

A GLOBAL ARMS CONTROL REGIME ON SHORT- AND MEDIUM-RANGE MISSILES

MATUS HALAS

15.11.2019

A global alternative to the former INF Treaty is a feasible solution to the current crisis of the arms control regime that can significantly improve regional stability in Asia.

It will not harm vital interests of its signatories provided it will not limit ground-launched delivery vehicles with a range greater than 3,000 km and existing TELs.

Given the shifting security environment in Europe, the EU nations should join the German-led development and procurement of an integrated air and missile defence system.

The deterrence dynamics also warrant a French-led joint European development and procurement of air-launched cruise missiles with a range greater than 2,000 km.

Japan and South Korea have a good reason to upgrade their Aegis systems as much as possible (including the SM-3 Block IIA and the SM-6) and Taiwan should get the system too.

It would make sense for Pakistan to have an air-launched land-attack medium-range cruise missile in order to strengthen the mutual deterrence on the Indian subcontinent.

POLICY PAPER

INTRODUCTION

On 2 August 2019, the Intermediate-Range Nuclear Forces (INF) Treaty ceased to be a valid international law document between the United States and the Russian Federation limiting ground-launched delivery vehicles with a range between 500 and 5,500 km. The INF Treaty resolved the crisis in East-West relations caused by the deployment of the Soviet SS-20 intermediate-range ballistic missiles and the reciprocal deployment of American missiles (Pershing II and BGM-109G) in Western Europe as part of the NATO double-track policy of the 1980s. The road-mobile, solid fuel, ground-launched SS-20s replaced the older largely silo-based SS-4 and SS-5 missiles, whose liquid fuel had to be loaded before the launching of the missile. The significantly improved accuracy of the new missiles together with their hard-to-track mobility and close-to-zero response time, which the older Soviet missiles did not have, led to an increased fear of decoupling among European allies. The Soviet Union acquired the first strike advantage resulting from its ability to quickly destroy pre-positioned stocks, critical infrastructure, and military bases as well as command and control centres in Western Europe in times of crisis. That led to a danger of decoupling of security between the European NATO member states and the United States because Washington would supposedly not risk a nuclear war in case of an attack against Western Europe for fear of a Soviet second-strike retaliation with strategic missiles. The US-made Euromissiles – which were able to hit the Soviet territory and were deployed to the United Kingdom, Germany, Italy, Belgium and the Netherlands – were meant to prevent this decoupling and were “a direct response to NATO European allies’ requests.” However, the resulting situation in the European theatre, in which only a few minutes separated the launching from the impact of the missiles, resembled the highly unstable relationship between the superpowers from the 1960s, in which they both had a first strike advantage. The INF Treaty signed in 1987 resolved this problem by eliminating the whole category of ground-launched cruise as well as ballistic missiles irrespective of their warheads.

The global security environment changed greatly since then. NATO expanded eastwards and there is no buffer zone mitigating the Russian doomsday thinking of being attacked by the Alliance. During the Cold War, Central Europe as the most probable battleground served that purpose, but the Alliance and the Russian Federation are immediate neighbours in the Baltics now. In case of a major crisis escalation, it is of vital interest for Russia to prevent reinforcements from coming to Europe from across the Atlantic. The easy-to-track naval assets of the Baltic fleet and NATO’s overall superiority in the air make this task relatively difficult to achieve for Russia. Ground-launched, road-mobile and thus difficult-to-track intermediate-range cruise missiles deployed deep inside the Russian territory seem to be a reasonable answer to this problem from Moscow’s perspective. Such a

strategy also credibly re-creates the decoupling problem among the NATO allies. Moreover, China developed a sizeable arsenal of missiles over the past years that would have been proscribed by the INF Treaty if Beijing had been a signatory party. A direct effect of that is a significant Chinese anti-access / area-denial (A2/AD) capability preventing the United States from moving its forces freely in the Chinese marginal seas in case of war or a major crisis. Washington has only limited options to counter that capability.

The INF Treaty ceased to serve the interests of both signatory nations because as the former US National Security Advisor put it, it was a “bilateral treaty in a multipolar ballistic missile world.” Russia developed and deployed the SSC-8 intermediate-range cruise missile over the last decade and the United States withdrew from the INF Treaty in 2019. The end of this treaty represents another sign of a general weakening of the global arms control and disarmament regime. If one looks at the fate of the Anti-Ballistic Missile Treaty, the Treaty on Conventional Armed Forces in Europe, the Vienna Document, the Joint Comprehensive Plan of Action or the INF Treaty itself, the general trend does not seem to be in favour of comprehensive arms control initiatives. Given the facts of the shifting global distribution of power and rapid development of new technologies, it is only reasonable that the logic of deterrence and arms build-up prevails over that of arms control and disarmament, which prosper under relative stability. Yet the need for a credible deterrence on the one hand and arms control on the other are not necessarily in conflict. This paper tries to illustrate that on the example of a possible global regime limiting the development and deployment of ground-launched short- and medium-range ballistic and cruise missiles.

