Gunnar Arbman, Charles Thornton

Russia's Tactical Nuclear Weapons

Part I: Background and Policy Issues



SWEDISH DEFENCE RESEARCH AGENCY

Systems Technology SE-172 90 Stockholm FOI-R--1057--SE November 2003

User report

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Part I: Background and Policy Issues

Photograph on front cover shows the Russian short distance missile Tochka-U. Source: Sergei Ivanov, "Russia's Arms and Technologies: The XXI Century Encyclopaedia – Volume2: Rocket and Artillery Armament of Ground Forces", Moscow: Oruzhie i Teknologii (OrTekh), 2001

Issuing organization	Report number, ISRN	Report type		
FOI – Swedish Defence Research Agency	FOI-R1057SE	User report		
Systems Technology	Research area code			
172 90 Stockholm, Sweden	3. Protection against Weapons of Mass Destruction			
	Month year	Project no.		
	November 2003	A 6123		
	Customers code			
	2. NBC Defence Research			
	Sub area code			
	31 Nuclear Defence Research			
Author/s (editor/s)	Project manager			
Gunnar Arbman	Lars Wigg			
Charles Thornton	Approved by			
	Sponsoring agency			
	Scientifically and technically responsible			
	Gunnar Arbman and Charles Thornton			
Report title				
Russia's Tactical Nuclear Weapons. Part I: Backgro	und and Policy Issues.			
Abstract (not more than 200 words)				
This is the first part in a series of two on Russia's tac background information on Russian TNW and discu		force structure, including what is		

This is the first part in a series of two on Russia's tactical nuclear weapons (TNW). In this report we provide some background information on Russian TNW and discuss policy issues. Russia's nuclear force structure, including what is openly known about its TNW developments since 1991, is addressed. In particular, the three documents on foreign policy, national security (blueprint), and military doctrine, published in 2000, are analysed with regard to their TNW guidelines. Based on a review of the threats currently facing Russia and how they affect Russia's TNW requirements, we conclude with a section on the implications for Russia's neighbours and strategic partners.

We conclude that Russia is likely to maintain a sizeable fraction of its present TNW arsenal for the foreseeable future as a cost-effective and vital defence component. The main reasons for this conclusion are related to Russian concerns about a future potentially expansionist NATO and, to some extent, China. On the other hand, Russia's problems along its southern front and in Central Asia, while of significant magnitude, are believed to have little, if any, impact on its future reliance on TNW. An exception would be if nuclear proliferation were to occur in the Middle East region combined with rising anti-Russian sentiments among Moslems in the area.

Russia, Tactical Nuclear Weapons, The Russian Policy Documents of 2000, Tactical Nuclear Force Developments Further bibliographic information Language English ISSN 1650-1942 Pages 55 p. Price acc. to price-list

Utgivare	Rapportnummer, ISRN	Klassificering		
Totalförsvarets Forskningsinstitut - FOI	FOI-R1057SE	Användarrapport		
Systemteknik	Forskningsområde			
172 90 Stockholm	3. Skydd mot massförstörelsevapen			
	Månad, år	Projektnummer		
	November 2003	A 6123		
	Verksamhetsgren	Verksamhetsgren		
	2. NBC skyddsforskning			
	Delområde			
	31 N-forskning			
Författare/redaktör	Projektledare			
Gunnar Arbman	Lars Wigg			
Charles Thornton	Godkänd av			
	Uppdragsgivare/kundbeteckning			
	Tekniskt och/eller vetenskapligt ansvarig			
	Gunnar Arbman och Charles Thornton			

Rysslands taktiska kärnvapen. Del I: Bakgrund och säkerhetspolitiska överväganden.

Sammanfattning (högst 200 ord)

Föreliggande rapport är den första av två som behandlar Rysslands taktiska kärnvapen. En översikt baserad på öppna källor ges av förändringarna i den taktiska kärnvapenarsenalen sedan 1991. I rapporten diskuteras vidare frågor rörande den ryska policyn för landets taktiska kärnvapen. Analysen grundar sig främst på de tre styrande dokument som utgavs år 2000 beträffande den ryska utrikespolitiken, det nationella säkerhetskonceptet och den nya militärdoktrinen. Den hotbild man upplever i dagens Ryssland berörs, liksom konsekvenserna av ett fortsatt ryskt taktiskt kärnvapeninnehav för omvärlden.

En viktig slutsats i rapporten är att Ryssland under överskådlig framtid sannolikt kommer att behålla stora delar av sin nuvarande taktiska kärnvapenarsenal. Orsakerna till detta står att finna i de långsiktiga, potentiella hot man i Ryssland ser såväl i väst (ett eventuellt fortsatt expansivt NATO) som i öst (en eventuell begynnande kinesisk expansion). Å andra sidan tror vi att dagens problematiska situation i och längs delar av landets södra gränsområden spelar en tämligen underordnad roll när man överväger det kommande behovet av taktiska kärnvapen. Detta kan dock komma att ändras om kärnvapenspridningen skulle omfatta Mellanöstern, samtidigt som de islamistiska anti-ryska stämningarna där förstärks.

Nyckelord

Ryssland, taktiska kärnvapen, ryska policydokument år 2000, utveckling av den taktiska kärnvapenarsenalen.

Övriga bibliografiska uppgifter	Språk Engelska
ISSN 1650-1942	Antal sidor: 55 p s.
Distribution enligt missiv	Pris: Enligt prislista

Russia's Tactical/Non-Strategic Nuclear Weapons Part I: Background and Policy Issues

Gunnar O. Arbman and Charles L. Thornton*

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I-0.0 Introduction to Part I

Since the 1970s, the United States and the Soviet Union, and now the United States and Russia, have negotiated and implemented several nuclear arms control agreements. These agreements have limited, reduced, and even eliminated categories of nuclear weapons spanning categories of intermediate range to strategic forces. By most accounts, these treaties have achieved successes in improving strategic stability and enhancing national and international security.

The one category of nuclear forces that remains uncovered by formal arms control measures is tactical weapons. When experts use the term "tactical" to describe a category of nuclear forces, most readers intuitively understand the reference. However, while the Intermediate Nuclear Forces (INF) Treaty and the Strategic Arms Reduction Treaty (START) explicitly define the types of weapon systems covered by those agreements, a working definition of tactical nuclear weapons (TNWs) has proven elusive. A working definition is explored in more detail below. The simplest definition is to use "tactical" to describe all sub-strategic forces not covered by the INF Treaty. There are, of course, many additional factors as discussed below, that make this category of weapons unique.

In 1991, the United States and the Soviet Union issued unilateral, but very similar declarations to reduce and restrict elements of their tactical nuclear weapons. Russia reiterated and expanded its commitments in 1992. This, as former Russian arms control diplomat and current senior research associate at the Center for Nonproliferation Studies at the Monterey Institute of International Studies Nikolai Sokov put it, "Was a relatively rare time when the objectives and interests of the two countries with regard to TNWs coincided almost perfectly." The arms control community welcomed these initiatives, but since they have never been formalized there remains little transparency into the reductions and limitations themselves. Although substantial data may be gleaned from open sources and public statements made by officials, Russia and the U.S. have yet to formally declare TNW numbers, locations, and dispositions.

By most estimates, Russia possesses thousands of active-duty tactical nuclear weapons, with thousands more in reserve. Russia asserts many legitimate reasons for retaining such a high TNW force structure. First and foremost, the decline in Russia's conventional military forces and their apparent inferiority to NATO and Chinese forces compels Russia to rely on battlefield nuclear munitions as an element of its deterrence against aggression. Military exercises conducted by the Russian Ministry of Defense (MOD) in recent years suggest that Russia would be unable to challenge massive invasions of its western or far eastern fronts without resorting to nuclear weapons.

But there is a paradox in Russia's military decline: the deterioration of its conventional forces means Russia must rely more heavily on its TNWs; and yet, the deteriorated state of the military's morale, readiness, and reliability means that there is an increased internal threat of the accidental or unauthorized launch, or the proliferation of a nuclear weapon. The troops associated with TNW safety, security, transportation, and storage can not be completely isolated from the general decline of Russia's military complex. There are, after all, a finite number of "elite" troops available, and the Strategic Rocket Forces (SRF) and several other services likely take priority.

Nonetheless, most analysts believe that Russia is complying with its unilateral 1991/1992 commitments. As noted by a prominent Russian government official, "Taking into account obligations under Article VI of the Nuclear Non-proliferation Treaty (NPT), Russia takes consistent steps towards the final objective the complete nuclear disarmament. However, as we have already more than once emphasized, it is

¹ Nikolai Sokov, "Strengthening the 1991 Declarations: Verification and Transparency Components," in Taina Susiluoto, editor, Tactical Nuclear Weapons: Time for Control, United Nations Institute for Disarmament Research, UNIDIR/2002/11, 2002, p. 96.

necessary to move in that direction step-by-step on the basis of a complex approach and with participation of all the nuclear powers."²

This is the first component of a two-part report. In Part I, we discuss the general policy issues surrounding Russia's tactical nuclear weapons. We address Russia's nuclear force structure, including what is openly known about its TNW developments since 1991. We then assess Russia's foreign policy, national security blueprint, and military doctrine, as published in 2000 and as they relate to TNWs. This section also includes a review of the threats currently facing Russia and how they affect Russia's TNW requirements, concluding with a section on the implications for Russia's neighbors and strategic partners.

Part II of this report, to be published separately, will focus on the technical issues surrounding Russia's tactical nuclear forces. It will begin with a review of what is known about the management of Russia's current TNW force structure, including operational and reserve forces, command and control issues, and modernization. We will discuss how consistent the operational TNWs are with the new Russian military doctrine and technical issues such as safety, aging, and manufacturing capabilities. Additional sections will be dedicated to the security of Russia's tactical warheads, TNW-associated personnel issues, and tactical warhead dismantlement. Finally, we will conclude with policy recommendations for Russia, the United States, other nuclear weapon states, and interested non-nuclear weapon states.

I-1.0 Russia's Nuclear Weapons Force Structure

I-1.1 Total Scope

A nuclear weapon is considered to be an entire system containing both the warhead and its delivery system. In Russia, as in all nuclear weapon states, warheads are either mated to delivery vehicles or are in reserve. Reserve warheads may be found in several basic states: undergoing assembly or disassembly at a Russian Ministry of Atomic Energy (MinAtom) facility; in storage at a Twelfth Main Directorate national stockpile site of the Ministry of Defense; in storage at a site near the deployed forces; or, in transit between one of these sites. Those warheads in transit or in storage at any of these sites may be either destined for dismantlement or for deployment.

Delivery systems consist of aircraft, missiles, naval vessels, or artillery. Existing arms control agreements provide for the accounting of strategic- and intermediate-range delivery systems, but not the warheads themselves. As described below, such agreements may assign a fixed number of accountable warheads to specific delivery systems. Therefore, since no international regimes call for the counting and verification of individual warheads, it is not feasibly possible to know how many or what type of warheads exist in Russia. Instead, a range of estimates is given in section I-2.0.

As will become apparent below, these issues are critical when assessing Russia's tactical nuclear weapons. Most delivery systems for TNWs may be used in either a conventional or nuclear role. The dual-use nature of the delivery systems suggests that such items would be more difficult to describe in a legally binding treaty than those used for strategic systems. Therefore, the lessons learned from existing arms control agreements may have only limited applicability to tactical nuclear weapons. Instead, any attempts to formalize the control of short-range nuclear forces will likely require the counting and verification of the warheads themselves. This would be a new feature of arms control, and since many of Russia's warhead storage sites co-locate all types of warheads, it would require Russia to open access to its entire inventory. Nonetheless, it is useful to describe the entire range of Russia's nuclear forces in order to understand where TNWs fit into the spectrum.

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² Ministry of Foreign Affairs of the Russian Federation, "Statement of the delegation of the Russian Federation at the First Session of the Preparatory Committee for the 2005 NPT Review Conference under Article VI of the Treaty (New York, April 11, 2002)," Information and Press Department, Daily News Bulletin, 24 April 24 2002.

I-1.2 Strategic Nuclear Forces

Strategic nuclear forces are those weapons that have intercontinental delivery capabilities. Such weapons were previously covered by the Strategic Arms Limitations Talks (SALT), and are now covered by the Strategic Arms Reductions Treaty and the Strategic Offensive Reductions Treaty (SORT). These treaties address the delivery vehicles, but not the warheads. According to the most recent START Memorandum of Understanding (MOU) data exchanges, Russia possesses a total of 5,436 attributed strategic warheads deployed on 1,101 delivery systems (ICBMs, SLBMs, and heavy bombers). These force levels are down from the initial START MOU exchange in 1994, when Russia reported 9,568 attributed strategic warheads deployed on 1,956 delivery systems. All START required reductions were met by 5 December 2001.

