Building Mutual Security in the Euro-Atlantic Region



REPORT PREPARED FOR

Presidents, Prime Ministers, Parliamentarians, and Publics

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LETTER FROM THE CO-CHAIRS

The forces of opportunity and necessity are converging today in the Euro-Atlantic region. With national elections recently concluded in several key countries, there is an important political opening to take a fresh look at security policies throughout the region and determine whether they meet current threats and challenges in the most effective way. This reassessment of security policies is not only necessary, but also long overdue.

The blunt truth is that security policies in the Euro-Atlantic region remain largely on Cold War autopilot: large strategic nuclear forces are ready to be launched in minutes; thousands of tactical nuclear weapons remain in Europe; a decades-old missile defence debate remains stuck in neutral; and new security challenges associated with prompt-strike forces, cybersecurity, and space remain contentious and inadequately addressed. This legacy contributes to tensions and mistrust across the Euro-Atlantic region and needlessly drives up the risks and costs of national defence at a time of unprecedented austerity and tight national budgets.

We must ask ourselves why, two decades after the Cold War has ended, must the United States, Russia, France, Germany, Italy, the United Kingdom, and other European nations spend hundreds of billions of dollars, roubles, euros, and pounds in response to these tensions, while both local and national leaders face a growing list of fiscal demands and unmet needs? The same is true globally in areas such as ending illiteracy, providing clean water, and improving basic health care.

The budgetary tradeoffs are real, but there is more at stake than "guns versus butter." The likelihood of a devastating conventional or nuclear conflict in the Euro-Atlantic region has dramatically diminished, yet Cold War-era security concepts and their associated weapons and military postures (in particular, mutual assured destruction and nuclear

forces on prompt-launch status) continue. This dangerous asymmetry between military capabilities and a true Euro-Atlantic partnership undermines cooperative efforts to meet emerging security threats in Europe and across the world.

Over the past year, we have been working with more than 30 senior political, military, and security experts from the Euro-Atlantic region to address this challenge. We recommend that political and military leaders establish a new dialogue to address nuclear weapons, missile defences, prompt-strike forces, conventional forces, cybersecurity, and space comprehensively, so that practical steps can be taken on a broad range of issues. We believe that considering these issues in an integrated way can lead to transformational change in Euro-Atlantic security—from the persistent Cold War shadow of mutual assured destruction to mutual security—and reduce the risk of conflict at every level.

This report outlines objectives and steps that could guide this integrated security dialogue. The four of us—joined by our distinguished military and civilian colleagues associated with this initiative—believe that this synergy between process and substance can lead to concrete results in the next few years. We have the opportunity to move the United States, Russia, Europe, and ultimately other regions towards a safer and more stable form of security with decreasing risks of conflict and an increasing measure of cooperation, transparency, defence, and stability for all nations.

We have reached the moment where meeting present problems with old clichés—and Cold War-era thinking—must end. A new strategy for building mutual security in the Euro-Atlantic region can reduce the chances of conflict in the years ahead and can build a more secure and promising future for all our citizens.

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I. INTRODUCTION

Euro-Atlantic security must be improved or the existing risks will grow. The window for building trust, confidence, and mutual security will not remain open indefinitely. Over the past two decades, no geopolitical space has undergone as dramatic a transformation as that between the Atlantic and the Urals. Yet more than 20 years after the end of the Cold War, no new approach to security in the Euro-Atlantic region—a geographic and political space that includes the European community of nations, Russia, and the United States—has been defined, agreed, or implemented. No nation benefits from this persistent inaction in defining a fresh approach to mutual security.

At a time of unprecedented austerity and tight national budgets, our publics are literally paying the price for this policy inertia, which needlessly raises costs for defence and misdirects resources away from fiscal demands, domestic priorities, and emerging security challenges and threats. In the area of nuclear weapons alone, the potential price tag is breathtaking. The United States is poised to embark on programmes to build new nuclear-armed ballistic missile submarines (SSBNs) and strategic bombers at a cost of more than US\$400 billion and to extend the life of nuclear weapons deployed in Europe at a cost of US\$10 billion. Russia reportedly plans to spend Rub 1.9 trillion over the next decade to modernise its strategic nuclear forces, while the United Kingdom estimates the cost of Trident replacement

At a time of unprecedented austerity and tight national budgets, our publics are literally paying the price for this policy inertia, which needlessly raises costs for defence and misdirects resources away from fiscal demands, domestic priorities, and emerging security challenges and threats. In the absence of a new military and political strategy, there is a risk that security and stability in the Euro-Atlantic region will break down.

at £25 billion¹. A new approach to security would not save every one of these dollars, roubles, pounds, or euros from being spent, and there is an inherent limit to nuclear reductions if some nuclear-weapon states are building up their inventories or if new nuclear powers emerge. But over time, the savings could be substantial.

Although the Euro-Atlantic region no longer faces the threat of a devastating conventional or nuclear conflict and relations in the region have dramatically improved, a destabilizing combination of security policy inertia and lingering political friction remains. Outdated Cold War-era security concepts and their associated weapons and military postures (in particular, mutual assured destruction and nuclear forces on prompt-launch status), continue as if the Berlin Wall had never fallen, producing a dangerous asymmetry between military capabilities and true political partnership. In the absence of a new military and political strategy, there is a risk that security and stability in the Euro-Atlantic region will break down.

The heart of the problem is a corrosive lack of trust among nations in the region, exacerbated by an extremely difficult menu of issues, including regional security. Nuclear weapons, missile defences, prompt-strike forces, conventional forces in Europe, cybersecurity, and space are all vital, complex, and related topics at the core of building a peaceful and secure Euro-Atlantic community. This Euro-Atlantic "trust deficit" undermines cooperation, increases tensions, raises costs, and, ultimately, puts our citizens at unnecessary risk.

Lack of trust also undermines both strategic stability and Europe's ability to provide leadership on global security issues. Euro-Atlantic nations must work together to reduce the role of nuclear weapons in their national security policies, establish effective cooperation on missile defences, ensure that new military capabilities do not undermine stability, strengthen Euro-Atlantic understandings and confidence relating to conventional forces, and begin to cooperate on cybersecurity and space-related issues. If we do not, who else will lead on these interrelated security challenges?

Today's leaders have an historic opportunity to apply a fresh approach to Euro-Atlantic security. Recognizing that differences will continue in some form for some time, the common interests of nations in the Euro-Atlantic region are more aligned today than at any point in modern history. For this reason, we have an opportunity to move decisively and permanently towards a secure Euro-Atlantic region of increasing promise by applying a cooperative approach to the region's obstacles and opportunities, developed jointly by all nations in the region. In this way, the military risks and costs can be greatly reduced.

We need a new concept for building mutual security in the Euro-Atlantic region—a strategy that is informed by the interests of all states, delinked from the past, and grounded in the realities of the present and the hopes for a better future. This report recommends a fresh approach, one which could be developed jointly by all nations in the Euro-Atlantic region. The key to this strategy: a new, continuing process of dialogue mandated by the highest political levels, where security could be discussed comprehensively and practical steps could be taken on a broad range of issues.

¹ Estimates relating to the costs for maintaining and modernising nuclear forces in the United States, Russia, and the United Kingdom vary. See "U.S. Nuclear Weapons Budget: An Overview," Center for Nonproliferation Studies, March 7, 2013, http://www.nti.org/analysis/articles/us-nuclear-weapons-budget-overview/; I. Kearns, "Beyond the United Kingdom: Trends in the Other Nuclear Armed States," Discussion Paper 1 of the BASIC Trident Commission, British American Security Information Council, November 2011, http://www.basicint.org/sites/default/files/commission-briefing1.pdf; and D. Priest, "The B61 bomb: A case study in costs and needs," *The Washington Post*, 17 September, 2012.

II. KEY FINDINGS

The following six recommendations provide a foundation for building a new strategy through dialogue and practical steps.

1. A new dialogue on building mutual security must address core security issues through a dynamic process that directly deals with key divides. A fresh approach to building mutual security in the Euro-Atlantic region could ensure that all states confront one another's fears and distrusts and that lingering divides are effectively bridged. The goal would be to understand and address different threat perceptions; decrease risks of conflict; and increase security, cooperation, transparency, mutual defence, and stability for all nations.

This approach to building mutual security could facilitate progress on a broad range of issues. If all parties believe that a serious dialogue is underway to understand and deal with different threat perceptions, the parties can make progress, recognizing that these issues are all related to overall security and stability in the Euro-Atlantic region.

2. Political leaders must mandate the dialogue. Establishing a politically mandated dialogue in which senior civilian and military leaders are continuously engaged is the crucial first step. In its absence, no institution or forum is likely to succeed in developing a new approach to Euro-Atlantic security. This initiative is not likely to spring up from existing official institutions

and bureaucracies. A successful process will require that heads of state or heads of government (whichever is appropriate) in Moscow, European capitals, and Washington mandate the dialogue between civilian and military leaders.