REGIONAL LOGIC OF DETERRENCE

The contemporary global security is characterised by the interconnected nature of regional security environments. Russia’s involvement in European affairs affects the United States due to its leadership in NATO, but the US is also actively engaged in the Middle East and it tries to contain the Chinese ascendance in East Asia too. China then competes with India for influence in South Asia and all around the Indian Ocean, while it also cooperates with India’s long-time foe, Pakistan. Furthermore, the strongest US ally in the Middle East, Israel, remains committed to limiting the power of Iran, which is militarily and politically backed by Russia. These intertwined relationships share a common imperative associated with nuclear weapons. As a bare strategic minimum, all nuclear-armed states aim to prevent foreign aggression by keeping a deterrent effect strong and stable through a countervalue retaliatory threat. Since Europe, East Asia, South Asia, and the Middle

East are regions with nuclear-armed states and an intense security competition, any arms control initiative at the global level would have to avoid undermining the deterrence dynamics in these regions in particular. At the same time, the common rules applied to all the relevant actors ask for the adoption of the lowest common denominator as a benchmark for a possible global arms control initiative.

Short (500–1,000 km), medium (1,000–3,000 km) and intermediate-range (3,000–5,500 km) ground-launched cruise and ballistic missiles are a destabilising factor in international security. They are relatively cheaper than air- and sea-launched alternatives requiring development of expensive platforms, but they are comparatively harder to track given their road-mobile character and the surrounding background noise on the ground. The often extremely limited time period from the launching of the missiles until their impact also makes them perfectly (but not exclusively) suited for seizing the initiative in many conflict scenarios. Unlike tactical missiles of a shorter range (usually up to 500 km) used at the battlefield, their range enables them to hit not only densely populated areas but also command and control centres, military bases, and critical infrastructure far behind the immediate line of contact. Since the available reaction time would probably only slightly exceed the time in which you usually finish your coffee, it would be very difficult for anyone to disperse the concentration of forces, change the location or effectively take cover. Abolishing (some part of) these weapon systems thus has a potential of significantly increasing the stability of deterrence relationships, similarly as in the case of the late Cold War and the INF Treaty. The most realistic option seems to be a global arms control regime on short- and medium-range ground-launched cruise and ballistic missiles with a range between 500 and 3,000 km. And although any global regime limiting the launch vehicles would not be, strictly speaking, a nuclear arms control or disarmament initiative, an agreement of nuclear-armed states, including China, India and Pakistan, would be crucial for its implementation.

THE MIDDLE EAST

The only actor considered to possess nuclear weapons in the Middle East is Israel, and its position as regards regional security is of an utmost importance. It would be rational for Tel Aviv to join any future arms control initiative only under the condition that it will not negatively affect its security and the credibility of its deterrent threat, most importantly vis-à-vis Iran. The Israeli Air Force is currently qualitatively superior to any regional actor by a degree of magnitude and its ongoing procurement of F-35I multirole fighter aircraft enables it to enter Iranian air space undetected. Bearing that in mind, Israel can be reasonably expected to scrap its

existing ground-launched intermediate-range Jericho-2 ballistic missiles which are able to hit Iran if and only if Tehran reciprocally decides to dismantle all its missiles capable of striking Israel. That would require adoption of a global prohibitive missile range limit up to a minimum of 3,000 km. Iranian non-strategic short- and medium-range missiles falling within this limit include Shahab-3, Qiam-1, Zolfaghar, Khorramshahr, and Sejil ballistic missiles and the Soumar cruise missile. As a result of such an arrangement at the global level, Tehran would lose the ability to strike Israel.

It will, nevertheless, keep operationally important tactical missiles with a range of up to 500 km and also a possibility to develop ICBMs in order to strike Europe and deter the United States. Such a possibility should not be seen as a major threat thanks to the already deployed ballistic missile defence in the US and Europe. Both the Qatari Al Udeid air base with the US Central Command forward HQ and the Emirati Al Dhafra air base will stay within the striking distance of Iranian missiles, which might be seen as a stabilising vulnerability. Since one of the side-effects of such an arms control deal with Israel and Iran as signatory parties would also lead to an increased security of Tehran's regional rival, Saudi Arabia, it cannot be reasonably expected that Iran would agree to disarm unless Riyadh joins the global initiative as well. Moreover, a promise of respecting the JCPOA by all the original signatories, including the United States, and a subsequent lifting of sanctions must serve as a motivation for Iran to limit its ballistic and cruise missile programme. The lack of an arrangement regarding missile technology has been seen by the current US administration as one of the most important deficiencies of the JCPOA anyway.