On 29 May 2002, U.S. President Bush and Russian President Putin signed the Strategic Offensive Reductions Treaty. It requires the parties to reduce their strategic delivery systems to 1,700 - 2,200 by 31 December 2012. Although START II had been negotiated and signed, and although the U.S. and Russia had continued to reduce their forces in accordance with its terms, the treaty was never fully ratified and has now been supplanted by SORT. SORT entered into force on 1 June 2003.

I-1.3 Intermediate Range Nuclear Forces

On 8 December 1987, the United States and the Soviet Union signed the Intermediate Range Nuclear Forces (INF) Treaty. It was the first treaty to eliminate an entire class of weapons, and also included strong verification provisions. Under INF, the Soviets destroyed approximately 2,000 ground-launched ballistic and cruise missiles with ranges of 500 - 5,500 kilometers. Although the eliminations were completed within three years - by 1 June 1991 - the treaty itself is unlimited in duration. Following the break-up of the Soviet Union, Russia, Ukraine, Kazakhstan, Belarus, Turkmenistan, and Uzbekistan became legacy treaty parties.

Since sub-strategic forces include both intermediate- and short-range weapons, our job of defining tactical forces would appear simple. That is, since all ground-based intermediate-range forces have been eliminated, those not covered by INF would by default be considered *tactical*. As it turns out, this is only partly helpful.

I-1.4 Tactical Nuclear Forces

I-1.4.1 Definitions

Arms control treaties for *strategic* nuclear weapons in Russia and the United States (START), as well as for *intermediate range* nuclear weapons (INF) provide exact definitions of the nuclear weapons covered by their provisions. These definitions are essentially based on the delivery systems allocated to the nuclear warheads. In contrast, there exists no generally accepted definition of *tactical* (TNW) or *non-strategic* nuclear weapons.

Trying to define TNW by **range** only, i.e. encompassing weapon systems with some maximum delivery capability–500 kilometers, for example–have invariably failed in spite of early attempts by the U.S. and NATO to do so during the cold war period. As noted by Andrea Gabbitas, a doctoral candidate at the Massachusetts Institute of Technology:

³ Bureau of Arms Control, "Fact Sheet: START I Aggregate Numbers of Strategic Offensive Arms (as of 31 January 2003)," U.S. Department of State, 1 April 2003.

The main problem with a range-based approach is that there is a significant gray area between strategic and non-strategic weapons and their associated delivery vehicles.⁴

Furthermore, some classes of weapons traditionally thought of as non-strategic due to the limited range of their delivery systems can still have yield characteristics similar to those of strategic weapons.

Attempts to define them by (low) **yield**, intended for battlefield use only, have fared no better than trying to define them by range. For example:

In the U.S. arsenal, the highest yield of weapons considered to be non-strategic nuclear weapons are a variant of the B-61 bomb at 170 KT and the nuclear SLCM with a yield of 150 KT. By contrast, U.S. strategic weapons have yields as low as 5 KT for air-launched cruise missiles (ALCMs) and 100 KT for ballistic missile.⁵

Since TNW are often associated with targets of tactical value, usually present on the battlefield or intimately connected with actual combat in other ways, one could try to define them by **targets**. But, "most of the unambiguously non-strategic weapons that once existed in the U.S. and Russian arsenals have been retired," and that the remaining "non-strategic nuclear weapons increasingly look like strategic weapons." Another problem is that the same target can be considered as being tactical or strategic, or even be transferred from one category to the other, depending on how a particular conflict evolves.

Efforts to categorize them by the **exclusion principle**—as systems not covered by an existing arms control treaty, such as START or INF—have also failed. While definitions based on the exclusion principle are not burdened by any ambiguity, objections can be raised as to the suitability of including nuclear weapon systems with intercontinental ranges in countries other than Russia or the U.S.—such as China—under the heading of TNW.

Classifications based on **delivery vehicles** have proven to be a useful tool in previous strategic arms treaties between the United States and Soviet Union. The main problem with delivery systems as a basis for a definition of non-strategic nuclear weapons is that they are often dual capable: they can be used to deliver nuclear warheads as well as ordinary conventional munitions. Furthermore, both strategic and non-strategic nuclear weapons can be launched from the same aircraft, or, as in the case of the United Kingdom, from the same strategic nuclear ballistic submarine (SSBN). As a consequence, delivery systems are not likely to form a suitable starting point—at least not in isolation—for a comprehensive and universal definition of TNW.

Non-strategic nuclear weapons may also be categorized by **capabilities**, **national ownerships**, or **locations**. None of these methodologies, however, are sufficient in isolation to constitute a suitable base for a comprehensive definition of TNWs.

If a future TNW related arms control and disarmament treaty is to be negotiated, the definitional problem will need to be addressed and resolved. For our purposes, we will utilize the definitions of nuclear weapon systems offered by a senior Counselor in the Russian Ministry of Foreign Affairs (MFA), Vladimir Rybachenkov:

• Nuclear weapons in the armed forces of the Russian Federation are understood to mean an aggregate of armaments that include nuclear charges, nuclear munitions, means of their delivery to

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⁴ Andrea Gabbitas, "Non-Strategic Nuclear Weapons: Problems of Definition," in Jeffrey Larsen and Kurt Klingenberger, editors, *Controlling Non-Strategic Nuclear Weapons: Obstacles and Opportunities*, Institute for National Security Studies, United States Air Force, July 2001.

⁵ Ibid. See also, "U.S. Nuclear Forces, 2002," *The Bulletin of the Atomic Scientists*, May/June 2003, pp 73-76.

⁶ Ibid.

the target and control means;

- Nuclear munitions are the combat parts of missiles, torpedoes, air bombs, and artillery projectiles that have nuclear charges;
- A nuclear charge is a device in which a nuclear energy release explosive process occurs.
- A weapon-delivery vehicle is a means to carry and deliver a nuclear munitions to the target;
- A nuclear weapon system is a complex of functionally associated means for ensuring authorized employment of munitions-delivery vehicles.⁷

The Russian MFA then categorizes its nuclear forces into two large categories:

- Strategic nuclear weapons are a class of nuclear weapons designed to engage objects in the geographically remote strategic areas (over 5000 kilometers) with the purpose of accomplishing strategic missions. The strategic nuclear weapons are in service with the strategic nuclear forces;
- Non-strategic nuclear weapons are all nuclear weapons not covered by the class of the strategic nuclear weapons.⁸

The Russian MFA further segregates non-strategic nuclear forces in the following manner:

- Tactical nuclear weapons are a class of nuclear weapons designed to engage objects in the tactical depth of enemy deployment (up to 300 kilometers) with the purpose of accomplishing a tactical mission. Under certain conditions, tactical nuclear weapons may be involved in the accomplishment of operational and strategic missions;
- Operational nuclear weapons are a class of nuclear weapons designed to engage objects in the
 operational depth of the enemy deployment (up to 600 kilometers) with the purpose of
 accomplishing an operational mission. Under certain conditions the operations nuclear weapons
 may be involved in the accomplishment of strategic missions and, in exceptional cases, in the
 accomplishment of tactical missions;
- Operational and tactical nuclear weapons are in service with the general purpose forces.⁹

I-1.4.2 Tactical Nuclear Force Deployments and Reductions Prior to 1992

By the early-1980s, Moscow had deployed large numbers of TNW delivery systems throughout the Soviet Union and Eastern Europe. The U.S. Department of Defense (DoD) also believed at the time that the Soviets had stockpiled additional warheads for the delivery systems, providing them with a reload capability. ¹⁰ By adapting land missiles, artillery, aircraft, and naval missiles to carry both conventional and tactical nuclear payloads, the Soviets relied heavily on dual-capable delivery systems.

By the mid-1980s, Soviet TNW systems had undergone generational improvements. The first operational SS-23s, with a range of 400-500 kilometers, were delivered to a brigade in the Belarussian district in

⁷ Vladimir Rybachenkov, "Nuclear Strategy of Russia," Counsellor [sic], Ministry of Foreign Affairs of the Russian Federation, *Lecture at the NATO School*, Obberamergau, 1 March 2001.

⁸ Ibid.

⁹ Ibio

¹⁰ U.S. Department of Defense, Soviet Military Power, 1981.

1985.¹¹ These systems replaced the SS-1c/SCUD B by improving accuracy and range.¹² Deployments expanded west and into East Germany. However, the Soviet Union eliminated the first lot of around 150 tactical nuclear weapons during 1988 - 1989 after its leadership decided in 1987 to include SS-23 (*Oka*) missiles under the INF Treaty.

In 1987, NATO estimated that the Warsaw Pact had deployed 1,360-1,365 short range nuclear missiles in Eastern Europe. In 1988, Soviet Premier Gorbachev and, in 1989, Soviet Foreign Minister Shevardnadze announced the unilateral removal of 400 tactical nuclear weapons from East Germany (160 for frontal aviation and 240 for missile troops and artillery). Although many western experts considered the Soviet proposal to be aimed at mitigating Washington's plans to modernize the NATO tactical nuclear forces, this effect was not realized and the Soviets proceeded with their plan. The last train with Soviet tactical nuclear weapons was dispatched from Germany to Russia in late June 1991, thereby eliminating all TNWs from the territory of Warsaw Pact member countries. In 1989, Soviet Foreign Minister Shevardnadze announced the unilateral removal of 400 tactical nuclear weapons from East Germany (160 for frontal aviation and 240 for missile troops and artillery). Although many western experts considered the Soviet proposal to be aimed at mitigating Washington's plans to modernize the NATO tactical nuclear forces, this effect was not realized and the Soviets proceeded with their plan. The last train with Soviet tactical nuclear weapons was dispatched from Germany to Russia in late June 1991, thereby eliminating all TNWs from the territory of Warsaw Pact member countries.

By the late 1980s and early 1990s, following the political and social upheavals in Eastern and Central Europe and the USSR's impending dissolution, the Soviet and Russian leadership decided to accelerate the removal of tactical nuclear weapons from the former Soviet Republics. This was mostly carried out from 1990-1992, under difficult conditions. As explained by a retired Russian general who served in the Nuclear Munitions Support Troops and MOD's Twelfth Main Directorate, Vitaliy Yakovlev:

Problems of an environmental and sociopolitical nature and national-ethnic contradictions that had accumulated over decades developed into disintegration processes, and in a number of cases into interethnic conflicts accompanied by armed clashes ... Alarming reports appeared in domestic and foreign mass media in this period about the presence of tactical nuclear weapons in Chechnya and so on. ¹⁶

I-1.4.3 1991/1992 Unilateral Presidential Nuclear Initiatives

In the fall of 1991, President George Bush decided to further eliminate or limit both strategic and tactical nuclear weapons. The U.S. initiative was a surprise to many in both the Warsaw Pact and NATO, since the early Soviet initiatives had not been enthusiastically received in Washington. It had become clear, however, that a nuclear exchange was less likely to commence due to military aggression than due to either an accidental or unauthorized launch. These concerns were capped by the attempted coup against Soviet President Mikhail Gorbachev in August 1991.

Bush's decision was followed by a similar pronouncement from Gorbachev. Still another set of publicly announced nuclear initiatives to go beyond START occurred on 28 January 1992, when President Bush presented his State of the Union address, and on 29 January 1992, when Russian President Boris Yeltsin spoke in a televised address from Moscow. President Yeltsin, whose remarks were prepared in consultation with other leaders around the former Soviet Union (FSU), reiterated and added to Gorbachev's earlier decisions.

¹⁶ Ibid.

¹¹ According to one report the SS-23s had been tested to a range not exceeding 400 kilometers and therefore did not fall under the INF treaty (Vitaliy Yakovlev, "History of Russian Tactical Nuclear Weapons Reduction," *Yaderny Kontrol*, 29 January 2002, pp. 79-80 [FBIS-SOV-2002-0402]). Perhaps because the Soviets included the SS-23 under INF, the U.S. Department of Defense at the time listed the missile's range at 500 kilometers in *Soviet Military Power*, 1987.

¹² The SS-1c/SCUD B had a range of 300 kilometers.

¹³ Unattributed and Untitled Article, *DPA*, Hamburg, 15 December 1988 [JPRS-TAC-89-001]; Unattributed and Untitled Article, *DPA*, Hamburg, 19 January 1989 [JPRS-TAC-89-004].

