Beyond Stability: The politics of conventional arms control in Europe

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Abstract The conventional arms control architecture in Europe is falling apart. This article argues that classic arms control theory fails to explain this continuing process. I suggest that its underlying stability paradigm, based on reciprocity and technical measures for war prevention, has forestalled a full understanding of actual arms control practices, particularly in Europe. In this context, I illustrate that conventional arms control has evolved in three historical stages. In each of these, state actors pursued different ideal-type purposes depending on the concrete geostrategic situation: the pursuit of politico-military advantages, the formal creation of crisis stability, and the transformation of international relations. In the last decade, the overall political focus has shifted once again to the first factor. Amidst new strategic competition, states are increasingly unwilling to agree to arms control regulations and transparency measures, as these could yield advantages to adversaries.

Keywords Deterrence · Crisis · Technology · Russia · Strategic competition

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Jenseits der Stabilität: Die Politik der konventionellen Rüstungskontrolle in Europa

Zusammenfassung Die konventionelle Rüstungskontrollarchitektur in Europa zerfällt. In diesem Beitrag wird argumentiert, dass die klassische Rüstungskontrolltheorie diesen anhaltenden Prozess nicht erklären kann. Das ihr zugrunde liegende Stabilitätsparadigma, das auf Reziprozität und technische Maßnahmen zur Kriegsverhütung setzt, verhindert ein Verständnis tatsächlicher Rüstungskontrollpraktiken, insbesondere in Europa. In diesem Zusammenhang wird gezeigt, dass sich die Entwicklung der konventionellen Rüstungskontrolle in drei historische Phasen einteilen lässt, denen abhängig von der konkreten geostrategischen Situation unterschiedliche idealtypische Handlungsmotive zugrunde liegen: das Streben nach politisch-militärischen Vorteilen, die formale Schaffung von Krisenstabilität und die Transformation zwischenstaatlicher Beziehungen. In den vergangenen zehn Jahren hat sich der politische Schwerpunkt wieder auf den ersten Faktor verlagert. Unter den Bedingungen erneuter strategischer Großmächtekonkurrenz sind Staaten immer weniger zu Rüstungskontroll- und Transparenzmaßnahmen bereit, da diese politischen Gegnern Vorteile verschaffen könnten.

Schlüsselwörter Abschreckung · Krise · Technologie · Russland · Strategischer Wettbewerb

1 Introduction

The conventional arms control architecture in Europe has been falling apart over the past two decades. In 2007, Russia suspended its participation in the Treaty on Conventional Armed Forces in Europe (CFE) from 1990—previously referred to as the "cornerstone" of European security. The reissuing and modernization of the Vienna Document on Confidence and Security Building Measures (CSBMs) of the Organization for Security and Co-operation in Europe (OSCE) has been stalled. The Treaty on Open Skies, which since 2002 has enabled more than 30 states in Europe and North America to conduct unarmed observation flights over each other's territory, is at risk of failure following the withdrawal of both the United States and Russia in 2020 and 2021, respectively. How are we to explain these developments?

I argue that in order to grasp the crisis of conventional arms control in Europe, we need to move beyond classic arms control theory, which developed in reaction to the nuclear revolution and rests on the premise that "a main determinant of the likelihood of war is the nature of [...] military technology" (Schelling 1960, p. 895). On this view, arms control describes "all forms of military cooperation between potential enemies in the interest of reducing the likelihood of war, its scope and violence if it occurs, and the political and economic costs of being prepared for it" (Schelling and Halperin 1961, p. 2).

The theory rests on the idea that rational leaders in nuclear weapon states have an incentive to promote the mutual development of secure second-strike capabilities. Following this assumption, it asserts that military stability can be achieved through

mutually assured destruction (MAD). Beyond levels of nuclear armament sufficient for MAD, arms races and nuclear crises are politically useless and irrational. This form of arms control accepts the political status quo; its purpose is to regulate destabilizing weapon systems and to provide techniques for confidence-building between adversaries. Put differently, the theory tends to bracket political issues in favor of technical solutions.

Since the late 1960s, this "stability" school of thought has become the dominant perspective among academic researchers and arms control advocates (Glaser 1990; Jervis 1989). More recently, both its analytical premises and its causal claims have been challenged, however. Based on empirical observations regarding actual arms control practices (primarily in the 1970s), scholars have pointed to several short-comings of the stability school—some of which are unique to nuclear weapons—by emphasizing the essentially political nature of arms control negotiations (Cameron 2017, 2020; Gavin 2012, pp. 120–133; Green 2020; Green and Long 2015, 2017; Lieber and Press 2017, 2020; Maurer 2019). In short, according to this criticism, arms control is not the opposite of power politics but rather an essential part of it.

I want to argue that understanding the emergence and demise of conventional arms control in Europe requires a similar approach. This is because European arms control negotiations have always been "primarily about political relations and objectives" (Blechman et al. 1990, p. 3). In this context, I identify three distinct historical-conceptual stages in the development of arms control in Europe since the early 1970s. In each of these, state actors pursued different ideal-type purposes depending on the concrete geostrategic situation: politico-military advantages, crisis stability, and the transformation of international relations.

The next section briefly examines the concepts that underpin the stability school, which I describe as technical arms control, and contrasts them with more political points of view. I identify wider (military and non-military) strategic interests, concerns for the European political order, and alliance management as the driving forces behind conventional arms control negotiations and argue that higher levels of uncertainty in studying the conduct and effects of conventional warfare have negatively affected the prospect of their success. In what follows, I illustrate these assumptions empirically. This will be done with reference to the history of conventional arms control in Europe but without the objective of providing fully-fledged case studies.

Section three describes the original logic of conventional arms control as it developed in the 1970s and highlights the favorable conditions that explain its success in the late 1980s. Section four reviews the increasing alienation between Russia and the West during the 2000s and points to the role of technological factors that undermine the effectiveness, and even the rationale, of conventional arms control measures. Finally, section five looks at the current stalemate and argues that, as in the 1970s, thinking in terms of military advantages has once again become the central driving force behind conventional arms control initiatives of all parties involved.

2 The purposes of arms control

What is the purpose of arms control? In this section, I sketch two general approaches to this question that have developed primarily with reference to nuclear systems: one technical, the other political. The technical approach focuses on the creation of military stability through secure (nuclear) second-strike capabilities and reciprocal transparency measures. It identifies and regulates "destabilizing" weapon systems in order to ensure MAD. In this way, arms control accepts the political status quo but proposes cooperation between adversaries in order to avoid risk-prone (and costly) arms races and accidental nuclear escalation.

According to the political approach, by contrast, arms control strategies "have neither meaning nor implications outside specific historical and geostrategic contexts" (Gray 1989, p. 1). They come in two forms. The counterforce school of thought focuses on achieving military advantages through warfighting capabilities against adversaries, based on fixed preferences. It also considers alliance commitments when determining force posture. Disarmament advocates, by contrast, seek to make use of changing state preferences to transform international relations in more fundamental ways. Both forms of "political arms control" differ with respect to their conception of the causes of war and their underlying ontological assumptions about international relations. Where they converge, however, is in acknowledging and promoting the potential for change writ large. I argue that understanding the fate of conventional arms control in Europe requires just such a political perspective.

2.1 Technical arms control: stability above all

Until the mid-twentieth century, arms control was synonymous with disarmament. The latter aimed at the general abolishment of weapon systems and was based primarily either on humanitarian or economic considerations. The unparalleled destructive power of nuclear weapons revolutionized approaches to both military strategy and arms control, as analysts pondered how to integrate the new weapons into previous warfighting strategies. As Bernard Brodie puts it, prior to 1945 "it was possible to contemplate methods of air defense keeping pace with and perhaps even outdistancing the means of offense" (Brodie 1946, p. 57).

After 1945, this option was closed. Nevertheless, as long as the United States had the advantage of being the only state capable of delivering nuclear devices, it could freely entertain the thought of either employing these weapons in warfighting or abolishing them altogether under international oversight. The first Soviet nuclear test in August 1949 changed the strategic situation. Even though Soviet nuclear capabilities remained relatively modest until the 1960s, they still "removed an element of choice from US policy" (Freedman and Michaels 2019, p. 86). In short, advances in missile technology and the growing Soviet arsenal undermined the rationale for massive retaliation and made US Air Force bases vulnerable to counterforce attacks.[1]

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[1] Bull argues that "it is only if the strategic balance persists, and is felt to be likely to persist despite efforts to remove it, that it creates [...] pressures for arms control" (Bull 1961, p. 74).

This is not the place to go into the details of the protracted development of US (and Soviet) nuclear strategic thought; suffice to say that over the 1950s, the US approach to nuclear weapons changed. By acknowledging the dangers of a surprise attack and the deterrent function of nuclear weapons in the context of the emerging Cold War, arms control advocates started to separate themselves from proponents of (nuclear) disarmament. As arms control "became a medium for reinforcing ideological and political division between East and West" (Sims 1990, p. 116), military stability replaced ideas about international political change.[2] This shift in the purpose of arms control implied new ways of thinking about the causes of war in the nuclear age.

Rather than investigating the political causes of interstate violence, analysts began to focus on the characteristics of (nuclear) weapon systems. The evolving nuclear stalemate between the United States and the Soviet Union reinforced the notion that a major cause of war was "the nature of […] military technology" (Schelling 1960, p. 895). By the 1970s, MAD had become "an inescapable fact of international political life" (Gavin 2012, p. 124), at least for advocates of the mutual vulnerability thesis. According to this logic, nuclear superiority cannot prevent the other side from inflicting unacceptable damage in the case of war (cf. Jervis 1989, pp. 74–106). Nevertheless, attempts to overcome vulnerability and escape MAD have the potential to intensify the security dilemma between adversaries and to raise escalatory risks.