SOUTH ASIA

If the Middle East geography sets the minimum required upper limit for a possible global arms control regime on delivery systems at the level of 3,000 km, then regional dynamics in East and South Asia together with the vital interests of India become the reason why it is not feasible to maintain the original INF Treaty range limits (500–5,500 km) at the global level. The deterrent threat of a countervalue retaliatory strike as an ultimate response in a major conflict serves as a stabilising factor in relations among the nuclear-armed states. Population centres are natural targets in these kinds of scenarios. Yet if India agreed to scrap all its missiles with a range from 500 to 5,500 km, it would not be able to hit any major Chinese city. China would similarly not be able to strike population centres in northern India except by launching its tactical ballistic missiles over the Himalayas from transporter erector launchers placed along the single road in Tibet close to the

border with India and Nepal. That does not make much strategic sense as regards the stability of the mutual deterrence.

The relationship between Pakistan and India is a bit different. The distribution of power and populations creates an imbalanced, asymmetric situation for the two countries. While virtually the entire population of Pakistan resides within a 500 km striking distance from India, the most densely populated part of India is in the northeast of the subcontinent, more than 500 km away from the border with Pakistan. However, the combined population number of the Indian states in an immediate vicinity of the border with Pakistan (i.e. Gujarat, Rajasthan, Punjab, etc.) is about the same as the total population number of Pakistan itself. Thus, if Islamabad decided to join a possible global arms control regime and dismantle its ground-launched short- and medium-range missiles – Including older versions of the Babur cruise missile and the entire family of Shaheen and Gauri ballistic missiles – it would still be able to pose a cost-effective and credible countervalue deterrent threat with its available tactical missiles. The Indian capital and four out of the ten biggest Indian cities (Delhi, Ahmedabad, Surat and Jaipur) would then become possible hostages in any major conflict on the Indian subcontinent.

From New Delhi's perspective, it is of little added value to aim its medium- and intermediate-range missiles on Pakistan, which can be easily and more effectively threatened by tactical missiles with a range of up to 500 km. Scrapping the Nirbhay cruise missile and Agni I-II ballistic missiles while aiming intermediate-range Agni III-IV missiles on China would, therefore, not impede India from achieving a desirable deterrent effect. On the other hand, the loss of the ground-based capability to threaten 80% of the Indian population might be seen as incompatible with Pakistani national interests. However, this loss can be mitigated by extending the range of Ra'ad (Hatf 8) air-launched cruise missiles or alternatively by joining in the development of a modified air-launched version of the Chinese CJ-10 medium-range land-attack cruise missile that would be compatible with the JF-17 Block III fighter aircraft that Pakistan is producing in cooperation with China.

EUROPE

The development and subsequent deployment of a new Russian ground-launched cruise missile, the SSC-8 (9M729), was the main reason for the US's withdrawing from the INF Treaty. Even if one omits some of the already known and additional newly reported deployments to the Kapustin Yar testing ground or to the Mozdok missile brigade, which is less than 500 km from Georgia, the deployment of the SSC-8 to Shuya (east of Moscow) and Yelansky (east of Yekaterinburg) could not serve

any military purpose provided the Russian reassurance about its alleged range of less than 500 km was true. On the other hand, if Western claims about the range of this new cruise missile (2,500 km) are correct, then the SSC-8 closes an important gap in the Russian force posture. Missiles from the Shuya base can reach the farthest parts of Germany as well as the Balkans and all the new NATO member states. The whole of Central Asia is within a striking distance from the Yelansky base, and the Mozdok base can cover the entire Middle East. But the most important fact here is that even if some global counterpart to the former INF Treaty were a feasible and possibly also realistic solution in general, it would most probably not contribute to solving the deterrence problem in Europe as such. Russia would be ready to adapt and develop systems able to strike Europe from a distance greater than 3,000 km, which would make it necessary for European nations to adopt a more proactive approach.