¹⁴ Vitaliy Yakovlev, "History of Russian Tactical Nuclear Weapons Reduction," *Yaderny Kontrol*, 29 January 2002, pp. 79-80 [FBIS-SOV-2002-0402].

¹⁵ Vitaliy Yakovlev, "History of Russian Tactical Nuclear Weapons Reduction," *Yaderny Kontrol*, 29 January 2002, pp. 79-80 [FBIS-SOV-2002-0402].

Although some of the provisions¹⁷ of the strategic aspects of the 1991/1992 Presidential Nuclear Initiatives (PNIs) were required when START I entered into force, and others were incorporated into START II, these initiatives also involved specific binding actions that are not specifically addressed by START I or START II. Unlike the initiatives for strategic nuclear weapons, those undertaken with respect to tactical or non-strategic nuclear weapons solely involved political commitments.

President Gorbachev specifically announced the following:

- The USSR would eliminate its entire global inventory of ground-launched, short-range nuclear weapons, including nuclear artillery shells, short-range ballistic missile warheads, and nuclear land mines.
- The USSR would remove all **surface-to-air missile** nuclear warheads from combat units. All such warheads would be stored at central locations, and a portion of them would be destroyed.
- The USSR called, on the basis of reciprocity, for the withdrawal of all nuclear weapons from **frontal aviation** units and for their placement in central storage. This would include gravity bombs and air-launched missiles.
- The USSR would remove all **naval** tactical nuclear weapons, including sea-launched cruise missiles from its surface ships, multi-purpose submarines, and land-based naval aircraft. A portion of these warheads would be destroyed, while the remainder would be centrally stored and available if necessary.

In November 1991, the U.S. Director of Central Intelligence (DCI) issued a classified memorandum that discussed Gorbachev's TNW pledges. The memorandum, which reflected the combined opinion of the U.S. intelligence community, noted the following impacts of the 1991 statement (emphases in original):

- If Gorbachev's unilateral initiatives to reduce tactical nuclear warheads are carried out, almost 75 percent of Moscow's inventory of these warheads will be destroyed or placed in central storage;
- If Gorbachev's reciprocal proposals are implemented, all of the Soviet inventory of tactical nuclear warheads will be destroyed or placed in central storage. 18

The DCI's memorandum also provided some insights into the motivations behind the Soviet initiatives. Beyond the attempted coup's repercussions, U.S. intelligence felt that the Soviet's were placing a high priority on nuclear security by removing the warheads from the non-Russian republics. U.S. intelligence also concluded that Gorbachev was attempting to reassert his credibility with the U.S. as a reliable negotiating partner. However, the memorandum assessed the Soviet president's capacity to fulfill the 1991 pledges as "questionable."

The U.S. intelligence memorandum reported the key provisions of Gorbachev's proposals, and added a few "key judgments":

A unilateral reduction on this scale will:

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¹⁷ For example: the cancellation of weapons systems programs, the removal of forces from alert status, and cooperation on command and control and nuclear weapons handling.

¹⁸ U.S. Director of Central Intelligence, *Soviet Tactical Nuclear Forces and Gorbachev's Nuclear Pledges: Impact, Motivations, and Next Steps (Interagency Intelligence Memorandum)*, NI IIM 91-10006, declassified (formerly classified Secret/NoForn-NoContract-Orcon), November 1991, p. iii.

- Increase the amount of time the Soviet Navy will require to arms its ships, submarines, and aircraft with nuclear munitions.
- Take at least several years to implement.

Reciprocal measures proposed by Gorbachev would, if implemented:

• Limit the air force's quick-response tactical nuclear capability by placing warheads in central storage. 19

President Yeltsin followed up on Gorbachev's proposals in 1992 with several additional announcements and provisions:

- Production for **ground-based** tactical missiles and nuclear **artillery shells** and **mines** had ceased.
- Russia would eliminate its stockpiles of nuclear weapons, including one-third of its **sea-based** tactical warheads and one-half of its weapons for **surface-to-air** missiles. Russia also intended a one-half reduction in its **air force** tactical stockpile.
- On a reciprocal basis, the remaining **air-based** tactical weapons could be removed from deployment and centrally stored.

Perhaps the most important and intriguing element contained in the PNIs was that, for the first time, the United States and Russia proclaimed their intentions to destroy nuclear warheads and not just their delivery vehicles. The Soviet leadership reportedly announced the following warhead eliminations schedule: naval warheads by 1995; antiaircraft missile warheads by 1996; nuclear mines by 1998; and, nuclear warheads of tactical missiles and artillery shells by 2000.²⁰

I-2.0 Baseline Numerical Estimates

Since no official reports have been openly published on the number of TNWs in Russia's arsenal, we will aggregate and summarize the best available estimates. It is important to start with baseline numerical estimates from 1991/1992, since all official Russian statements subsequent to that time have generally used the formula of reporting on progress by percentages of PNI implementation, as opposed to real numbers.

The open source estimates on the number of Soviet/Russian TNWs that existed in 1991/1992 vary widely. The following are some samples:

- At the time of the PNI statements, one Russian estimate provided the following account of Soviet TNWs:
 - 13,759 platforms
 - 11,305 warheads
 - This account estimated that at the conclusion of the unilateral reductions, Russia would still possess 2,560 TNW-related aircraft and 3,100 bombs.²¹

²¹ Ibid.

¹⁹ U.S. Director of Central Intelligence, *Soviet Tactical Nuclear Forces and Gorbachev's Nuclear Pledges: Impact, Motivations, and Next Steps (Interagency Intelligence Memorandum)*, NI IIM 91-10006, declassified (formerly classified Secret/NoForn-NoContract-Orcon), November 1991, p. v.

²⁰ Vladimir Belous, "Nuclear Warheads: What Do We Do? Good Intentions and Harsh Reality," *Nezavisimaya Gazeta*, 17 June 1992, p. 2 [JPRS-UMA-92-026].

- "... about 20 thousand of sub-strategic nukes [sic]."²²
- "Russia's 22,000 tactical weapons -- a number, by the way, I think that is substantially higher than official estimates but is a number that I believe based on Russian sources." ²³
- "About 8,800 Soviet nuclear weapons are in service for tactical use by the Air Force and Ground Forces, and another 3,400 for non-strategic use by the Navy." [Total = 12,200]
- "There were some 15,000 or 17,000 [TNWs] spread across the former Soviet Union [in 1991]."²⁵

Estimates openly available on the number of warheads slated for withdrawal and elimination based on the 1991/1992 initiatives also vary considerably:

- "Gorbachev declared a similar Soviet initiative which produced 13-14,000 units of nuclear weaponry for Russia to destroy." 26
- "As a result of the unilateral and reciprocal initiatives, some 15,000 tactical nuclear warheads have been corrected [sic] in Russia."²⁷
- "If carried out, the Russian tactical warhead reduction initiatives, announced in 1991, could result in the elimination of a total of about 15,000 tactical warheads." ²⁸
- The PNIs would require Russia to destroy approximately 8,000 tactical nuclear warheads.²⁹
- "In early 1992 there were an estimated 4,000 substrategic nuclear weapons still in Belarus, Kazakhstan, and Ukraine." 30
- "A total of around 3,000 tactical nuclear weapons were removed from Ukraine." 31

More recent estimates have not reduced the ranges in estimates:

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²² Yuri Fedorov, "Russia's Doctrine on the Use of Nuclear Weapons," *Pugwash Conferences on Science and World Affairs*, 15-17 November 2002.

²³ Bruce Blair, Senior Fellow, Foreign Policy Studies, The Brookings Institute, "Russian Missile Detargeting and Nuclear Doctrine," Hearing of the Military Research and Development Subcommittee of the House National Security Committee, Representative Curt Weldon, Chairman, provided by Federal Information Systems Corporation, 13 March 1997.

²⁴ Edward Warner III, "Command and Control of Soviet Nuclear Weapons," Statement presented to the Defense Policy Panel of the House Committee on Armed Services, 31 July 1991, p.3, cited in Kurt Campbell, et al, *Soviet Nuclear Fission: Control of the Nuclear Arsenal in a Disintegrating Soviet Union*, CSIA Studies in International Security No. 1, Harvard University, p. 21.

²⁵ Graham Allison, Member Russia Task Force of the Secretary Of Energy Advisory Board, "Hearing on Russian Nuclear Proliferation," U.S. Senate Foreign Relations Committee, Senator Jesse Helms, Chairman, provided by eMediaMillWorks, Inc., Federal Document Clearing House, Inc., 28 March 2001.

²⁶ Timur Kadyshev, "Tactical Nuclear Weapons," *Conference Summary on The Future of Russian-US Arms Reductions: START III and Beyond*, Co-sponsored by the MIT Security Studies Program and the Center for Arms Control, Energy, and Environmental Studies at the Moscow Institute of Physics and Technology, Cambridge, Massachusetts, 2-6, February 1998.

²⁷ Claiborne Pell, Senator, "U.S. Plans and Programs Regarding Weapons Dismantlement in the Former Soviet Union," Senate Foreign Relations Committee Hearing, provided by Federal Information Systems Corporation, 27 July 1992.

²⁸ Office of the Secretary of Defense, *Proliferation: Threat and Response*, U.S. Department of Defense, April 1997.

²⁹ Vladimir Belous, "Nuclear Warheads: What Do We Do? Good Intentions and Harsh Reality," *Nezavisimaya Gazeta*, 17 June 1992, p. 2 [JPRS-UMA-92-026].

³⁰ Jon Brook Wolfsthal, Cristina-Astrid Chuen, Emily Ewell Daughtry, editors, *Nuclear Status Report: Nuclear Weapons, Fissile Material, And Export Controls In The Former Soviet Union*, No. 6, A Cooperative Project of the Monterey Institute of International Studies and the Carnegie Endowment for International Peace, June 2001, p. 33.

³¹ Vitaliy Yakovlev, "History of Russian Tactical Nuclear Weapons Reduction," *Yaderny Kontrol*, 29 January 2002, pp. 79-80 [FBIS-SOV-2002-0402].

- "By the end of 1996, Russia had 4,000-5,000 non-strategic warheads. This weaponry is stored in Army, Air Force and Navy depots and under the custody of the Twelfth Main Directorate of the Ministry of Defense. Decommissioned tactical warheads are stored in centralized depots, as well as in the depots of production and dismantlement plants, or are transported to liquidation sites ... Under current projections, by 2003, no more than one thousand tactical weapons will remain, though it is more likely that only several hundred will exist." 32
- In 1998, the U.S. Congress found that, "The 7,000 to 12,000 or more nonstrategic (or "tactical") nuclear weapons estimated by the United States Strategic Command to be in the Russian arsenal may present the greatest threat of sale or theft of a nuclear warhead in the world today."³³
- In 2002, "Russians have made tremendous progress in openness, but there are pockets of secrecy that are completely out of step with the new environment, and the greatest zone of secrecy relates to tactical nuclear weapons. Our unclassified intelligence estimates of the Russia's tactical nuclear weapons arsenal is in the range of 12,000 18,000. That's way too many, and the range is dangerously wide."³⁴
- In 2002, "The current Russian stockpile is estimated to include ... about 3,500 operational tactical nuclear weapons" [Note: this estimate would not include warheads in storage.]

Throughout the 1990s, analysts in the U.S.-based Natural Resources Defense Council have provided a periodically updated list of estimates on Russian nuclear forces. Their numbers have evolved as follows:

	1996		2000^{36}		2002^{37}	
	Launchers	Warheads	Launchers	Warheads	Launchers	Warheads
Strategic Defense	1,100	1,100	1,200	1,200	1,200	1,200
Bombers & fighters	426	1,600	400	1,600	385	1,540
Naval						
Aircraft	240	600	140	600	95	190
Cruise missiles		500		500	n/a	240
Anti-submarine	n/a	500	n/a	300	n/a	210
Total	1,766	4,300		4,200		3,380*

^{*}An additional 8,000 - 10,000 non-operational strategic and non-strategic warheads may be in reserve or awaiting dismantlement.

For the purposes of this report, we will utilize the estimates provided by Alexei Arbatov, a member of the Russian Duma. In 1999, Arbatov provided the following table of his own calculations:³⁸

³³ "Russian Nonstrategic Nuclear Weapons," Public Law 105-261, *Strom Thurmond National Defense Authorization Act for Fiscal Year 1999* [H.R. 3616], Title XV, Subtitle A, Section 1504, 17 October 1998.

