WHY DO STATES AGREE TO INTRUSIVE VERIFICATION?
EARLY FINDINGS OF THE INTERMEDIATE-RANGE NUCLEAR FORCES (INF) TREATY CASE.

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1. Summary

The Intermediate-Range Nuclear Forces (INF) Treaty established the foundation for the Strategic Arms Reduction Treaty (START) family of nuclear arms control agreements. The experience with implementing this 1987 accord on intermediate-range missiles facilitated subsequent U.S.-Russian strategic arms control treaties with increased verification intrusiveness. The INF treaty, a feat in regional nuclear politics, was also a first step towards a denuclearized Europe.

The compromise on INF reductions and the Soviet Union’s acceptance of on-site inspections (OSI) came as a surprise to Western policy makers and the U.S. arms control community. This paper examines the verifiable attainment of INF cuts and highlights the precedent-setting role of the Stockholm Accord confidence- and security-building measures (CSBM) in attaining the OSI agreement. It argues that regional transparency and confidence-building efforts created the foundation for a regional agreement on INF elimination.

Today, as in the 1980s, the inadequacy of military transparency and confidence in the Euro-Atlantic region is seen as a stumbling block for nuclear arms control. The complete elimination of nonstrategic nuclear forces in Europe remains an elusive feat. As the “Four Elders” noted in their 2007 Wall Street Journal piece, the goal of the eventual elimination of nuclear weapons calls on us to “redouble our efforts to resolve regional confrontations.”

The INF Treaty case offers insights into the tight link between strengthened regional cooperative security mechanisms and the progress on bilateral nuclear reductions. It highlights the importance of CSBM in institutionalizing military transparency and promoting regional demilitarization.

This paper begins with a discussion of transparency’s role in the demilitarization of state relationships. It continues with a background on the INF Treaty. If further notes the challenge of agreeing to OSI in bilateral arms control and notes the importance of conventional CSBM in gaining the INF accord. The paper concludes with an assessment of lessons learned and their applicability to today’s arms control challenges.

This research is a work in progress. Comments, criticisms, and feedback are most welcome.

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2. Regional Transparency’s Role

The common conception of future nuclear reductions involves “parity” agreements among the nuclear weapons-possessing states. The “parity” agreements framework comfortably fits with the established notions of strategic stability among great powers. This perspective, however, bypasses regional security challenges that serve as a stumbling block to initiating arms control discussions. Its limitations becomes apparent in analyzing the prospects for U.S.-Russian arms control after the 2010 New START agreement.

The Euro-Atlantic arms control experience of the 1980s offers fertile soil for examining the impact of cooperative arms control on state relations. “The institutional effects of arms control,” according to U.S. scholar Joseph Nye, “helped to shape expectations in ways that limit[ed] worse-case analyses, reassure[d] allies as well as adversaries, and preserve[d] areas of cooperation from the short-run vicissitudes of political changes.” Wrote Nye, “[t]hey do this by providing information that alters the way key participants understand their interests or see new cause and effect relationships. Included in this information are procedures for transparency and timely warning through inspection or verification which tend to discourage worse-case assumptions.”

To achieve the longstanding goal of a Euro-Atlantic region without nonstrategic nuclear weapons, one must conceive of nuclear reductions as a cooperative endeavor among states seeking to develop a regional “security community.” This advanced security relationship would allow the states to “determine co-operatively those actions that reassure” one another with the ultimate goal of “remov[ing] military force as a factor in interstate relations, thus establishing political stability.” As U.S. scholar Ivo Daalder wrote in 1992, increased trust could permit this type of arms control to “be both formal and informal, with the possibility that agreements [are] reached through reciprocated unilateral actions.”

Beyond bilateral and, eventually, multilateral nuclear arms control between great powers the challenge of demilitarizing state relationships looms large. In a recent book, U.S. scholar Charles Kupchan argued of the existence of four phases that contribute to a “breakout” of stable peace out within a region. These phases were as follows:

(1) Unilateral accommodation, in which “a state confronted with multiple threats seeks to remove one of the sources of its insecurity by exercising strategic restraint and making concessions to an adversary. Such concessions constitute a peace offering, an opening gambit intended to signal benign as opposed to hostile intent.”