Such a mandate could help create the essential positive dynamic for discussions that would further boost what must be a systematic effort to deepen cooperation and mutual understanding. As part of this dialogue, nations could discuss a range of practical, concrete steps relating to core security issues that together could increase transparency, mutual understanding, decision time for political leaders in extreme situations, and mutual defence capabilities.

A framework to advance dialogue could include increasing leadership decision time. The new dialogue on building mutual security could address practical steps to increase decision time and crisis stability for leaders, particularly during heightened tensions and extreme situations. Taking surprise or short-warning fears off the table by mutual understandings and subsequent agreements would significantly improve stability, particularly in a potential crisis.

PROPOSED GUIDING PRINCIPLES FOR SUCCESSFUL DIALOGUE

- Considering offence and defence, nuclear and conventional weapons, and cybersecurity in a new security construct
- Reducing the role of nuclear weapons as an essential part of any nation's overall security posture without jeopardizing the security of any of the parties
- Creating robust and accepted methods to increase leadership decision time during heightened tensions and extreme situations
- Transitioning from the remnants of mutual assured destruction to mutual understanding to mutual early warning to mutual defence to mutual security
- Enhancing stability by increased transparency, cooperation, and trust

To get started, leaders from a core group of Euro-Atlantic nations could appoint an informal Euro-Atlantic Security Contact Group, perhaps joined by a representative from the European Union (EU), the North Atlantic Treaty Organization (NATO), and the Organization for Security and Co-operation in Europe (OSCE). The purpose of the Contact Group would be to develop recommendations to leaders on key points, including the principles guiding this new dialogue, the civilian and military leaders who should be charged with this new responsibility, the issues to be addressed, and any early priorities.

Leaders could then meet to initiate the new dialogue on building mutual security in the Euro-Atlantic region, informed by the recommendations of the Contact Group. This meeting would provide a clean launch to a new process and new approach. Leaders could make clear that they seek to develop a process that will respond more quickly to changing technological and

political developments and will avoid rigid linkages that can result from a situation where every nation insists that their issues be addressed first or resolved before any others.

The dialogue could then proceed in both concept and practice in other tracks, including new ones, with the continuing involvement of leaders and the Contact Group. Existing tracks—such as the Russia-NATO Council and the Forum for Security Cooperation in the OSCE-could provide avenues for advancing specific issues. Some issues may be bilateral, involving neighbouring states; other issues might be multilateral, involving certain regions of Europe; and still other issues might be applicable throughout the Euro-Atlantic region and have broad implications for Asia and other regions, meaning that China and other key states will need to be engaged and their perspectives taken into account. Other existing agreements and decision-making mechanisms also could be considered. Clearly, the United States and Russia would have to work bilaterally to begin and advance key elements of this agenda.

- 3. Core principles should guide the new dialogue on building mutual security. Implementing the approach to building mutual security described in this report should be guided by a set of core principles consistent with the development of a flexible, phased, consultative approach to building mutual security in the Euro-Atlantic region. These guiding principles could include
- Considering offence and defence, nuclear and conventional weapons, and cybersecurity in a new security construct
- Reducing the role of nuclear weapons as an essential part of any nation's overall security posture without jeopardizing the security of any of the parties
- Creating robust and accepted methods to increase leadership decision time during heightened tensions and extreme situations
- Transitioning from the remnants of mutual assured destruction to mutual understanding to mutual early warning to mutual defence to mutual security
- Enhancing stability by increased transparency, cooperation, and trust

- 4. The dialogue could support specific steps that would not require new legally binding treaties but could help facilitate treaties where necessary. The objective of the dialogue would be to develop practical steps that could be taken through politically binding arrangements. This approach could create a positive dynamic for discussions among member states of the Euro-Atlantic region and further boost what will be a continuing effort in the years ahead to deepen cooperation. Such an approach could also
- Inform negotiation of any new legally binding treaties and improve prospects for their approval by legislatures and parliaments
- Include efforts to adjust or update existing treaties and agreements to ensure that they are appropriate to the current security environment
- **5. Priorities will be essential for making progress.** The approach recommended in this report is meant to be applied broadly. It could cover nuclear forces, missile defences, prompt-strike capabilities, conventional forces, cybersecurity, and space, as well as their relevant domains (e.g., air, sea, land, and space).

Within this flexible framework for dialogue, priorities could be established and progress implemented in phases over the next 15 years. Over time, increasing transparency, awareness, decision time in extreme situations, and capabilities for cooperative defence—both active and passive—could increase trust, build confidence, and provide a foundation for subsequent steps.

Issues relating to nuclear weapons and missile defence should receive the highest priority in the first five years, with a premium on the early implementation of options that will increase transparency, confidence, and trust. However, it should also be possible to take steps relating to conventional forces, cybersecurity, and space during the initial phase. In all instances, practical progress in one area will help catalyze progress in others. Specific illustrative steps with phasing are laid out in Section IV of this report.

6. A new Euro-Atlantic Security Forum could be established to implement many of the specific steps proposed in this report and further ongoing discussions. A principal recommendation of this report is that although existing structures can and should be used and improved where necessary, a new Euro-Atlantic Security Forum that begins with a new process of dialogue could

RECOMMENDATIONS

- 1. A new dialogue on building mutual security must address core security issues through a dynamic process that directly addresses key divides.
- 2. Political leaders must mandate the dialogue.
- 3. Core principles should guide the new dialogue on building mutual security.
- 4. The dialogue could support specific steps that would not require new legally binding treaties but could help facilitate treaties where necessary.
- 5. Priorities will be essential for making progress.
- 6. A new Euro-Atlantic Security Forum could be established to implement many of the specific steps proposed in this report and further ongoing discussions.

be established. Such a forum could play a crucial role in (a) implementing key steps once agreements have been reached and (b) sustaining the dialogue on building mutual security. The establishment of this new forum also could elevate the profile of this new initiative and help symbolise and instil this fresh approach to building mutual security. Specifically, the forum could

- Provide a mechanism for implementing many of the specific steps discussed in this report relating to nuclear forces, missile defence, prompt-strike capabilities, conventional forces, cybersecurity, and space.
 For example, the forum could begin as a venue for establishing Missile Defence Cooperation Centres and later for implementing reciprocal transparency and confidence-building measures relating to nuclear forces, or the pooling and sharing of data relating to cyberthreats
- Provide an integrating platform across all potential military domains—land, sea, air, and space
- Over time, be used as a venue for discussions between civilian and military specialists on core Euro-Atlantic security issues, such as comparison and development of joint threat assessments, both regionally and globally; military doctrines; and so forth

In summary, addressing core security issues within the unifying policy framework of a dialogue for building mutual security could yield an historic and long overdue transformation in Euro-Atlantic security. Most important, the process could assist all parties in overcoming many of the political fears and divides that have bogged down progress in the past. It could also provide an important impetus to cooperation in the Euro-Atlantic region on an even broader front, including economics, energy, and other vital areas of the globalization process.

The following sections of this report outline objectives and steps that could be discussed as part of this new dialogue in six areas (nuclear forces, missile defences, prompt-strike forces, conventional forces in Europe, cybersecurity, and space). The report concludes with an illustrative matrix of steps with two phases.

III. THE ROAD AHEAD: STEPS THAT LEADERS CAN CONSIDER

NUCLEAR FORCES

Steps to Consider

- 1: Reciprocal U.S.-Russian commitments on reducing prompt-launch status
- 2: Reciprocal confidence-building measures on nuclear ballistic missile submarines
- 3: Agreed tiered U.S.-Russian strategic nuclear force postures
- 4: UK-French shadow declarations
- 5: Reciprocal transparency, security, and confidence building on tactical nuclear weapons
- 6: Reciprocal cuts in tactical nuclear weapons
- 7: Five-year target for consolidation of tactical nuclear weapons with mutual reductions

STRATEGIC NUCLEAR FORCES

Today, U.S. and Russian strategic nuclear forces are set primarily to promptly destroy each other. Even under the latest strategic nuclear arms accord, each country will maintain thousands of nuclear warheads on hundreds of ballistic missiles ready for prompt launch and capable of hitting their targets in less than 30 minutes. Although the risk of a deliberate nuclear exchange between the United States and Russia has receded, the risk of an accidental or unauthorised launch of a ballistic missile remains and may have increased as cyberthreats and nuclear missile capabilities proliferate globally:

• Prompt-launch status on ballistic missiles puts pressure on leaders in each country to maintain "launch on warning" or "launch under attack" or the Russian concept of ответно-встречный удар (second/retaliatory strike) options to ensure that there can be no advantage from a first strike.