³² Timur Kadyshev, "Tactical Nuclear Weapons," *Conference Summary on The Future of Russian-US Arms Reductions: START III and Beyond*, Co-sponsored by the MIT Security Studies Program and the Center for Arms Control, Energy, and Environmental Studies at the Moscow Institute of Physics and Technology, Cambridge, Massachusetts, 2-6, February 1998.

³⁴ Gen. Eugene Habiger, U.S. Air Force (Ret.), Former Commander U.S. Strategic Command, "The Treaty Between the United States of America and the Russian Federation on Strategic Offensive Reductions," Committee on Senate Foreign Relations, provided by eMediaMillWorks, Inc., Federal Document Clearing House, Inc., 23 July 2002.

¹35 Arms Control Association, "Fact Sheet: Soviet/Russian Nuclear Arms Control," Washington, June 2002.

³⁶ Robert Norris and William Arkin, "NRDC Nuclear Notebook: Russian Nuclear Forces, 2000," Bulletin of the Atomic Scientists, Vol. 56, No. 4, July/August 2000, p. 70.

³⁷ Robert Norris and William Arkin, "NRDC Nuclear Notebook: Russian Nuclear Forces, 2002," Bulletin of the Atomic Scientists, Vol. 58, No. 4, July/August 2002, pp. 71-72.

³⁸ Alexei Arbatov, "Deep Cuts and De-alerting: A Russian Perspective," in Harold Feiveson, editor, *The Nuclear Turning Point*: A Blueprint for Deep Cuts and De-Alerting of Nuclear Weapons, The Brookings Institutions, Washington, 1999, p. 319.

	Total in service	Subject to elimination in accordance with	To be el	To be eliminated	
Weapons	in 1991	USSR-Russian commitments	1997 (political)	2003 (technical)	
Ground forces			· · · · · · · · · · · · · · · · · · ·	,	
Rocket forces	4,000	4,000	4,000	4,000	
Artillery	2,000	2,000	2,000	2,000	
Corps of Engineers (atomic demolition mi	700	700	500	700	
Air Defense (ground-to-air missiles	3,000	1,500	2,400	3,000	
Air forces	-,				
Frontal aviation	7,000	3,500	6,000	7,000	
(bombs, short range ai	r-to-surface missil	les)	,	,	
General purpose Navy		,			
Ships and submarines	3,000	1,000	1,000	3,000	
(antiship, antisubmarii	ne, land-attack)				
Naval aviation	2,000	1,000	2,000	2,000	
Total	21,700	13,700	17,900	21,700	

Obviously, Russia has not completed its reductions as anticipated in 1991/1992. As Arbatov explains, "Whereas in 1991 the USSR had about 22,000 tactical nuclear weapons, at present Russia retains around 3,800, including 200 atomic demolition munitions, 600 air defense missile warheads, 1,000 gravity bombs and short-range air-to-surface missiles, and 2,000 naval antiship, antisubmarine, and land-attack weapons. All those are in the depots of the air force, navy, and air defense or in central storage facilities of the nuclear-technical troops of the Twelfth Main Directorate of the Ministry of Defense. Those that are withdrawn from the active service are in the central storage facilities of the Twelfth Directorate, in the storage facilities of the production-dismantling plants, or in transit to these sites." 39

Russia's official declarations are described in detail elsewhere in this report. To summarize here, however, by utilizing Arbatov's estimates as a baseline and Russia's subsequent official declarations, we estimate the following evolution in Russian TNW force levels:

Weapons	Total in service in 1991	Outside central storage in 2000, 2001, & 2002	Warhead inventory in 2000, 2001, & 2002	Outside central storage in 2004	Warhead inventory in 2004
Ground forces					
Rocket forces	4,400	0	>0	0	0
Artillery	2,000	0	>0	0	0
Corps of Engineers	700	0	>0	0	0
Air Defense	3,000	unknown	1,500	unknown	1,500
Air forces					
Frontal aviation	7,000	unknown	3,500	unknown	3,500
General purpose Navy					
Ships and submarines	3,000	0	2,000	0	2,000
Naval aviation	2,000	0	1,400	0	1,000
Total	21,700		8,400		8,000

As depicted in this chart, it is not known how many air defense and tactical aviation nuclear munitions are stored with forward deployed forces. We believe that these munitions are not *deployed* in the sense that the warheads are mated to the delivery systems and on alert. Rather, we believe that even those warheads that may be assigned to service-level units are in local storage (as opposed to those warheads stored in centralized sites). If Russia completes implementation of the PNIs as planned, we believe that Russia will possess approximately 8,000 tactical nuclear warheads, available for either deployment or elimination, in its stockpile by 2004.

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³⁹ Ibid., p. 320.

I-3.0 1992-2003 Tactical Nuclear Force Developments

Following the attempted presidential coup in August 1991 and the transition from Soviet Union to independent republics, Moscow began to make plans for the removal of all nuclear weapons from the newly independent states to Russian territory. The first to be returned to Russia would be the tactical nuclear forces. These weapons were "presumed to be less closely monitored ... arousing the most anxiety in Western general staffs, particularly if there are serious ethnic disturbances." Even at the outset, Russia's intention was to destroy the returning tactical warheads rather than the standard practice of recycling them back into the active inventory. However, in an interview with the French media, the chief of the nascent Russian Ministry of Defense, General Konstantin Kobets "stressed that no one yet has adequate technology to eliminate these warheads." He suggested the need for international cooperation, and that the elimination of the warheads could take up to seven years.

In the Fall of 1991, U.S. and Soviet delegations met in Moscow and Washington. At those meetings, the United States pressed the Soviets to disable and to consolidate its widely dispersed tactical nuclear weapons, which the U.S. believed posed the greatest danger as the Soviet Union disintegrated. Reginald Bartholomew, the U.S. Undersecretary of Defense for International Security Affairs, further stated:

It has been generally agreed here and abroad that the major danger from nuclear weapons in the dissolution of the former Soviet Union comes from the wide dispersion of the smaller, easily transportable tactical warheads. As I have said, a main objective of our meetings in October and November in Moscow and Washington, and the main purpose of Secretary [of State] Baker's December trip to the four capitals was to push for rapid disabling and consolidation of these tactical nuclear weapons for dismantling. After some initial resistance by military and civilian officials of the former Soviet Union, I can report that a large-scale process is underway inside the former Soviet Union to do what we pushed for.⁴²

In a 1992 letter to United Nations Secretary General Boutros Boutros Ghali, President Boris Yeltsin described Russia's general plans for the consolidation of the USSR's TNW legacy:

The former USSR's weaponry of this kind is currently located on the territory of three states - Russia, Belarus, and the Ukraine. In line with the agreement between the CIS states all tactical nuclear munitions will be moved to Russia by 1 July 1992. Production of nuclear warheads for ground-launched tactical missiles, artillery shells, and nuclear landmines has been halted. Stockpiles of these tactical nuclear weapons will be eliminated ... Russia is eliminating a third of its sea-launched tactical nuclear weapons and half of its nuclear warheads for surface-to-air missiles ... Russia will also be halving stocks of airborne tactical nuclear weapons. 43

In order to accomplish the TNW withdrawals, Russia signed an agreement *On Joint Measures With Respect to Nuclear Weapons* with Kazakhstan, Belarus, and Ukraine. This agreement called for not only the transfer of all TNWs from the three republics to Russia by 1 July 1992, but also the elimination of the warheads by Russia. The debate within Russia over what to do with the warheads once repatriated

⁴⁰ Jan Kraze, "General Kobets' Surprising Serenity," *Le Monde*, 16 December 1991, pp. 1, 3 [FBIS-SOV-91-242].

⁴¹ Ibid.

⁴² Reginald Bartholomew, Undersecretary of Defense for International Security Affairs, "Dismantling of The Former Soviet Union's Nuclear Weapons," Hearing of The Senate Armed Services Committee, Senator Sam Nunn, Chairman, provided by Federal Information Systems Corporation, Federal News Service, 5 February 1992.

⁴³ Boris Yeltsin, "Russian and the World," Letter to UN Secretary General Boutros Boutros Ghali, New York, *Rossiyskaya Gazeta*, 31 January 1992 [FBIS-SOV-92-023].

continued for some time. In one press interview, Marshal Shaposhnikov, then Commander-in-Chief of the Joint Armed Forces of the Commonwealth of Independent States (CIS) stated:

The future of these weapons is [not determined] ... We intend to reutilize [utilizirovat] or dismantle [razdelyvat] these weapons – in line with existing accords. Weapons-grade plutonium and uranium are to be turned into nuclear fuel to be used for peaceful purposes. Some Western states are offering a very long list of services here: transportation, storage, protection [sberezheniye], and, last, reutilization. But we have quite enough experience in these matters. We have, after all, already removed nuclear weapons from Europe, from the Transcaucasus, and from the Baltic. 44

In fact, Lieutenant General Sergey Zelentsov, then deputy chief of the Russian MOD's Twelfth Main Directorate, announced that the TNWs were removed from the Transcaucasia region in 1991. 45 In 1992. Russian Defense Minister Pavel Grachev affirmed that there were "no tactical nuclear weapons ... on the territory of the Baltic states."46

The historical record of the TNW withdrawals from the newly independent republics set the stage for many of the issues that continue to arise regarding these weapon systems. There was considerable movement of TNWs from the territories of Ukraine, Kazakhstan, and Belarus to Russia in the early 1990s. It appears that a variety of TNW types were deployed previously to the Ukrainian and Belarusian republics: anti-aircraft missile warheads, aerial bombs for front-line aircraft, torpedo and sea-launched cruise missile warheads, nuclear landmines, and artillery shell warheads. 47 By one estimate, "Over 4,000 tactical nuclear warheads were withdrawn from Ukraine, Belarus and Kazakhstan to Russia in early 1992."48

Kazakhstan had "practically no" TNWs deployed on its territory at the time of independence. 49 According to General Zelentsov, those few TNWs deployed in Kazakhstan had been quickly removed in January 1992.⁵⁰ Belarus was scheduled to return all of its TNWs to Russia by 1 July 1992. A much smaller quantity of tactical weapons resided in Belarus than in Ukraine, but by February of 1992 there was already confusion reported in the media as to the progress of the withdrawals. One report suggested that the Russian president and the Belarusian foreign minister had claimed that the withdrawals of TNWs had been completed by January 1992, but this was refuted by the Belarusian Defense Ministry, which merely stated that the withdrawal was "coming to and end." Ultimately, the last transfer of TNWs from Belarus took place by the end of April 1992.

I-3.1 The Withdrawal from Ukraine

Regarding the withdrawal of TNWs, Ukraine was the most problematic of the newly independent republics. At the time of its independence, Ukraine possessed the largest stockpile of TNWs of the three

⁴⁴ Sergey Parkhomenko, "Marshal Shaposhnikov: 'Russian President's Statements Are Political Statements ...'," Nezavisimaya Gazeta, 12 February 19992, p. 2 [FBIS-SOV-92-029].

⁴⁵ Statements by Lieutenant General Sergey Zelentsov, *Interfax*, 6 May 1992 [FBIS-SOV-92-088]. This is confirmed by Vitaliy Yakovley, "History of Russian Tactical Nuclear Weapons Reduction," Yaderny Kontrol, 29 January 2002, pp. 79-80 [FBIS-SOV-2002-0402].

⁴⁶ News conference with Pavel Grachev, Radio Rossii Network, 16 December 1992 [FBIS-SOV-92-243].

⁴⁷ K. Belyaninov, "Kravchuk Probably Did Not Know Everything," Komsomolskaya Pravda, 8 May 1992, p. 3 [FBIS-SOV-92-

⁴⁸ Ashton Carter, Assistant Secretary of Defense, "Former Soviet Union Cooperative Threat Reduction Program" House Armed Services Committee, Federal Document Clearing House, Inc., 28 April 1994.

⁴⁹ Russian Foreign Ministry expert, *Interfax*, 7 February 1992 [FBIS-SOV-92-029].

⁵⁰ Vladimir Desyatov and Pavel Felgengauer, "Missiles Are in Place, Only a Canard Had Flown Away. But Decree on the Republic's Army Is Nothing But the Truth," Nezavisimaya Gazeta, 18 March 1992, p. 1 [FBIS-SOV-92-054].