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3 For example, see Paul Doty, “The Minimum Deterrent and Beyond,” Daedalus, Fall 2009, pp. 130-139.
5 Nye, op. cit., pg. 157.
6 This notion of regional security communities was first put forth by Karl Deutsch in the 1950s; see Security Communities, edited by Emanuel Adler and Michael Barnett, Cambridge University Press, 2008.
8 Daalder, op. cit.
(2) **Reciprocal restraint**, a phase in which “[t]he states in question trade concessions, each cautiously stepping away from rivalry as it entertains the prospect that geopolitical competition may give way to programmatic cooperation.”

(3) Deepening of **societal integration** and (4) **generation of new narratives and identities**.¹⁰

The first two phases are directly related to the demilitarization of state relations. The institutionalization of reciprocal restraint, according to Kupchan, is one of the keys to a preserving a “stable peace” between states. The latter two phases, in turn, are the provenance of governance and diplomacy. (This paper does not focus or elaborate on them.¹¹)

The 1987 INF Treaty case allows an examination of how transparency may factor into the working of the accommodation and restraint dynamics within a region. As U.S. political scientist Andrew Kydd, among others, noted, agreement to the accord’s transparency regime allowed Moscow to signal readiness to engage with Washington. The treaty was a “costly signal” intended to reassure the West of a change in Soviet motivations.¹² Further, the INF Treaty’s keystone element, the OSI mechanism, played an important role in the unilateral, bilateral, and regional reassertion processes.

Mutual military transparency is a powerful tool in the security relations between states. As U.S. scholar U.S. scholar Kristin Lord has contended, “[b]ecause information about military capabilities is sensitive, deliberately sharing that information can build confidence, and possibly trust, among states and create a political climate conducive to resolving differences.”¹³ If properly institutionalized, the ability to mutually verify the accuracy of shared information, especially with “boots on the ground,” may also facilitate demilitarization.

That said, “the effects of greater transparency depend on what it shows and how states react.”¹⁴ To be an effective demilitarization tool, the effort to reassure through transparency must be recognized as such by all the states involved. Towards this end, Moscow’s signals in the 1980s proved to be insufficiently recognized by the West. As Lord has pointed out, even after the conclusion of nuclear and the serious discussion of conventional arms control agreements, the Soviet withdrawal from Afghanistan, and Moscow’s acceptance of the peaceful revolutions in Europe, “many American policy makers [still] questioned Soviet motives.”¹⁵

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¹⁰ Kupchan, pg. 6.
¹⁴ Lord, pg. 24.
Despite that, the INF Treaty was a breakthrough in arms control efforts between the United States and Russia and, more crucially, within the Euro-Atlantic region. The evolution of the Soviet position on the role of military transparency went in hand with regional efforts at demilitarization. Further, Moscow’s longstanding abidance with the INF treaty—despite its military’s desire to the contrary—also offers instructive lessons on the importance of transparency.16

3. The INF Treaty’s Importance

The INF Treaty was signed on December 8, 1987 by U.S. President Ronald Reagan and the USSR’s General Secretary Mikhail Gorbachev. The agreement entered into force at a June 1, 1988 summit in Moscow upon the exchange of instruments of ratification. The implementation of the treaty obligations was completed by June 1, 1991. And, ten years after that, the United States and Russia completed the implementation of INF OSI.

The INF Treaty is best known for eliminating a class of nuclear weapons. The accord encompassed the destruction of the following systems: ground launched ballistic or cruise missiles with ranges of 1,000 to 5,500 kilometers (km), and shorter-range missiles with ranges of 500 to 1,000 km.17 Moscow and Washington agreed to eliminate the shorter-range missiles in the first year-and-a-half of the treaty’s duration. The destruction of the longer-range missile systems would take place within three years.

In the INF Treaty, the Soviet Union agreed to a disproportionate reduction—“more than three times”—of nuclear warheads.18 In return for this concession, Moscow accomplished its goal of eliminating the Pershing II. The system was seen as “a significant threat to Soviet military planners due to its capability to hit high-value Warsaw Pact targets as far east as Moscow in 8 to 14 minutes.”19

In line with treaty obligations, the United States eliminated 2,332 treaty-limited items, including 846 missiles and 289 launchers. The former Soviet Union, in turn, destroyed 5,439 treaty-limited items, including 1,846 missiles and 825 launchers.20 The missile systems included, on the U.S. side, the Pershing II, BGM-109G, Pershing IA, and Pershing IB missiles, on the Soviet side, SS-20, SS-4, SS-5, SSC-X-4, SS-12, and SS-23 missiles.21 In addition, both sides agreed to ban the production and flight tests of INF missiles.22 This ban is still in place today.