If both the United States and Russia gradually remove nuclear weapons from prompt-launch status, taking into account developments in other nations, the threat of rapid mutual assured destruction as well as the chance of accidental, mistaken, or unauthorised launch can be sharply reduced.

- This status increases the risk that a deliberate decision to use ballistic missiles will be made in haste on the basis of faulty or incomplete data with disastrous consequences.
- Large numbers of both intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs) deployed continuously on promptlaunch status also multiplies the risk of a purely accidental or unauthorised launch of nuclear ballistic missiles.

Given the U.S.-Russian relationship today, the question arises about what requires both countries to continue to live with the risk of an accidental or unauthorised nuclear launch. The answer appears circular: as long as Russia and the United States can launch hundreds of nuclear ballistic missiles on short notice against each other, both must maintain a similar capability.

If both the United States and Russia gradually remove nuclear weapons from prompt-launch status, taking into account developments in other nations, the threat of rapid mutual assured destruction as well as the chance of accidental, mistaken, or unauthorised launch can be sharply reduced. The more time the United States and Russia build into the process for ordering a nuclear strike, the more time is available to gather data; exchange information; gain perspective; discover errors; and avoid an accidental, mistaken, or unauthorised launch. For the United States and Russia, keeping nuclear weapons on prompt-launch status now *increases* the risk it was designed to reduce.

With respect to British and French strategic nuclear forces, the United Kingdom has four Vanguard submarines—its only remaining nuclear deterrent since the 1990s—with at least one on patrol at all times. That one submarine is normally kept at an operational status of several days' notice to fire, and its missiles are not targeted at any country. The French maintain a nuclear deterrent of nuclear-powered SSBNs, with four operational since the end of 2010. Currently, at least one French SSBN is at sea at any given time, and another is in overhaul. In addition, France has a number of nuclear air-to-surface missiles that can be deployed on land-based and carrier-based aircraft.

TACTICAL NUCLEAR WEAPONS

With the exception of the U.S.-Soviet/Russian Presidential Nuclear Initiatives (PNIs) in 1991 and 1992, tactical nuclear weapons have remained outside bilateral U.S.-Russian arms control discussions and agreements. Moreover, the PNIs contained no provisions for monitoring or verification of U.S. and Russian tactical nuclear weapons inventories—though the PNIs led to perhaps 17,000 tactical nuclear weapons being withdrawn from service.

In 1997, Presidents Clinton and Yeltsin agreed that in the context of the Strategic Arms Reduction Treaty (START) III negotiations, the United States and Russia would explore possible measures relating to tactical nuclear systems, including appropriate confidence-building and transparency measures. However, both the 2002 Moscow Treaty and the 2011 New START Treaty applied only to operationally deployed strategic nuclear warheads.

Tactical nuclear weapons are considered to be the most likely targets for terrorists. Their relatively small size and uncertain access prevention mechanisms, or permissive action links (PALs)—particularly in older weapons—contribute to their vulnerability to theft and unauthorised use.

Russia's erosion of conventional military capability, distrust of NATO enlargement, and concerns about maintaining its territorial integrity have led it to increase dependency on nuclear weapons, including retaining tactical nuclear weapons greatly in excess of those deployed by the United States in Europe. Not surprisingly, many NATO nations see Russian tactical nuclear weapons as a threat directed primarily, if not exclusively, at them, and insist on Russian reciprocal reductions as the price for any further changes to NATO's nuclear posture. Steps taken by NATO to reassure allies can look suspicious or even threatening when viewed from Moscow—especially by military professionals who believe their job is to assume the worst case. In the eyes of Russian leaders, these weapons also play a critical role as an equaliser for the weakness of the nation's conventional forces vis-à-vis other nations.

In two op-eds published separately in *The Wall Street Journal* in 2007 and 2008, former U.S. Secretaries of State George Shultz and Henry Kissinger, former U.S. Secretary of Defense William Perry, and former U.S. Senator Sam Nunn argued for eliminating tactical nuclear weapons and beginning a dialogue, including within NATO and with Russia, on their consolidation to enhance security and as a first step towards their careful accounting and eventual elimination. Others have echoed their call.²

OBJECTIVES

By making a bold move towards de-emphasising the role of nuclear weapons in their own security policies prior to the 2015 Nuclear Non-Proliferation Treaty (NPT) Review Conference, the United States, Europe, and Russia could reduce the danger posed to nations in the Euro-Atlantic region and increase their credibility in encouraging other nations not to acquire nuclear weapons. Such actions could also assist in building international cooperation required to apply pressure on nations still seeking nuclear weapons and rally the world to take essential steps in preventing catastrophic terrorism, consistent with United Nations Security Council Resolution (UNSCR) 1540.

The dialogue related to nuclear forces could centre on measures designed to reduce the role of nuclear weapons in national security strategy, mobilise efforts to de-emphasise the importance of nuclear weapons globally, convince others to forgo nuclear arms, and prevent terrorists from acquiring nuclear materials or weapons. The overarching goal should be to enhance strategic stability and ensure that nuclear weapons are never used.

With respect to force posture and operations, both strategic and tactical, nations in the Euro-Atlantic region could

- Support sharp reductions in strategic nuclear weapons deployed on prompt-launch status
- Support nuclear force postures that include sharp reductions in deployed and nondeployed nuclear weapons, both strategic and tactical
- Encourage a process of consolidation, reduction, and eventual elimination of tactical nuclear weapons, which today are more of a security risk than asset to the United States, Europe, and Russia
- Reinvigorate the principle of cooperation by tangibly reducing nuclear risks in the Euro-Atlantic region
- Develop proposals on nuclear threat reduction that could later provide a foundation and template for reducing nuclear risks globally
- Discuss joint efforts to comply with and strengthen UNSCR 1540

POSSIBLE STEPS

1. Reciprocal U.S.-Russian commitments to remove a percentage of strategic nuclear forces from promptlaunch status (applied to existing force levels or levels under the New START ceiling). Parties could announce plans to take a percentage of their strategic nuclear forces under New START off prompt-launch status. As part of this announcement, the parties could indicate their procedures for removing weapons from prompt-launch status and hold discussions on this initiative, including the procedure for removing weapons from prompt-launch status. This initiative could be accompanied by a proposal on transparency and confidence building,

² All five articles written by Shultz, Perry, Kissinger and Nunn are available at www.nuclearsecurityproject.org/op-eds. The site also includes links to statements of support from leaders around the world who have echoed many of the positions of the four American statesmen.

in which the parties would offer the opportunity to observe or inspect the procedure and the results of removing weapons from prompt-launch status. This step could be accomplished at least in part using procedures under the existing New START treaty.

Contribution to advancing guiding principles: This approach, although removing only a percentage of missiles from prompt-launch status, would be a solid start to an ongoing process of reducing pressure on U.S. and Russian nuclear triggers and increasing leadership decision time in extreme situations.

2. Reciprocal confidence-building measures relating to ballistic missile submarines. Although the operational practices of U.S. ballistic missile submarines are not known publicly, Russia has concerns that U.S. Trident submarines patrol close enough to its coasts to launch missiles and hit their targets within 10 to 15 minutes. The United States could commit to keeping its ballistic missile submarines farther from their targets (either at the edge of their range or just outside it). In recognition that today Russia reportedly rarely deploys its ballistic missile submarines in this manner, Russia could respond in kind perhaps with an exchange of declarations between the U.S. and Russian presidents. Given the extreme difficulty in monitoring the absence or presence of submarines in a particular ocean area, no monitoring or verification would be associated with this commitment—the declarations would be made as part of an effort to build confidence and predictability.

The eventual participation of the United Kingdom and France—who both deploy ballistic missile submarines—in this confidence-building measure would be encouraged.

Contribution to advancing guiding principles: A U.S. commitment along these lines could increase missile flight times to at least 25 minutes and thereby reduce Russian anxiety about a very short-warning attack. The extra time provided by keeping ballistic missile submarines away from Russia (and the United States) also could reinforce efforts to reduce the prompt-launch status of land-based ballistic missiles.

3. Agreed tiered U.S.-Russian strategic force postures. The stated objective would be to remove all nuclear weapons from prompt-launch status globally over the next 10 to 15 years, including the use of essential monitoring and inspections to ensure verification. As a first step that could move us strongly in this direction, the United States and Russia could limit the number of warheads on prompt-launch status to several hundred as part of a tiered force posture. Specific steps are described below.