⁵¹ Igor Sinyakevich, "Belarus: Tactical Nuclear Weapons Still Not Withdrawn From Republic. What About Statements by President Yeltsin and Belarus Foreign Ministry Petr Kravchenko?" Nezavisimaya Gazeta, 8 February 1992, p. 1 [FBIS-SOV-92-027]; Statement by Colonel General Anatoly Kostenko, *Pravda*, 11 February 1992 [FBIS-SOV-92-029].

new nuclear states (which included Belarus and Kazakhstan). Initially, while it claimed to exercise "rigid control to ensure the nonuse and nonemployment of nuclear weapons" on its soil, Ukraine planned the removal of all TNWs by 1 July 1992 and the destruction of the warheads in Russia by 1994.⁵² Withdrawal of the TNWs from Ukraine began by at least January 1992, initially from the Kiev District. In an interview given that month by the Kiev District's military commander, a correspondent noted that, "The first nuclear warheads from tactical missiles and nuclear artillery ammunition have already been sent to the designated point [i.e., a Russian storage site]."

This period in early 1992 saw considerable activity regarding TNW shipments. According to Pavel Felgengauer, a prolific Russian military analyst, the warheads associated with the Ukrainian TNWs were manufactured at Arzamas-16.⁵⁴ In accordance with standard Soviet methodologies, all warheads were transported out of Ukraine by rail. By February 1992, one report claimed that "almost one half" of the TNWs in Ukraine had been withdrawn.⁵⁵ Russian General Zelentsov reported that 57% had been withdrawn by March.⁵⁶

However, Ukrainian authorities routinely delayed shipments.⁵⁷ Then, in March 1992 President Kravchuk suspended the removal of TNWs from Ukraine. Kravchuk reported to a visiting U.S. congressional delegation that he was not confident that Russia was destroying the warheads removed from his territory. He therefore ordered all shipments suspended until "reliable guarantees of their subsequent destruction [could] be obtained." Kravchuk went on to claim that Russia did not then possess sufficient facilities for dismantling the warheads and therefore suggested that Ukraine required its own warhead disassembly plant. Ukraine's assertions were not a surprise among western experts. In a 1991 memorandum by the U.S. Director of Central Intelligence, the U.S. recognized then that, "the republics want a greater say in the Kremlin's nuclear decision-making."

Kravchuk's solution was unacceptable to both Russia and western governments, since it would conversely provide Ukraine with the capability to manufacture warheads. During a U.S. congressional hearing in July 1992, General William Burns, the lead U.S. negotiator on nuclear threat reduction issues, relayed the American concerns with respect to Ukraine's suspension of the nuclear transfers:

We did have some problems, as you know, in March where the government of Ukraine stopped the withdrawal of tactical weapons. We made a very strong presentation to the Ukrainian government, and I think they understood the seriousness of the act that they were taking and backed away from them. At the same time, I think the Russian government provided them with greater assurances of openness as to what was happening to these weapons as they were being withdrawn. So, I think the process is working. 60

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⁵² UKRINFORM-TASS, "Kravchuk: Ukrainian Armed Forces Starts 3 January," 3 January, p. 3 [FBIS-SOV-91-003]; Aleksey Petrunya, TASS International Service, 8 January 1992 [FBIS-SOV-92-006].

V. Shvyrev, "Strictly According to Schedule - Tactical Nuclear Weapons Are Being Withdrawn From the Territory of the Kiev Military District," *Narodnaya Armiya*, interview with Colonel A. Koryakin, 28 January 1992, p. 1 [FBIS-SOV-92-023].
 Pavel Felgengauer, "Ukraine Seeks Nuclear Independence. This Could Lead to Its International Isolation," *Nezavisimaya Gazeta*, 14 March 1992, p. 2 [FBIS-SOV-92-051].

⁵⁵ Russian Foreign Ministry expert, *Interfax*, 7 February 1992 [FBIS-SOV-92-029].

⁵⁶ Vladimir Desyatov and Pavel Felgengauer, "Missiles Are in Place, Only a Canard Had Flown Away. but Decree on the Republic's Army Is Nothing But the Truth," *Nezavisimaya Gazeta*, 18 March 1992, p. 1 [FBIS-SOV-92-054].

⁵⁷ K. Belyaninov, "How Much Will its Own Arzamas-17 Cost Kiev?" *Komsomolskaya Pravda*, 18 March 1992, p. 1 [FBIS-SOV-92-054].

⁵⁸ Sergey Tsikora, "President Kravchuk Suspends Removal of Tactical Nuclear Weapons from Ukraine," *Izvestia*, 14 March 1992, p. 1, 2 [FBIS-SOV-92-051].

⁵⁹ U.S. Director of Central Intelligence, *Soviet Tactical Nuclear Forces and Gorbachev's Nuclear Pledges: Impact, Motivations, and Next Steps (Interagency Intelligence Memorandum)*, NI IIM 91-10006, declassified (formerly classified Secret/NoForn-NoContract-Orcon), November 1991, p. vi.

⁶⁰ General William Burns, U.S. Army (Ret.), Chief Negotiator on the Safety, Security and Dismantlement of Nuclear Weapons, U.S. State Department, "U.S. Plans and Programs Regarding Weapons Dismantlement in the Former Soviet Union," Senate

A solution acceptable to Ukraine eventually was reached, however. The Russian Defense and Atomic Energy Ministries concluded several agreements with the Ukrainian Defense Ministry:

- An agreement between Ukraine and the Russian Federation On the Procedure for Redeployment of Nuclear Weapons From the Territory of Ukraine to Central Preplant Bases of the Russian Federation With the Objective of Stripping and Destroying Them;
- A protocol between Ukraine and Russia to the above agreement concerning the procedure for verifying the destruction of nuclear weapons being removed from the territory of Ukraine at RF industrial enterprises; and,
- An annex to the protocol between Ukraine and the Russia concerning the processes and activities for verifying the destruction of nuclear weapons at RF industrial enterprises.⁶¹

The Ukrainian president was first to sign those documents, and then the Russian Defense Ministry needed a little over two weeks to remove around 1,500 tactical nuclear weapons from Ukrainian territory. Shipments resumed in April of 1992. By 6 May, the Russian MOD was able to announce that the last TNW from Ukraine crossed into Russian territory at 0130 that morning. General Zelentsov noted that the elimination of the Ukrainian-origin warheads would begin within a month and would last until the year 2000.

I-3.2 Within Russia

Throughout the 1990s, officials continually claimed that Russia was implementing consistently its unilateral initiatives related to tactical nuclear weapons. At the April 2000 Non-Proliferation Treaty (NPT) Review Conference, Russian Minister of Foreign Affairs Ivanov stated that:

- Tactical nuclear weapons "...[had] been completely removed from surface ships and multipurpose submarines, as well as from the land-based naval aircraft, and are stored at centralized storage facilities."
- "One third of all nuclear munitions for the sea-based tactical missiles and naval aircraft [had] been eliminated."
- Russia was "about to complete the destruction of nuclear warheads from tactical missiles, artillery shells and nuclear mines."
- Russia had "destroyed half of the nuclear warheads for anti-aircraft missiles and for nuclear gravity bombs." ⁶⁵

In 2001, the Russian MFA's Rybachenkov presented the following "Implementation of the Russian Unilateral Initiatives of the Reduction of the Tactical Nuclear Weapons":

Foreign Relations Committee Hearing, Senator Claiborne Pell, Chairman, provided by Federal Information Systems Corporation, 27 July 1992.

⁶¹ Vitaliy Yakovlev, "History of Russian Tactical Nuclear Weapons Reduction," *Yaderny Kontrol*, 29 January 2002, pp. 79-80 [FBIS-SOV-2002-0402].

⁶² Ibid.

⁶³ K. Belyaninov, "Kravchuk Probably Did Not Know Everything," *Komsomolskaya Pravda*, 8 May 1992, p. 3 [FBIS-SOV-92-090].

⁶⁴ Statements by Lieutenant General Sergey Zelentsov, *Interfax*, 6 May 1992 [FBIS-SOV-92-088].

⁶⁵ Ivanov, Igor S., Statement, Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons, *Minister of Foreign Affairs of the Russian Federation*, New York, April 25, 2000.

- All tactical nuclear weapons of surface ships, multipurpose submarines, and land based naval aviation were removed and kept in the centralized storage facilities;
- One third of the total amount of nuclear warheads for sea-launched tactical missiles and naval aviation had been eliminated;
- All tactical nuclear warheads, previously deployed out[side] of Russia, had been withdrawn and were being eliminated;
- Production of the nuclear warheads for ground-launched tactical missiles, artillery nuclear projectiles, and mines had been fully stopped;
- Elimination of the nuclear warheads for three types of tactical missiles, six types of artillery nuclear projectiles, and nuclear mines were being completed;
- Half of the total amount of warheads for air defense missiles and nuclear air bombs had been eliminated; and,
- Tactical nuclear weapons were deployed only inside the national territory."66

At the First Session of the Preparatory Committee for the 2005 NPT Review Conference, held in April 2002 in New York, the Russian delegation issued a statement that included several items of interest on TNWs:

As regards the reduction of non-strategic (tactical) nuclear weapons (NSNW), Russia is guided by the unilateral initiatives of the President of the Russian Federation (1991-1992). These initiatives of the Russian Federation are being implemented in accordance with the Federal objective-oriented program of elimination and disposal of nuclear warheads for strategic and tactical arms. In the course of the implementation of the Program:

- All NSNW has been dismantled from surface ships and multiple-purpose submarines, as well from ground-based naval air force and placed for centralized storage; more than 30% of nuclear munitions of the total number designed for tactical sea-launched missiles and naval air force have been eliminated;
- All tactical nuclear munitions previously deployed outside Russia have been brought back to her territory and are being eliminated;
- Production of nuclear munitions for tactical ground-launched missiles, nuclear artillery shells and nuclear mines has been completely stopped; the destruction of nuclear reentry vehicles for tactical missiles and nuclear artillery shells, as well as nuclear mines continues;
- 50% of nuclear surface-to-air missiles and 50% of nuclear air bombs of their total number have been destroyed;
- *All Russia's NSNW have been placed only within national territory.*

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⁶⁶ Vladimir Rybachenkov, "Nuclear Strategy of Russia," Counsellor [sic], Ministry of Foreign Affairs of the Russian Federation, *Lecture at the NATO School*, Oberammergau, 1 March 2001.

So, Russia has practically implemented all the declared initiatives to reduce NSNW with the exception of elimination of nuclear weapons of the Army ... Russia plans to complete implementation of the initiatives in the sphere of NSNW by 2004 on condition of adequate financing.⁶⁷

Nonetheless, signs remain that Russia may be moving to sustain, and possibly reinforce, its tactical nuclear forces in various regions. For example, in 2000, under the Nunn-Lugar Cooperative Threat Reduction (CTR) Program the Russian Defense Ministry requested that the U.S. fund the installation of perimeter security systems around a nuclear weapon storage site near the town of Novorossiysk. The security systems themselves had already been provided by the U.S. Defense Department through the CTR Program in 1997 and 2000, but MOD claimed it did not have sufficient financing to install the systems.

The Novorossiysk site is in southern Russia on the Black Sea coast. General Colonel Igor Nikolayevich Valynkin, Chief of the Russian General Staff's Twelfth Main Directorate, confirmed that Novorossiysk only came under his organization's control in 1998 along with the other Russian Air Force and Navy nuclear weapon storage sites. Since Novorossiysk is a regional, service-level site, it likely includes few bunkers and minimal storage capacity intended only to support spare warheads or weapon maintenance. The Russians noted in CTR technical discussions with the U.S. DoD that the security at Novorossiysk was not up to Twelfth Main Directorate safety and security standards and was therefore insufficient to support nuclear weapons. Consequently, MOD had removed all of the weapons from Novorossiysk.

