



ARMS CONTROL IN THE AGE OF NEW ARMS RACES: REALITIES AND OPTIONS FOR PAKISTAN



Ghazala Yasmin Jalil

ABSTRACT

Global arms control is in decline with both US-Russia bilateral arms control collapsing and multilateral arms control weakening. This has not only heralded a new era where the norms of arms control and disarmament have been replaced by a “normative” approach that de-emphasises formal arms control and encourages responsible behaviour and creating informal conditions for disarmament. It has been accompanied by a renewed emphasis on nuclear weapons and other weapons systems that have set in motion a new era of arms races. Both the US and Russia are developing an array of nuclear weapons and are indulging in massive military modernization programmes. India is also indulging in military acquisitions and constantly modernizing its nuclear forces, accompanied by a threatening posture against Pakistan. It has also made tremendous progress in military space programme. This makes the international strategic arena an extremely dangerous one. It has also heralded an era characterised by Neorealist notions of anarchy and self-help. In such an uncertain world Pakistan’s best option is to follow the self-help principle whereby it should have a strong strategic and conventional deterrent so that no country can threaten its security. At the same time, Pakistan needs to keep lobbying and pushing for arms control arrangements and build alliances to counterbalance threats from India.

Key Words: Arms control, normative approach, arms races, anarchy, self-help.



India is indulging in military acquisitions and constantly modernizing its nuclear forces. It has also made progress in military space programme and even conducted an anti-satellite test in March 2019

Pakistan's best option is to follow the self-help principle. It should have a strong strategic and conventional deterrent so that no country can threaten its security

Introduction

There has been a visible decay in international arms control. The US and Russian bilateral arms control arrangement has collapsed. The year 2019 saw the demise of the 1987 Intermediate-Range Nuclear Forces (INF) Treaty that was the cornerstone of European security which required the United States and the Soviet Union to eliminate and permanently forswear all of their nuclear and conventional ground-launched ballistic and cruise missiles with ranges of 500 to 5,500 kilometers. The last remaining bilateral treaty the New Strategic Arms Reduction Treaty (START) is on the verge of demise unless it can be extended by February 2021. There are no serious efforts by the US to extend the treaty even though Russia has offered to extend it unconditionally. The US withdrew from the Joint Comprehensive Plan of Action (JCPOA) in 2018 which put checks on the development of Iranian nuclear programme. The Nuclear Non-Proliferation Treaty (NPT) has not made any substantive progress. The CTBT has been in limbo for over two decades. UN forums like the Conference on Disarmament have been ineffective in negotiating arms control arrangements. There is no progress on the much-needed arms control legislation in outer space. The US has not taken any interest in arms control arrangements in outer space. In fact, it is developing space force that is exclusively devoted to combat and space operations.

Overall, the world has either moved away from arms control arrangements or abrogated existing arms control agreements. This has not only heralded a new era where the norms of arms control and disarmament have been replaced by a renewed normative approach that de-emphasises formal arms control and encourages responsible behaviour, and creating informal conditions for disarmament. The breakdown in arms control has been accompanied by a renewed emphasis on nuclear weapons and other weapons systems, it has set in motion a new era of arms races. Both the US and Russia are developing an array of nuclear weapons and indulging in massive military modernization programmes. India is also indulging in military acquisitions and constantly modernizing its nuclear forces. It has also made tremendous progress in

military space programme and even conducted an anti-satellite test in March 2019. This makes the international strategic arena an extremely dangerous one. Pakistan's neighbour India heightens Pakistan's threat perceptions with ever increasing military power and a threatening posture.

With the crumbling of the arms control arrangements the international system is moving towards a world characterised by self-help. In such a world, what should be Pakistan's options? The paper would argue that while Pakistan stands by its commitment to arms control but the world is moving away from it, towards a renewed emphasis on nuclear weapons and other weapon systems. India also seems least interested in discussing arms control arrangement. In such a scenario, Pakistan's best option is to follow the self-help principle. It should have a strong strategic and conventional deterrent so that no country can threaten its security. At the same time Pakistan needs to keep lobbying and pushing for arms control arrangements like the arms control in outer space and regional arms control regime.

The paper would address questions like: How are the norms of global arms control changing? How is global arms control regime faring with new realities in the global strategic environment? What impact is it having in terms of perpetuating new arms races? What options can Pakistan's pursue?

The World's Biggest Postwar Arms Importers

Value of arms imports by country from 1950 to 2017 (in billion TIV)*

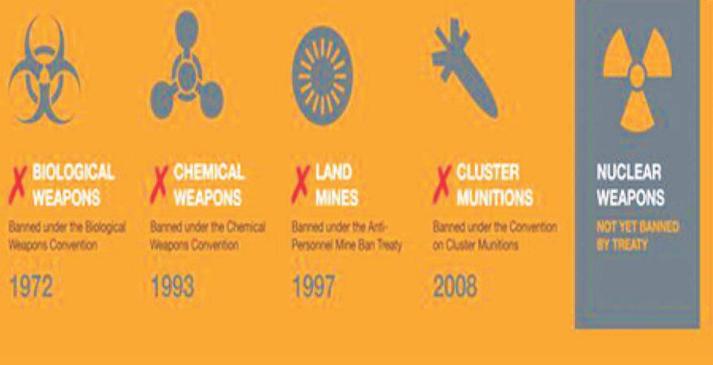


* TIV (trend-indicator value) is based on the known unit production costs of weapons and represent the transfer of military resources rather than the financial value of the transfer.