The presidents of Russia and the United States could announce a goal to remove nuclear weapons from prompt-launch status. The long-term goal would be to have no weapons deployed this way by any nation. The presidents could also initiate a process to lead to this goal over time:

- First, both countries could commit to a process to begin removing nuclear weapons from prompt-launch status.
- *Second*, as an intermediate step, both countries could limit the number of warheads on prompt-launch status to several hundred as part of a tiered posture.
 - » Within five years, both the United States and Russia could limit the number of warheads on promptlaunch status to several hundred deployed on ICBMs and SLBMs.
 - » This posture would have a first tier with a limited number of weapons on day-to-day alert status, a second tier with delayed response of days or perhaps weeks, and a third tier that required longer periods to be brought back to readiness. The objective would be to move most strategic forces to the second and third tiers.
 - » U.S. and Russian ICBM and SLBM warheads could be removed from their missiles and subject to a politically binding transparency regime designed to provide confidence that (a) warheads had been removed from ICBMs and SLBMs, (b) numerical limits associated with each of the three tiers (deployed and nondeployed) were being adhered to, and (c)

any move to return warheads to ICBMs or SLBMs from the second or third tier could be detected. The focus would be to ensure that ICBMs and SLBMs are no longer deployed with warheads in excess of the first tier limit.

» Other options for removing ICBMs and SLBMs from prompt-launch status without removing warheads are also possible (e.g., removing onboard batteries or dismantling pressure tubes for opening silo doors), including during monitoring through parties' inspections. The time necessary to restore prompt-launch status under these options could be equal to the time necessary to return warheads to ICBMs and SLBMs.

In addition to enhanced transparency, ICBMs and SLBMs could be subject to inspections already in place in the New START Treaty. The two sides might also agree to additional measures in the Bilateral Consultative Commission under New START. Both sides would be permitted to continue training routines.

The United States and Russia could begin a dialogue with the United Kingdom, France, and China in anticipation of a subsequent agreement to remove all warheads from prompt-launch status (although the United Kingdom's ballistic missile submarine force might already fit into this construct). Even more broad, the United States and Russia could engage in a dialogue with other nuclear-weapon states to de-emphasise globally the role and importance of nuclear weapons and gain mutual assurances that no state, in the absence of an actual or imminent threat, will operationally deploy its nuclear weapons on prompt-launch status.

Contribution to advancing guiding principles: The lower number of weapons with prompt-launch capability could sharply reduce the chance that either side could launch a first strike which could totally eliminate the other side's weapons—thus improving the assured survivability of forces. This approach, although not yet removing all missiles from prompt-launch status, could reduce the pressure on the U.S. and Russian triggers and the concern that the other side would pull the trigger on warning.

4. UK-French shadow declarations. As a voluntary confidence-building measure, the United Kingdom and France could provide data consistent with certain specific data exchanged between the United States and Russia under the New START Treaty. Russia and the United States could also provide certain specific data they exchange under New START to the United Kingdom and France. The United Kingdom and France might also consider broader declarations with respect to future plans for their nuclear forces.

Contribution to advancing guiding principles: Including the United Kingdom and France in a data exchange on strategic forces would be an important step towards building increased transparency, cooperation, and trust among all nuclear-weapon states in the Euro-Atlantic region.

5. Reciprocal transparency, security, and confidence building on tactical nuclear weapons. The United States, NATO, and Russia could begin consultations regarding reciprocal steps that could be taken to increase transparency, security, and confidence building. For example, the United States could elaborate on the stockpile data released in May 2010 (5,113 warheads in the U.S. arsenal) indicating the number of strategic and tactical nuclear weapons within this total and the number of U.S. tactical nuclear weapons now in Europe. Russia could provide similar data. Information could also be exchanged regarding implementation of the 1991–1992 PNIs, visits could be made to agreed storage sites in the

As a voluntary confidence-building measure, the United Kingdom and France could provide data consistent with certain specific data exchanged between the United States and Russia under the New START Treaty.

A five-year target for completing consolidation of U.S. tactical nuclear weapons to the United States, combined with a process of mutual reductions with Russia, could give a greater sense of direction and pace to nuclear risk reduction in Europe.

Euro-Atlantic region, and other steps could be taken to increase confidence (e.g., a joint threat and security assessment or nondeployment zones stated as confidence-building measures). The United States and Russia could also discuss best practices relating to the safety, security, storage, and transfer of nuclear weapons.

Contribution to advancing guiding principles: The implementation of data exchanges, confidence-building measures, and more inclusive U.S., NATO, and Russian threat assessments could help increase transparency and confidence and narrow the gap between Russian and Western security perceptions. This step could also make a valuable contribution to reinvigorating cooperation on European security.

6. Reciprocal cuts in tactical nuclear weapons. The United States and NATO could support the European Leadership Network's (ELN) call for an immediate 50 percent reduction in U.S. tactical nuclear weapons now stationed in Europe, to be consolidated back to the United States and eventually eliminated. Russia could take reciprocal steps, and the parties could commence a dialogue aimed at further steps.

Contribution to advancing guiding principles: This step could be widely perceived as a concrete contribution to both reducing the nuclear risk in Europe and devaluing the role of nuclear weapons in European security policies.

7. Five-year target for consolidation of tactical nuclear weapons with mutual reductions. In the context of seeking mutual reductions of tactical nuclear weapons, beginning with enhanced transparency, security, and confidence building for U.S. and Russian tactical nuclear weapons, the United States and NATO could announce support for further reductions of U.S. tactical nuclear weapons in Europe, with the announced target of completing the consolidation of U.S. tactical nuclear weapons to the United States within five years. The final timing and pace would be determined by broad political and security developments between NATO and Russia, taking into account Russia's tactical nuclear posture and the full range of political and security issues relating to Euro-Atlantic security.

Contribution to advancing guiding principles: A five-year target for completing consolidation of U.S. tactical nuclear weapons to the United States, combined with a process of mutual reductions with Russia, could give a greater sense of direction and pace to nuclear risk reduction in Europe. Moreover, the consolidation, reduction, and elimination of tactical nuclear weapons (combined with transparency, security, and confidence-building measures) whose very roots are grounded in Cold War concepts of deterrence could send a strong signal that European nations including Russia are moving away from mutual assured destruction to a new concept for mutual security.

MISSILE DEFENCES

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Steps to Consider

- 1: Reciprocal transparency measures
- 2: Joint missile defence exercises
- 3: Pooling and sharing of data and information
- 4: Political commitments

In December 2001, President George W. Bush announced that the United States would withdraw from the Anti-Ballistic Missile (ABM) Treaty effective June 2002. Over the past decade, as the U.S. missile defence programme has evolved during both the George W. Bush and Obama administrations, Russia has expressed concern that the U.S. missile defence programme has no defined endpoint and thus at some point could undermine Russia's strategic nuclear deterrent. The New START agreement includes language in its preamble recognizing the interrelationship between strategic offensive arms and strategic defensive arms. However, the United States and Russia have different views of what this interrelationship might mean going forward.

For Europe, the stakes associated with missile defence have never been higher, following the agreement reached in 2010 at Lisbon in the NATO-Russia Council to pursue missile defence cooperation. If progress can be made in developing a joint approach to missile defence, it will surely create a positive dynamic for progress on other security issues. Indeed, cooperative missile defence offers an avenue to the larger goal of transforming the very nature of security relations among member states of the Euro-Atlantic region. Conversely, failure to develop a cooperative approach risks undermining

relations and greatly reducing the prospects of moving towards a more inclusive Euro-Atlantic security community.

Development of cooperative approaches to missile defence could be based on several basic factors:

- The United States/NATO and Russia are no longer adversaries. Today, they are often, but certainly not always, partners at the political level. The continuing deficit of trust in each other's intentions and the construct of mutual nuclear deterrence inherited from the Cold War, however, prevents the development of a full-scale, unified missile defence system. Mutual trust can be enhanced only through participation of both parties in mutual activities in the area of missile defence, a key issue at the core of strategic stability and development of a peaceful and secure Euro-Atlantic community.
- Russia, the United States, and NATO accumulated significant experience in the area of missile defence in their theatres of operation. However, in such areas as receiving and exchanging information from systems for early warning of a missile strike, there is a potential that has not yet been realised.
- Future collaboration in the area of interconnected missile defence will require the development of new approaches to interaction when it comes to military technology and exchange of information.

OBJECTIVES

Develop a cooperative process and approach to effective missile defence in the Euro-Atlantic region that could

- Provide an enhanced threat picture, notification of missile attack, and enhanced missile defence capabilities
- Establish a new pattern for mutual work to enhance trust and stimulate cooperation in other areas
- Build a foundation for Euro-Atlantic states to lead the broader international effort in addressing global threats posed by ballistic missile proliferation, nuclear proliferation, and terrorism

The Missile Defence Cooperation Centres also could provide a foundation for a new Euro-Atlantic Security Forum with broader responsibilities relating to nuclear and conventional forces, cybersecurity, and space.

POSSIBLE STEPS

1. Reciprocal transparency measures regarding missile defence systems and capabilities. This approach could include a suite of transparency measures for parties to consider, perhaps leading to an agreed set of parameters for exchanging data. Specific transparency measures could include offering technical briefings of systems capabilities and observations of tests, as well as annual declarations of missile defence systems (e.g., numbers of silos and mobile launchers, interceptor missiles, radars, missile defence-capable ships, and so forth, applied to present and projected capabilities). In addition to the annual declarations, changes in these declarations also could be announced.