16 See, for example, Nikolai Sokov, "Russia’s military debates withdrawal from the INF treaty," WMD Insights, October 2006.
18 Ibid.
19 Ibid.
The INF Treaty’s intrusive verification component set a precedent in bilateral nuclear arms control. The treaty regime included baseline, close-out, elimination, and short-notice inspections. Both countries also initiated in July 1988 unprecedented continuous portal monitoring operations. As a U.S. government fact sheet noted, “[a]t Magna, Utah, and Votkinsk, USSR, permanent communities of up to 30 inspectors each are located outside the gates of former INF missile production and final assembly plants to check exiting vehicles for Treaty-limited items.”23 Finally, the agreement included, among other provisions, a National Technical Means (NTM) enhancement provision.24 This provision allowed both Moscow and Washington to request up to six times a year the removal of “land-mobile ground-launched ballistic missiles ... from their shelters and [the opening of] the shelter roofs for at least six hours for observation.”25

In a 1988 testimony to the U.S. Senate Committee on Foreign Relations, U.S. Secretary of State George Shultz, subsequently one of the “Four Elders,” highlighted the importance of the agreement’s emphasis on mutual military transparency. Testified Shultz, “[w]e have designed this treaty so that we would not have to take Soviet data on trust. But we also ensured that we would have more basic data for the INF Treaty than for any other arms control treaty in history.”26 In another testimony, he noted, “[t]he structure of the verification regime has built-in redundancies. This sort of double-checking is what gives it its power. One layer of the regime builds on another, to provide a whole that is greater than the sum of its parts.”27

The INF agreement created the foundation for the practical execution of bilateral arms reductions. The treaty saw the creation of data exchange, inspections, escort bureaucracies, primarily in the respective military organizations. Both Moscow and Washington created Nuclear Risk Reduction Centers—organizations that were tasked with the coordinated sharing of military transparency and predictability information.28 Washington also stood up the On-Site Inspections Agency (OSIA) to carry out its share of INF inspections. The OSIA subsequently evolved into the Defense Threat Reduction Agency (DTRA), the Department of Defense’s organization that carried out cooperative threat reduction projects in the states of the Former Soviet Union.29

24 National Technical Means are satellites, aircraft, as well as electronic and other types of technologies used in monitoring.
25 As an OSIA fact sheet noted, “[t]his procedure in conjunction with other measures [was] intended to help deter the Soviets from hiding illegal missiles at those SS-25 bases not subject to inspection.” On-Site Inspection Agency, “A Glossary of INF Terms,” OSIA fact sheet, May 15, 1989.
29 “The European Command Headquarters at Stuttgart served as the major military organization coordinating the INF Treaty implementation efforts in the five West European basing countries.” OSIA fact sheet, “INF Treaty Overview,” May 1, 1989.
These new government bureaucracies did more than just facilitate the implementation of an arms control treaty regime. “The fact that inspectors could for the first time enter sensitive U.S. and Soviet missile facilities was a breakthrough and harbinger of the end of the Cold War,” wrote U.S. arms control analyst (now U.S. Assistant Secretary of State) Rose Gottemoeller. In August 1988, U.S. inspectors were present at the first Soviet SS-12 missile destruction operation at Saryozek. A month later, Soviet inspectors were present during the first missile elimination operation at the Longhorn Army Ammunition Plant in Texas. Speedy progress saw the elimination of shorter-range missiles “one month in advance of the Treaty deadline of November 30, 1989.”

To be sure, more than two states were involved in the agreement. Missiles and treaty-limited equipment were based in multiple NATO and Warsaw Pact states. The former included the Federal Republic of Germany, Belgium, the Netherlands, Italy, and the UK. The latter, respectively, included East Germany and Czechoslovakia. Far from being just a bilateral arms control accord, the achievement and implementation of INF Treaty engaged multiple states in the Euro-Atlantic.