** Including East and West Germany

Source: Stockholm International Peace Research Institute

Forbes statista



Theoretical Framework

International relations have a widely differing perspective on the role and value of institutions such as the ones that comprise the arms control regime. Liberal school of thought is a proponent of international institutions and sees cooperation among states possible.¹ Realism does not see value of institutions and when they are there, they only serve the interests of major powers.² Many critical theorists use Robert Cox's concept of hegemony and power³ to define the global nuclear order. It is reflected in the ability of large powers to define the global order and the arms control regime.⁴ These very powers once showed willingness to negotiate arms control agreements to mitigate the threat of nuclear war. They defined the rules of the game. Prime example is the NPT where only five states were recognised as nuclear-weapon states (NWS) and the rest of the signatory states gave up their right to develop nuclear weapons. Arms control in the past was focused on preventing the horizontal proliferation of nuclear weapons while managing the vertical proliferation. In essence they defined the norms of global nuclear order. In a similar way, now the great powers are redefining the norms of the global nuclear order, arms control and offensive turn in other spheres like outer space. These reflect the power structures and power relations. The abandonment of existing arms control arrangements, and a move towards military and nuclear modernization is also setting a new norm

The world is witnessing a fundamental change in the arms control norms. From traditional arms control to "normative" arms control discourse

The new "normative" approach is much bigger one, not just confined to the nuclear realm but extends to biological weapons, outer space, cyberspace and many other areas

for other emerging powerful countries. India is such a power that is massively investing in armament, both conventional and nuclear, it is also increasing its offensive power in outer space. This is of concern to Pakistan since its main security threat comes from India.

The paper would also rely on the Neorealist school of thought which sees international structure characterised by anarchy, where states are responsible for their own security. Since there is no overarching mechanism to govern states, they feel threatened by each other and must rely on themselves for security, thus it is a self-help system.⁵ International norms, institutions and agreements are falling apart; trade and technology wars dominating international agenda; and tense relations between the US and Russia and US and China driving geopolitics world order is unpredictable. Cooperative security arrangements have crumbled. There is a resurgence of the importance of Sovereign states which are responsible for their own security.⁶

Change in Norms of Arms Control

The world is witnessing a fundamental change in the arms control norms. From traditional arms control to "normative" arms control discourse. The US has emerged as the champion of the latter approach. It is a fluid approach that favours establishing norms of responsible behaviour. Dr Christopher Ashley Ford said "We seek to develop and build upon like-mindedness with a wide range of partners willing to engage in good faith in trying to manage these challenges. We also seek to use this like mindedness as a foundation for collective action in response to reckless or destabilizing behaviours".⁷ In essence, this means that there is a move away from arms control treaties that are legally binding and signatory states must adhere to. The arguments used are that, given the tremendous advancements in technology, formal legal treaties and instruments cannot keep up with the pace of technology. In practice this means that the US does not want its arms developments constrained by any bilateral or multilateral arms control agreements. This is perhaps why there has been an unravelling of the existing arms control arrangements, and no political will to negotiate new ones or extend old arms control arrangements.



US Secretary of State Mike Pompeo “the US would no longer cede military advantage to revisionist state like China that is threatening US and its allies.”

The new “normative” approach is manifested in US initiatives like Creating an Environment for Nuclear Disarmament (CEND). It was originally submitted as a working paper in the second preparatory committee for the NPT Review Conference in 2018.⁸ It focuses on creating conditions where states relations are not driven by competition but are cooperative and free from conflict. It also promotes best practices and creates awareness of issues instead of following hard rules codified by international treaties. This approach is a much bigger one, not just confined to the nuclear realm but extends to biological weapons, outer space, cyberspace and many other areas.

The nuclear weapons states, especially the US, have for decades set the rules for international non-proliferation regime. They are still setting out the norms and rules of international arms control regime. It has set on a course that de-emphasises formal arms control arrangements and emphasises a fluid vague approach that is being dubbed the normative approach. This trend has been accompanied by an unravelling of existing arms control arrangements.

Unravelling of Arms Control

There has been a systematic unravelling of the existing arms control arrangement. It ranges from abrogation of bilateral arms control arrangements between US and Russia, multilateral ones like JCPOA and open skies treaty. Refusal to engage in meaningful negotiations regarding CTBT, FMCT, progress in NPT, outer space and biological weapons.

The breakdown of US-Russia bilateral arms control started with US withdrawal from the 1972 Anti-

Another arms control treaty that is under threat is the 2010 New Strategic Arms Reduction Treaty, which limits the deployed strategic nuclear warheads and bombs to 1,550, deployed missiles and bombers at 700, and the total number of launchers at 800



President Barack Obama signs the instrument of ratification of the New START Treaty, Feb. 2, 2011

Ballistic Missile Treaty (ABM) in 2002. It sets limits on ABM systems the two countries could deploy against each other. Subsequently, the US went on to develop and deploy extensive missile defence systems in US homeland as well as in Europe. For Russia, US missile defence deployments under NATO's European Phased Adaptive Approach (EPAA) in Europe are a source of concern. While the US maintains that its missile defences are aimed against threats from Iran and Middle East.⁹ Russia suspects it is meant to nullify its second-strike capability. It has long been a source of contention between the two states. As later section will show Russian arms development are geared towards overcoming this vulnerability.