Contribution to advancing guiding principles: Reciprocal transparency could highlight the strictly limited capabilities of missile defences deployed in Europe and underscore that these European defences could in no way be supportive of a pre-emptive ballistic missile strike against Russian strategic nuclear forces.

2. Joint missile defence exercises. This step could include computer simulations, command post and field exercises, joint training, and the actual use of missile defence systems of Russia, the United States, and NATO. These joint missile defence exercises would provide familiarity with equipment, doctrine, tactics, and capabilities and also create a foundation for the compatibility of information systems and interception means.

Contribution to advancing guiding principles: As with reciprocal transparency measures, joint missile defence exercises could increase confidence that these defences do not undermine strategic deterrence and enhance their potential effectiveness through joint operations against non-strategic missile threats. Both characteristics could increase leadership decision time.

3. Pooling and sharing of data and information from early warning radars and satellites in Missile Defence Cooperation Centres staffed by U.S., NATO, and Russian officers who would provide an enhanced threat picture and notification of missile attack.3 Nations could pool data and information from a network linking their respective satellite and radar sensors and those of other participating states. Data and information from NATO/U.S./Russian satellites and radars would continue to go to their respective Command and Control Centres. But data and information from their respective launch-detection satellites and surveillance/ acquisition radars would also go, in real time, to the newly formed Missile Defence Cooperation Centres (subject to prior screening or filtering by each party to protect sensitive data and information).

This shared data and information would be fused in the Missile Defence Cooperation Centres to give all parties an enhanced threat picture and notice of ballistic missile attack. This fused data and information would in turn be passed in parallel to both the NATO/U.S. and the Russian Command and Control Centres. This approach would enhance the data and information available to both parties' Command and Control Centres—giving each party the data and information from the other party's launch detection satellites and surveillance/acquisition radars.

There would be no compromise of sovereignty, and each party would protect its own territory. But separate operational protocols could be negotiated in advance to commit one party to intercept a missile flying over its territory though aimed at the territory of another party.

³ For a more complete discussion of the approach described here, see *Missile Defense: Toward a New Paradigm*, Euro-Atlantic Security Initiative (EASI) Working Group on Missile Defense, February 2012, http://carnegieendowment.org/2012/02/03/missile-defense-toward-new-paradigm/9cvz

Russia and NATO together would develop a cooperative approach based on full partnership, focusing initially on the threat from medium- and intermediate-range ballistic missiles. Issues associated with the threat of long-range ballistic missiles would be left for later consideration. Cooperation on the medium- and intermediate-range threat would build trust and confidence among the parties and could make it easier to resolve the more difficult issues associated with long-range ballistic missiles at a later time.

Other countries could participate if they do not develop or acquire their own medium- or intermediate-range ballistic missiles and cooperate in efforts to prevent the proliferation or spread of these missiles.

The Missile Defence Cooperation Centres also could provide a foundation for a new Euro-Atlantic Security Forum with broader responsibilities relating to nuclear and conventional forces, cybersecurity, and space.

Contribution to advancing guiding principles: Giving all participants a more transparent and complete picture of the threat environment and notification of ballistic missile attack could substantially increase leadership decision time in extreme situations. Moreover, this option could be a lynchpin in moving from mutual assured destruction to mutual understanding to mutual early warning to mutual defence to mutual security, because it would contribute to each point on the continuum. Importantly, a visible and substantive agreement on missile defence cooperation along these lines could energise cooperative efforts on a broad front and help bury the suspicion and mistrust that still exists among nations in Europe.

4. Political commitments. The United States, NATO, and Russia could provide written political commitments not to deploy their missile defences in ways that would undermine stability. (Russia has insisted on legally binding guarantees.)

These commitments could be consistent with the substantive and geographic approach described in Step 3, above, and the assumption that the current dead-end dialogue in this area cannot be resolved completely and immediately. Instead, the problem could be solved step-by-step, beginning with creating a foundation for practical cooperation and interaction in the area of missile defence. A Russian/U.S. political declaration could include principles of cooperation in the area of missile defence based on full partnership for countering ballistic missile strikes. Signing of the declaration would create conditions for reaching specific agreements.

Contribution to advancing guiding principles: Written political commitments could further demonstrate a political meeting of the minds regarding missile defence intentions and capabilities, underscoring the intent of leaders to cooperate on this issue, today and in the future. In combination with Step 1, the commitments could constitute self-restraint, in that missile defence deployments would coincide with the threat and would not undermine stability.

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PROMPT-STRIKE FORCES

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Steps to Consider

- 1: Reciprocal transparency
- 2: Legally binding commitments
- 3: Reciprocal basing commitments

Prompt-strike forces, as conceived in the United States, seek to provide the capability to attack terrorists, weapons of mass destruction, or other targets worldwide within 60 minutes using conventional weapons. During the George W. Bush administration, the United States considered converting some strategic nuclear missiles into strategic long-range conventional weapons with precision guidance systems. The plan met with great scepticism in Congress, however, and there is currently no money and no programme to pursue it. The United States is now considering other non-ICBM/SLBM prompt-strike options.

In Russia's view, the unlimited posturing of promptstrike forces can disrupt the current balance in the area of strategic offensive weapons and, eventually, undermine strategic stability not only in the Euro-Atlantic region but also across the world. Factoring in that prompt-strike forces are comparable to weapons of mass destruction in terms of their capabilities, Russia believes they should be subject to limitation based on international agreements.

It should be noted that the development, deployment, and employment of prompt-strike capabilities could raise concerns about lowering the threshold for the use of conventional long-range ballistic missiles or similar systems, or significantly raise the risk that a country that detected the launch of a prompt-strike system might

fear it was the target of an attack and respond accordingly, including with nuclear weapons. Also, there are concerns that prompt-strike forces could be the leading edge of a pre-emptive strike against command, control, communications, and strategic assets. Problems relevant to the future of the Intermediate-Range Nuclear Forces (INF) Treaty also could arise with regard to the development of prompt-strike systems.

OBJECTIVES

In the event of the development and deployment of prompt-strike systems, ensure that they do not undermine strategic stability, increase pressures on leadership decision time, or reduce trust and cooperation on other core security issues. As part of this process, governments would need to discuss and determine what constitutes a prompt-strike system.

POSSIBLE STEPS

1. Reciprocal transparency. To eliminate or at least reduce the risk that a country might mistakenly perceive itself to be the focus or target of prompt-strike forces, governments could devise a system to provide programmatic and operational transparency and confidence building, including advance notification and observation (where relevant) of prompt-strike system test launches, prompt-strike forces exercises, and their imminent use.

Under this approach, information could be exchanged through the Missile Defence Cooperation Centres staffed by U.S., European, and Russian personnel or a new Euro-Atlantic Security Forum. Such a system would need to provide credible warning of imminent use of prompt-strike forces to be effective—possibly a difficult standard to meet in a scenario involving an operational use of prompt-strike forces during a crisis.

However, all measures should be taken to prevent a situation in which a country could mistakenly conclude that it is a target of prompt-strike forces.

Contribution to advancing guiding principles: Enhanced programmatic and operational transparency regarding prompt-strike forces—combined with advance notification of imminent use—could help ensure that such prompt-strike systems do not undermine trust, cooperation, and strategic stability.

2. Legally binding commitments. Beginning with the United States and Russia, countries could agree to quantitative limits on developing and deploying promptstrike forces, as well as possibly technical specifications of these forces. Such obligations could be included in a legally binding agreement. The purpose would be to prevent an arms race in the area of highly accurate longrange systems with conventional weapons.

Contribution to advancing guiding principles: Legally binding commitments in the development and deployment of prompt-strike forces could help mitigate their destabilizing impact on strategic stability. The signing of an agreement also could enhance countries' mutual trust with respect to one another's intentions. Such an approach also may discourage other countries from pursuing weapons of mass destruction as an alternative method for achieving their national security.

3. Reciprocal basing commitments. States could announce what bases and in what numbers prompt-strike forces will be deployed. These bases and systems also could be segregated from any nuclear weapons-related activities or deployments, with an agreed number of site visits by representatives from other countries. In this scenario, early-warning systems—assuming they had reliable coverage and were aided by the practice of advance notification of imminent use of prompt-strike forces—could distinguish between the use of prompt-strike versus nuclear forces.

Contribution to advancing guiding principles: Commitments relating to the basing of prompt-strike systems could help ensure that their deployment did not undermine strategic stability.

All measures should be taken to prevent a situation in which a country could mistakenly conclude that it is a target of prompt-strike forces.