Arms control is an instrument for mitigating such risk. It aims to uphold military stability, and thus mutual vulnerability, by ensuring secure second-strike capabilities (not necessarily parity of military forces). Given their nature, these capabilities cover various elements and types of behavior, all of which can be subject to arms control measures. These include the vulnerability of retaliatory weapons, the security of command and control arrangements, the fallibility of warning systems, the urgency of decision-making, the level of available information about forces, and the resulting potential for misunderstanding (Schelling and Halperin 1961, p. 51). At the same time, guaranteed mutual vulnerability implies the possibility of lowering the level of total armaments between adversaries to the minimum sufficient for deterrence. The stability school of thought holds that any further military build-up beyond this threshold is politically and militarily useless.

2.2 Political arms control: stability is what states make of it

Despite the prominence of stability thinking among arms control strategists, the practice of bilateral US–Soviet negotiations on nuclear weapons did not correspond to its normative prescriptions. In the mid-1980s, Thomas Schelling himself acknowledged that arms control had "gone off the tracks" in part because "it often looks as if it is the arms negotiations that are driving the arms race" (Schelling 1985, p. 219).

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[2] Sims traces the "idea that nuclear arms control might best serve as an instrument for stability, instead of for political change or propaganda" (Sims 1990, p. 133), back to the 1940s. Nevertheless, she acknowledges that "in a policy sense" these concepts became decisive only later, when the US Department of Defense, under Robert McNamara (1961–1968), hired analysts from the RAND Corporation (Sims 1990, p. 161).

Indeed, some in the US strategic community recognized that "under the right circumstances arms control agreements might be used as tools to gain competitive advantages over the Soviets" (Maurer 2019, p. 360).

For advocates of this "competitive approach," arms control practices went beyond ensuring mutual vulnerability and stable deterrence. They were primarily meant to serve defense planning and to address a diverse set of domestic and international challenges. This position also advocated attempting to achieve superiority and developing counterforce capabilities to destroy the adversary's nuclear (and conventional) arsenals. By contrast, disarmament advocates continued to promote the reduction of weapon systems for economic and humanitarian reasons. The broader aim was to change the political status quo and to overcome the East–West divide by means of (arms control) cooperation. Both forms—competitive and cooperative—can be classified as "political arms control." They rest on a set of (diverse) arguments that question the classic assumptions of the stability school of thought.

First, counterforce advocates maintain that the stability school overestimates the certainty of MAD, that is, the survivability of capabilities (in both their present and their future manifestations). As the nuclear balance remains "delicate" (Wohlstetter 1959), they argue, arms control needs to hedge against possible contingences by continuously improving nuclear and nonnuclear systems. Second, the counterforce school holds that because of this delicate balance, arms control can provide military and political advantages. Despite successful (nuclear) arms control negotiations, competition between the United States and the Soviet Union in the development and procurement of military technologies continued throughout the Cold War. Each side attempted to exempt certain systems and their configuration and characteristics from regulation, in a bid to gain a competitive edge.

Third, the notion of competition extends to military alliances and nuclear nonproliferation. The United States' decision to protect Western Europe by means of extended deterrence, so the argument goes, required larger, if not superior, forces and different postures. In the words of James Cameron, "the Nixon, Ford, and Carter administrations held on to the belief that they needed to push forward with technological innovation in order to maintain the integrity of the U.S. security guarantee to NATO" (Cameron 2020, p. 126). Finally, concerns about constituencies, budgets, and domestic policies have at times overruled military—that is, strategic—considerations. This argument has become prominent in both counterforce and disarmament circles, but with opposite interest groups in mind. The counterforce school has been associated with the influence of the "military-industrial complex" and the organized interests of nuclear weapons manufacturers. Disarmament advocates, by contrast, draw on wider societal interests and social movements (of the sort that emerged in the 1980s, for example, during the Euromissile crisis).

All of these arguments are relevant to understanding conventional arms control in Europe. The first two are particularly important as they relate to principled differences between conventional and nuclear warfare. On the one hand, uncertainty regarding the effects of employing conventional weapon systems is considerably greater than even the counterforce school's assessment of the uncertainty of nuclear warfighting. Due to their lower explosive power and operational limits, the effects of conventional weapons are much more dependent on a set of highly contingent

factors on the battlefield. On the other hand, conventional weapons remain deliberate instruments for use in military conflict. In contrast to nuclear deterrence, which "reflects a concern with the avoidance of war" (Axelrod 1990, p. 248), conventional warfare has always been closely related to concerns about the actual balance of forces and the availability of weapon systems sufficient for conducting limited war and achieving victory.

In terms of their societal significance, however, conventional arms control policies in Europe were also "as much about politics as [...] about the military potential and the characteristics of the weapons and forces" (Kelleher 1996, p. 32). Insofar as the European division and the German question were at the center of the Cold War, the regulation of conventional forces could not but affect the security of the United States, the Soviet Union, and European states both east and west. Conventional arms control debates, in contrast to nuclear arms control between the superpowers, became decisive for the regional order as they addressed the role of US security guarantees and the future of military and, over time, political relations, with repercussions for state identities.

In this context Emily Goldman suggests that, far from maintaining stability, technical arms control may even enhance instability when it neglects the political conditions of regulation. Studying the fortunes of naval arms control in the interwar period, she points out that robust and lasting arms control agreements require the integration of both non-military and military components of security. Her concept of "political-based arms control" acknowledges the multidimensional character of stability,[3] which requires that states "manage or moderate the differences that created and sustain the military rivalry" (Goldman 1994, p. 21). I want to argue that this observation applies more generally to the situation in Europe and helps to explain the changing fortunes of conventional arms control over the past five decades. The next three sections explore this nexus in greater detail. I show that conventional arms control essentially evolved in three distinct historical stages with diverging overall political purposes.

3 The cold war logic of conventional arms control

In the first stage, from the early 1970s to the mid-1980s, states engaged in conventional arms control negotiations pursued predominantly political and military advantages. Western interests followed domestic economic imperatives and concerns about alliance management in the context of US debates on burden-sharing between members of the North Atlantic Treaty Organization (NATO). Securing Soviet agreement to multilateral negotiations on Mutual and Balanced Force Reductions (MBFR) in Central Europe, however, required the acceptance of the political

[3] For comparison, Sims uses the term "political arms control" in a different, pejorative way to mean the use of disarmament rhetoric for the purposes of foreign policy propaganda (Sims 1990, p. 254). This usage is similar to Hedley Bull's characterization of Soviet rhetoric at the Geneva Conference or World Disarmament Conference in the early 1930s (Bull 1961, p. 33–34). He also refers to "the conduct of political warfare about arms control," by which he means "the cultivation of a favourable public image in relation to disarmament" (Bull 1961, p. 66–67).

status quo: the existence of two military blocs in Europe with their own exclusive spheres of influence. While the concluding document of the Conference on Security and Co-operation in Europe (CSCE)—the Helsinki Final Act of 1975—recognized the borders established following the Second World War and set up modest confidence-building measures (CBMs), the MBFR talks dragged on without substantial progress.

The second stage began with Mikhail Gorbachev's turnaround in Soviet security policy in 1986. His readiness to agree to asymmetric disarmament in order to reform the Soviet Union domestically and change political relations in Europe allowed NATO members to reach most of their original military goals. In the five-year period that followed, all major pillars of the European conventional arms control architecture—the CFE Treaty, the Vienna Document, and the Treaty on Open Skies—emerged. In parallel with the relaxation of political relations between East and West, the purpose of arms control shifted from pursuing strategic advantages to ensuring military stability in line with the theoretical orthodoxy. This would all change with the unexpected dissolution of the Soviet Union in December 1991, however, which created entirely novel political conditions.

3.1 Pursuing politico-military advantages

Throughout the Cold War, Western strategic debates on conventional arms control concentrated on removing the quantitative force imbalance between NATO and the Warsaw Treaty Organization (WTO), particularly in Central Europe (Falkenrath 1995, p. 241; Zellner 1994, p. 40). In theory, Eastern superiority with regard to the sheer number of major weapon systems put a premium on the possibility of a surprise Soviet attack, but it also required NATO to emphasize possible nuclear escalation in its overall deterrence posture. At the same time, the downscaling of Soviet and WTO forces to NATO's level would have allowed the United States to reduce its European footprint, to cut costs, and to address the issue of burden-sharing more forcefully within the alliance. On the other hand, Western European states aimed to prevent unilateral US force reductions, which became a real possibility in the late 1960s.

For decades, the Soviet Union and its allies had no incentive to change the status quo (and thus their numerical superiority), however.[4] On the contrary, Moscow primarily sought international legitimacy for its territorial gains following the Second World War. From the perspective of the Soviet Union and the WTO, any arms reductions had to follow political recognition of the inviolability of borders. Negotiations kicked off after an informal bargain between Henry Kissinger, National Security Advisor to US President Nixon, and General Secretary Leonid Brezhnev in the context of consultations on the interim agreement (Strategic Arms Limitation Talks I, SALT I) and the Anti-Ballistic Missile Treaty (ABM Treaty). By May 1972, NATO allies were left with no choice but to support the US approach (Haftendorn 2008, p. 238).

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[4] The WTO did have a numerical advantage, but its level and military significance were frequently exaggerated at the time (Bitzinger 1989).

The Soviet Union agreed to consultations on force reductions in Central Europe that eventually initiated the MBFR talks in October 1973. These talks "aimed at achieving equal ground and air forces manpower ceilings" (Borawski 1986, p. 18).[5] In turn, the United States consented to the organization of a pan-European security conference, launched in July 1973. The conference led to the 1975 Helsinki accords of the CSCE, which, alongside the ten guiding principles for relations among the participants, included limited CBMs. By contrast, the MBFR negotiations dragged on for almost sixteen years without any tangible results. One major obstacle was the problem of verifying manpower reductions due to data uncertainties about Soviet and WTO force levels. Although important, these issues ultimately emerged due to incompatible interests.