4. A Tumultuous Regional Accord

An important aspect of the INF Treaty model is its sensitivity towards and the direct focus on Euro-Atlantic security dynamics. As detailed analyses of regional nuclear politics are easily available, this section offers only a broad brush stroke. However, the fact that that the achievement of the INF agreement coincided with NATO-Warsaw Pact discussions about regional military transparency and conventional arms control is a point that needs to be emphasized. The bilateral accord would have been incredibly difficult without the prior adoption of regional CSBM.

In December 1979, NATO adopted the controversial “double-track” decision. According to this decision, the U.S. would “first, ... deploy in Europe 572 intermediate-range missiles [including Pershing II] capable of striking targets deep within the European area of the Soviet Union, and, second, ... seek negotiations with the USSR to reduce or eliminate such missiles from the deployments of both sides.” “Double-track” followed a flurry of Western concerns about the Soviet Union’s deployment of the SS-20 missile system in the European

32 Ibid.
In 1981, the Reagan administration proposed the “zero-zero offer”—an elimination of all INF systems—to Moscow. Yet, the negotiations were difficult. And, in 1983, the Soviet Union walked out of the talks. In the meantime, the deployment by both sides of INF missiles continued unabated in the region. After a gradual restarting of the talks, the respective drafts of an INF Treaty were tabled in the first half of 1987. Meanwhile, Moscow tried in vain to include the U.S.-owned warheads on the West German Pershing missiles into the scope of the negotiations. In any event, by July 1987, Reagan and Gorbachev had agreed to a “double global zero.” The treaty was propelled forward by the unilateral announcement by the Federal Republic of Germany of the intent to eliminate INF missiles stationed on its territory contingent on a U.S.-Soviet agreement. Bucking Washington, this announcement sent a powerful message to the negotiating parties and the region as a whole.

The summer of 1987 also saw the commencement of informal discussions between NATO and Warsaw Pact states on the reduction of conventional forces, an agreement subsequently known as the Conventional Armed Forces in Europe Treaty. These efforts continued a region-focused search for security through the Mutual and Balanced Force Reductions (MBFR) first initiated in 1973. Yet, a 1986 document on regional CSBM preceded important achievements on both nuclear and conventional arms control. It set the foundation for a fruitful accomplishment on all of these difficult efforts.

The September 1986 agreement on intrusive military transparency measures under the Document of the Stockholm Conference on CSBM and Disarmament in Europe (CDE), known as the Stockholm Accord, was a breakthrough for regional security. This agreement, adopted by United States, Canada, and thirty-three European states, including the Soviet Union, expanded the CSBM agreed upon in the 1975 Helsinki Final Act. The document “provide[d] for an annual exchange of calendars with forecasts of notifiable military activities, a standard format for the notification of military exercises, agreed time and size constraints, and procedures for observation and inspection of such exercises.” As Soviet Diplomat Ambassador Roland Timerbaev wrote,

“[t]he fruitfulness of new approaches and the need for their implementation have been convincingly demonstrated by the results of the Stockholm [CDE]. The practical significance of the Stockholm [A]ccords lies in the fact that a set of political and military-technical measures has been agreed upon to reduce

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35 See the Department of State website, op. cit.
37 See the Department of State website, op. cit.
the risk of war in Europe and to strengthen security and confidence among
the participants in the agreements that have been reached.”

In essence, Moscow noted a link between the progress of regional transparency efforts and
the change in its stance on bilateral nuclear accords and their verification. The sequencing
of these negotiations was important. An orientation toward “common security” in the Euro-
Atlantic region as opposed to a focus on NATO-Warsaw Pact dynamics also enabled arms
control breakthroughs.

To be sure, all of these developments followed an evolution of Soviet military doctrine in
the 1970s and a new orientation in Moscow toward domestic reforms in the 1980s.
American analyst Mary FitzGerald pointed out that, starting in the 1970s, the “changes in
[Soviet military] strategy, operational art, and tactics have ... generated changes in force
structure and weapons modernization that indicate a downgrading of nuclear
contingencies and a preference for conventional warfare.” These changes, she argued,
pointed to Moscow’s sincere interest in arms control efforts. There was, however, a bitter
disagreement in Western assessments of Gorbachev’s intentions.