CONVENTIONAL FORCES IN EUROPE

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Steps to Consider

- 1: Strengthen Confidence- and Security-Building Measures in Europe
- 2: Strengthen the Treaty on Open Skies
- 3: Seek politically binding agreement: Key CFE Treaty provisions with Confidenceand Security-Building Measures

It is the conventional forces-related piece of the European security puzzle—the perception of relative weakness in conventional forces—that has provided the rationale for tactical nuclear weapons deployments in Europe dating back to the 1950s. Today, NATO says that it does not consider any country to be its adversary and that it poses no threat to Russia. Russia, however, looks at NATO's conventional capabilities relative to

It is the conventional forces-related piece of the European security puzzle—the perception of relative weakness in conventional forces that has provided the rationale for tactical nuclear weapons deployments in Europe dating back to the 1950s. its own and, when combined with NATO's geographic advance and emerging missile defence capabilities, perceives a prospective threat to its security—and the need to maintain tactical nuclear weapons as a counterbalance. Additionally, although the Russian conventional force deployments clearly do not present a threat to Western Europe, some NATO members and other states bordering Russia fear that Moscow could deliver a substantial blow and see Russian tactical nuclear weapons deployments as threatening. Some nations in the Euro-Atlantic region remain concerned over the prospect of force concentrations close to national borders.

CFE TREATY

The 1990 Conventional Armed Forces in Europe (CFE) Treaty established equal limits between NATO and Warsaw Pact force levels in five equipment categories: tanks, armoured combat vehicles, artillery, combat aircraft, and attack helicopters. It also established significant transparency about those forces through information exchange and on-site inspections. The CFE Treaty's intent was to establish a secure and stable balance of forces in Europe. However, the end of the Warsaw Pact and the Soviet Union in 1991; the withdrawal of Russian forces from Central Europe, the Baltic States, and the Commonwealth of Independent States; the outbreak of military conflicts; and the enlargement of NATO all have called into question the CFE Treaty's continuing relevance and effectiveness.

In 1996, CFE parties agreed that it was necessary to amend the CFE Treaty and began negotiations to do so. The CFE Flank Agreement was adopted to provide higher equipment levels in the treaty's "flank" (north and south) region; it entered into force in 1997.

In 1999, the Adapted CFE Treaty, together with the CFE Final Act, was adopted at the OSCE Istanbul summit. The revisions agreed there transformed the treaty from an agreement based on group limits to one based on limits for individual states parties. They also included an important provision that allowed individual states to accede to this new regime. This provision was particularly important for the Baltic Republics and countries in the Balkans. The associated CFE Final Act contained political commitments to resolve Russian stationing of forces issues in Georgia and Moldova.

Russia ratified the Adapted CFE Treaty in 2004. NATO allies, however, took the position that they would not ratify the Adapted CFE Treaty until the political commitments attached to the CFE Final Act (relating to the removal of Russian forces from the territory of Georgia and Moldova) were fulfilled. Russia maintained that all commitments relating to the CFE Treaty had been fulfilled and viewed NATO's condition as unjustified. Proposals to resolve this impasse were unsuccessful. On December 12, 2007, Russia suspended CFE Treaty implementation, refusing to accept inspections and ceasing to provide information to other CFE Treaty parties on its military forces as required by the Treaty. The 2008 Georgia conflict further clouded the future of the CFE Treaty; in November 2011, the United States and its NATO allies announced that they would cease carrying out certain obligations with regard to Russia.

Because of the dramatic changes in the European security environment over the past 20 years, the CFE Treaty long ago lost its original rationale: a short-warning, strategic conventional attack by Russia against NATO, or vice versa, is unthinkable, though historical animosities add to continuing fears and concerns.

That said, the CFE Treaty provided confidence building and stability benefits for its parties for 17 years—well beyond the end of the Cold War. Many benefits remain relevant today to the concept of increasing transparency, understanding, leadership decision time, and mutual defence in the Euro-Atlantic region as a whole or in sub-regions:

- The CFE Treaty's transparency provisions—the information exchange and inspection regime—and the
 Joint Consultative Group composed of treaty parties
 enhanced confidence and predictability in force levels.
- The CFE Treaty is woven into the fabric of European security, and there is well-founded concern that its final unravelling could exacerbate tensions and obstruct progress on priority issues.
- In the absence of the CFE Treaty, or an agreed Euro-Atlantic answer to the question of what comes next with respect to conventional forces in Europe, the final unravelling of the CFE Treaty will contribute to the perception, if not the reality, of a Europe once again divided.

FOUR ADDITIONAL CONVENTIONAL FORCE PILLARS

In addition to—or in the absence of—the CFE regime, four other pillars to the Euro-Atlantic security fabric relate to conventional forces in Europe: the Dayton Accords modelled on CFE; the Vienna Document including a range of Confidence- and Security-Building Measures (CSBMs) applied to all OSCE countries; the Treaty on Open Skies providing for aerial overflights and imaging of much of Europe; and the Wassenaar Arrangement promoting transparency and greater responsibility in transfers of conventional arms and dual-use goods and technologies.

The CFE Treaty is woven into the fabric of European security, and there is well-founded concern that its final unravelling could exacerbate tensions and obstruct progress on priority issues.

Expanding the application of the Treaty on Open Skies and extending technical collection capabilities could increase leadership decision time and mutual understanding through greater cooperation, transparency, and trust.

OBJECTIVES

In the wake of the impasse in bringing the Adapted CFE Treaty into force and now the suspension of obligations by parties under the existing CFE Treaty, finding a way forward that supports the interests of all states and enhances transparency, predictability, and stability would be a crucial step in reinforcing the independence of all states in the Euro-Atlantic region, reassuring NATO allies, reducing Russian concerns over NATO, and building stronger relations with Russia. The objectives of such a process could be the following:

- Preserve and expand the building blocks of an integrated European security architecture
- Maintain and, if possible, strengthen a Euro-Atlantic community-wide regime relating to conventional forces that centres on transparency, predictability, force limits, and consultations that increase leadership decision time

- Seek to update and strengthen both the Vienna Document and the Treaty on Open Skies so that they remain relevant and viable as transparency and confidence-building measures that reflect the emerging realities of European security
- Without prejudice to the future of the CFE Treaty, do everything possible to continue a process of reductions with transparency, including the continued functioning of the Vienna CSBM Document, the Treaty on Open Skies, and the Dayton Accords and current, nonthreatening conventional force deployments and postures.

POSSIBLE STEPS

1. Strengthen CSBMs in Europe. States participating in the Vienna CSBM Document could support increases to the evaluation visit quota and adjustments to the way observations are scheduled. In addition, states in the Euro-Atlantic region could consider regional military liaison missions—that is, reciprocal agreements between nations that would permit small numbers of officers to monitor activities in defined regions. This provision could be included as an expanded Vienna Document.

Contribution to advancing guiding principles: Continued adherence to and strengthening of the Vienna Document by all parties could serve as a valuable bridge should the CFE Treaty continue to unravel or cease to exist. An increase in evaluation visits—supplemented by regional military liaison missions—could enhance leadership decision time and mutual understanding through greater cooperation, transparency, and trust.

2. Strengthen the Treaty on Open Skies. Currently, the Treaty on Open Skies applies to 34 nations; however, 57 OSCE nations are in the Euro-Atlantic zone. States not covered by the treaty include Albania, Austria, Monaco, Serbia, Tajikistan, Turkmenistan, Andorra, Azerbaijan, Kazakhstan, Liechtenstein, Malta, Montenegro, Macedonia, Uzbekistan, Armenia, Cyprus, Ireland, Kyrgyzstan, Moldova, Mongolia, San Marino, and Switzerland.

Under this option, parties to the Treaty on Open Skies could seek to expand the application of the Treaty within the OSCE.

Parties to the Treaty on Open Skies also could seek to extend the technical collection capabilities now permitted under the Treaty (e.g., to include digital photography and gas and particulate sampling).

Contribution to advancing guiding principles: Expanding the application of the Treaty on Open Skies and extending technical collection capabilities could increase leadership decision time and mutual understanding through greater cooperation, transparency, and trust. Moreover, these measures apply to both conventional and nuclear capabilities; as such, they could be a building block in monitoring a transition from offensive to primarily defensive systems on alert and devaluing the role of nuclear weapons.

3. Without prejudice to the future of the CFE Treaty, agree on key CFE Treaty-related provisions essential to leadership decision time, and seek a politically binding agreement to extend and implement these provisions with CSBMs. Candidate provisions for a politically binding agreement could include those relating to relevant ceilings, information exchanges, and accession clause and inspections. Additional transparency could be provided on data and activities of military forces out of garrison, as well as clarity on the deployment of forces. Where possible, limits that enhance regional stability and new measures relating to new conventional capabilities (e.g., drones) could also be discussed and agreed on.