On the one hand, NATO remained opposed to any withdrawal of US equipment from NATO bases on the grounds that in a crisis, forces airlifted to Europe would need access to combat-ready equipment.[6] On the other hand, the Soviet Union viewed MBFR primarily in political terms, as a byproduct of East–West détente, which ultimately failed after the collapse of SALT II and the Soviet invasion of Afghanistan in 1979. Nevertheless, the MBFR talks provided essential experiences that facilitated the rapid success of the subsequent CFE negotiations (after radical changes to Soviet security policy in the late 1980s created a window of opportunity). Indeed, in April 1986, Soviet General Secretary Mikhail Gorbachev announced "substantial reductions in all the components of land forces and tactical air forces" that would "cover the entire European territory from the Atlantic to the Urals" (cited in Van Oudenaren 1988, p. 40).

The WTO Budapest appeal from June 1986 formalized this approach. WTO member states proposed cutting the troop strength of each alliance by 100,000 to 150,000 men within one or two years, followed by a reduction of land forces and tactical air forces by 25% until the early 1990s (United Nations 1986, p. 11). Furthermore, speaking at the United Nations (UN) in December 1988, Gorbachev promised that within two years the Soviet Union would reduce the numerical strength of its armed forces by 500,000 men and would withdraw six tank divisions from the German Democratic Republic (GDR), Czechoslovakia, and Hungary. These unilateral initiatives put the formal process of conventional arms control negotiations in motion. Following the formal end of the unsuccessful MBFR talks in February, the CFE negotiations began in March 1989.[7] In these negotiations, Western military goals for arms control focused on the ability to practice deterrence by denial with conven-

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[5] Over time, proposals during the MBFR negotiations would go beyond a manpower ceiling to include both the reduction of equipment and even tactical nuclear warheads and delivery vehicles (Bluth 1999, p. 200).

[6] A willingness to preserve this equipment, known as pre-positioned overseas material configured in unit sets (POMCUS), led NATO to propose equal ceilings on active units rather than on all stationed forces (Winner and McNerney 1996, p. 134–5, fn. 43).

[7] Even if they had been successful, however, the MBFR talks' limited focus on reducing manpower in Central Europe would have been disadvantageous to NATO as it would have allowed the Soviet Union to make full use of its greater strategic depth on the continent. Given that the territory of the Soviet Union had not been a subject of negotiation, Moscow would have been able to relocate its forces from the interior of the USSR in times of crisis.

tional means alone, which in turn implied the elimination of the WTO's capability for "short-warning, large scale and sustained offensive operations" (Falkenrath 1995, p. 11).

The dominant and frequently cited logic suggested that asymmetric reductions would lead to numerical parity, which in turn would "achieve greater stability and security in Europe" (OSCE 1990a). This parity approach resulted in highly asymmetric disarmament obligations between NATO and WTO members, which also yielded different financial costs. Moreover, the Eastern group of states accepted many definitions of and ceilings on treaty-limited equipment (TLE), including battle tanks, armored combat vehicles (ACVs), artillery pieces, combat aircraft, and attack helicopters. Finally, important elements of initial WTO and Soviet proposals from spring 1989, which among other things had included negotiations on naval forces and short-range nuclear weapons, were ultimately not incorporated (Falkenrath 1995, p. 48). Pursuing an agenda with global aspirations that focused on domestic reform, Mikhail Gorbachev and Soviet Foreign Minister Eduard Shevardnadze were able to sideline the Soviet military, which opposed both unilateral disarmament proposals and, later, the CFE negotiation outcome. At the same time, Western observers perceived the plan to establish parity between conventional weapons holdings as a necessary but not sufficient condition for "stabilizing the military component of East–West relations in Europe" (Wittmann 1989, p. 69).

As such, the concept of parity, which was inspired by nuclear arms control negotiations and the theoretical analysis thereof (Axelrod 1990, p. 247), was more a political than a military idea. It reflected the Cold War bloc structure (based on two alliances) and provided an intuitive, visible, and comprehensible measure for diplomatic negotiations. The military logic in Europe, however, implied an additional focus on "non-reduction measures" and "operational constraints" that would supply early indicators of mobilization, maximize the time needed for offensive action, and limit the possible scope of operations, all without undermining defense capabilities (Darilek and Setear 1990; Foerster et al. 1989, p. 7; Wittmann 1989, pp. 69–75). In this context, the CSCE Stockholm conference from January 1984 to November 1986 took a leap forward by transforming the limited CBMs of the Helsinki final act into "militarily significant, politically binding and verifiable" CSBMs.

In the process, the East made considerable concessions. The Soviet Union, among others, dropped its long-term opposition to on-site inspections and agreed to the so-called functional approach, which exempted independent naval exercises and movements of air forces from notification requirements (Borawski 1988, pp. 83–93). The problem for Moscow, as the head of the US delegation James Goodby put it, was "to weigh these disadvantages against the hoped-for political advantages" (Goodby 1988, p. 165). From NATO's perspective, constraining the operational (rather than the structural) elements of force posture followed a similar logic to that of the MBFR talks in Vienna and the CFE negotiations. Their goal was to curb the political-military utility of Soviet and WTO conventional forces. Information exchange, observations of military exercises, and constraints throughout Europe would reduce the level of secrecy in closed societies, address the greater strategic depth of the Soviet Union, and raise the political costs of offensive maneuvers. The CFE Treaty later also incorporated the logic of operational constraints, not only by addressing weapon

categories needed for offensive actions but through a system of regional ceilings (OSCE 1990a, Arts. IV–VI) that limited the concentration of forces in zones of possible conflict between both alliances.

3.2 Military stability or political transformation?

From the beginning, the fundamental open question driving this nascent conventional arms control process concerned its wider strategic aims. Should it stabilize an existing status quo of confrontation or become an essential element of a profound political shift towards a more cooperative security order? As indicated above, NATO viewed Gorbachev's conventional arms control proposals as an opportunity to improve its conventional warfighting capabilities (Falkenrath 1995, p. 6). From this point of view, there was an increasing need to bolster conventional defense capabilities in case nuclear deterrence failed.

Anxiety about the possibility of failure increased following the successful negotiation of the Intermediate-Range Nuclear Forces (INF) Treaty in December 1987, which eliminated land-based theater nuclear missiles with the ability to hit high-value targets in the Soviet Union. The prevailing numerical superiority of WTO conventional forces provided the Eastern bloc with eventual escalation dominance, which could only be remedied by reductions and the achievement of quantitative parity with NATO. The unexpected fall of the Berlin Wall in November 1989 accelerated this process. In less than a year, the German question, which had not only defined the post-War European political order but had caused the massive concentration of forces in Central Europe in the first place, dissolved. In parallel, the Soviet Union promised to withdraw its forces—which included, among others, more than 300,000 military personnel—from Eastern Germany by the end of 1994. Moreover, behind the former Iron Curtain, Soviet republics began to proclaim their sovereignty from the Union, thereby diminishing the power of the center. In arms control, too, grand change suddenly became possible.

On 17 November 1990, the CSCE participants agreed to the Vienna Document 1990, which built upon and added to the CSBMs contained in the Stockholm document. On 19 November 1990, the member states of NATO and the WTO signed the CFE Treaty. Two days later, the 35 participating States of the CSCE agreed to the Charter of Paris for a New Europe, declaring the end of an era of confrontation and division (OSCE 1990b). Subsequently, NATO and WTO members continued negotiations on the Treaty on Open Skies. In March 1991, however, the WTO dissolved. In December, the Soviet Union followed. Almost overnight, what had been designed to improve relations while preserving the essential structure of the European security order became instruments for managing the outcome of revolutionary change.

In this situation, the arms control and CSBM negotiations, in particular the CFE Treaty, provided benefits far beyond the reduction of military capabilities and the creation of stabilizing measures to reduce military escalation risks. The subsequent process of disarmament and transparency also facilitated Europe's transformation from a highly militarized zone to a region of political cooperation. It also accompanied the German unification process and offered an institutional mechanism for eliminating obsolete military equipment (Falkenrath 1995, pp. 244–5). Most im-

portantly, however, the inspection process that followed the ratification of the CFE Treaty in July 1992 established military routines between European states, strengthened inter-state communication on an operational level, and led to the foundation of national verification centers, including a network of professional personnel.

In this sense, the end of the Cold War resembled the period immediately following the First World War, when the "arms control process codified a shift in political relations" (Goldman 1993, p. 260), which were "inextricably connected to competing visions of the future shape of Europe" (Foerster et al. 1989, p. 21). The collapse of the WTO and the Soviet Union, which no one had expected when the conventional arms control negotiations began, opened a brief window of political opportunity. Conventional arms control was given the chance to take on a new function that would go beyond both stability thinking and the counterforce tradition in nuclear arms control: safeguarding political change on the continent and, eventually, contributing to the creation of a pan-European security community that included Russia.

4 Arms control in the evolving European security order

During this short third stage, conventional arms control became an "instrument for creating a new architecture rather than a supporting pillar for the old one" (Holst 1991, p. 91). Throughout the early 1990s, it promised to become a stepping-stone within the larger process of Europe's political and military transformation. This golden age of arms control passed quickly, however. Gorbachev's political vision of a "common European home" (Gorbachev 1989), originally conceived as the peaceful co-existence of two different political and socio-economic systems under a single strategic framework, never materialized. Instead, the early decision to extend preexisting Western institutions to Central and Eastern Europe sidelined competing conceptions of a European security order (Sarotte 2014).