The next causality of the breakdown in bilateral arms control is the 1987 Intermediate-Range Nuclear Forces (INF) Treaty. It was signed between the two Cold War super powers to keep ground-based nuclear weapons out of Europe. The INF prohibited the manufacture and deployment of missiles with ranges 500-5500 km. It led the US and Russia to remove thousands of nuclear missiles aimed at each other. Under the INF, the Soviet Union eliminated 1846 missiles while the US 846.¹⁰ The US accused Russia of violating the treaty by developing the ground launched cruise missile Novator 9M729. Russia also accused the US of violating the treaty as well. It alleges that the missile defence interceptors that the US has deployed in Europe can be turned into offensive weapons with minor modifications. Russia also accused US of violating the treaty by using prohibited missiles for target practice; by developing drones that are essentially cruise missiles and by taking maritime missile defence system Aegis Ashore and basing it on land.¹¹ Russia showed willingness to discuss and resolve the issues time and again but the US did not respond positively. The US formally declared withdrawal from INF in February 2019. As of August 2019, the treaty formally ended.



Open Skies Treaty is a multilateral agreement that facilitates short-notice unarmed reconnaissance over flights among member states with the aim to promote military transparency

The US has stated China as one of the reasons for withdrawing from the INF. US Secretary of State Mike Pompeo clearly stated that "the US would no longer cede military advantage to revisionist state like China that is threatening US and its allies".¹² This suggests that while the US made Russian non-compliance as an excuse for withdrawing from the INF. It is in fact no longer perceived to be in US interest to forgo an entire category of ballistic missiles.

Demise of the INF has serious repercussion as it leaves Europe vulnerable to the danger of medium range ballistic missiles. It leaves the US and Russia to develop and field intermediate range nuclear missiles which lessens the security of Europe. In fact, the US is already well on its way to test and deploy missiles that were prohibited under INF.¹³ Also if the US deploys IRBMs in China's neighbourhood it would threaten China. China would react by building and fielding weapons of its own.

Another arms control treaty that is under threat is the 2010 New Strategic Arms Reduction Treaty, which limits the deployed strategic nuclear warheads and bombs to 1,550, deployed missiles and bombers at 700, and the total number of launchers at 800. This is also a landmark treaty under which US and

Russia eliminated thousands of nuclear warheads and launchers. New START will expire in February 2021 and can be extended for a further five years through mutual agreement.¹⁴ There have so far not been any hopeful signs from the US that it is willing to extend the treaty. It has said that new arms control treaties should be negotiated that also include China. China has refused to negotiate any such trilateral arms control arrangements, saying that its nuclear arsenal is very small and does not threaten any great power. However, if US and Russia fail to extend the New START expires, it would be the end of bilateral arms control architecture that has provided a check on unrestrained arms development for decades.

Russian President has warned that letting the New START expire would have huge repercussions. He said that with the end of New START there will not be any limitations on arms control which could have catastrophic consequences.¹⁵ He also expressed deep concern over the absence of global discussion over the issue.

The bilateral arms control structure is at risk and its demise would be destabilising not just for US and Russia but for the entire world, since it is likely to fuel an unchecked nuclear arms race. It would also have wider implications that go beyond US and Russia and would negatively impact the entire world. It also strengthens the norm that the US is building to de-emphasize formal arms control towards a "normative" approach.

On the multilateral front the US also withdrew from the JCPOA. Negotiated in 2015, it sets certain limits on Iran's nuclear programme so that it cannot develop nuclear weapons. The parties to the agreement were Iran, US, China, Russia, France, Germany, UK and EU. It was endorsed by the United Nations Security Council Resolution S/RES/2231, and was binding on all member states. It was thus part of international law. When the US withdrew from it in May 2018 it thus challenged UN Security Council authority. It also withdrew despite the fact that Iran was in compliance with JCPOA implementation as verified by the International Atomic Energy Agency.¹⁶ The US also



CTBT also remains in limbo which was signed in 1996 but has yet to enter into force because of refusal of the US, China, India, Pakistan, Israel, Iran, Egypt and North Korea to ratify the treaty since it will ban any future nuclear testing



imposed a string of sanctions on Iran. The withdrawal from JCPOA falls in line with the general policy to abrogate arms control arrangements. It was also a political decision against Iran, and part of the Trump Administration's agenda to undo any arms control achievements of the Obama Administration.

Open Skies Treaty is another one that the US has been talking about withdrawing from since the end of 2019. Open Skies Treaty is a multilateral agreement that facilitates short-notice unarmed reconnaissance over flights among member states, with the aim to promote military transparency. It has been in force since 2002 and has 34 state parties. The US claims Russia is abusing the treaty and with satellites operational it is redundant. However, it is more likely to be part of the new wave of abrogating existing arms control arrangements. In essence, the US does not want any curbs or checks on its activities.

The NPT has not made much progress for years. The 2015 NPT Review conference ended in failure and the one in 2020 (postponed due to Covid-19 pandemic) is not likely to have much success either. The Nuclear weapons states have failed under its article VI to pursue negotiation in good faith over disarmament and cessation of arms races. In frustration, states in favour of nuclear abolition have negotiated the Treaty on the Prohibition of Nuclear Weapons (TPNW) in July 2017. It has also revealed fissure in non-proliferation regime and has hastened initiatives like CEND.