5. Breakthroughs in On-Site Inspections

The achievement of the INF Treaty and the Soviet acceptance of OSI came as a surprise to
Western policy makers and the U.S. arms control community. Washington was focused on
the “legacy of U.S.-Soviet politics concerning general and complete disarmament plans that
persisted” from the 1950s and “into the early 1960s.” The link between the breakthrough
in regional transparency dynamics and the progress on bilateral nuclear arms control
transparency was thus not appreciated.

As a report for the U.S. government noted, “[b]y the mid-1960s, many U.S. experts had
come to believe that no progress in U.S.-Soviet arms control agreements was possible if the
United States held OSI to be a prerequisite.” The failure to achieve agreement on the
Acheson-Lilienthal plan and the Open Skies proposal, both of which included OSI, initiated
a bilateral dynamic of rejection. The argument about the inability to verify an arms

40 Roland Timerbaev, “A Soviet official on verification,” The Bulletin of the Atomic Scientists, January-February
1987, pp. 8-10.
41 Mary FitzGerald, “Arms Control and the New Revolution in Soviet Military Affairs,” Center for Naval
Analyses, August 1987.
42 FitzGerald, op. cit.
43 A Congressional report summarized the debate as follows. “This policy of “reasonable sufficiency,” as
enunciated by General Secretary Gorbachev, acknowledges that NATO is an unlikely aggressor and calls for
shifting a great portion of Soviet economic and technical resources to solve internal problems. More negative
interpretations perceive “reasonable sufficiency” as having little effect on Soviet operational military planning
or doctrine. This viewpoint sees increased Soviet interest in arms control, including the INF treaty, as merely
an attempt to erode Western public support for a robust NATO defense.” Bowman, et al.
45 Ibid.
46 See discussion in Janne Nolan, “Public and Congressional Attitudes Toward On-Site Inspection,” in Dunn, op.
cit.
control because of a disagreement about the level of intrusiveness required for this purpose served as an effective political tool for stymieing progress. The emergence of National Technical Means (NTM) revolutionized the arms control business and enabled the emergence of limited arms control agreements. As the aforementioned report continued, “[t]hrough the mid-1970s, the United States looked almost exclusively to NTM to verify treaty compliance.”

However, OSI as an approach maintained its “resiliency” in the Arms Control and Disarmament Agency (ACDA). “ACDA, in conjunction with the Defense Department, was responsible for undertaking a series of field tests and technical studies that evaluated various OSI techniques.” Coupled with NTM, an effective OSI regime was seen essential to resolving ambiguities, deterring treaty noncompliance, and detecting treaty violations.

Scholars have noted that, though it had largely remained under the radar, the Soviet acceptance of OSI went back to the 1970. As William Potter wrote, a “trend emerging after 1976 and becoming more pronounced in the Gorbachev period is the acceptance of nearly the entire range of on-site inspection measures, including in some instances inspection on demand.” “At the same time that more intrusive measures have found their way into negotiating postures across a broad spectrum of arms control forums,” argued Potter.

As noted above, the changes on the Moscow's agreement in September 1986 to participate in an OSI regime under the Stockholm Accord set a precedent. The Stockholm Accord “was the first major agreement in which the Soviet Union and other Warsaw Pact countries permitted [OSI] on their territory as a means of verification.” Crucially, Stockholm saw OSI with no right of refusal. “The inspections [were] not necessarily limited to military exercises, moreover, but [may have been] conducted for other, potentially suspect, military activities.”

Moscow reaffirmed its commitment to INF verification during the October 1986 Reykjavik summit between Gorbachev and Reagan. In a 1987 article in the Bulletin of the Atomic Scientists, Timerbaev wrote that the “Soviet government has recently adopted a new approach to this crucial issue.” In any event, Timerbaev argued,

"The attempts that are being made to use verification issues to avoid agreements on arms limitations and disarmament are immoral and sanctimonious, as well as basically destructive. Broadly speaking, the problem of verification is no longer on the agenda as some kind of obstacle

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47 PSR study, op. cit.
48 Ibid.
49 PSR study, op. cit., pg. 58.
50 Potter, op. cit., pg. 196.
51 Stovall, op. cit.
52 Ibid.
53 Timerbaev, op. cit.
to agreements. What is needed now is to deal constructively with that problem.”