Nevertheless, in the 2000s, conventional arms control could still have mitigated the political consequences of NATO enlargement for Russia by stabilizing expectations and reducing uncertainty. Both sides missed the chance to use arms control to this end, however. When hopes for a Russian–Western partnership were ultimately dashed, the European arms control architecture ceased to provide the promised benefits, at least to Moscow. In short, the more marginalized Russia became politically, the less inclined it was to accept previously agreed limits on its military posture. In parallel, rapid technological modernization and associated fundamental changes to warfare over the last three decades have undermined (though not eliminated) the utility of remaining conventional arms control provisions.

4.1 Political change and arms control

After the collapse of the Soviet state, conventional arms control in Europe buttressed expectations for a Russian–Western strategic partnership. CFE members successfully addressed the emergence of sovereign states in the territory of the former Soviet

Union. They also regulated personnel strength[8] and reached a compromise on CFE flank zone limits.[9] In addition, the 1995 Dayton Peace Agreement between the parties to the conflict in the former Yugoslavia created the preconditions for the subsequent establishment of a sub-regional arms control regime modeled on the CFE.

From Moscow's perspective, however, the process of NATO enlargement increased the pressure on real CFE reform, since it added new military capabilities to the Western group of states that were not accounted for in the Treaty mechanisms. Hence, after the decision to invite Poland, Hungary, and the Czech Republic to join NATO, Russia set course to reform the CFE Treaty to mitigate the consequences of enlargement, which it could no longer prevent.[10] At the CFE Treaty review conference in May 1996, member states initiated the process of negotiating a modernized treaty. The OSCE Lisbon Summit in December that same year defined the "scope and parameters" of the Treaty to improve its operation by strengthening, among others, "the security of each State Party, irrespective of whether it belongs to a politico-military alliance" (OSCE 1996). After two years of negotiation, the state parties signed an agreement on an adaptation of the CFE Treaty (the A-CFE Treaty) at the Istanbul Summit of the OSCE in November 1999 (OSCE 1999).

The adapted Treaty resolved the two groups of state parties, represented by the now dissolved WTO and NATO prior to enlargement, and removed the concentric zone model of territorial sub-ceilings for the three land-based weapon systems (battle tanks, ACVs, and artillery). Instead, it introduced national ceilings, increased the level of verification, and made it possible for other European states to join the Treaty (Bolving 2000; OSCE 1999).[11] In addition, Russia pledged to withdraw or destroy its TLE in Moldova by the end of 2001 and to withdraw its troops by the end of 2002 (OSCE 1999, p. 50 and p. 237; Lachowski 2001, p. 558). In a joint statement with Georgia, Moscow also agreed to reduce its level of TLE in the country, disband two military bases, and negotiate the fate of two more (OSCE 1999, p. 252). Disagreements on the scope and status of Russian compliance with these "Istanbul Commitments" ultimately prevented the A-CFE Treaty from coming into force, however.

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[8] In May 1992, the former Soviet republics agreed to divide their common ceiling among themselves in the Treaty of Tashkent. Two months later, at the CSCE Helsinki Summit, the CFE members adopted the "Concluding Act of the Negotiation on Personnel Strength of Conventional Armed Forces in Europe," the CFE 1A Agreement (OSCE 1992).

[9] Previously, these zones were sensitive territories covering the immediate vicinity of NATO and WTO members. After the Soviet dissolution, they transformed into restraining provisions for weapon deployment and movement of troops within the national territories of now independent states. As an annex to the Final Document, the Flank Agreement realigned parts of the original flank zone in Ukraine and Russia and attached them to a different zone, added additional constraints on equipment in the removed territories, and introduced new transparency measures.

[10] The Russian Foreign Intelligence Service (SVR) established a link between NATO enlargement and the CFE Treaty as early as 1993 (Wilcox 2020, p. 162). Jane M. O. Sharp argues that it was Viatcheslav Kulebyakin who, in July 1994, was the first to explicitly link both processes at the Joint Consultative Group (Sharp 2006, p. 93).

[11] This point remains important to Russia since the three Baltic states (Estonia, Latvia, and Lithuania) did not join the CFE Treaty when they regained independence from the Soviet Union.

The controversy evolved around questions of timing and responsibility for delays, but it also pointed to altered power hierarchies between Russia and the West. For Moscow, the commitments were not formally part of the A-CFE Treaty and were instead political in nature, requiring prolonged negotiations. Progress also depended on the cooperation of authorities in breakaway regions beyond the control of the central governments in Chișinău and Tbilisi (which had appealed to Moscow for financial and military support), including the separatist territories of Abkhazia and South Ossetia in Georgia and Transnistria in Moldova. When the Bush administration took office in January 2001, Washington's interest in arms control and compromising with Russia on these issues significantly decreased.

At the Prague Summit in November 2002, NATO allies adopted the US position by making the A-CFE Treaty ratification dependent on the full implementation of the Istanbul commitments (NATO 2002).[12] Russian–Western political relations began to deteriorate for other reasons as well, however. In June 2002, the US withdrew from the ABM Treaty. In March 2003, US forces invaded Iraq. In March 2004, ten more states in Central and Eastern Europe, including the three Baltic states, joined NATO.[13] Western support for political change in Georgia and Ukraine ("color revolutions") further contributed to the perception of encirclement among Russian elites.[14]

Meanwhile, Western views of Russia likewise changed for the worse. Large numbers of Chechen asylum seekers in Europe brought home the brutality of the second Chechen War (1999–2009).[15] The increasing oppression of a politically active civil society and the process of regaining state control under the Putin administration challenged the idea that liberal values and democratic norms had a chance of asserting themselves in Russia. The nationalization of the media and energy sector pointed to the ongoing turf wars between parts of the old Yeltsin elite and new ruling groups from St. Petersburg, many with intelligence backgrounds.[16] Despite these

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[12] Linking Russia's fulfillment of the Istanbul Commitments and the ratification of the A-CFE Treaty has remained controversial among allies. In its 2002 arms control and disarmament report, for example, the German Ministry of Foreign Affairs noted that insisting on the connection between ratification and fulfillment of the commitments would make the ratification of the A-CFE Treaty dependent on the resolution of a minor issue. It could endanger the entry into force of the agreement despite its relevance to the security and stability of the entire continent (Bundesregierung 2003, p. 36). The public split with the United States over the war in Iraq in the summer of 2002, however, led the German government to downplay the issue in order to prevent further damage to bilateral relations. Until 2007, several NATO members engaged in attempts to facilitate diplomatic progress, but NATO ultimately maintained its collective position (Lachowski 2006, p. 757).

[13] Russia did not officially object to the Baltic states joining NATO, provided they first became parties to the CFE Treaty, which did not materialize (Lachowski 2002, p. 711).

[14] To be sure, Russia itself actively supported political elites and incumbents in both cases.

[15] As Gerber and Mendelson point out with reference to United Nations High Commissioner for Refugees (UNHCR) data, in 2003 and 2004 Chechens were the largest asylum-seeking population in the industrialized world. In 2005, they were the second largest (Gerber and Mendelson 2008, p. 42).

[16] The overall number of people with intelligence and military backgrounds in the Russian political elite and the level to which they form a homogenous group (*siloviki*) has been the subject of much controversy. President Putin's personal network, whose members occupy central positions within the Russian state, includes several former KGB agents.

developments, the parallel demise of the conventional arms control architecture did not automatically follow.

Even after Russia's suspension of the implementation of the CFE Treaty in December 2007, member states continued consultations in search of a solution, seeking either to bring the A-CFE Treaty into force or to set up a new framework document. Most NATO member states preferred either negotiations on the basis of the CFE Treaty or the ratification of the A-CFE Treaty after the implementation of the Istanbul Commitments by Russia. The United States in particular had been in favor of interim implementation measures that would have allowed for the exchange and verification of information on a voluntary basis, despite Russia's suspension of the CFE Treaty (von Arx 2012, pp. 218–22). Russia, by contrast, proposed that a completely new conventional forces arrangement be devised by rethinking the previous conceptual foundation. A final round of consultations within the group of 36 (including all state parties to the CFE Treaty plus six additional NATO members) ultimately failed in May 2011, without reaching consensus on the form of future instruments for regulating conventional forces (Zellner 2012).

4.2 Technological modernization and competition

Rapid advancements in military technology have added to these changes in political relations, further eroding the usefulness of existing quantitative and qualitative metrics for counting weapon systems and the prevalent logic of establishing military stability through deceleration and the regional disengagement of forces. In addition, objective uncertainty about the pace and direction of technological progress has increased interstate competition. This contrasts with the situation during most of the Cold War, when the military technology available to the East and the West remained similar in quality overall. Even though NATO had opted for technological superiority to balance the numerical advancements of the WTO and the Soviet Union in the 1960s, clear breakthroughs by one side were rare and, when they did occur, short-lived.

This situation changed in the 1980s due to the increasing use of microelectronics and computers, which the Soviet economy had difficulties producing, even though Soviet military officers were the first to grasp the strategic significance of this ongoing revolution in military affairs (Ogarkov 1984). The research and development of innovations still in use today, including stealth fighters and precision munitions, dates back to this period (Schörnig 2007, p. 127). When fielded in the late 1980s, and following the Soviet collapse, they tremendously improved US military capabilities in comparison to the Soviet, and later Russian, armed forces. During the Gulf War in 1991, for example, American forces first used laser- and GPS-guidance munitions, which were significantly more precise than conventional gravity bombs (Hallion 1995). As a result, the number of aircraft necessary for conducting successful bombing operations decreased significantly, since fewer bombs were needed to destroy concrete and even hardened targets, including bunkers, bridges, and command and control centers. Single aircraft could now attack multiple targets per flight from longer distances while reducing risks to pilots and radar exposure.