The Comprehensive Nuclear Test-Ban Treaty (CTBT) also remains in limbo, which was signed in 1996 but has yet to enter into force because of refusal of the US, China, India, Pakistan, Israel, Iran, Egypt and North Korea to ratify the treaty since it will ban any

The new arms race is not likely to be bilateral but will involve many more states. It will include states like China, India, Pakistan, Israel and North Korea. It may also encourage a whole new round of nuclear proliferation

future nuclear testing.¹⁷ Similarly, the FMCT remains in limbo due to differences over the terms of the treaty, whereby states like Pakistan and others insist that existing fissile material stockpiles should be taken into consideration as well as banning future fissile material production. It has been concerned over the prospects of being locked into a relative disadvantageous position over India's larger fissile material stockpile. The US put up a proposal in 2006 for five NPT recognized nuclear weapons states that lacked verification measure.¹⁸ However, since then no progress has been made over the issue.

Arms control negotiations have also stalled in the realm of outer space. There is one effective treaty the Outer Space Treaty signed in 1967 that only bans placement of nuclear biological weapons in space but it does not prohibit placement of conventional weapons in space. Partial Test Ban Treaty (PTBT) of 1963 bans nuclear test in Atmosphere, Outer Space and Underwater. Efforts over the years to negotiate effective laws to regulate outer space have not had much success. The UN Conference on Disarmament (CD) has been deadlocked for decades. European Union's International Code of Conduct for Outer Space Activities convened in 2015, which proposes not to damage or destroy any satellite except for self-defence and for managing space debris, has not had any significant success. The initiative for Prevention of an Arms Race in Outer Space (PAROS) has been on CD agenda for several decades now without success. Russia and China have endorsed and submitted proposals many a times for arms control measure in outer space and PAROS.¹⁹ However, the US has rejected all proposals and refuses to introduce any proposals of its own. This has been accompanied by an increase in offensive military activities in outer space. The US has created the US Space force to maintain superiority in space.

Export control regimes have been created which are essentially a group of elite states that aim to prevent the proliferation of nuclear, chemical, biological weapons, conventional weapons and missiles technology to states outside the group. These include the Missile Technology Control Regime,





On March 1, 2018 Russian President Vladimir Putin in a state of the nation speech said that Russia is developing nuclear powered underwater drone, a nuclear tipped cruise missile and a hypersonic missile that is unrivalled in the world and has the capability to defeat any missile defence system

Australia Group, Wassenaar Arrangement and the Nuclear Suppliers' Group. India's has been included in the three out of the four export control groups. It has essentially been promoted as a state displaying "responsible nuclear behaviour." The US has lobbied hard for India to be included in the fourth group as well – the NSG. According to present criterial of the group, India needs to be an NPT signatory to be granted membership. But the US is trying to circumvent the rules to include India in NSG. In 2008 it had the group grant a waiver to India, whereby NSG member states could do nuclear business with India. If this is part of the new US normative approach to arms control, to promote and reward "responsible behaviour" this is certainly cause of concern for Pakistan. The latter also seeks membership of NSG but has so far been denied membership.

Rise of Era of New Arms Races

The weakening of international arms control has been accompanied by an era of new arms races. Both US and Russia are already modernizing massively across all their nuclear legs. There is competition in offensive nuclear weapons but also in non-nuclear weapons, as well as in development of space weapons. However, the new arms race is not likely to be bilateral but will involve many more states. It will include states like China, India, Pakistan, Israel and North Korea. It may also encourage a whole new round of nuclear proliferation, perhaps including Iran and Saudi Arabia. A wave of new countries like Brazil, Egypt, South Korea could also opt for developing nuclear weapons.²⁰ This will make the new arms race deadlier and more complex and the world a very dangerous place.

The United States

At present the US has around 1650 strategic nuclear warheads deployed on land, air and sea, and around 180 tactical nuclear weapons on US bases around Europe.²¹ The US plans for massive modernization over the next 30 years with the cost of \$

1.7 billion.²² Some of the modernization plans were inherited from the President Obama administration while some are new. However, the US nuclear arsenal is being upgraded at land, air and sea. The US investment in upgrading and updating its nuclear forces is the largest in the world.

Moreover, with the Nuclear Posture Review (NPR) in 2018 the US has made it clear that it is going to develop a whole new range of nuclear weapons. This would include new ICBMs, new bombers, and submarines that are capable of launching ballistic missiles as well and new tactical nuclear weapons.²³ During the Cold war, the latter were deemed dangerous by both US and Soviet Union and they eventually agreed to eliminate these. Development of tactical nuclear weapons would mean a lowering of nuclear threshold which is dangerous thinking on the part of the US. The NPR also call for the development of a sea launched cruise missile.

The US is also modernizing its triad of nuclear forces. The US has plans to replace its 400 Minuteman III ICBMs which are deployed by the Air force. It has plans to develop 600 missiles out of which 400 will be deployed through 2070. In the air, B2 and B-52 bombers are being upgraded.²⁴ These will eventually be replaced by the B-21 Raider. The Air force plans to purchase 100 B-21s. The US has plans to equip its bombers with air-launched long-range cruise missile (ALCM).²⁵

The US plans are pushing other countries like China and Russia to modernize their nuclear arsenals and non-nuclear weaponry.

