Executive summary:

1. The world faces a new era of security uncertainty fueled by technologies such as hypersonic missiles, increased accuracy of targeting and by advances in Artificial Intelligence (AI) and cyber-technology. Several thousand nuclear warheads currently remain deployed ready for targeting.

2. Withdrawal from the Intermediate-range Nuclear Forces Treaty (INFT) at this time carries a high risk of igniting a new nuclear arms race and with it an unacceptably increased likelihood of nuclear hostilities whether by accident, mistake, non-authorised malign or deliberate intent.

3. The chances of such hostilities escalating would be high, and threatens human and planetary health and life through the increased likelihood of global humanitarian crisis and famine.

4. Instead of withdrawing from the INFT, international diplomacy should focus on extending the various international arms-limitation regimes including an extended INF Treaty, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT) and the Treaty on the Prohibition of Nuclear Weapons (TPNW).

Introduction:

1. Medact is a membership organisation for health professionals bringing a public health perspective to broader societal issues including peace and security. Medact was formed in 1992 from the merging of the Medical Campaign Against Nuclear Weapons and the Medical Association for the Prevention of War.

2. One of Medact’s key concerns and areas of work is the production of research and materials outlining the health and humanitarian effects of the use of nuclear weapons. In 2017, Medact published a report entitled A Safer World: Treating Britain’s harmful dependence on nuclear weapons providing information about the risks associated with the UK’s current nuclear weapons policies and recommendations for how it could engage more actively with nuclear disarmament.¹

Background to the INF Treaty

During the Cold War until the Intermediate-range Nuclear Forces Treaty (INFT) was signed, NATO ran computer simulations of a Soviet invasion through the Fulda Gap in Germany countered by ‘tactical’ battlefield (low-yield) nuclear weapons, many of which were ground-launched; all projections ended in planetary extinction because the battlefield was destabilized leading to an unstoppable “tit-for-tat” nuclear escalation. The INF treaty concerns ground-launched ballistic or cruise missiles which may or may not have nuclear warheads – this ambiguity often being intended – against targets on the ground. Even though the INFT is a bilateral US/Russia treaty and was primarily developed to prevent a nuclear war in Europe, its terms are world-wide. After the INFT was signed 2,692 missiles and their launchers were destroyed – more in Russia than in NATO.

Prior to the INFT, in 1972 the US (under Nixon) and USSR (under Brezhnev) had also ratified the bilateral Anti-Ballistic Missile Treaty (ABMT): this limited the numbers of surface-to-air

missiles against enemy 'strategic' missiles (but not 'tactical' missiles) and was part of the ongoing Strategic Arms Limitation (SALT) negotiations talks. Complications arose with the development of strategic missiles armed with nuclear-tipped MIRV (multiple independently targeted re-entry vehicles). Such developments led the Reagan administration, in an effort to gain a significant advantage, to develop the ambitious Space Defence Initiative (SDI). This was followed by the Gorbachev/Reagan summit leading to the INF of 1987.

In 2002, after the break-up of the USSR, the US unilaterally withdrew from the ABMT: initially Russia was relatively relaxed partly because ABM systems against tactical missiles was not included in the ABMT although the distinction between 'tactical' and 'strategic' was getting blurred. In May 2002 the bilateral Strategic Offensive Reduction Treaty (SORT) was signed, followed in 2010 by the next Strategic Arms Reduction Treaty (New START) to halve the number of strategic nuclear missile launchers on each side. However, Russia became increasingly critical of US/NATO plans to deploy interoperable Ballistic Missile Defense systems in the Baltic States and Eastern Europe – and even the very short range (and therefore INF-compliant) ABM Mistral missiles in Estonia which are due to be delivered in 2020.²