With the collapse of the Soviet Union (and subsequently the Soviet military and defense industry), the US technological edge increased further. In the 1990s, domestic interest groups in the US pushed for technological superiority (Carter 2001), while the Russian military, among others, lacked the resources to compete and develop new military equipment. The US advantage was not limited to hardware, however, and extended to software used in weapon systems that could multiply their capabilities while remaining indistinguishable from the outside. This further undermined previous counting methods for evaluating the balance of forces. In parallel, the driving force for military technological progress in the West shifted from the state to the private sector. Since then, civilian innovations in microelectronics and computing have become part of ever more sophisticated weapon systems that connect and integrate command and control systems based on real-time information exchange and multiple sensors. The interconnectedness of weapon systems has multiplied the effects of conventional weapons, which in some instances are now able to replace weapons of mass destruction for strategic tasks (Müller and Schörnig 2001).

The performance of these weapons varies with the available data, bandwidth, and systems used to transform data into information for decision-making. Hence, even technologically inferior and quantitatively outnumbered single weapon systems can have significant advantages when acting within a superior information space. Unmanned (combat) aerial vehicles (UAVs/UCAVs), are the classic example. Major advances in communication and automation technology have enabled the United States to employ combat drones effectively in numerous operations since the early 2000s, starting with the armed versions of the MQ-1 Predator after 9/11.

Over the past decade, several states have been intensifying technological competition with the United States in selected areas or have been trying to reduce US qualitative superiority through asymmetric responses (Horowitz and Schwartz 2020). In Europe, Russia has invested in electronic warfare systems and is increasingly fielding unmanned land systems. Moscow's technological catch-up process has been most significant in the realm of long-range precision-strike systems, however (McDermott and Bukkvoll 2018). Russia has been able to develop and deploy precise cruise missiles stationed on land or launched from surface ships, which were used successfully in combat during the Syrian civil war (BBC 2017; Marcus 2015). In this way, Russia has broken the US–UK monopoly.

These capabilities are particularly significant in the European theater, since they enable Moscow to threaten military installations such as airfields, command headquarters, and radar installations from Russian soil with pinpoint accuracy. In addition, the acceleration of operations puts significant pressure on military and political decision-making speed (Altmann and Sauer 2017). This can lead to higher levels of alert, but also reduces the chances of finding diplomatic solutions and complicates the development of meaningful military CSBMs.

5 Back to the future: between deterrence and crisis stability

Over the past decade, conventional arms control in Europe has once again changed tack. The political conditions that previously allowed for the limiting of force pos-

tures and the pursuit of disarmament no longer exist. Amidst renewed strategic uncertainty, many states are unwilling to yield possible competitive military advantages to multilateral regulation and intrusive transparency measures. Conventional arms control has come full circle. As in the 1970s, it tends to serve as a forum for pursuing political and military advantages. The stalemate in reforming the Vienna Document, conflicts within the OSCE Structured Dialogue, and the demise of the Open Skies Treaty are evidence of this general dynamic. At the same time, arms control advocates have pointed to the inherent risks of mutual deterrence postures, which may lead to unintended military escalation. The ambition of their proposals has been limited to strengthening crisis stability. Overall, there is currently no vision that extends beyond the political status quo.

5.1 The primacy of politics

Since Russia began its offensive military campaign against Ukraine in February 2014, Western defense debates have focused on whether NATO members could mobilize necessary reinforcements and bring them to the battlefield in times of crisis, particularly in the Baltics. At the Wales Summit in September 2014, the alliance created the Very High Readiness Joint Task Force (VJTF)—comprised of up to 5000 troops ready for deployment within 48 to 72 h—and increased the size of the NATO response force. That same year, the United States launched the European Reassurance Initiative,[17] which established a rotational Armored Brigade Combat Team in western Poland, complemented by a combat aviation brigade based in Germany. The 2016 Warsaw Summit created an enhanced forward presence (eFP), which in total consists of four multinational, battalion-sized battle groups deployed in Lithuania, Latvia, Estonia, and Poland. Member states also created a tailored forward presence (tFP) in the southeastern flank, built around a Romanian framework brigade.

In parallel, several European NATO members have set out long-term modernization and ambitious procurement plans for their (conventional) armed forces, which foresee substantial growth in military expenditures into the 2030s. Even though NATO continues to stress the dual approach of deterrence and dialogue in its relations with Russia, the political emphasis is firmly on the former. Russia's approach to NATO member states (particularly the United States) has also shifted to deterrence. Moscow continues to reinforce its force posture in Kaliningrad, on the Crimean peninsula, and in the military districts bordering Ukraine. Large-scale snap exercises and increasing military air traffic signal Russia's resolve and illustrate its readiness to practice strategic brinkmanship. Following NATO's expulsion of eight "undeclared Russian intelligence officers" from its headquarters in October 2021 (Emmott and Osborn 2021), Russia ended diplomatic relations with NATO by recalling the remaining staff from its mission in Brussels.

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[17] In 2017, the initiative was renamed the "European Deterrence Initiative." Its budget increased from one billion USD to more than 6.5 billion USD in 2019 and now stands at 4.5 billion USD (2021). Since 2017, the largest share has been reserved for the pre-positioning of additional equipment to facilitate the deployment of division-sized forces in the regional theater in case of military conflict.

It also suspended the work of NATO's military liaison office in Moscow and demanded that the NATO Information Office at the Belgian Embassy cease its operations (Ministry of Foreign Affairs of the Russian Federation 2021b). The effects of this evolving mutual deterrence relationship, which includes targeted public relation efforts to strengthen credibility and cohesion, are noticeable in political debates on the remaining elements of the conventional arms control architecture. The failed reissuing and overdue modernization of the Vienna Document 2011 is a case in point. Since 1999, the Document has not seen any substantial changes. Many provisions, including thresholds for the notification and observation of military activities, continue to reflect Cold War conditions. Even though OSCE participating States have introduced more than twenty amendment proposals in relation to different chapters of the Document over the last two decades, most of them still await adoption, which requires consensus.

Since 2014, Russia and Belarus have withdrawn all of their previous proposals for reforming the Document in Working Group A of the OSCE Forum for Security Co-operation (FSC). In November 2016 (and again in November 2021), Moscow also firmly rejected the formal reissuing of the Vienna Document, which is supposed to occur at least every five years,[18] citing NATO's policy of deterrence and its increased presence in the Baltics as obstacles (OSCE 2016a). According to Russian diplomats, the Western "policy of containment" undermines the very basis of negotiations (OSCE 2020a).

Nevertheless, NATO members have continued to advance proposals for modernization. In October 2019, Germany presented a package deal, now co-sponsored by 33 OSCE participating states, including all NATO members plus Georgia, Finland, Sweden, and Ukraine. This "consensus proposal" combines various pending reform ideas and has been hailed as an "opportunity to launch a constructive negotiation" (OSCE 2020b). The devil is in the details, however. The proposal addresses Western concerns about large Russian military (snap) exercises by lowering the thresholds for the notification and observation of military activities and makes suggestions for improving existing risk reduction procedures. Even though Russia would profit disproportionally from the requested increase in the number of available inspections and evaluations, other long-standing former Russian concerns have not been incorporated. They include, among others, information exchange on naval forces, the notification of multinational troop movements, and trans-border military transit—all of which aim at monitoring NATO and US forces. Adopting arms control measures that advance the causes of potential adversaries would seem to be inconceivable for both sides.

This stalemate also extends to the OSCE Structured Dialogue. Established in December 2016 on Germany's initiative, the Dialogue provides an additional platform for discussing threat perceptions, military doctrines, and risk reduction measures. From the start, however, many OSCE participating states have been skeptical of its purpose. The interpretative statements added by Russia and the United States to the 2016 OSCE Ministerial Council declaration, which "welcomes the launching of

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[18] The reissuing of the Vienna Document would add four FSC decisions that are already in force under the VD-Plus mechanism to the official text of the document.

a structured dialogue," speak volumes about the limits of promoting technical arms control. While the United States pointed out that it faced "statutory limitations" on bilateral military-to-military cooperation with Russia, Moscow highlighted the principle of the indivisibility of security in the OSCE area (OSCE 2016b), which it believes NATO enlargement is undermining (TASS 2017).

Similar issues of strategic principle are behind the US and Russian exit from the Open Skies Treaty, which since 2002 has enabled member states to conduct unarmed observation flights over each other's territory. In 2020, the Trump administration used legitimate concerns about Russian treaty compliance as a pretext for withdrawing, against the wishes of European states, which would have preferred that outstanding issues be resolved diplomatically (German Federal Foreign Office 2020). Members of the US administration even suggested that Russia may have been using the Treaty "in support of an aggressive new [...] doctrine of targeting critical infrastructure [...] with precision-guided conventional munitions" (U.S. Department of State 2020). Political concerns and the pursuit of competitive advantages have also become the main leitmotif for Moscow. After the US withdrawal, Russia made its loyalty to the Treaty conditional on a number of demands, all geared towards gaining equal political status with Washington. When European treaty members rejected them as unreasonable, Moscow decided to also withdraw (Ministry of Foreign Affairs of the Russian Federation 2021a).

5.2 Strengthening crisis stability

There is agreement among arms control advocates that "addressing a destabilizing quantity of conventional arms on the European continent [...] is no longer relevant" (Charap et al. 2020, p. iii and p. x) and that the CFE Treaty is "politically dead and militarily all but useless" (Zellner et al. 2020, p. 1; cf. Zellner 2019, p. 1). Instead, most emphasize the prevalence of operational constraints and incident prevention. However, they still diverge in their assessment of the danger of surprise attack and the relevance of sub-regional arms control arrangements. Arms control advocates acknowledge diverging views on risk assessment[19] but argue that current developments could produce a "spiral of escalation" that could lead "to instability and [the] potential breakdown of deterrence in a crisis" (Zellner et al. 2018, p. 7).