There are no START-related facilities in that area, as the START Memorandum of Understanding data does not identify any strategic weapons associated with the Novorossiysk region, regarding Navy or any other assets. Furthermore, General Valynkin confirmed to U.S. CTR officials in 2000 that all tactical (land and sea) nuclear weapons are stored at central sites with respect to the 1991/1992 Presidential Nuclear Initiatives. Since no strategic assets are located there, and since the Twelfth Main Directorate had already removed the weapons from that site, it would appear that Russia could be moving to reintroduce tactical systems in support of Black Sea Fleet operations. The resurgence of the Russian Navy in the region certainly appears to be underway, as President Putin ordered its head, Admiral Vladimir Kuroyedov, to prepare the Novorossiysk port to be prepared to base the Black Sea Fleet there by 2010. 68

The U.S.-Russian interaction regarding Novorossiysk offered some insight into what was clearly an evolving Russian policy with respect to its theater nuclear forces. Several additional insights were provided during the public discussions and U.S. congressional hearings concerning the 2002 Strategic Offensive Reductions Treaty (SORT, or Moscow Treaty). For example, in May 2002, Yuri Baluyevsky, First Deputy Chief of the Armed Forces General Staff for Arms Control, held a news conference to discuss the results of the SORT negotiations. During the session, he offered a comment on the issue of TNWs:

When some American colleagues and military politicians tell us that they are worried by tactical nuclear weapons, we say, let's make it clear who should be worried more by it. You have your tactical nuclear weapons in Europe and these weapons can be used against our strategic nuclear weapons or other facilities in our country, strategic or economic ones. So, let's make it clear who should be worried by the presence of tactical nuclear weapons more?

We have largely fulfilled our unilateral obligations with regard to nuclear tactical weapons. We are ready to conduct negotiations. And one of our first conditions will be

⁶⁷ *Ministry of Foreign Affairs of the Russian Federation*, "Statement of the delegation of the Russian Federation at the First Session of the Preparatory Committee for the 2005 NPT Review Conference under Article VI of the Treaty (New York, April 11, 2002)," Information and Press Department, Daily News Bulletin, April 24, 2002.

⁶⁸ ITAR-TASS, "Novorossiysk transport issues should be settled before fleet can move in - Putin," 16 September 2003.

this: let's make everything clear with the places where these tactical nuclear weapons are stored. Russia have them all on its own territory [sic]. ⁶⁹

In July 2002, the U.S. Senate Armed Services Committee held hearings on SORT. The issue of Russia's TNWs, not covered by the treaty, was a prevalent topic during the discussions. U.S. Defense Secretary Donald Rumsfeld made several relevant comments, especially concerning transparency and accounting. He particularly stressed the reasoning for *not* including TNWs in the treaty:

We might have argued, conversely, that Russia's proximity to rogue nations allows them to deter those regimes with tactical systems, whereas because they're many thousands of miles away from us, the U.S. distance from them requires more intercontinental systems than Russia needs. This could have resulted in a mind-numbing debate over how many nonstrategic systems should equal an intercontinental system or open the door to a discussion of whether an agreement must include all nuclear warheads, including tactical nuclear warheads, and so on and so forth, ad infinitum. ⁷⁰

Senators Daniel Akaka and Bill Nelson queried Rumsfeld on the number of tactical weapons in the Russian inventory, to which Rumsfeld responded:

"I think that what's important there -- and the Russians have many multiples more than we do of theater nuclear weapons. We believe that our interest is in gaining a better awareness as to what they have, and we do not have a good fix on the numbers from an intelligence standpoint, nor have they been forthcoming in discussing that ... We think that some degree of transparency would be helpful as to what they're doing by way of production, what they're doing by way of storage ... The fact that they have many multiples more than we do does not concern me, because they have a different circumstance than we do."

The "different circumstances" to which Rumsfeld refers are at the heart of Russian policy with respect to TNWs. As explained in the following section, Russian policy has evolved to the point that it nearly embraces TNWs as vital to its national security.

I-4.0 Recent Developments in Russia's Tactical Nuclear Forces Policy

I-4.1 Early Post-Cold War Russian Military Policies

Just as the Soviet Union and the United States were beginning to emerge from their Cold War confrontation, and as Premier Gorbachev's openness policies allowed for a more informed and overt debate within Russia on nuclear policy issues, Russian analysts began to publish articles on the future of their country's military strategy. One such article was written by Radomir Bogdanov and Andrey Kortunov of the Institute of USA and Canada Studies in the Russian Academy of Sciences (ISKRAN).⁷²

⁶⁹ Yuri Baluyevsky, "Press Conference with First Deputy Chief of the Armed Forces General Staff on Arms Control," *Official Kremlin International News Broadcast*, Federal News Service, Inc., 24 May 2002.

pp. 3-13 [JPRS-TAC-89-033].

Donald Rumsfeld, "U.S. Senate Armed Services Committee Holds a Hearing on the Nuclear Treaty with Russia," U.S.
 Senator Carl Levin, Chairman, provided by eMediaMillWorks, Inc., Federal Document Clearing House, Inc., 25 July 2002.
 Transcript, "U.S. Senate Armed Services Committee Holds a Hearing on the Nuclear Treaty with Russia," U.S. Senator Carl

Levin, Chairman, provided by eMediaMillWorks, Inc., Federal Document Clearing House, Inc., 25 July 2002. ⁷² Radomir Bogdanov and Andrey Kortunov, "On the Balance of Power," *International Affairs* (Moscow), No. 8, August 1989,

Bogdanov and Kortunov argued for "reasonable sufficiency" as the basis for restructuring its post-Cold War nuclear forces, essentially minimum deterrence through a 95% reduction in Russia's nuclear forces. They suggested that qualitative measures, as opposed to quantitative measures, should be the defining parameters and that the "special nature" of nuclear weapons "presupposes a drastic unilateral cut in the Soviet nuclear arsenal. Specifically, Bogdanov and Kortunov proposed a force structure of 500 nuclear warheads with differing yields and mounted on SS-25 mobile launchers and Delta 4 submarines.⁷³ Thus the elimination of all TNWs, they felt, would not adversely affect Russia's national security.

In late 1992, Russia began to draft new military doctrines to address the changed domestic and international conditions. As Marshal Shaposhnikov noted, "The world has now entered a period of transition from confrontation to demilitarization and new international relations, to global cooperation and collaboration." He claimed that the primary threats to Russian security were internal and that the draft military blueprint was designed to prevent war, not fight it. Given Russia's conditions in 1992-1993, Russia would keep its military forces within some measure of *reasonable sufficiency*, which Shaposhnikov defined as, "A state's ability in the event of aggression against it to cause unacceptable damage to the attacker and make it halt military action." In this context, nuclear weapons become the most important component of the armed forces.

On 7 December 1992, the Russian Congress of People's Deputies issued a decree, *On the Situation in the Armed Forces and the Military Policy of the Russian Federation*. It stated the following:

The activity of the states of the world community are substantially reducing the level of the direct military threat. At the present stage the protection of Russia's sovereignty and territorial integrity can be ensured by the Armed Forces' resolution of two main tasks: deterring the unleashing of wars directed against Russia by the presence of strategic nuclear forces and other forces equipped with high-precision weapons and delivery vehicles; [and] the prompt neutralization of military conflicts by highly mobile general-purpose forces. ⁷⁶

The decree further called for the Russian parliament and president to draft the necessary legislation and military policies in 1993 to support these goals at sufficient levels. Clearly, TNWs play key roles in both of the objectives. The outlines of Russia's new military doctrine took some time to develop and began to surface publicly toward the end of 1993. Some of its provisions caused consternation among western experts. In particular, Russia abandoned the no-first use stance it had taken with respect to nuclear weapons since 1982.

During U.S. congressional hearings on Russian nuclear command and control, Bruce Blair, who at the time was a Senior Fellow in Foreign Policy Studies at The Brookings Institution and is now President of the U.S.-based Center for Defense Information, made the following observation:

We all know that Russia grew more dependent on nuclear weapons following the disintegration of the conventional Red Army. Now, this puts their nuclear doctrine and strategy in the spotlight, where there are two disturbing trends that I would like to briefly cover. One of these is the growing expectation among Russian planners that they could be

⁷³ Ibid.

⁷⁴ Viktor Litovkin, "Military Danger to the Commonwealth Now Lies Within It, Marshal of Aviation Yevgeniy Shaposhnikov Believes," *Izvestiya*, p. 2 [FBIS-SOV-92-222].

⁷⁵ Ibid.

⁷⁶ Decree Number 4049-1 of the Russian Congress of People's Deputies, signed by R. I. Khasbulatov [Chairman of the Russian Federation Supreme Soviet], reported in *Rossiyskaya Gazeta*, 19 December 1992, p. 15 [FBIS-SOV-92-247]. *Interfax* reported on 22 April 2000 [FBIS document CEP20000422000073] that Boris Yeltsin Decree No. 1833 of 2 November 1992 to be found in the *Collection of Acts of the President and Government of the Russian Federation*, 1993, No. 45, p. 4329.

forced to initiate the use of tactical or theater nuclear forces in a regional crisis with China or NATO.

They are a weak state in conventional military terms, and they plan to rely for compensation for this weakness on nuclear weapons in the future. And they have clearly abandoned their no-first-use pledge of 1982 and shifted their doctrine toward a policy that relies on earlier and quick use of tactical or theater nuclear weapons. Now, what does this mean? For one thing, it means that growing reliance on these weapons might cause Russia to reverse course on tactical weapons consolidation; redeploying them on ships at sea, probably the Baltic and Black Sea fleets first, on tactical aircraft, and even more likely, on short-range tactical missiles that are now under development and test. Many of these forces could wind up along the Russian borders, in Kaliningrad and even in Belarus. And this might not only lower the threshold for intentional use during a crisis, but it would also compromise operational safety because tactical nuclear weapons of all categories of nuclear weapons have by far the poorest safeguards.

As explained by Yuriy Nazarkin, who was associated with the Russian Security Council, the new military doctrine was "part of the general security concept of the Russian Federation and defines ways and means to ensure the state's military security during the transition period." Although Russia officially no longer considered any state a "potential enemy," the country's leadership very clearly identified a number of potential conflict zones surrounding most of the state.

Some of the new doctrine's principles were aimed directly at the potential NATO expansion. For example, Russia pledged not to use nuclear weapons against non-nuclear weapon states as recognized by the Nuclear Nonproliferation Treaty, unless those states were allied with a nuclear weapon state. As Nazarkin clarifies, "According to the new formula, the stationing of nuclear weapons (of another state) on the territory of a nuclear-free state that is party to the Nonproliferation Treaty is no reason to exclude this state from the guarantee formula."

Nazarkin further explained that the no-first use policy had forced itself into a contradictory situation – that is, while the Soviet leadership had criticized nuclear deterrent operations it had continued to build up the state's nuclear forces. The new policy no longer considered nuclear weapons as war-fighting tools; it instead assigned them a political role as a deterrent force. Since the no-first use policy was primarily a political statement with controversial military significance, Nazarkin's explanation is entirely plausible. In fact, as Sergey Rogov, then president of the Center of National Security and International Relations and current director of ISKRAN, wrote, "We have rejected the old propagandist approach to nuclear weapons and interpreted the concept of nuclear deterrence in the form in which the United States and its NATO allies have always advocated it with considerable frankness."

Alexander Pikayev, Scholar-in-Residence and Non-Proliferation Program Co-Chair at the Carnegie Moscow Center, provided a detailed and, with respect to tactical nuclear forces, disconcerting analysis in 1994. In it, he wrote that:

In the past, the shortcomings of conventional armed forces were compensated for through numerical superiority. By the present time, that strength reserve has practically been

⁷⁷ Bruce Blair, Senior Fellow, Foreign Policy Studies, The Brookings Institution, "Russian Missile Detargeting and Nuclear Doctrine," Hearing of the Military Research and Development Subcommittee of the House National Security Committee, Representative Curt Weldon, Chairman, provided by Federal Information Systems Corporation, 13 March 1997.

⁷⁸ Yuriy Nazarikin, "From a Means of Armed Conflict to a Political Holding Factor," *Frankfurter Runcschau*, 20 November 1993, p. 10 [FBIS-SOV-93-224].

⁷⁹ Ibid.