Regional CSBMs could be included in this process. Although the regional measures section of the Vienna Document encourages countries to undertake additional measures of these types, no such measures have been negotiated and agreed on since the adoption of the document.

These discussions could take place in a new venue or the existing 57-nation OSCE Forum for Security Cooperation, which is the only functioning pan-European forum relating to conventional arms in Europe. Discussion within the OSCE could reinforce the relevance of the all-European venue for addressing military security in Europe.

Contribution to advancing guiding principles: A politically binding agreement to extend and implement key CFE Treaty-related provisions with additional CSBMs could break the impasse over the implementation of existing agreements on conventional forces in Europe and contribute an important piece to the foundation for a new concept for mutual security in the Euro-Atlantic region. Such an agreement could greatly increase leadership decision time relating to conventional conflict and greatly enhance cooperation, transparency, and trust.

CYBERSECURITY

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Steps to Consider

1: Euro-Atlantic Cybersecurity Forum

The issue of cybersecurity—the protection of government, military, and civilian networks from attack—continues to gain importance in international security.

The threat of cyber-related crime and state-sponsored intrusion and operations is growing. Digital infrastructure has already suffered intrusions that have allowed criminals to steal millions of dollars and nation-states and other entities to steal intellectual property and sensitive military information.

Officials are increasingly concerned that cyberattacks will transition to more elaborate and sophisticated attacks—possibly in conjunction with a conventional military strike. A destructive attack does not simply

The Euro-Atlantic community needs a strategy for cybersecurity designed to bring like-minded nations together on a host of cyber-related issues.

overload computers or networks—it destroys data or software, and systems must be replaced to return to the status quo. There also is a risk that a cyber intrusion could trigger a security crisis—for example, false warning of a missile attack or an intrusion into national command and control systems—that could lead to a conflict.

The Euro-Atlantic community needs a strategy for cybersecurity designed to bring like-minded nations together on a host of cyber-related issues. Only by working with international partners can member states of the Euro-Atlantic region best address these challenges, enhance cybersecurity, and reap the full benefits of the digital age.

There is no question that the complexities of cyber-related issues are difficult to unravel. Both offensive and defensive components cut across multiple areas of concern (e.g., government, military, and civilian), and cyber operations are among the most sensitive and secretive activities of states. There is also concern that cyber-related issues are simply not conducive to a Euro-Atlantic community-wide initiative or that initiatives might serve to increase rather than decrease cyber-related threats.

OBJECTIVES

The objectives of a dialogue on cybersecurity in the Euro-Atlantic region could be the following:

- Provide a reliable forum for the early exchange of information relating to cyberthreats—in particular, those with a military-security dimension—in the Euro-Atlantic area.
- Develop reliable mechanisms accepted by parties for information exchange on dangerous events (as judged by the parties) in cyberspace and conduct of mutual investigations in instances of dangerous occurrence.

Perhaps more ambitiously, use this forum as a mechanism for discussing shared approaches for the defence of networks and response to cyberattacks and for strengthening an international partnership to create initiatives that address the full range of activities, policies, and opportunities associated with cybersecurity.

POSSIBLE STEPS

- **1. Euro-Atlantic Cybersecurity Forum.** This forum could build on current discussions between U.S. and Russian officials regarding confidence-building measures in cyberspace and be implemented as follows:
- A "hotline" network between authorised representatives of the parties that could involve consultations and meetings between senior representatives of the parties on cybersecurity and the use of a network of national centres for response to cyber incidents
- An extension to the Missile Defence Cooperation Centres or a new Euro-Atlantic Security Forum
- A separate Cyber Risk Reduction Forum

Whichever approach is used for implementation, the purpose is to give all participants a more transparent and complete picture of the threat environment.

Regarding what information would be exchanged, there are a number of concepts, such as the following:

 Reporting. Nations could report dangerous cyber events that they detect as originating from sources probably using their country. There would be an expectation that nations would then act to explain any such events, conduct joint investigations when necessary, and curtail such activity.

- Pooling and sharing. More broadly, nations could pool and share data and information from national systems to provide an enhanced cyberthreat picture and notification of cyber-related threats or attacks.
- Assistance. The forum could be a conduit whereby nations could coordinate and provide other nations with assistance.

Once established and as experience and confidence grows, the forum also could be used more ambitiously. For example, senior cyber officials could meet periodically to share approaches to the defence of networks, the response to cyberattacks, and the strengthening of international partnerships to address cybersecurity. This collaboration could include discussions relating to the development of an international agreement or agreements that would limit cyberwar.

Contribution to advancing guiding principles: Increased transparency regarding cyberthreats could increase leadership decision time in extreme situations and reduce the risk of a cyberthreat or attack that develops into a conflict.

SPACE

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Steps to Consider

 Implement Information Exchange pilot project

The domain of space is becoming increasingly relevant to every aspect of mutual security in the Euro-Atlantic region. Individual countries have different perspectives relating to space.

Some have focused on legally binding restrictions to prohibit space weapons and the targeting of space assets (as represented by the draft Treaty on the Prevention of the Placement of Weapons in Outer Space, the Threat or Use of Force against Outer Space Objects—submitted to the Conference on Disarmament in February 2008 by Russia and China), believing these capabilities would inevitably undermine strategic stability.

The domain of space is becoming increasingly relevant to every aspect of mutual security in the Euro-Atlantic region.

Others favour focusing on developing a non-legally binding code of conduct or transparency and confidence-building measures that would establish guidelines for behaviour in space, limit the creation of space debris, and increase transparency and other elements of international cooperation in space.

At a meeting in June 2012, the European Union circulated a new draft of its proposed International Code of Conduct for Outer Space Activities, which would not be legally binding. More than 110 participants from more than 40 countries took part in the meeting, including Russia and the United States. The proposed code would be applicable to all space activities conducted by states or nongovernmental entities and would lay down the basic rules to be observed by space-faring nations in both civil and defence space activities. The focus is on avoiding collisions and conflicts in space.

On 22 October 2012, the European Union announced that it would hold the first multilateral experts' meeting to discuss the draft code in the near future. This meeting should provide an opportunity for each participant to present and exchange views on the text, ask for clarifications, and present new ideas. All United Nations member states are invited to participate. At the end of this process, the European Union and other supporters of this initiative intend to present a final version of the International Code of Conduct that would be open to participation by all states on a voluntary basis at an ad hoc diplomatic conference.

OBJECTIVES

The objectives of a dialogue on space could be the following:

- Promote international cooperation in the exploration and use of outer space for peaceful purposes.
- Strengthen the safety, security, and predictability of all space activities.
- Provide a foundation for any future transparency and confidence-building measures or legally binding arms control agreements that would prevent space from becoming an area of conflict.

POSSIBLE STEPS

1. Implement information exchange pilot project for the proposed content of an International Code of Conduct for Outer Space Activities using Missile **Defence Cooperation Centres or a new Euro-Atlantic** Security Forum. To help facilitate a future agreement on an International Code of Conduct for Outer Space Activities, information relating to a proposed draft Code of Conduct could be exchanged through the Missile Defence Cooperation Centres staffed by U.S., European, and Russian personnel. (Note that Russia believes such a code should include prohibiting space weapons and the targeting of space assets.) Over time, Missile Defence Cooperation Centres (or a new Euro-Atlantic Security Forum) could also be used as a forum to discuss future transparency and confidence-building measures or legally binding agreements relating to space.

Contribution to advancing guiding principles: A pilot project that used Missile Defence Cooperation Centres or a new Euro-Atlantic Security Forum could independently contribute to building trust, cooperation, and strategic stability as well as inform the conclusion and implementation of a truly international Code of Conduct and any future agreements relating to space. Information exchange conducted under an International Code of Conduct—once completed—could also be exchanged in Missile Defence Cooperation Centres or a new Euro-Atlantic Security Forum.

A pilot project that used Missile Defence Cooperation Centres or a new Euro-Atlantic Security Forum could independently contribute to building trust, cooperation, and strategic stability as well as inform the conclusion and implementation of a truly international Code of Conduct and any future agreements relating to space.

IV. THE ROAD AHEAD: PRIORITIES AND PHASING

Anew, continuing process of dialogue mandated by the highest political levels, where security could be discussed comprehensively and practical steps could be agreed upon and taken on a broad range of issues, is the critical first step and the necessary foundation for building mutual security.

The following includes practical steps that are examined by a group of experts as part of this initiative (detailed in Section III of this Report) and that could be considered as part of a new dialogue. Of course, once governments launch the official process, the actual steps, priorities, and phasing would be decided by participating nations.