Perceptions also diverge on the probability of escalation, the inherent risks resulting from deterrence postures, and the political feasibility of arms control. Arms control critics and counterforce advocates tend to view uncertainty as an exploitable and controllable resource and question the causal relationship between improving capabilities (arms races) and the outbreak of war (Krause 2021, p. 163). These debates reflect the distinction between technical and political arms control as discussed above.

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[19] The risk report correctly observes that "the political leaderships in Russia and the NATO States so far seem to consider the risk of an unintended escalation of dangerous military incidents in Europe acceptable and believe that this can be managed by traditional risk reduction means" (Zellner et al. 2018, p. 7). The authors suggest, however, that even if the "current deterrence relationship in Europe is still predominantly perceived as more or less stable and not overly worrying, this situation could change" (Zellner et al. 2018, p. 14).

Conventional arms control advocates are once again focusing on crisis stability. Existing proposals argue for CSBMs and limitations on the movement and build-up of forces along the NATO–Russia contact line. Despite a "lack of trust and reluctance to cooperate on both sides," proponents suggest that even under such conditions, "certain steps to ensure military stability are possible and mutually beneficial" (Buzhinskiy and Shakirov 2019, p. 6). A report by the OSCE Network (hereafter "risk report"), which proposes sub-regional arms control measures to explore "what can be done if a political consensus emerges," envisions the "establishment of a Baltic contact zone" that would include the three Baltic States and Poland, but also eastern Germany, Belarus, and the Western Military District of Russia (Zellner et al. 2018, p. 4). In this zone, states would agree to limit the permanent and temporary deployment of armed forces, to reduce the size and character of military exercises, and to introduce additional transparency measures.

The risk report recommends building on the non-binding NATO–Russia Founding Act of May 1997 (NATO 1997) and the 1990 Treaty on the final settlement with respect to Germany (the Two-Plus Four Treaty). Both entail pledges to limit forces in the sub-regions. The Two-Plus Four Treaty prohibits the deployment of foreign armed forces and nuclear weapons or their carriers in eastern Germany, while the Founding Act provides for reciprocal restraints. In the context of enlargement, NATO members (as an interim solution until the adaptation of the CFE Treaty) have promised to refrain from the "additional permanent stationing of substantial combat forces" in the "current and foreseeable security environment" (NATO 1997, p. 14).[20] This pledge has been mirrored by Russia's commitment to "exercise similar restraint in its conventional force deployments" (NATO 1997, p. 14) and to "show due restraint with regard to ground TLE levels and deployments in the region which includes the Kaliningrad oblast and the Pskov oblast" (OSCE 1999, p. 243).[21]

In contrast to the Cold War, the overall emphasis of proposals for arms control in such sub-regional zones or other "strategically sensitive locations" (Charap et al. 2020, p. xiii, et seqq.) is now on operational constraints and risk reduction rather than force structure limits.[22] Ideas for such measures address various "drivers of escalation" via CSBMs, constraints on military exercises, and incident prevention measures. For example, it has been suggested that existing obligations related to notifying and observing military equipment be extended to include, among others, long-range strike capabilities, naval forces (with long-range strike capabilities), transport and logistic capacities, and A2/AD capabilities. In turn, arms control advocates recommend banning (training and snap) exercises or limiting their size. They also seek to increase the scope of the notifiable forces involved, including "naval,

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[20] Even though the parties do not conclusively define the term "substantial combat forces", Russian officials have previously indicated that one brigade in each of the new NATO member states (i.e., those that joined after 1997) would be acceptable (Alberque 2016, pp. 10–11 fn. 45).

[21] Moreover, in a statement attached to the CFE Final Act of 1999, Russia explicitly stated that it will "show due restraint with regard to ground TLE levels and deployments in the region which includes the Kaliningrad oblast and the Pskov oblast" (OSCE 1999, p. 243).

[22] Exceptions apply for permanently based forces or (critical) infrastructure in the respective area (Charap et al. 2020, pp. 58–59; Zellner et al. 2018, p. 21, 2020, pp. 10–11).

coastal, air, air defence, and internal security forces" (Zellner et al. 2018, p. 22), to limit the use of live fire in training, and to introduce strict observation provisions.

Even though such steps are useful for strengthening crisis stability, they face political obstacles similar to those faced by attempts to modernize the Vienna Document. In addition, the selection of sub-regions has been criticized on the grounds of the indivisibility of security within NATO (in contrast to the principle of the indivisibility of security among OSCE participating States) and the correlation of forces. Given Russian military numerical superiority in the Baltic and Black Sea regions, arms control arrangements that would preserve its advantage based on reciprocity or symmetry of measures are perceived "as a nonstarter" (Kulesa and Kacprzyk 2020, p. 3).

Similar reservations apply to new CSBMs and greater Western transparency, which some fear would not be reciprocated. Some observers even suspect that introducing technical measures to increase military stability could lead to "a broader political understanding with Russia," which would in turn undermine present deterrence policies "without meeting the conditions for normalization of relations" set by NATO (Kulesa and Kacprzyk 2020, p. 3). The latter include, as a minimum, Russia's withdrawal from Crimea, the implementation of the Minsk agreements, and the end of support for separatists in the Donbas.

This opposition to pursuing arms control without preconditions in Western–Russian relations stems from concerns about political and military disadvantages. Ironically, such concerns correspond historically to Germany's hostile stance on arms control until the late 1960s, that is, before the dramatic shift to *Ostpolitik* (Eastern Policy).[23] Under Chancellor Konrad Adenauer, the German government had promoted the idea of NATO pursuing a "policy on the basis of strength" (*Politik der Stärke*) because it "assumed the utility of military confrontation and tension to serve political ends" (Kelleher 1996, p. 35). Any form of détente went against the Hallstein Doctrine, which implied the non-recognition of the GDR and expressed the political logic that, by exerting pressure on the Soviet Union and by taking an uncompromising stance, West Germany could enforce the issue of reunification. Adenauer's political rationale also rested on a particular view of Soviet intentions, according to which the Soviet Union was poised for expansion towards the West and outward aggression (cf. Bluth 1999, p. 182).

A similar logic applies today. Arms control skeptics in both Moscow and the West consider Russia to be at war with Europe. Within this framework, attempts at arms control (let alone disarmament) are perceived as futile and counterproductive, particularly since Russia already enjoys "a visible conventional superiority in the theater around the Baltic and Ukraine" (Blank 2018, p. 5). Overall, bridging the divide between technical and political approaches to conventional arms control in Europe will be difficult. It will require the identification of sufficient common ground between adversaries and the creation of space for negotiation and finding overlapping interests. As in the late 1980s, this will be possible only if conventional arms control

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[23] Bluth notes that "despite Adenauer's deep opposition to any notion of disengagement in central Europe, studies were carried out under the leadership of General Heusinger about troop reductions in central Europe in the context of German reunification" (Bluth 1999, p. 184).

measures manage to enhance the security of all involved parties simultaneously (albeit to different degrees) or if they become one element of a global great power bargain.

6 Conclusion: whither conventional arms control?

Reviving conventional arms control in Europe is a daunting task. Not only must existing institutions adjust to new geopolitical realities, but they face rapid technological challenges and a prevailing environment of distrust. Rather than seeking military sufficiency, the great powers have been pursuing strategic advantages. Deterrence advocates are thus cautious of seemingly simple technical solutions that could undermine political coherence or change the status quo to the advantage of adversaries. Some observers might therefore agree with Colin Gray that (conventional) arms control is indeed "either impossible or unimportant" (Gray 1992, p. X and pp. 16–19). The above discussion provides further evidence of the primacy of politics.

The emergence of conventional arms control in Europe coincided with a convergence of interests, both domestic and international, among formal adversaries in the late 1960s. Subsequent negotiations in Vienna (MBFR) and Helsinki (CSCE) were part of a global détente between the superpowers. They provided states in the Euro-Atlantic region with a forum for multilateral, diplomatic exchange and for the pursuit of national interests via arms control. As long as the Soviet Union sought to preserve and consolidate the post-war order and its military and political grip on the Eastern bloc, real progress, even on technical measures, remained impossible, however. In contrast to the inherent risk of an accidental launch of nuclear weapons, conventional weapons created no pulling effect on their own; they did so only when linked directly to nuclear escalation.

The situation changed in the late 1980s under Gorbachev. Soviet arms control policies shifted from pursuing unilateral advantages to ensuring a stable military basis in order to enable domestic reform and improve political relations, both in Europe and globally. Gorbachev's global vision and readiness to disarm provided the West with an opportunity to reach its previous arms control goals and secure asymmetric Soviet concessions in the process. The unexpected (and unrelated) disintegration of the Soviet state that followed turned the military relationship on its head. The arms control architecture that was still evolving at the time became an instrument in political talks on the transformation of the European security order. The early decision to enlarge Western institutions, including NATO, sidelined competing ideas. The more politically marginalized Russia became in Europe, the less inclined it was to accept previously agreed limits on its military posture.

The failure of Russian democracy on the one hand and objective US hegemony on the other have prevented the necessary reforms to arms control institutions. In parallel, rapid technological modernization over the last two decades has devalued existing operational constraints and previously agreed limitations on force structure. The available instruments have proved insufficient and are no longer relevant to addressing contemporary security challenges. Today, conventional arms control

practices seem to have returned to where they began in the early 1970s. Amidst new strategic competition, many states are unwilling to risk even minor disadvantages at the margins through arms control regulations and intrusive transparency measures, as these could yield advantages to adversaries. In parallel, arms control advocates no longer seek to transform the political order and are content with the stabilization and management of the status quo in Europe. As long as the purpose of conventional arms control depends on strategic objectives, however, change is possible.

This could occur in one of two ways: based on technological advancements or in the form of broader considerations related to the political order on the continent. In the first case, technical solutions for promoting military stability could, for example, become politically feasible due to the increasing role of strategic non-nuclear weapons. This shift will establish new connections between conventional and nuclear risk management and, by extension, between conventional and nuclear arms control strategies. In the second case, radical domestic policy changes in Russia or the United States, even if currently unlikely, could create a strategic inflection point. If this were to occur, conventional arms control might once again become instrumental to safeguarding the transformation of the European security order.