⁸⁰ Sergey Rogov, "Nuclear Deterrence: Today and Tomorrow," *Krasnaya Zvezda*, 14 December 1993, p. 2 [FBIS-SOV-93-242].

exhausted ... Russian nonnuclear potential can turn out to be inadequate to repel a large-scale nonnuclear attack. It is therefore entirely natural to rely on the country's nuclear might so that it, under new conditions, accomplished functions of deterrence – of not only nuclear but also of large-scale nonnuclear aggression.⁸¹

Pikayev advised against the use of strategic forces, since the reprisals would inflict unacceptable damage on Russia. He therefore warned:

This means that the role of tactical nuclear weapons will increase in the future. A potential theater of military operations can turn out to be outside Russia's borders or in Russian regions where storage of tactical nuclear weapons is impossible in peacetime due to political considerations. Therefore, we will have to stress those types of weapons which can be airlifted to the theater of military operations in a short period of time. Tactical nuclear warheads installed on short range ballistic missiles and also on aircraft air-to-ground tactical missiles will acquire special significance. 82

Another Russian analyst extended those evaluations in 1995, writing that, "Russia, due to geographic and historical factors, has found itself in an even more hostile encirclement than the USSR ... It is tactical nuclear weapons, not strategic nuclear weapons, that can result only in mutual destruction and that served as a deterrent factor for the unleashing of any aggression." Such assessments would continue to influence Russian nuclear doctrine throughout the decade of the 1990s. But, one American analyst observed:

The problem of substrategic nuclear weapons is magnified by Russia's growing reliance on nuclear arms as its conventional forces deteriorate. I think this dependency is reflected in Russia's abandonment in 1993 of its no first-use nuclear policy, and in the open discussion among prominent Russian military and defense industry figures of the need to develop a new generation of nuclear munitions for tactical and battlefield use. The dangers in this system is the compounded Moscow's reliance on a launch on warning nuclear strategy and by the deterioration of Russia's early warning system, large portions of which existed in other post-Soviet states.⁸⁴

Russia's increasing reliance on nuclear forces was not anticipated fully by western experts. In the 1991 memorandum on Gorbachev's unilateral initiatives, the U.S. Director of Central Intelligence suggested that due to perceived improvements in their conventional forces, "The senior Soviet leadership has probably concluded that tactical nuclear warheads can be eliminated or stored without significantly compromising the war-fighting capabilities they will require." As will be discussed in the following sections, Russia's post-Cold War transitional experiences have essentially driven it to rely progressively more on its tactical nuclear forces to not only deter external military aggression, but also to stop any foreign military operations against Russian territory if deterrence failed.

I-4.2 The 1999 Russian Security Council Meeting

⁸¹ Aleksandr Pikayev, "Arsenal of the 21st Century: With What Weapons Will Russia Greet the 21st Century? This Is a Vital Question That Is Determining the Fate of the Russian Defense Industry," *Novoye Vremya*, No. 39, September 1994, pp. 12-14 [JPRS-UMA-94-041].

⁸² Ibid.

⁸³ Valeriy Konovalov, "The 'Clear Warheads' Have Finally Been Written Off: Something About Tactical Nuclear Weapons," *Zavtra*, No. 40, 19 October 1995 [FBIS-UMA-95-239-S].

⁸⁴ William Potter, Center for Nonproliferation Studies, "Proliferation of Weapons from Russia," Hearing of the International Security, Proliferation and Federal Services Subcommittee of the Senate Governmental Affairs Committee, Senator Thad Cochran, Chairman, provided by Federal Information Systems Corporation, 5 June 1997.

⁸⁵ U.S. Director of Central Intelligence, *Soviet Tactical Nuclear Forces and Gorbachev's Nuclear Pledges: Impact, Motivations, and Next Steps (Interagency Intelligence Memorandum)*, NI IIM 91-10006, declassified (formerly classified Secret/NoForn-NoContract-Orcon), November 1991, p. vi.

Following the events in Kosovo and Yugoslavia, and under the context of NATO's eastward expansion, the Russian Security Council held a meeting on 29 April 1999. Chaired by Vladimir Putin, the focus of the meeting was Russia's nuclear weapons complex – specifically its tactical nuclear forces. President Yeltsin opened the meeting by saying, "For half a century the nuclear forces have been one of the decisive factors in the stability of the situation in the world as a whole. That is precisely why maintaining the combat readiness of our nuclear potential at a high level is one of Russia-s priority state interests."86 Presentations were made by Defense Minister Igor Sergeyev and Atomic Energy Minister Yevgeniy Adamov, and the meeting was attended by Prime Minister Yevgeniy Primakov, Federation council Chairman Yegor Stroyev, and other Security Council members.

According to one report, "Particular attention was devoted to the questions of extending the timetable for the storage and operation of tactical nuclear weapons ... Last year the Russian military stated that Asian tactical nuclear munitions had been placed in storage too. But NATO expansion and the war in Yugoslavia have forced the Russian military to keep their 'nuclear powder' dry."87 Therefore, as Yeltsin stressed to the Council, "We must consider in detail the whole industrial cycle of the nuclear arms complex, including scientific research in the sphere of nuclear armaments; the carrying out of tests, the production, and the storage of such weapons; and guaranteeing their safe operation and recycling."88

At the meeting, Yeltsin reportedly signed three decrees. Most reports noted that two of the decrees contended with the future of Russia's tactical and strategic nuclear forces, while the third was too classified to publicize. One report, however, described the three decrees as follows: one decree would operationalize the newly developed *Iskander* short-range missile system with nuclear warheads; one decree was connected with improvements in the nuclear weapons testing and experimental facilities; and, one decree called for the development of supercomputers in order to enhance the safety of Russia's nuclear arsenal.89

Most concerning to us, however, was the deliberate signal to western governments that Russia felt compelled to rely ever more heavily on its nuclear deterrent, and specifically on its TNWs. The Russia Information Agency quoted Security Council Chairman Putin as saying that the presidential decrees covered not only the development of the nuclear weapons complex, but also a "concept for developing and using non-strategic nuclear weapons."90 Two months later the Russian military undertook a simulation exercise that demonstrated explicitly Russia's growing reliance on its tactical nuclear forces.

I-4.3 The "Zapad-99" Military Exercises

From 21-26 June 1999, Russia held its largest post-Cold War military exercises in the northwest of the country. Named "Zapad-99," or "West-99," it involved at least five military districts (Leningrad, Moscow, North Caucasus, Volga, and Ural), the command and control centers of the Northern, Baltic, and Black Sea Fleets, and the Caspian Flotilla, the Strategic Rocket Forces and Strategic Aviation, troops from the Ministry of Internal Affairs, Federal Border Service, Federal Security Service, Ministry of Emergencies, and Ministry of Railways, plus units from Belarus and observers from Kazakhstan.⁹¹ Approximately 6,000 service members were involved. The exercises were overseen by then Defense

⁸⁶ Report by Rossiyskaya Gazeta/ITAR-TASS, Flawless Nuclear Shield," 30 April 1999, p. 2 [FBIS document MM3004141699].

⁸⁷ Ilya Bulavinov and Ivan Safronov, "Yeltsin orders nuclear shield to be patched up," Kommersant, 30 April 1999, provided by The British Broadcasting Corporation, 4 May 1999.

⁸⁸ Report by Rossiyskaya Gazeta/ITAR-TASS, "Flawless Nuclear Shield," 30 April 1999, p. 2 [FBIS document MM30041416991.

⁸⁹ "Russian nuclear complex falling apart. Russian Federation Security Council outlines measures to revive it," Nezavisimaya Gazeta, 30 April 1999.

⁹⁰ Reuters, "Agencies: Russia To Develop Tactical Weapons," Moscow, 29 April 1999.

⁹¹ Igor Korotchenko, "Russian Army Prepares To Repulse Aggression. NATO Allied Armed Forces Will Feature on General Staff Maps As Likely Adversary," Nezavisimaya Gazeta, 23 June 1999, p. 2 [FBIS document MS2206181699].

Minister Marshal Igor Sergeyev with the objective of refining "methods for the work of command and operational personnel of the large units of armed services of the country's western region in the control of troops (forces) under conditions of an aggravation of the military and political situation, an outbreak of armed conflicts and their development into a regional war."

Zapad-99 took place under severe conditions for the Russian military, which had sustained dramatic declines in funding since 1991 and suffered the August 1998 economic shock along with the rest of the country. It therefore started the exercises with shortages of spare parts, fuel, training, and manpower. Although the military leadership did not designate a specific opponent, it is clear that the exercises were targeted against a hypothetical NATO invasion. In fact, some reports have asserted that the General Staff even used blue indicators on its maps for NATO forces and red for Russian troops. The exercises were scheduled in 1998, before NATO began its military campaign in the Balkans. But, Zapad-99 was influenced heavily by the events in Kosovo and Yugoslavia.

One Russian report described the three phases of the operation this way:

In phase one the Russian Federation Armed Forces and other Western region military formations were placed on a corresponding level of combat alert, and under the scenario instructions their leaders authorized defense missions in the context of a deteriorating military-political situation in Europe ... Phase two of the exercises envisages the use of groupings from the Russian Federation Armed Forces, as well as from allied states to repulse aggression in the West ... Phase three will begin 25 June in the Kaliningrad Special Region with a report from the commander of the Baltic Fleet. And it will continue at the Pravdinsk Test Range, where a tactical motorized rifle regiment-level live-fire exercise will be held.⁹⁴

Sergeyev himself paid particular attention to the more vulnerable districts, Leningrad and Kaliningrad. One of the scenarios drilled in the exercises called for Kaliningrad to demonstrate its viability under the conditions of a sea and air blockage, and then be rescued by units of the Belarussian army. The simulation suggested that the CIS forces could defend the Baltic region, though Russia did practice inflicting heavy damage on the harbors and airports of the newly independent Baltic states ho, incidentally, were striving for NATO membership.

However, some reports suggested that the CIS defenses failed in either Belarus or a Russian district northwest of Moscow. In order to restore territorial integrity, Russia resorted to the use of a nuclear bomb strike on the battlefield delivered by strategic, long-range aviation. Another report described the use of the *Tochka* short-range, nuclear-capable missile to stop a simulated enemy counterattack in the Moscow military district. Still another report, citing leaked NATO intelligence, stated that Russia launched a cruise missile in the vicinity of Iceland, with the purpose of delivering a nuclear attack on the United

⁹³ Igor Korotchenko, "Russian Army Prepares To Repulse Aggression. NATO Allied Armed Forces Will Feature on General Staff Maps As Likely Adversary," *Nezavisimaya Gazeta*, 23 June 1999, p. 2 [FBIS document MS2206181699].

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⁹² Press Release, Ministry of Defense of the Russian Federation, as reported in *ITAR-TASS* 21 June 1999 [FBIS document LD2106033399].

⁹⁴ Oleg Falichev and Oleg Pochinyuk, "Training Makes the Army Strong. We Must Never Forget That," *Krasnaya Zvezda*, 23 June 1999, p. 1 [FBIS document MS2306092699].

⁹⁵ Yuriy Golotyuk, "Go 'West 99' Young Man. By the End of the Week Russia and Belarus will Have Routed the Training Ground 'Aggressor' Who Has Attacked Them," *Izvestiya*, 22 June 1999, p. 2 [FBIS document MS2206131999].

⁹⁶ Jukka Rislakki, "Russian Military Exercise Worried Baltic Countries. According to Russia, The Countries Have Nothing to Fear," *Helsingin Sanomat* (Finland), 28 June 1999 [FBIS document AU2806205499].

⁹⁷ Sergey Sokut, "Balkan Option Fails. Repulsion of Enemy's Air Offensive Rehearsed in the Course of Zapad '99 Exercises," *Nezavisimaya Gazeta*, 24 June 1999 p. 2 [FBIS document MS2406122999].

⁹⁸ Oleg Falichev and Feliks Semyanovskiy, "Zapad '99: Mission Accomplished, Goals Achieved," *Krasnaya Zvezda*, 29 June 1999, p. 1 [FBIS document MS2906124499].

States.⁹⁹ All of these responses within the exercises explicitly demonstrated that Russia would likely need to rely on its nuclear forces to stop a NATO attack: "During the exercises, having exhausted all possibilities for resisting the enemy with conventional weapons, Russia inflicted a nuclear strike on him." A little over eighteen months later, as detailed below, Russia was accused of re-introducing TNWs to Kaliningrad.

I-4.4 The 2000 Russian Policy Statements

In 2000, Russia updated each of its major policy statements regarding foreign policy, national security, and military affairs. Delivered within months of Vladimir Putin's assumption of the Russian presidency, the three documents updated and refined the early post-Cold War policy statements. However, the documents largely retained the look and feel of a Russia in transition.

I-4.4.1 The National Security Concept

The first to be issued, in January 2000, was the *National Security Concept*. With this new concept, Russia notably updated its policy on the use of nuclear weapons. Several of the key statements follow:

"[One] trend shows itself in attempts to create an international relations structure based on domination by developed Western countries in the international community, under US leadership and designed for unilateral solutions (including the use of military force) to key issues in world politics in circumvention of the fundamental rules of international law."

"Elevated to the rank of strategic doctrine, NATO's transition to the practice of using military force outside its zone of responsibility and without UN Security Council sanction could destabilize the entire global strategic situation."

"The following are the principal tasks for ensuring the Russian Federation's national security:

- to ensure the sovereignty and territorial integrity of the Russian Federation and the security of its border lands; [...]
- to increase the state's military potential and maintaining it at a sufficient level; [...]"