Russia

Like the US, Russia is also undergoing a modernization of its nuclear forces at land, air and sea. Some modernization is to replace and upgrade aging systems, while some are in response to US weapons plans. Less than a month after US released its NPR, Russian President Vladimir Putin announced plans to develop and field a range of new nuclear weapons. On March 1, 2018 Russian President Vladimir Putin in a state of the nation speech said that Russia is developing nuclear powered underwater drone, a nuclear tipped cruise missile and a hypersonic missile that is unrivalled in the world and has the capability to defeat any missile defence system.²⁶ He claimed that its new hypersonic missile can reach any point in the world. He described the proposed cruise missile as having unlimited range and difficult to detect.²⁷ He emphasised that both these missiles are invincible and cannot be detected by any missile defence system. The thrust of



The US nuclear modernization, its abrogation of arms control treaties and rising tensions in bilateral relations with China are creating incentives for the latter to modernize its nuclear forces

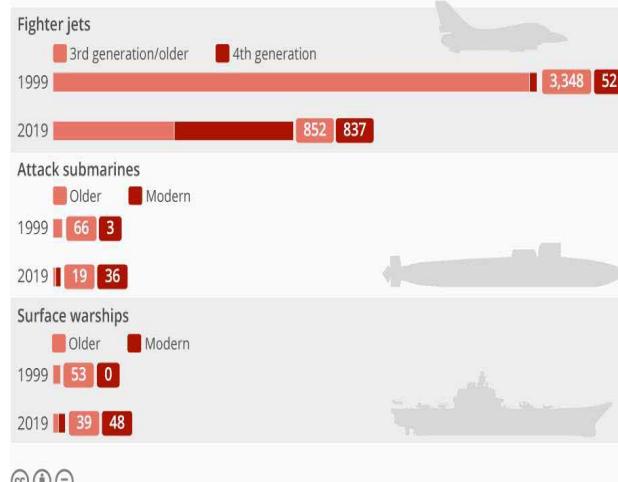
these weapons development is the threat that Russia perceives from US missile defence systems developed since demise of the ABM treaty.

Overall, Russia is modernizing across all three nuclear legs - on land, air and sea. At sea Russia is modernizing its ballistic missile submarine fleet. It has 6 Delta Class submarines. It also deployed a few Borei Class submarines in the last few years and has plans to induct six more Borei Class submarines bringing the total number of the submarine fleet to at least 12, that will field 192 SLBMs with approximately 580 warheads²⁸ since most missiles are equipped with multiple independently targetable re-entry vehicles (MIRVs). The Yasen Class attack nuclear submarines would carry SLCMs. In the air Russia is planning to replace its existing bomber fleet TU-160 with the stealth bomber PAK-DA. On land the Topol-M is being modernized. It has deployed MIRVed version of the Topol-M the RS 24 Yars. It currently deploys 180 ICBMs carrying 480 nuclear warheads. A new more advanced Sarmat ICBM is being developed and deployed after 2020.²⁹

US development of missile defences threatened Russia and it has developed an array of weapons to counter and defeat US. They are both

Then & Now China's Military Modernization

Share of modern and older equipment in the Chinese military



Source: International Institute for Strategic Studies via University of Sydney

massively modernising their arsenals in order to deter threats from each other and other major powers in the world. Their arms race is not just confined to this field but extends to non-nuclear field, offensive and defensive strategic systems, space and cyberspace as well. The brewing new arms race bodes ill for the two great powers as well as for the international security.

China

On the other hand, the US-China relations have also deteriorated considerably since US president Donald Trump came into power. The trade war between the two countries has also heightened tensions. For over a decade the West and especially the US have seen China's rise as a threat. South China Sea has increasingly become a flashpoint between the US and China. China sees the area as its sphere of influence while the US has an increasing presence and activity in the area. So, there is a competition brewing between US and China as well.

The US nuclear modernization, its abrogation of arms control treaties and rising tensions in bilateral relations with China are creating incentives for the latter to modernize its nuclear forces. China has a modest nuclear programme compared to the US and Russia. It only has a nuclear arsenal of roughly 280 nuclear warheads, compared to approximately 4000 nuclear warheads of the US.³⁰ It has a triad of nuclear forces - based on land, air and sea.

China is modernizing across all three legs of its nuclear triad. However, it is concentrated more on its ground-based forces and its sea-based capabilities. China is modernizing its ICBMs force. It is adding road mobile DF-31A and DF-41 and has also developed a hypersonic glide vehicle DF-ZF which became operational in October 2019. Missile is designed to be mounted on DF-17 and has two dual use Cruise missiles CJ-10 and CJ-20.³¹ It has also introduced the intermediate range DF-26 being dubbed as the Guam killer intended against the threat of US forces in the Pacific.³² It has the capability to launch close to 80 IRBMs in Asia, including US forces in Japan and South Korea.

China is developing MIRV capable ICBMs in response to the US ballistic missiles defence plans. It has updated the DF-5 which was the main component of its strategic deterrence into MIRV-capable DF-5B. China is also developing technologies that can penetrate BMD systems, satellite capabilities that can potentially damage US space-based BMD systems and also developing BMD system of its own.³³ China's modernization is driven by a threat from the US, and to a lesser extent from Russia and India.