A proposal to dismantle all existing short- and medium-range missiles with a range between 500 and 3,000 km would be a highly attractive global arms control proposal with a potential to increase stability in many regions of the world, e.g. in the Middle East. Hence it would be relatively easy to sell this idea to European nations. The only condition that the European reality would require to be implemented at the global level is that – unlike in the case of the former INF Treaty – the existing launching systems supporting these missiles would not be affected by the new deal. The main reason for this is that Moscow cannot be expected to dismantle all its Iskander-K transporter erector launchers (TELs), which are also capable of launching SSC-8s, and Washington will similarly never scrap all the Mark 41 launching systems used in combination with Aegis Ashore, which were also used to test-fire a non-INF-compliant cruise missile from a ground mobile launcher in August 2019. Such an arrangement might be acceptable even to Russia because it would probably be feasible to either redesign the SSC-8 so as to extend its range by just a few hundred kilometres more or develop another missile with a range greater than 3,000 km. The EU/NATO member states in Europe would then still remain vulnerable, and population centres, critical infrastructure, command and control centres and military bases in Western Europe would still be threatened by Russian missiles from behind the approximate Archangelsk – Nizny Novgorod – Rostov on Don line. One cannot help but wonder in this situation why the European members of NATO do not seem to be as worried about the SSC-8 and decoupling as they were during the Cold War. “[T]he SSC-8 has not triggered an existential assurance crisis for the alliance,” and that despite the fact that especially the Baltic nations, but also Germany with a sizeable US military presence, and the Benelux countries with their critical infrastructure and pre-positioned stocks, should definitely be alarmed.

Two supplemental European solutions must thus be adopted in order to stabilise the mutual deterrence. First, France has both the available know-how and experience to produce air-launched medium-range nuclear-capable cruise missiles.

It would thus be reasonable for other European nations (and the EU) to financially support the ongoing French cruise missile project ASN4G (Air-Sol Nucléaire de 4eme Génération) in order to radically speed up its research and development while insisting on its range being greater than 2,000 km. To mitigate the Russian threat, strengthen European solidarity and prevent transatlantic decoupling, the future ASN4G cruise missiles and compatible aircraft should be also deployed to air bases in new NATO member states with at least some US presence, particularly in Romania (Campia Turzii) and Poland (Mirosławiec or Łask). And second, an analysis published by the Federal Academy for Security Policy suggests that “[u]pgrading NATO’s missile defence capabilities in Europe, which could also intercept Russian intermediate-range and shorter-range missiles, would be an option.” Berlin is already in the process of developing and procuring the next generation integrated air and missile defence system, while Germany (together with Poland) is also a designated NATO framework nation for missile defence. Supporting parts of this German-led initiative and capability development through, for example, EDF funding would be a very sensible approach provided the system would effectively counter the latest Russian missiles and ultimately deploy also to the Baltics. Investing into the system supplied by the German-American joint venture would then, on the one hand, strengthen transatlantic ties, and, on the other hand, promote the development of the European defence industrial base.

These two projects would significantly improve the stability of deterrence in Europe and balance out the current Russian offensive advantage in case of an escalating crisis. They represent a perfect opportunity not only for strengthening the responsibility of Europeans for their own security, but also for boosting the role of the European pillar of NATO and for spending the EU defence-related funds in a meaningful way. As a result, the United States would be able to better focus its attention towards regions with fewer wealthy and powerful allies than it has in Europe, which is ultimately in the long-time interest of Washington.

EAST ASIA

The missile inventory of Beijing is arguably one of the strongest reasons why the INF Treaty became obsolete. A wide array of short-, medium- and intermediate-range ballistic and cruise missiles enables Beijing to pursue its A2/AD strategy in the East and South China Seas, leading to its asymmetric position vis-à-vis the United States and arms control. China refuses to join any nuclear arms limitation talks and it previously rejected the option of discussing any multilateralisation of the former INF Treaty. This seems understandable given the fact that the United States and Russia possess by far the greatest share of the global nuclear weapons stockpile, and

China joining the INF Treaty would equal a voluntary surrender of its strategic advantage against the United States in the marginal seas of Asia. It would also deny China the ability to strike the Japanese area west of Nagoya, including the US military bases in Iwakuni, Sasebo, and Kadena (Okinawa). An alternative proposal of limiting only missiles with a range between 500 and 3,000 km might, however, preserve key national interests of Beijing without, strictly speaking, touching upon the issue of nuclear weapons.