Missile and related technology (particularly the development of hypersonic missiles, drones and AI-cyber as well as "Command, Control, Communications, Computer, Intelligence, Surveillance, and Reconnaissance" (C4ISR) systems) has transformed the scene in the last decade and will continue to do so. But the fundamental issues of 'defence' policy continue. Before President Trump announced his intent to abrogate the INFT, the US Army had already started to develop two 1,000 Km-range missiles – one hypersonic (to attack hardened targets like bunkers) and the other a cheaper ‘gun-barrel’ supersonic system against ‘softer’ targets such as mobile command posts.³

Russia dismissed US claims that these were developed to protect NATO allies from a perceived threat from Iran and is concerned that NATO’s Basic Missile Defence systems in Eastern Europe are to contain Russia’s deployment of nuclear weapons, thereby making a NATO/US nuclear attack victorious. Nevertheless, currently the technically INFT-compliant Russian SS26 Iskander missile can reach most of Poland and the southern Baltic states, and the outskirts of Berlin and of Stockholm.⁴ Furthermore, some European NATO allies host fleets of air-launched US-made variable-yield (0.3 to 340 kt) B61 bombs which can be used tactically at lower yields or strategically at higher yields and which can also ‘bust bunkers’. The US is developing a new version (B61-12) with a new tail-fin assembly which increases the accuracy of its terminal flight path, allowing its top yield to be reduced to 50 kt thereby possibly reducing collateral damage when used to bust a bunker. Russia is concerned that the greater accuracy would make NATO think that they could win a nuclear war, and therefore be increasingly tempted to use them.

Trump’s intent to abrogate the INFT may follow his appointment of John Bolton as National Security advisor as Bolton argues that the INFT restricts US ability to counter countries such as China as well as a re-emergent Russia.

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³ Missile Threat, Missiles of Russia. CSIS Missile Defense Project. [https://missilethreat.csis.org/country/russia/](https://missilethreat.csis.org/country/russia/)
Has the INF Treaty been violated?

1. It is possible that Russia may have violated the INFT with tests of a GLCM system (SSC-8). However, Russia is not being forthcoming about whether they have deployed it against Europe. Strong circumstantial evidence has led the United States to claim that Russia has indeed deployed it.\(^5\)\(^6\) Putin is reported to have claimed that a hypersonic missile under development will be available in 2020.\(^7\)

2. On the other hand, although the US may not yet have violated the INFT technically as the Treaty is restricted to ground-launched missiles, their recent activities in Eastern Europe and the Baltic States referred to above have caused concern in Russia, as there are suspicions that prior to Trump’s statement on October 20th the US was preparing to violate the INFT.
   a. Although the US uses a technical argument that such developments are not in breach of the INFT, and the terms of that Treaty allow inspection regimes, they have not allowed Russian inspectors to check whether adaptations to sea or air-launched missiles could be used for ground launches (which would violate the INFT).
   b. Some in the US administration such as Bolton advocate using GLC missiles against other Nuclear Weapons States (such as China) but as the INFT also precludes the US (and Russia) from developing any intermediate range missiles even against other nations, such would breach the INFT. Furthermore, the US developments referred to above – such as the air-launched B61-12 bomb – can be expected to aggravate Russian concerns.\(^8\)

How best could a return to compliance with the Treaty be achieved?

1. In the long term, this must happen by restoring trust between the US and Russia through mutual inspections more thorough than those allowed under the current INFT terms. A proposal of this sort was made in 2011.\(^9\)

2. Because the INFT prevents both Russia and the US from deploying intermediate range missiles against other States (such as China), a candid bilateral and multilateral assessment of the global security scene is required, particularly as climate change, global development and population pressures accelerate and increasingly destabilise demographic trends. This requires imaginative leadership and political will to preserve national interests by adopting policies in favour of peaceful global development.

3. It has long been recognised that restoring trust in international relationships requires confidence-building measures, which the UK should continue to promote.

What would the consequences be of the US withdrawing from the Treaty?