The deepening Strategic Partnership between the US and India is fuelling India-Pakistan arms competition. It is providing technological advantages to India and it is emboldening it in terms of its nuclear posture and encouraging pre-emptive tendencies

India is looking to acquire fighter jets, missiles, submarines and warships in the next five to seven years. These plans are a great source of concern for Pakistan whose primary security threat comes from India

At sea, China is developing the submarine launched ballistic missiles (SLBM), JL-2 with a range of over 7000 km. It has four submarines capable of carrying 12 SLBM each and a fifth submarine is under construction.³⁴

Overall, China's modernization may include deploying SLBMs, and cruise missiles but it is primarily focused on improving the quality and quantity of its land based nuclear force. It is focused on MIRVing its missiles and making them more penetrable against any missile defence systems. The ultimate goal is to make its nuclear forces more survivable and less vulnerable to a first strike

India's Modernization

India has benefitted from the weakening of arms control regime and the prominence of normative approach where it can be declared as a responsible nuclear weapons state and being brought into the fold of elite states running the non-proliferation regime. The deepening Strategic Partnership between the US and India is fuelling India-Pakistan arms competition. It is providing technological advantages to India and emboldening it in terms of its nuclear posture and encouraging pre-emptive tendencies.

India has built its conventional forces massively and continues to build nuclear forces. It has a triad of nuclear forces where it is working on ICBM capability and also operationalising submarine based Naval nuclear capability. It has plans to build 4-6 nuclear attack submarines at sea in the next 15 years. It already has two nuclear submarines operational since 2017 and already has a range of nuclear capable missiles that are part of its naval nuclear strike capabilities. These include K-15 and K-4 missiles, Dhanush and Brahmos cruise missile. This gives India a second-strike capability.³⁵ The US has also approved sale of 24 anti-submarine MH-60 Helicopters worth \$ 2.6 billion. This nuclearizes the Indian Ocean and makes Pakistan's naval nuclear deterrent more vulnerable.

It is also massively building its missiles defence capabilities. Besides its indigenous systems it has negotiated a deal with Russia to acquire five S-400 missiles defence systems worth \$5.5 billion. The systems are expected to be delivered between 2020-3 and would give it capability to defend against incoming missiles and aircrafts. This negatively impacts on nuclear deterrence equation between India and Pakistan thus creating more instability in South Asia.³⁶

India is in the process of acquiring major weaponry. The US cleared sale of \$155 million deal to sell India 10 AGM-84L Harpoon Block II air-launched missiles and 16 MK 54 torpedoes.³⁷ US companies are also bidding for a contract worth \$15 billion to supply 114 combat airplanes for the air force. India is also buying \$14.5 billion worth of weapons from Russia.³⁸ India is set to spend \$ 130 billion on military modernization in the next five to seven years.³⁹ It is looking to modernize across all three forces. India is looking to acquire fighter jets, missiles, submarines and warships in the next five to seven years. These plans are a great source of concern for Pakistan whose primary security threat comes from India. Such massive build-ups tilt the strategic balance in favour of India and bring more instability to South Asia.





With the militarization and possible weaponization of space by the great powers, the prospects of any negotiation of treaties to keep space weapons-free would become a utopian idea

Arms Race in Outer Space

The arms race is also spilling into outer space. Both Russia and the US have extensive military space assets and have anti-satellite capabilities as well. The US has set up a Space force as a military service for space operations with the mission to protect US interests in space, to provide support to land, air, naval and cyber forces, offensive and defensive space operations to achieve space superiority. This essentially means a broad role for military space assets. Russia already has a space force. India also conducted an anti-satellite test in March 2019. India has considerable military space assets that are threatening Pakistan. With the militarization and possible weaponization of space by the great powers, the prospects of any negotiation of treaties to keep space weapons-free would become a utopian idea.

States address their perceived security needs by enhancing their own relative strength. Cooperative arms control draws little attention...States, therefore prepare for wars they do not want and that they usually do not wage

Implications and Options for Pakistan

The crumbling international arms control structure has ushered in an era that is characterised by military build-ups, arms races in the conventional, nuclear and space realms. This undermines strategic stability at the international and regional level. The world today is unpredictable, marked by distrust; "states address their perceived security needs by enhancing their own relative strength. Cooperative arms control draws little attention...States, therefore prepare for wars they do not want and that they usually do not wage".⁴⁰ It seems the world is descending into Neorealist notion of anarchy and chaos. In such a world it is important to assess options for states like Pakistan.



JF-17 Thunder

There are a limited number of options that Pakistan can exercise in the emerging scenario. It looks like the world is collapsing into a structure where each state is responsible for its own security – a self-help world. International institutions in the form of arms control regime have weakened and are failing to keep weapons development in check. It is failing to provide an overarching framework that regulates, keeps check and balance on offensive capabilities of states.

In Pakistan's neighbourhood as well, there is barely any arms control arrangement in place. Pakistan proposed a Strategic Restraint Regime (SRR) in the wake of 1998 nuclear tests but India rejected it. Pakistan also proposed it in the round of bilateral talks in 2004. Its primary purpose was to prevent an open ended nuclear, conventional and missile arms race and reduce the risk of a nuclear war. However, India rejected all such proposals over the years, and has gone on to massively arm itself in conventional, nuclear realms and has developed offensive military capabilities in outer space. India's ambitions of achieving a great power status have been aided by weapon deals with Russia and the US. Indo-US strategic partnership has also played a part in tilting strategic balance in favour of India which sees the latter as a counter balance against a rising China.