An interesting sign of a change in Soviet policy was the accommodation of U.S. concerns about the production of INF missiles through perimeter-portal monitoring. Washington contended that the Moscow could secretly deploy SS-20 missiles at SS-25 sites and offered OSI as a remedy to this problem. In turn, Moscow suggested and eventually agreed to the stationing of inspectors on the territory of the facilities in question. Further, the Russian side went even further “suggesting that Soviet perimeter-portal monitoring could cover the Pershing production plant at Magna, Utah, rather than the more sensitive General Dynamic ... production plant in San Diego.”

Washington, in turn, stepped back from some of its most intrusive verification proposals once it realized that Moscow could implement them. In March 1987, the United States put forward a verification document that “stressed short-notice on-site inspections.” As two U.K. scholars explained, this proposal suggested the assignment of “200 Soviet inspectors to between 6 and 14 facilities where American missiles were produced, assembled, stored, and maintained.” In a response to this, “Moscow suggested the “inspections of factories, and not just at gates, but inside.” Eventually, however, the scope of Washington’s verification proposal substantially shrunk. And, though the State Department argued that this was in response to the changed circumstances of Gorbachev’s “double zero” proposal, “other Administration officials said the move reflected considerable objections ... to Soviet inspectors having widespread access to sensitive military facilities.”

In sum, the “red lines” of military transparency are elusive.

6. Lessons and Enduring Relevance

Why do states agree to intrusive verification? This rough and unfinished assessment of the INF Treaty case offers the following preliminary conclusions. Washington’s need for OSI was driven primarily by its desire to deter Soviet noncompliance and detect violations—all in the context of preserving NATO deterrence. Moscow’s agreement to OSI was, in turn, driven primarily by the desire to resolve ambiguities and detect violations—all in the context of signaling reassurance to the United States and NATO.

In revisiting Kupchan’s stable peace “breakout” phases, one can argue that military transparency works not only as an initial signal, but also as subsequent glue for unilateral accommodation and reciprocal restraint. That said, military transparency doesn’t offer substantial reassurance without the deepening of social integration or the generation of new narratives and identities. As Lord noted, “[t]he impact of transparency depends not

54 Ibid.
56 Ibid.
57 Ibid.
just on the nature of the information, but on whom that information is about. Mistrust is tightly linked to identity.”\textsuperscript{58}

Transparency carries importance not only as a signal or a litmus test, but also as a practical measure of promoting the demilitarization between states. The debate in Washington stressed the focus on NATO security and overstated Soviet recalcitrance on transparency. In turn, Moscow’s agreement to bilateral nuclear OSI was related to a breakthrough on regional transparency and CSBM and conventional arms control discussions.

As Kupchan recently wrote, the “challenge of contemporary statecraft entails not just preserving existing zones of stable peace, but also deepening and enlarging them.”\textsuperscript{59} The end of the Cold War had opened up the possibility that Russia could be integrated into the Euro-Atlantic regional security community. At that time, regional arms control efforts were seen by some scholars as a possible way to “devalu[e] nuclear weapons of any kind [and] further delegitimiz[e] military force as a means of settling intra-European disputes.”\textsuperscript{60}

Today, as in the 1980s, the inadequacy of military transparency in the Euro-Atlantic is seen as a stumbling block for arms control. The reduction of nonstrategic nuclear forces remains an elusive goal. The INF Treaty offers an insightful case study on the links between the efforts to strengthen regional cooperative security mechanisms and the progress on bilateral nuclear reductions. In 1987, broad accords on conventional security and the implementation of regional military transparency agreements served as the foundation for Soviet agreement to deepen transparency and to implement nuclear cuts. Thus, the improvement in the regional security context and the institutionalization of military-to-military engagement between military establishments in the troubled areas of the Euro-Atlantic serves as an essential first step towards a non-nuclear Europe.\textsuperscript{61}

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\textsuperscript{58} Lord, pp. 38-39.
\textsuperscript{59} Kupchan, op. cit., pg. 5.
\textsuperscript{60} Daalder, op. cit.
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