References

Alberque, William. 2016. "Substantial Combat Forces" in the Context of NATO-Russia Relations, Research Paper, NATO Defense College, Research Paper 131, June 2016. https://www.ndc.nato.int/download/downloads.php?icode=493. Accessed 3 Dec 2021.

Altmann, Jürgen, and Frank Sauer. 2017. Autonomous weapon systems and strategic stability. *Survival* 59(5):117–142. https://doi.org/10.1080/00396338.2017.1375263.

von Arx, Pierre. 2012. Recent developments in the field of arms control and confidence- and security-building measures. In *OSCE Yearbook 2011*, ed. IFSH, 201–223. Baden-Baden: Nomos.

Axelrod, Robert. 1990. The concept of stability in the context of conventional war in Europe. *Journal of Peace Research* 27(3):247–254. https://doi.org/10.1177/0022343390027003002.

BBC—British broadcasting corporation. 2017. Russia fires cruise missiles at IS targets in Syria, 31 May 2017. https://www.bbc.com/news/world-middle-east-40104728. Accessed 7 Dec 2021.

Bitzinger, Richard A. 1989. *Assessing the conventional balance in Europe, 1945–1975 (A RAND note).* Santa Monica: The RAND Corporation.

Blank, Stephen. 2018. Mission impossible: pursuing arms control with Putin's Russia, European leadership network, January 19, 2018. https://www.europeanleadershipnetwork.org/wp-content/uploads/2018/01/180115-Stephen-Blank-Arms-Control-Policy-Brief-ELN.pdf. Accessed 4 Dec 2021.

Blechman, M., William J. Durch, and Kevin P. O'Prey. 1990. *NATO's stake in the new talks on conventional armed forces in Europe. Regaining the high ground*. London: Palgrave Macmillan.

Bluth, Christoph. 1999. Détente and conventional arms control: West German policy priorities and the origins of MBFR. *German Politics* 8(1):181–206. https://doi.org/10.1080/09644009908404547.

Bolving, Klaus. 2000. The adapted treaty on conventional armed forces in Europe—CFE—considerations concerning baltic CFE-membership. *Baltic Defence Review* 4:31–66.

Borawski, John. 1986. The world of CBMs. In *Avoiding war in the nuclear age. Confidence-building measures for crisis stability*, ed. John Borawski, 9–42. Westview Press: Boulder, CO.

Borawski, John. 1988. *From the atlantic to the Urals. Negotiating arms control at the Stockholm conference*. Washington DC: Pergamon-Brassey's.

Brodie, Bernard. 1946. Implications for military policy. In *The absolute weapon: atomic power and world order*, ed. Bernard Brodie, 57–89. New Haven: Yale Institute of International Studies.

Bull, Hedley. 1961. *The control of the arms race. Disarmament and arms control in the missile age*. London: Weidenfeld & Nicolson.

Bundesregierung. 2003. *Bericht der Bundesregierung zum Stand der Bemühungen um Rüstungskontrolle, Abrüstung und Nichtverbreitung sowie über die Entwicklung der Streitkräftepotenziale*. Jahresabrüstungsbericht 2002. Drucksache 15/1104.

Buzhinskiy, Evgeny, and Oleg Shakirov. 2019. Outlines for future conventional arms control in Europe: A sub-regional regime in the Baltics, European Leadership Network, Sept. 3, 2019. https://www.europeanleadershipnetwork.org/wp-content/uploads/2019/09/190904-Outlines-for-Future-Conventional-Arms-Control-in-Europe.pdf. Accessed 9 Dec 2021.

Cameron, James. 2017. *The double game: the demise of America's first missile defense system and the rise of strategic arms limitation*. New York: Oxford University Press.

Cameron, James. 2020. What history can teach. *Daedalus* 149(2):116–132.

Carter, Ashton B. 2001. Keeping the edge. Managing defense for the future. In *Keeping the edge. Managing defense for the future*, ed. Ashton B. Carter, John P. White, 1–25. Cambridge: MIT Press.

Charap, Samuel, Alice Lynch, John J. Drennan, Dara Massicot, and Giacomo Persi Paoli. 2020. A new approach to conventional arms control in Europe. Addressing the security challenges of the 21st century, RAND corporation, CA. https://www.rand.org/content/dam/rand/pubs/research_reports/RR4300/RR4346/RAND_RR4346.pdf. Accessed 9 Dec 2021.

Darilek, Richard E., and John Setear. 1990. Arms control constraints for conventional forces in Europe (A RAND note). RAND corporation, CA. https://apps.dtic.mil/sti/pdfs/ADA222198.pdf. Accessed 12 Dec 2021.

Emmott, Robin, and Andrew Osborn. 2021. NATO expels eight 'intelligence officers' from Russian mission to alliance, Reuters, 6 October 2021. https://www.reuters.com/world/nato-says-expelled-eight-members-russian-mission-alliance-2021-10-06/. Accessed 6 Dec 2021.

Falkenrath, Richard A. 1995. *Shaping europe's military order. The origins and consequences of the CFE treaty*. Cambridge, London: MIT Press.

Foerster, Schuyler, William Barry, William Clontz, and Harold Lynch. 1989. *Defining stability. Conventional arms control in a changing Europe*. Boulder: Westview Press.

Freedman, Lawrence, and Jeffrey Michaels. 2019. *The evolution of nuclear strategy*. London: Palgrave Macmillan.

Gavin, Francis J. 2012. *Nuclear statecraft. History and strategy in america's atomic age*. Ithaca, London: Cornell University Press.

Gerber, Theodore P., and Sara E. Mendelson. 2008. Casualty sensitivity in a post-soviet context: Russian views of the second Chechen War, 2001–2004. *Political Science Quarterly* 123(1):39–68.

German Federal Foreign Office. 2020. Statement of the foreign ministries of Belgium, Czech Republic, Finland, France, Germany, Greece, Italy, Luxemburg, Netherlands, Portugal, Spain and Sweden on the announcement by the US to withdraw from the open skies treat, May 22, 2020. https://www.auswaertiges-amt.de/en/newsroom/news/joint-declaration-open-skies/2343892. Accessed 3 Dec 2021.

Glaser, Charles L. 1990. *Analyzing strategic nuclear policy*. Princeton: Princeton University Press.

Goldman, Emily O. 1993. Arms control: the continuation of politics by other means. *Diplomacy & Statecraft* 4(2):258–284.

Goldman, Emily O. 1994. *Sunken treaties. Naval arms control between the wars*. Pennsylvania: The Pennsylvania State University Press.

Goodby, James. 1988. The Stockholm conference: negotiating a cooperative security system for Europe. In *U.S.-Soviet Security Cooperation*, ed. L. Alexander George, Philip Farley, and Alexander Dallin, 44–172. Oxford, New York: Oxford University Press.

Gorbachev, Mikhail. 1989. Europe as a Common Home. Address given by Mikhail Gorbachev to the Council of Europe (Strasbourg, 6 July 1989). https://chnm.gmu.edu/1989/archive/files/gorbachev-speech-7-6-89_e3ccb87237.pdf. Accessed 6 Dec 2021.

Gray, Colin S. 1989. *An approach to naval arms control: strategy and campaign*. Department report 5–89. Newport: Naval War College.

Gray, Colin S. 1992. *House of cards. Why arms control must fail*. Ithaca: Cornell University Press.

Green, Brendan R. 2020. *The revolution that failed: nuclear competition, arms control, and the Cold War*. Cambridge: Cambridge University Press.

Green, Brendan R., and Austin Long. 2015. Stalking the secure second strike: intelligence, counterforce, and nuclear strategy. *Journal of Strategic Studies* 38(1–2):38–73. https://doi.org/10.1080/01402390.2014.958150.

Green, Brendan R., and Austin Long. 2017. The MAD who Wasn't there: soviet reactions to the late cold war nuclear balance. *Security Studies* 26(4):606–641. https://doi.org/10.1080/09636412.2017.1331639.

Haftendorn, Helga. 2008. The link between CSCE and MBFR. Two sprouts from one bulb. In *Origins of the European security system, 1965–1975. The Helsinki process revisited*, ed. Andreas Wenger, Vojtech Mastny, and Christian Nuenlist, 237–258. London: Routledge.

Hallion, Richard P. 1995. Precision guided munitions and the new era of warfare (air power studies centre paper number 53). https://man.fas.org/dod-101/sys/smart/docs/paper53.htm. Accessed 10 Jan 2021.

Holst, Johan Jørgen. 1991. Arms control in the nineties: a European perspective. *Daedalus* 120(1):83–110.

Horowitz, Michael C., and Joshua A. Schwartz. 2020. To compete or retreat? The global diffusion of precision strike. https://ssrn.com/abstract=3752391. Accessed 12 Oct 2021.

Jervis, Robert. 1989. *The meaning of the nuclear revolution*. Ithaca, London: Cornell University Press.

Kelleher, Catherine M. 1996. The political context of conventional arms control efforts in Europe. In *The treaty on conventional armed forces in Europe: the politics of post-wall arms control*, ed. Catherine M. Kelleher, Jane M.O. Sharp, and Lawrence Freedman, 31–56. Baden-Baden: Nomos.

Krause, Joachim. 2021. Deutsche Rüstungskontrollpolitik im strategischen Niemandsland. *Sirius* 5(2):157–164. https://doi.org/10.1515/sirius-2021-2007.

