### The future role of the UK's nuclear weapons

The SDSR lists a number of future threats that UK nuclear weapons are intended to deter.<sup>12</sup>

These include the risk of nuclear missile attack by state or non-state 'actors'. The UK's position on the Atlantic coast is far from any possible new state-based nuclear threat. The only realistic locations for such threats are in the Middle or Far East. The historical lesson is that the intention of any such state is to try to create its own regional nuclear 'deterrent' – and the cases of Iran and North Korea are relevant here. The recent response to Iran is showing how the international community can use both negotiations and sanctions to prevent the possibility of a new nuclear weapons capability. The case of North Korea shows that the deployment of US nuclear-armed aircraft in the region has arguably led to a more aggressive response from that country rather than the reverse. One thing that is definitely clear is that UK nuclear

weapons have been completely irrelevant to both situations.

Turning to non-state actors, there is a very real possibility that terrorists could use highly radioactive nuclear materials with explosives to spread radiation. The only solution is effective policing and controls of nuclear materials including medical sources. UK nuclear weapons could not possibly be of any use in deterring this threat. In fact, some terrorist groups might see it as a success if they could prompt a nuclear response.

The SDSR cites the value of UK Trident in countering a theoretical future threat from Russia (or possibly China). This argument is simply not credible as the overwhelmingly dominant factor in such Russian calculations would be the hundred times larger US nuclear arsenal. British nuclear weapons are irrelevant.

And all of this discussion assumes intent. Russia has major trading relations with NATO countries. Russia also suffered terribly during World War II – with 8.5 million soldiers dead and perhaps double this number of civilians killed, by far the largest casualties of any nation involved. The idea that it would risk launching a major assault on NATO – whether nuclear-armed or not – is hardly credible. Political and economic action and – in extreme circumstances – non-nuclear military forces are more than enough to deal with such a risk. NATO currently dramatically outspends Russia on its military forces by a factor of ten,<sup>13</sup> which rather begs the question of who is threatening whom?

The recent conflict in Ukraine (including Crimea) arguably reflects old ideas about 'spheres of influence'. While Russian actions may be unacceptable, such a conflict may also be partly a result of a new nationalism among Russian-speaking minority groups in some Eastern European and former Soviet countries, and a reaction to NATO's expansion eastwards to the borders of Russia.

## Nuclear hypocrisy and inconsistency

The arguments in favour of nuclear deterrence, used by the UK and other nuclear-armed states, can be used by any country. If nuclear deterrence 'works' then, to follow the logic of this proliferation argument, every state should be armed with nuclear weapons. Such beliefs have been the driver of nuclear arms races such as during the Cold War, or the nuclear stand-off between India and Pakistan and are clearly understood by North Korea.

This double standard, that the existing nuclear states *require* nuclear weapons for their security but that other non-nuclear states *cannot* have nuclear weapons to avoid greater insecurity, has been the source of a growing reaction at the UN, particularly as progress on disarmament has almost stopped and huge arsenals remain. It is the primary driver for the start of a new multilateral legal process towards a nuclear ban treaty supported by 135 non-nuclear states.<sup>14</sup>

## Conclusion

The US and Russia continue to deploy very large numbers of nuclear weapons, but the UK's arsenal also represents a major threat. While nuclear deterrence may work on *occasion*, it also *creates* an enormous risk – that of the destruction of civilisation – through the continued deployment of nuclear weapons. Russian and US weapons kept on high alert markedly heighten this risk. Launch command and control technology further add to the risk through its vulnerability to miscalculation, accident and cyber-attack. The UK's nuclear arsenal is irrelevant in deterrence terms in relation to these very large arsenals, but its role in disarmament *could* be very significant. The UK could choose a different political path similar to that chosen by South Africa, Brazil, Japan and a large number of nations which, while possessing the technological ability to make nuclear weapons, see the benefits of not having such arms. This path would help to improve international security.

The UK could take a leading role in reducing the risk of nuclear war by immediately:

- taking Trident nuclear submarines off patrol;
- placing warheads in storage;
- cancelling the replacement of the Trident submarines; and
- actively supporting an active UN/multilateral process for a global nuclear ban.

There would obviously need to be further steps towards complete disarmament as a multilateral process proceeded.

This in my view would be the responsible and enlightened course of action for the UK in its current situation. We only have this one planet and the use of nuclear weapons would have disastrous world-wide consequences. No nation can create security for itself by threatening nuclear devastation 'elsewhere'.

**Dr Philip Webber is Chair of SGR and author of numerous books and reports on nuclear weapons.**

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## Notes and references

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## Stop Trident

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