\(^5\) SSC-8 (Novator 9M729). Missile Threat, CSIS Missile Defense Project. [https://missilethreat.csis.org/missile/ssc-8-novator-9m729/](https://missilethreat.csis.org/missile/ssc-8-novator-9m729/)


1. A crucial concern is the high probability of a new nuclear arms race between the US, Russia and China, reversing the successes so far of the Non-Proliferation Treaty in reducing the global stockpile of nuclear weapons.
   a. The risk of non-Nuclear Weapons States developing their own stock of nuclear arms might also be increased because of lost confidence in the policies of ‘extended deterrence’ under which they have hitherto felt protected. Such countries include Saudi Arabia, Egypt, Turkey and Japan.

2. An important immediate consequence would be the increasing vulnerability of European NATO states to possible aggression from Russia – or at least a perception of increased vulnerability – through a weakening of US resolve to protect them while the US increases its own defences.¹⁰

3. Hence in times of increased international and regional tensions, the chances of an accidentally triggered or unauthorised hostile nuclear attack would increase with consequent almost certain escalation through tit-for-tat exchanges. This would have dire humanitarian consequences such as nuclear famine.

**Could the Treaty be amended to make it more attractive to both sides?**

1. It has been suggested that removing the INFT’s limit on cruise missiles might help sustain the reputations of the US and of Russia without too much effect on the efficacy of the INF as a whole; but this could only make it slightly more attractive. Were such to occur, it would be important not to remove the limit on hypersonic ballistic missiles as deployment of those would also increase the risks of a full-scale nuclear war.

2. As mentioned above, confidence in the treaty would be enhanced by more thorough and open access inspections of states’ missile systems to ensure compliance.

**Is the INF Treaty still relevant given the technological and geopolitical developments since it was signed?**

1. Medact believes so. But relevance would be increased by increasing the number of parties to the Treaty. Ideally it should include all the nine Nuclear Weapon States but in the first place a Treaty between all five NPT-registered NWSs would go a long way to improving global safety.
   a. The new technologies make it imperative for the INFT to be reinforced rather than discarded. ‘Big Data’ analytic systems and C4ISR has become an essential component of NATO military deployments.¹¹ Naturally such developments are regarded as essential intelligence assets to be highly classified, but such technologies will inevitably be developed by potential adversaries.

2. In order to reduce tension between parties, consideration must be given to strategies encouraging a degree of information sharing, if not of the data itself perhaps a demonstration of mutual awareness of each country’s respective systems. This would of course be a bold strategy not to be undertaken without extreme caution; but by offering the prospect of such sharing, barriers of suspicion and distrust may become eroded leading to greater confidence and less need to have any deployments at all.

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¹⁰ Defence Committee inquiry, ‘Consequences for UK Defence of INF Withdrawal’. Parliament Live: 20 November 2018. [https://www.parliamentlive.tv/Event/Index/88cb0a54-16b2-4c1c-84f9-893b656119db](https://www.parliamentlive.tv/Event/Index/88cb0a54-16b2-4c1c-84f9-893b656119db)

What role could the UK play in future discussions of the Treaty?

1. The UK could take a significant role by reiterating its support for the INFT as a major nuclear arms controlling measure and emphasizing the UK’s expertise in Big Data and essential processes such as disarmament verification.\textsuperscript{12}

2. The only nuclear weapons deployed by the UK are launched from submarines and are therefore not relevant to treaties involving land-launched missiles. Although during 2018 the UK has been severely provoked by criminal acts perpetrated by members of the Russian Intelligence Services, every effort should be taken to emphasise the UK’s peaceful intentions toward the Russian government and people.

3. Such measures should include confidence-building measures during and after the transition of UK’s Trident to the Dreadnought-Class Trident submarines (which should acknowledge the UK’s likely inability to sustain ‘Continuous-at-sea-Deterrence’ during the transition\textsuperscript{13}) and also demonstrating the UK’s expertise in advanced security technologies such as cyber and artificial intelligence.

4. Efforts should also be made to improve relations with the people of Russia by advocating mutual respect for each nation’s historical and future roles in promoting global security. Ways this could be done include long-term discussions about achieving a safer world free from weapons of mass destructions involving and including the future of the NPT and a thoughtful consideration of the TPNW currently before the United Nations.