This leaves Pakistan the option to develop and maintain a conventional and nuclear capability as a hedge against India's growing offensive capabilities. Since Pakistan has a small economy compared to its rival India and also a smaller defence budget, Pakistan cannot match India's weapon for weapon or afford to get into a costly arms race. It has thus focused on maintaining a basic conventional capability. It relies on its nuclear deterrent to counter the threat from India. It



Another option for Pakistan is to seek alliances in order to counterbalance threats from India

has an estimated 110-120 nuclear arsenal and a credible minimum deterrence policy. It relies on short and medium-range missiles, as well as cruise missiles to provide land based nuclear deterrent. Pakistan's missiles arsenal ranges from the short-range Nasr with 60 km range, to its Shaheen 2 series with a maximum range of 2500 km.⁴¹ Pakistan has also developed the Ababeel with 2200 km range which can launch multiple warheads using MIRV technology. It can also defeat enemy radars and is meant to ensure missiles' survivability against Indian BMD systems. Several of Pakistan's later missiles have been developed to evade or defeat Indian BMD, which is a great source of concern for Islamabad. Pakistan also has developed the 700 km range Babur cruise missile which is also capable of avoiding radar detection and penetrate Indian missile defence systems. Pakistan has developed the Air Launched Cruise Missile (ALCM) Raad with 350 km range which is again meant to penetrate missile defence systems.

At sea Pakistan has tried to develop a second-strike capability in response to Indian operationalization of the naval leg. It is comprised of Submarine-Launched Cruise Missile (SLCM) Babur-3 with 450 km range, which is deployed on the Agosta Class diesel powered submarines. Pakistan has thus tried to bring qualitative and quantitative improvements to its nuclear and missile forces in order to maintain the credibility of its nuclear deterrent in the face of India's massive nuclear and conventional build-up, and its increasingly sophisticated BMD systems.

Another option for Pakistan is to seek alliances in order to counterbalance threats from India. Pakistan has a long and time-tested alliance with China that has helped Pakistan strengthen its defence capabilities, boosted its economy with the China-Pakistan

Despite weakening of global arms control, Pakistan needs to keep lobbying for effective arms control measures like FMCT, CTBT, its membership to NSG and arms control in outer space

Economic Corridor (CPEC), and has backed Pakistan on the diplomatic front. Since Prime Minister Imran Khan came to power, Pakistan is also strengthening its relations with US, Russia, Turkey, Iran, Malaysia, Kyrgyzstan, Qatar and Saudi Arabia. He has made 25 visits to 11 countries in the short two-year tenure of his government. It seeks to strengthen its ties across the globe.

Despite weakening of global arms control, Pakistan needs to keep lobbying for effective arms control measures like FMCT, CTBT, its membership to NSG and arms control in outer space. The world needs to realize that abrogation of arms control and unchecked development of offensive weapons is very dangerous and destabilising. It only leads to one path - war and perhaps annihilation of humanity. Proponents of effective arms control must thus come together and work for steering the world away from the path of destruction.

Conclusion

The de-emphasis of traditional arms control and a move towards a normative approach to arms control that shuns formal controls over arms development and offensive activities has translated into demise of US-Russia arms control as well as weakening of global arms control. It essentially means that the international norms have clearly been moving away from arms control and disarmament. Nuclear weapons are being portrayed as good, as a measure of national status, strength and useable. The resulting new arms races have pushed the international security landscape towards an emphasis on arms and the realist concept of self-help. The new arms races are more complex than the one during the Cold War and multilateral. This is a very dangerous development and signifies a return to the Neorealist concept of anarchy where individual states are responsible for their sovereignty and security. In such a scenario, Pakistan's best option is to rely on its own conventional and nuclear capabilities to secure itself against a rapidly arming India, seek alliances to counterbalance India and keep lobbying for some arms control arrangements in order to maintain strategic stability in South Asia.

Ms. Ghazala Yasmin Jalil is a Research Fellow at Arms Control and Disarmament Center (ACDC), Institute of Strategic Studies (ISS), Islamabad.