Since the first island chain blocks the Chinese free access to the open waters of the Pacific Ocean, it is of a vital interest for Beijing to preserve the security of its second-strike submarine-based nuclear deterrent in the deep waters of the South China Sea in times of a major conflict. The Chinese A2/AD strategy, which is necessary for achieving this goal, is made possible precisely by non-strategic missile capability. Yet if China agreed to limit the range of its missiles and scrap those falling within the 500–3,000 km range, it would still be able to protect its submarine-based nuclear deterrent in key areas of Asian marginal seas. This solution would also not prevent Beijing from targeting US military bases in Japan. In fact, it would even indirectly benefit China because the remaining ground-launched intermediate-range ballistic and cruise missiles necessary to implement the A2/AD strategy in the South China Sea would have to be deployed behind the imaginary Sichuan-Shaanxi-Beijing line. The advantage of this option is that it overlaps with less populated areas of Western and Northern China and thus even possible counterforce strikes would not threaten Chinese population centres. That would introduce additional steps to the escalation ladder, which would ultimately help to stabilise interstate interactions.

One way or the other, a decision to join a global, ground-launched, short- and medium-range missile control regime would require China to dismantle hundreds of its weapons. Those would most probably include ballistic missiles like the DF-11A with an extended range, the DF-15, the DF-16, the recently introduced DF-17 with a hypersonic glide vehicle on top of it, and the DF-21, as well as the family of CJ-10 medium-range cruise missiles and probably also the CJ-100 missile. The US would not have to scrap any missiles in its possession, yet it would have to rely exclusively on air and sea assets at its disposal. And although Beijing would not surrender its A2/AD strategic advantage by such a commitment, which would only increase the overall stability in the region, it can hardly be expected that China would be willing to voluntarily join this kind of supposedly unbalanced arrangement. Washington thus must implement further steps to motivate Beijing if it wants to seal the deal.

One of the possible steps is to continue with the build-up of the ballistic missile defence system in Japan. The United States already approved the sale of the most modern SM-3 Block IIA interceptors for Aegis Ashore in Japan in 2019 and it would also supply SM-6 surface-to-air missiles for Tokyo's latest Maya-class Aegis

destroyers. The same approach is reasonable with respect to the Aegis Combat System in the possession of the South Korean navy. Yet the most powerful motivation for Beijing would be a reconsideration of the US Aegis-related policy towards Taiwan. Taiwan already has or will shortly acquire Mark 41 vertical launchers and SM-2 surface-to-air missiles, but a possibility of deploying a naval or even land-based Aegis system equipped with the latest SM-3 and SM-6 missiles might be a game-changer in the US-China arms control discussions. On the other hand, it would be certainly desirable to have North Korea on board any missile control regime too, especially given the existence of the ground-launched, solid-fuel, medium-range ballistic missile KN-15. However, the success of a possible global missile control deal is not conditioned upon the ongoing US-North Korean disarmament talks. The whole of South Korea and all US troops deployed there would still remain within a 500 km distance from the 38th parallel north and Beijing necessarily plays a crucial role with respect to North Korea anyway.

CONCLUSIONS

A global arms control deal prohibiting short- and medium-range ballistic and cruise missiles is a feasible initiative with a potential to strengthen stability in many regions across the world without a need to sacrifice the national interests of any signatory party. It would limit delivery vehicles irrespective of the type of warhead, but this is probably the only feature it would share with the former INF Treaty. The range limit must be more modest (from 500 to 3,000 km) and it cannot include already existing TELs. The core principle of keeping the mutual deterrence intact must be preserved under all circumstances and it requires multiple compromises from all sides. Any such deal would thus have a necessarily rather limited ambition. As one of the recent analyses put it, the existence of sea- and air-launched cruise missiles with an extended range “has relativised the strategic value of the ban on ground-launched INF systems” anyway. A possible deal cannot shift the balance of power, but only stabilise the already existing situation and interactions, with maybe some positive side-effects as a bonus.

One of these benefits might be an increased warning / reaction time due to a prolongation of flights of ballistic and cruise missiles beyond the range limited by the treaty. However, the most transformative effect of any missile control regime would most probably be the effect on the Middle East security environment. Preventing Iran, Saudi Arabia and Israel from striking each other with ballistic or cruise missiles has a potential to significantly stabilise the whole region. That is in the long-term interest of virtually all relevant actors in the world. The stability of the mutual deterrence will, however, require not only promoting of some arms control

initiatives, but also additional actions by many states. Europeans must do a lot to develop an integrated air and missile defence system as well as air-launched nuclear-capable intermediate-range cruise missiles. Pakistan should acquire similar cruise missile as well and the United States would do well to reconsider its Aegis policy towards Taiwan. None of that ultimately depends on the success of a possible global missile control regime. And that success, of course, would be largely determined by the design of a given treaty's verification procedures. A yearly quota for on-site inspections with a flexible list of eligible sites is a sine qua non condition for that.

Matus Halas (halas@iir.cz)
Head of the Centre for European Security
Institute of International Relations Prague