Kulesa, Łukasz, and Artur Kacprzyk. 2020. Dilemmas of arms control. Meeting the interests of NATO's north-eastern flank, April 2020, international centre for defence and security. http://icds.ee/wp-content/uploads/2020/04/ICDS_Report_Dilemmas_of_Arms_Control_Kacprzyk_Kulesa_April_2020_cor.pdf. Accessed 4 Dec 2021.

Lachowski, Zdzislaw. 2001. Conventional arms control. In *SIPRI yearbook 2001*, ed. SIPRI, 549–577. Oxford: SIPRI.

Lachowski, Zdiszlaw. 2002. Conventional arms control. In *SIPRI yearbook 2002*, ed. SIPRI, 709–735. Oxford: SIPRI.

Lachowski, Zdiszlaw. 2006. Conventional arms control. In *SIPRI Yearbook 2006*, ed. SIPRI, 749–773. Oxford: SIPRI.

Lieber, Keir A., and Daryl G. Press. 2017. The new era of counterforce. *International Security* 41(4):9–49.

Lieber, Keir A., and Daryl G. Press. 2020. *The myth of the nuclear revolution*. Ithaca, London: Cornell University Press.

Marcus, Jonathan. 2015. Russian missiles 'hit IS in Syria from Caspian Sea', 7 October 2015. https://www.bbc.com/news/world-middle-east-34465425. Accessed 7 Dec 2021.

Maurer, John D. 2019. Divided counsels: competing approaches to SALT, 1969–1970. *Diplomatic History* 43(2):355–377. https://doi.org/10.1093/dh/dhy069.

McDermott, Roger N., and Tor Bukkvoll. 2018. Tools of future wars—Russia is entering the precision-strike regime. *The Journal of Slavic Military Studies* 31(2):191–213. https://doi.org/10.1080/13518046.2018.1451097.

Ministry of Foreign Affairs of the Russian Federation. 2021a. Foreign ministry's statement following the Russian federation's sending notifications to the states parties to the treaty on open skies, 18 June 2021. www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/4790770. Accessed 2 Dec 2021.

Ministry of Foreign Affairs of the Russian Federation. 2021b. Foreign Ministry statement on response measures to NATO decisions regarding the Russian Permanent Mission to NATO in Brussels, 18 Oct. 2021. www.mid.ru/en/foreign_policy/news/-/asset_publisher/cKNonkJE02Bw/content/id/4907931. Accessed 1 Dec 2021.

Müller, Harald, and Niklas Schörnig. 2001. RMA and nuclear weapons—A calamitous link for arms control? *Disarmament Forum* 4:17–26.

NATO—North Atlantic Treaty Organization. 1997. Founding act on mutual relations, cooperation and security between NATO and the Russian federation, 27 May 1997. https://www.nato.int/cps/en/natohq/official_texts_25468.htm. Accessed 1 Dec 2021.

NATO—North Atlantic Treaty Organization. 2002. Prague summit declaration. https://www.nato.int/cps/en/natohq/official_texts_19552.htm (Created 21 Nov 2002). Accessed 4 Jan 2022.

Ogarkov, Nikolai V. 1984. Zashchita sotsializma: opyt istorii i sovremennost' [The Defense of Socialism: Experience of History and the Present Day]. *Krasnaya Zvezda*, 9 May 1984.

OSCE—Organization for Security and Co-operation in Europe. 1990a. Treaty on conventional armed forces in Europe, 19 November 1990. https://www.osce.org/files/f/documents/4/9/14087.pdf. Accessed 1 Jan 2022.

OSCE—Organization for Security and Co-operation in Europe. 1990b. Charter of Paris for a new Europe, 21 November 1990. https://www.osce.org/files/f/documents/0/6/39516.pdf. Accessed 12 Oct 2021.

OSCE—Organization for Security and Co-operation in Europe. 1992. Concluding act of the negotiation on personnel strength of conventional armed forces in europe (CFE-1A agreement). https://www.osce.org/files/f/documents/8/b/14093.pdf (Created 10 July 1992). Accessed 27 Oct 2021.

OSCE—Organization for Security and Co-operation in Europe. 1996. Lisbon document 1996. https://www.osce.org/files/f/documents/1/0/39539.pdf (Created 3 Dec 1996). Accessed 7 Dec 2021.

OSCE—Organization for Security and Co-operation in Europe. 1999. Istanbul document 1999. https://www.osce.org/files/f/documents/6/5/39569.pdf (Created 19 Nov 1999). Accessed 12 Oct 2021.

OSCE—Organization for Security and Co-operation in Europe. 2016a. Statement by the Delegation of the Russian Federation, FSC.JOUR/840, Annex 3. https://www.osce.org/files/f/documents/9/4/281341.pdf (Created 9 Nov 2016). Accessed 6 Dec 2021.

OSCE—Organization for Security and Co-operation in Europe. 2016b. From Lisbon to Hamburg: declaration on the twentieth anniversary of the OSCE for arms control. https://www.osce.org/files/f/documents/3/e/289496.pdf. Accessed 3 Dec 2021.

OSCE—Organization for Security and Co-operation in Europe. 2020a. Statement by the delegation of the Russian federation, FSC.JOUR/956, Annex 3. https://www.osce.org/files/f/documents/3/4/457450.pdf (Created 1 July 2020). Accessed 23 Nov 2021.

OSCE—Organization for Security and Co-operation in Europe. 2020b. Statement by the representative of the European Union, FSC.JOUR/956, Annex 2. https://www.osce.org/files/f/documents/3/4/457450.pdf (Created 1 July 2020). Accessed 23 Nov 2021.

Sarotte, Mary E. 2014. *1989: the struggle to create post-cold war Europe*. Princeton: Princeton University Press.

Schelling, Thomas C. 1960. Reciprocal measures for arms stabilization. *Daedalus* 89(4):892–914.

Schelling, Thomas C. 1985. What went wrong with arms control? *Foreign Affairs* 64(2):219–233.

Schelling, Thomas C., and Morton H. Halperin. 1961. *Strategy and arms control*. New York: The Twentieth Century Fund.

Schörnig, Niklas. 2007. *Theoretisch gut gerüstet? Die amerikanische Rüstungsindustriepolitik der 1990er Jahre aus IB-Perspektive*. Baden-Baden: Nomos.

Sharp, Jane M.O. 2006. *Striving for stability in europe. Negotiation, implementation and adaptation of the CFE treaty*. New York: Routledge.

Sims, Jennifer E. 1990. *Icarus restrained. An intellectual history of nuclear arms control, 1945–1960*. Boulder: Westview Press.

TASS. 2017. Statements on indivisibility of security remain nice slogan for West, says Lavrov, 13 July 2017. https://tass.com/politics/956255. Accessed 6 Dec 2021.

U.S. Department of State. 2020. Statement by secretary Michael R. Pompeo. On the treaty on open skies. https://ee.usembassy.gov/2020-05-22-1/. Accessed 3 Dec 2021.

United Nations. 1986. Letter dated 86/06/11 from the Chargé d'affaires a.i. of the Permanent Mission of Hungary to the United Nations addressed to the Secretary-General, A/41/411 S/18147. https://digitallibrary.un.org/record/118767/files/A_41_411_S_18147-EN.pdf. Accessed 21 Nov 2021.

Van Oudenaren, John. 1988. Conventional arms control in europe: soviet policy and objectives. In *Conventional arms control and the security of Europe*, ed. Uwe Nerlich, James Thomson, 40–66. New York: Westview Press.

Wilcox, Mark R. 2020. *The treaty on conventional armed forces in Europe and Russian foreign and security policy*. Dissertation. Kansas State University.

Winner, Andrew, and Michael J. McNerney. 1996. Turning points: the link between politics and arms control. In *The treaty on conventional armed forces in Europe: the politics of post-wall arms control*,

ed. Catherine McArdle Kelleher, Jane M.O. Sharp, and Lawrence Freedman, 123–163. Baden-Baden: Nomos.

Wittmann, Klaus. 1989. *Challenges of conventional arms control*. The Adelphi Papers 29 (239). London: Brassey's.

Wohlstetter, Albert. 1959. The delicate balance of terror. *Foreign Affairs* 37(2):211–234.

Zellner, Wolfgang. 1994. *Die Verhandlungen über Konventionelle Streitkräfte in Europa. Konventionelle Rüstungskontrolle, die neue politische Lage in Europa und die Rolle der Bundesrepublik Deutschland*. Baden-Baden: Nomos.

Zellner, Wolfgang. 2012. Conventional arms control in europe: is there a last chance? Arms control today. https://www.armscontrol.org/act/2012-03/conventional-arms-control-europe-there-last-chance. Accessed 15 Oct 2021.

Zellner, Wolfgang. 2019. Addressing the threat of uncontrolled escalation by means of conventional arms control in Europe. *Security and Human Rights* 30(1–4):100–107. https://doi.org/10.1163/18750230-03001002.

Zellner, Wolfgang, Philip Remler, Wolfgang Richter, Andrei Zagorski, Evgeny P. Buzhinsky, Vladislav L. Chernov, Ali Serdar Erdurmaz, Marc Finaud, Cornelius Friesendorf, Terrence P. Hopmann, Łukasz Kulesa, Igors Rajevs, Benjamin Schaller, Hans-Joachim Schmidt, Niklas Schörnig, Oleg Shakirov, and Simon Weiß. 2018. Reducing the Risks of Conventional Deterrence in Europe Arms Control in the NATO-Russia Contact Zones, OSCE Network. http://osce-network.net/file-OSCE-Network/Publications/RISK_SP.pdf. Accessed 9 Dec 2021.

Zellner, Wolfgang, Olga Oliker, and Steven Pifer. 2020. A little of the old, a little of the new: a fresh approach to conventional arms control in europe, deep cuts issue brief #11, September 2020. https://deepcuts.org/files/pdf/Deep_Cuts_Issue_Brief_11-Fresh_Approach_to_CAC_in_Europe.pdf. Accessed 9 Dec 2021.

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