NUCLEAR FORCES

YEARS 1-5

- Commit to remove all nuclear weapons from promptlaunch status globally over the next 10–15 years. As a first step in this gradual process, the United States and Russia could remove a percentage of strategic nuclear warheads operationally deployed today from promptlaunch status as early as possible.
- Implement reciprocal transparency, security, and confidence building on tactical nuclear weapons.
- Implement a 50 percent reduction in U.S. tactical nuclear weapons now stationed in Europe, with a target for completing consolidation of all U.S. tactical nuclear weapons to the United States within five years; reciprocal steps by Russia.
- Implement UK-French shadow declarations as a voluntary confidence-building measure.

YEARS 6-15

- The United States and Russia limit the number of warheads on prompt-launch status to several hundred deployed on intercontinental ballistic missiles (ICBMs) and submarine-launched ballistic missiles (SLBMs).
- Implement reciprocal confidence-building measures relating to ballistic missile submarines.
- Seek agreement with the United Kingdom and France removing all warheads from prompt-launch status and gain mutual assurances that no nuclear-armed state, in the absence of an actual or imminent threat, will operationally deploy its nuclear weapons on prompt-launch status.
- Remove all warheads from prompt-launch status.

MISSILE DEFENCES

YEARS 1-5

- Implement, through the new Euro-Atlantic Security Forum, the establishment of a Missile Defence Cooperation Centre and the pooling and sharing of data and information from early-warning radars and satellites.
- Implement reciprocal transparency measures regarding missile defence systems and capabilities and annual declarations looking ahead 5–10 years (e.g., numbers of silos and mobile launchers, missiles, radars, ships, and so forth).
- Continue joint missile defence exercises.
- Implement written political commitments not to deploy missile defences in ways that would undermine stability.

YEARS 6-15

- The content and character of future cooperation against longer-range ballistic missile threats—including issues associated with long-range (or strategic) ballistic missiles—would be considered.
- Implement agreements relating to future cooperation against longer-range ballistic missile threats and address concerns relating to the impact of missile defence systems on strategic arms.

PROMPT-STRIKE FORCES

YEARS 1-5

• Conceptual discussions would begin in Years 1–5; however, many of the issues associated with prompt-strike forces and the implementation of specific steps would be addressed in Years 6–15.

YEARS 6-15

- If and as prompt-strike programmes emerge, provide programmatic transparency.
- Implement operational transparency and confidence building, including a system of advance notification and observation (where relevant) of prompt-strike system test launches, prompt-strike forces exercises, and their imminent use.
- Implement reciprocal basing commitments, announcing at which bases and in what numbers prompt-strike forces will be deployed and segregating bases and systems from any nuclear weapons-related activities or deployments, with visits to these bases.

CONVENTIONAL FORCES

YEARS 1-5

- Increase evaluation visit quota under the Vienna Document and ensure each participating state can adequately participate; consider regional military liaison missions to conduct Vienna Document observations.
- Expand the application of the Treaty on Open Skies within the OSCE, and allow additional collection capabilities such as digital photography.
- Intensify consultations regarding key Conventional Armed Forces in Europe (CFE) Treaty-related provisions that could be included in a politically binding agreement applying to all nations in the Euro-Atlantic region.

YEARS 6-15

- Agree on key CFE Treaty-related provisions essential to building mutual security, and conclude a politically binding agreement to extend and implement these provisions with Confidence- and Security-Building Measures (CSBMs).
- Implement new agreements on conventional forces in Europe with CSBMs.

CYBERSECURITY

YEARS 1-5

- Begin discussing and implementing, through the new Euro-Atlantic Security Forum, a process of reporting dangerous events in cyberspace, pooling and sharing data to provide an enhanced cyberthreat picture, and using the Euro-Atlantic Security Forum as a conduit to coordinate and provide other nations with assistance.
- Using the new Euro-Atlantic Security Forum as a venue, senior cyber officials discuss shared approaches to the defence of networks, responses to cyberattacks, and means of strengthening international partnerships to address cybersecurity. This collaboration could include discussions relating to the development of an international agreement or agreements that would limit cyberwar.

YEARS 6-15

 Implement shared approaches to cybersecurity, including any agreements relating to limiting cyberwar.

SPACE

YEARS 1-5

 Implement the Information Exchange pilot project for the International Code of Conduct for Outer Space Activities using the new Euro-Atlantic Security Forum and the Missile Defence Cooperation Centres.

YEARS 6-15

 Using the new Euro-Atlantic Security Forum as a venue, discuss future transparency and confidence-building measures or legally binding agreements relating to space.

A NEW EURO-ATLANTIC SECURITY FORUM

A new Euro-Atlantic Security Forum begins with a new process of dialogue mandated by political leaders. That dialogue can lead to agreements on practical steps and further discussions. The forum could play a key role in implementing specific steps and building mutual security.

YEARS 1-5

- Within the framework of the new Euro-Atlantic Security Forum, implement the establishment of a Missile Defence Cooperation Centre to provide an enhanced threat picture and notification of missile attack.
- Begin consultations regarding possible steps that could be included in a Euro-Atlantic security regime for conventional forces.
- Report dangerous events in cyberspace, pool and share data to provide an enhanced threat picture, and coordinate assistance.
- Provide a venue for cyber officials to meet to discuss shared approaches to the defence of networks, responses to cyberattacks, and means of strengthening international partnerships to address cybersecurity.
- Implement the Information Exchange pilot project for the International Code of Conduct for Outer Space Activities.

YEARS 6-15

 Discuss future transparency and confidence-building measures or legally binding agreements relating to space.

PRIORITIES AND PHASING

PROMPT-STRIKE MISSILE DEFENCES **NUCLEAR FORCES FORCES** YEARS Commit to remove all nuclear Establish Missile Defence Begin conceptual discussions. weapons from prompt-launch Cooperation Centre through 1 - 5status globally over next 10-15 new Euro-Atlantic Security years; U.S. and Russia remove % of Forum; data sharing from strategic forces off prompt launch. early-warning radars and satellites. Reciprocal transparency, security, and confidence-building on Reciprocal transparency measures tactical nuclear weapons. regarding missile defence systems and capabilities with annual updates. Fifty percent reduction in U.S. tactical nuclear weapons in Europe, with a target for Continue joint missile defence completing consolidation of all exercises. U.S. TNW in 5 years; reciprocal steps by Russia. Written political commitments not to deploy missile defences that Voluntary UK-French shadow would undermine stability. declarations. YEARS U.S. and Russia limit number of Consider future cooperation If and as prompt-strike warheads on prompt-launch status against longer-range ballistic programmes emerge, provide 6 - 15to several hundred. missile threats. programmatic transparency. Implement reciprocal confidence-Implement agreements relating Implement operational building measures relating to to longer-range ballistic missile transparency- and confidenceballistic missile submarines. threats; address concerns over building, including system impact of missile defence on of advance notification and strategic arms. observation (where relevant) UK-France agree to remove of test launches, exercises, and warheads from prompt-launch imminent use. status; gain mutual assurances that no nuclear-armed state. without actual or imminent threat, Reciprocal basing will deploy nuclear weapons on commitments; segregating bases and systems from any prompt-launch status. nuclear weapons-related activities or deployments; base Remove all warheads on promptvisits. launch status.

Indicates a possible agenda item for the Euro-Atlantic Security Forum; other steps also could be included.

CONVENTIONAL FORCES IN EUROPE	CYBERSECURITY	SPACE	
Increase evaluation visit quota under Vienna Document and ensure full state participation; consider regional military liaison missions. Expand Open Skies Treaty within the OSCE; allow additional collection capabilities. Intensify consultations on CFE provisions that could be included in politically binding agreement.	Begin reporting dangerous events in cyberspace through new Euro-Atlantic Security Forum; pool and share data; coordinate and provide nations with assistance. Discuss shared approaches to: defence of networks; responses to cyberattacks; and strengthening international partnerships.	Implement pilot project for International Code of Conduct for Outer Space Activities through Euro-Atlantic Security Forum.	YEARS 1-5
Agree on key CFE provisions essential to building mutual security; conclude politically binding agreement, with CSBMs. Implement new agreements on conventional forces in Europe, with CSBMs.	Implement shared approaches to cybersecurity, including agreements relating to limiting cyberwar.	Discuss future transparency and confidence building measures or agreements.	YEARS 6-15

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Building Mutual Security in the Euro-Atlantic Region: Report Prepared for Presidents, Prime Ministers, Parliamentarians, and Publics

Building Mutual Security in the Euro-Atlantic Region is the result of a Track II dialogue among distinguished former senior political leaders, senior military officers, defence officials, and security experts from Europe, Russia, and the United States. Des Browne, Wolfgang Ischinger, Igor Ivanov, and Sam Nunn co-chaired the effort.

The report's key findings and supporting analysis were developed through a series of meetings that began during the Munich Security Conference in February 2012. Members of the group subsequently gathered in Washington, Moscow, and Paris to finalise the report to be presented to political, military, and civil leaders in 2013.

Additional information, including the Russian report and summary materials, is available at www.BuildingMutualSecurity.org.

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