NOTES

1. Robert Keohane, "Twenty Years of Institutional Liberalism," *International Relations*, Vol. 26, No. 2.
2. John Mearsheimer, "The False Promise of International Institutions," *International Security*, Vol. 19, No. 3 (Winter, 1994-1995).
3. Robert Cox, "Social Forces, States and World Orders: Beyond International Relations Theory," *Millennium: Journal of International Studies*, Vol. 10, No. 2, 1981
4. Nick Ritchie, "A hegemonic nuclear order: Understanding the Ban Treaty and the power politics of nuclear weapons," *Contemporary Security Policy*, Vol. 40, Issue. 4, 2019
5. Kenneth Waltz, *Theory of International Politics* (New York, NY: McGraw-Hill, 1979) and Kenneth Waltz, "Structural realism after the Cold War," *International Security*, Vol. 25, No. 1, 2000.
6. SverreLodgaard, "Arms Control and World Order," *Journal for Peace and Nuclear Disarmament*, Vol. 2, No. 1, 2019, 1-18.
7. Dr Christopher Ashley Ford, Assistant Secretary of Bureau of International Security and Nonproliferation "Rules, Norms, and Community: Arms Control Discourses in a Changing World," Presentation at the European Union Conference on Nonproliferation, Brussels, Belgium, December 13, 2019, <https://www.state.gov/rules-norms-and-community-arms-control-discourses-in-a-changing-world/>
8. Paul Meyer, "Creating an Environment for Nuclear Disarmament: Striding Forward or Stepping Back?" *Arms Control Today*, April 2019,
9. Stephen J. Cimbala, *The United States Russia and Nuclear Peace* (Palgrave Macmillan, 2020)
10. Amy Woolf, "U.S. Withdrawal from the INF Treaty," CRS Insight, Updated February 1, 2019, <https://fas.org/sgp/crs/nuke/IN10985.pdf>
11. Mikhail Gorbachev, "Mikhail Gorbachev: A New Nuclear Arms Race Has Begun," October 25, 2018, <https://www.sipri.org/commentary/essay/2018/crumbling-architecture-arms-control>
12. Connor Finnegan, "Pompeo says US suspending landmark nuclear deal because of Russian violations," ABC News, December 4, <https://abcnews.go.com/Politics/pompeo-us-suspending-landmark-nuclear-deal-russian-violations/story?id=59602417>
13. The US has asked \$100 million budget to develop missiles that would be banned under INF. The US also tested a medium range cruise missile in December 2019.
14. Frank Klotz, "Extending New Start is in America's National Security Interest," *Arms Control Today*, January/February 2019.
15. "Russia: Putin warns start treaty at risk," Al Jazeera, June 6, 2019, <https://www.aljazeera.com/news/2019/06/russia-putin-warns-start-nuclear-arms-treaty-risk-190606163914989.html>
16. Dan Smith, "The US withdrawal from the Iran deal: One year on," SIPRI Commentary, May 7, 2019, <https://www.sipri.org/commentary/expert-comment/2019/us-withdrawal-iran-deal-one-year>
17. "Comprehensive Test-Ban Treaty," <https://www.un.org/disarmament/wmd/nuclear/ctbt/>
18. "Fissile Material Cut-Off Treaty at a Glance," Factsheet, Updated June 2018, Arms Control Association, <https://www.armscontrol.org/factsheets/fmct>
19. "Prevention of an Arms Race in Outer Space," CD documents, [https://www.unog.ch/80256EE600585943/\(httpPages\)/D4C4FE00A7302FB2C12575E4002DED85?OpenDocument](https://www.unog.ch/80256EE600585943/(httpPages)/D4C4FE00A7302FB2C12575E4002DED85?OpenDocument)
20. Alex Arbatoy, "Mad Momentum Redux? The Rise and Fall of Nuclear Arms Control," *Survival*, Vol. 61, No 3, June-July 2019, 7-38.
21. "US Nuclear Modernization Programmes," *Arms Control Association Factsheet*, August 2018, <https://www.armscontrol.org/factsheets/USNuclearModernization>
22. "U.S. Strategic Nuclear Forces:Background, Developments, and Issues," CRS Report RL33640, April 2020, Federation of American Scientists, <https://fas.org/sgp/crs/nuke/RL33640.pdf>
23. "Nuclear Posture Review," February 2018, US Department of Defence, p. VIII, <https://dod.defense.gov/News/SpecialReports/2018NuclearPostureReview.aspx>
24. "US Nuclear Modernization Programmes," *Arms Control Association Factsheet*, August 2018, <https://www.armscontrol.org/factsheets/USNuclearModernization25>. Benjamin Zala, "How the next nuclear arms race will be different from the last one," *Bulletin of Atomic Scientists*, Vol. 75, No. 1, January 2019.
25. "Presidential Address to the Federal Assembly," March 1, 2018,<http://en.kremlin.ru/events/president/news/56957>
26. Ibid
27. Pavel Podvig, "Russia's Current Nuclear Modernization and Arms Control" *Journal for Peace and Nuclear Disarmament*, Vol.1, No. 2, 2018, 256-267
28. Dmitri Trenin, "Russian views of US nuclear modernization, *Bulletin of the Atomic Scientists*," Vol. 75, No.1, 2019, 14-18
29. GötzNeuneck, The Deep Crisis of Nuclear Arms Control and Disarmament: The State of Play and the Challenges," *Journal for Peace and Nuclear disarmament*," Vol. 2, No. 2, 2019, 431-452
30. Gregory Kulacki, "China's Nuclear Force: Modernizing from Behind," *Union of Concerned Scientists*, January 2018, <https://www.ucsusa.org/resources/chinas-nuclear-force>
31. Benjamin Zala, "How the next nuclear arms race will be different from the last one," *Bulletin of the Atomic Scientists*, 2019 75:1, p.39
32. Alexei Arbatov, "Engaging China in Nuclear Arms Control," October 2014, Carnegie Moscow Center, https://carnegieendowment.org/files/Arbatov_China_nuclear_Eng2014.pdf
33. Gregory Kulacki, "China's Nuclear Force: Modernizing from Behind," op.cit.
34. Ghazala Yasmin Jalil, "India's Development of Sea-Based Nuclear Capabilities: Implications for Pakistan," *Strategic Studies*, Vol. 38, No. 1, Spring 2018
35. For more information see Ghazala Yasmin Jalil, "Indian Missile Defence Development: Implications for Deterrence Stability in South Asia," *Strategic Studies*, 2015.
36. Ayaz Gul, "Pakistan Criticizes Proposed Sale of US Missile Systems to India," VOA, April 17, 2020, <https://www.voanews.com/south-central-asia/pakistan-criticizes-proposed-sale-us-missile-systems-india>
37. Irfan Maher "Indian Increasing Defence Budget and Military Modernization: Security threats for Pakistan," *Modern Diplomacy*, April 25, 2020, <https://moderndiplomacy.eu/2020/04/25/indian-increasing-defense-budget-and-military-modernization-security-threats-for-pakistan/>
38. Zahoor Khan Marwat, "India's \$130 billion military modernisation," *The News*, October 24, 2019.
39. SverreLodgaard, op.cit, p.15
40. Naeem Ahmad Salik, *The Genesis of South Asian Nuclear Deterrence: Pakistan's Perspectives* (Oxford: Oxford University Press, 2009), p. 210.