"A vital task of the Russian Federation is to exercise deterrence to prevent aggression on any scale and nuclear or otherwise, against Russia and its allies."

"The Russian Federation should possess nuclear forces that are capable of guaranteeing the infliction of the desired extent of damage against any aggressor state or coalition of states in any conditions and circumstances."

"The Russian Federation considers the possibility of employing military force to ensure its national security based on the following principles:

• use of all available forces and assets, including nuclear, in the event of need to repulse armed aggression, if all other measures of resolving the crisis situation have been exhausted and have proven ineffective [...]"

¹⁰⁰ Ivan Safronov, "Russia Plans To Give West a Scare. Every Two Years," *Kommersant*, 10 July 1999,p. 2 [FBIS document MS1207141199].

⁹⁹ Aleksandr Koretskiy, "Russia Inflicted Nuclear Strike on United States. Only in Training for Now," *Segodnya*, 2 July 1999, p. 1 [FBIS document MS0207123799].

¹⁰¹ National Security Concept of the Russian Federation, Decree No. 24 of the President of the Russian Federation, 10 January 2000.

Russian commentators generally favored the revised nuclear policies. Konstantin Makiyenko, Deputy Director of the Russian Strategic Analysis Center, considered the new policy to be logical: "Today, probably for the first time since the 18th century, Russia is surrounded along the entire perimeter of its border by countries that are developing ever more dynamically, in the military sphere as well." Another analysis noted, "The new doctrine emphasizes the use of nuclear weapons, as an awareness on the part of Russian military strategists of Russia's extreme weakness in almost all spheres of conventional weapons ... Being unable to respond appropriately to an emerging threat using conventional weapons, Russia is forced to rely increasingly on its nuclear forces, which requires that they be maintained in a state of high combat readiness." ¹⁰³

As might be expected, this document was not well received by western observers. A British newspaper lead off by commenting, "Russia has revised its defense doctrine to make it easier to press the nuclear button in an international crisis, while unequivocally declaring the west a hostile power that must be resisted ... The hostile tone appears to seal a drawn-out process of disenchantment with the west." Although generally conciliatory, a Finnish editorial remarked, "The new security doctrine ... shows that Russia has no hesitation about frightening those who are seen as enemies." In Sweden, Assistant Undersecretary Katarina Engberg, head of the Defense Ministry's secretariat for analysis and long-term defense planning, stated, "We are concerned about Russia's nuclear arms rattling." She further explained that while the Security Concept may contain a lot of rhetoric, she thought it should be taken seriously since it may have psychological effects on the relations between Russia and bordering countries like Sweden and Finland.

I-1.4.2 The Military Doctrine

Three months later, in April 2000, Russia issued its latest *Military Doctrine*. This new version explicitly "is a document for a transitional period - the period of the formation of democratic statehood and a mixed economy, the transformation of the state's military organization, and the dynamic transformation of the system of international relations." It further explicitly "develops the *Basic Guidelines for the Russian Federation's Military Doctrine of 1993* [sic] and fleshes out in respect of the military sphere the precepts of the *Russian Federation National Security Concept*." It therefore is partly repetitive of early documents, but also refines important concepts.

The Russian government may have found the *Military Doctrine* to be the most difficult of the three 2000 policy statements to publish. This is not surprising, given that the other two are primarily top-level policy statements and the *Military Doctrine* has direct practical ramifications. One Russian article claimed that the final version was the third iteration of at least three completely incompatible versions over three years. Moreover, an early draft submitted by the Defense Ministry's Military-Strategic Research Center commanded substantial attention when it

¹⁰² Article in *Interfax*, 14 January 2000 [FBIS document LD1401172300].

¹⁰³ Vladislav Dunayev, "United States Studies Moscow Doctrine. Not Much Difference Between Kremlin and White House Nuclear Policies," *Nezavisimaya Gazeta*, 19 January 2000, p. 6 [FBIS document MS2001095800].

¹⁰⁴ Ian Traynor, "Russia Raises Nuclear Threat," *The Guardian*, 14 January 2000 [FBIS document MS1401123800].

¹⁰⁵ Sture Gadd, "Russia Exaggerates the Threat From Outside," *Helsinki Hufvudstadsbladet*, 19 January 2000 [FBIS document MS2001225300].

¹⁰⁶ Bengt Albons, "Sweden Concerned by Russian Defense Doctrine," *Stockholm Dagens Nyheter*, 21 January 2000 [FBIS document AU2601225000].

¹⁰⁷ Russian Federation Military Doctrine, Decree No. (unknown), 21 April 2000, provided by *Nezavisimaya Gazeta*, "Russian Federation Military Doctrine, Approved by Russian Federation Presidential Edict of 21 April 2000," 22 April 2000, pp. 5-6 [FBIS document CEP20000424000171].

¹⁰⁸ Ibid.

¹⁰⁹ Oleg Odnokolenko, "Not-So-Fresh Doctrine. Strategists Do Not Consider Chechen War To Be A War.," *Segodnya*, 22 April 2000, p. 2 [FBIS document CEP20000424000057].

was circulated by the media in 1999. In fact, the final version was essentially ready in February 2000, but final approval was delayed to coincide with strategic nuclear arms reductions negotiations and Anti-Ballistic Missile (ABM) Treaty discussions with the United States.

Dmitry Rogozin, chairman of the Duma Committee for International Affairs, commented to the media that, "The doctrine is a defensive one but at the same time it presupposes the use of every possible means of warfare, including the use of nuclear weapons, to ward off potential menaces ... Russia will not be waiting for the aggressor to seize a part of its territory or to destroy its nuclear potential. It will deal the necessary strike itself." But Valery Manilov, the Russian army's General Staff First Deputy Chief, stressed that, "The Russian military doctrine has an absolutely defensive character."

Numerous passages in the *Military Doctrine* are pertinent to the issue of TNWs. Under the heading of "Safeguarding Military Security," it outlines the general principles for maintaining nuclear forces:

The Russian Federation ... maintains the status of nuclear power to deter (prevent) aggression against it and (or) its allies ...

Under present-day conditions the Russian Federation proceeds on the basis of the need to have a nuclear potential capable of guaranteeing a set level of damage to any aggressor (state or coalition of states) under any circumstances.

The nuclear weapons with which the Russian Federation Armed Forces are equipped are seen by the Russian Federation as a factor in deterring aggression, safeguarding the military security of the Russian Federation and its allies, and maintaining international stability and peace.

The Russian Federation reserves the right to use nuclear weapons in response to the use of nuclear and other types of weapons of mass destruction against it and (or) its allies, as well as in response to large-scale aggression utilizing conventional weapons in situations critical to the national security of the Russian Federation.

The Russian Federation will not use nuclear weapons against states party to the Nonproliferation Treaty that do not possess nuclear weapons except in the event of an attack on the Russian Federation, the Russian Federation Armed Forces or other troops, its allies, or a state to which it has security commitments that is carried out or supported by a state without nuclear weapons jointly or in the context of allied commitments with a state with nuclear weapons. 112

In section II, under the heading "Military-Strategic Principles: Nature of Wars and Armed Conflicts," the *Military Doctrine* describes specific constraints on the use of nuclear weapons:

The Russian Federation maintains a readiness to wage war and take part in armed conflicts exclusively with a view to preventing and repulsing aggression, protecting the integrity and inviolability of its territory, and safeguarding the Russian Federation's military security as well as that of its allies in accordance with international treaties ...

¹¹¹ Pavel Koryashkin, ITAR-TASS, 25 April 2000 [FBIS document CEP20000425000086].

¹¹² Russian Federation Military Doctrine, Decree No. (unknown), 21 April 2000, provided by *Nezavisimaya Gazeta*, "Russian Federation Military Doctrine, Approved by Russian Federation Presidential Edict of 21 April 2000," 22 April 2000, pp. 5-6 [FBIS document CEP20000424000171].

¹¹⁰ Ivan Novikov, *ITAR-TASS*, 24 April 2000 [FBIS document CEP20000424000113].

A large-scale war utilizing only conventional weapons will be characterized by a high likelihood of escalating into a nuclear war with catastrophic consequences for civilization and the foundations of human life and existence. ¹¹³

In a following section, subtitled "Principles Governing the Use of the Russian Federation Armed Forces and Other Troops," the *Military Doctrine* more directly delineates the potential use of nuclear forces:

The goals of the use of the Russian Federation Armed Forces and other troops are in a large-scale (regional) war in the event that it is unleashed by a state (group or coalition of states) -- to protect the independence, sovereignty, and territorial integrity of the Russian Federation and its allies, to repulse aggression, to effectively engage the enemy, and to force it to end its military operations on terms according with the interests of the Russian Federation and its allies ...

The Russian Federation Armed Forces and other troops should be prepared to repulse aggression, effectively engage an aggressor, and conduct active operations (both defensive and offensive) under any scenario for the unleashing and waging of wars and armed conflicts, under conditions of the massive use by the enemy of modern and advanced combat weapons, including weapons of mass destruction of all types ...

The main missions of the Russian Federation Armed Forces and other troops are ... maintenance of the composition, condition, combat and mobilization readiness, and training of the strategic nuclear forces, and of the forces and assets ensuring their functioning and utilization, as well as of command and control systems, at a level guaranteeing a set level of damage for an aggressor under any circumstances;

In rebuffing an armed attack (aggression) on the Russian Federation and (or) its allies ... conduct of strategic operations, operations, and combat operations (including jointly with allied states) to rout the invaders and eliminate groups of troops (forces) that have been (are being) created by the aggressor in regions where they are based or concentrated and on communication routes ... [and] maintenance of readiness for utilization, and utilization (in cases envisaged by the Military Doctrine and in accordance with the stipulated procedure), of the nuclear deterrent potential. 114

A senior representative of the Russian Foreign Ministry, Vladimir Rybachenkov, described the key concepts of these policy documents to the NATO School in Germany. He noted that Russia considers nuclear weapons as a credible deterrence factor, assuring military security of Russian territory and maintenance of strategic stability. He further affirmed that Russia reserves the right to use nuclear weapons in response to the use of WMD against its territory and its allies as well as in response to a large scale conventional attack.¹¹⁵

I-1.4.3 The Foreign Policy Concept

This report will dwell less on the final document in the trilogy of policy statements issued in 2000, *The Foreign Policy Concept of the Russian Federation*, except to note a few passages relevant to Russia's tactical nuclear forces:

Military-political rivalry among regional powers, growth of separatism, ethnic-national and religious extremism. Integration processes, in particular, in the Euro-Atlantic region

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¹¹³ Ibid.

¹¹⁴ Ibid.

¹¹⁵ Vladimir Rybachenkov, "Nuclear Strategy of Russia," Counsellor [sic], Ministry of Foreign Affairs of the Russian Federation, *Lecture at the NATO School*, Oberammergau, 1 March 2001.

are quite often pursued on a selective and limited basis. Attempts to belittle the role of a sovereign state as the fundamental element of international relations generate a threat of arbitrary interference in internal affairs.

The threats related to these tendencies are aggravated by the limited resource support for the foreign policy of the Russian Federation, making it difficult to uphold its foreign economic interests and narrowing down the framework of its information and cultural influence abroad.

... on a number of parameters, NATO's present-day political and military guidelines do not coincide with security interests of the Russian Federation and occasionally directly contradict them. This primarily concerns the provisions of NATO's new strategic concept, which do not exclude the conduct of use-of-force operations outside of the zone of application of the Washington Treaty without the sanction of the UN Security Council. Russia retains its negative attitude towards the expansion of NATO.

It is only through an active dialogue with the U.S. that the issues of limitation and reduction of strategic nuclear weapons may be resolved. 116

Given Russia's outlook on NATO's expansion and activities in Yugoslavia, the ascendancy of the United States – Russia's recent Cold War adversary, with deployed TNWs in Europe – and Russia's internal problems, an overt reliance on nuclear forces is not surprising. Although the three major policy documents issued in 2000 do not explicitly denote the roles and responsibilities of Russia's TNWs, it takes little analytical effort to assess the central position such assets now play in Russian security policy. Within weeks of issuing the final document in the trilogy, Russia was observed by U.S. intelligence moving tactical nuclear weapons into its Baltic district, Kaliningrad. The story did not break publicly until 2001, but the link between the 2000 policy statements and their practical implementation is unmistakable.

I-4.5 Nuclear Policy Debates in 2000

Throughout this report, we have presented a variety of official and non-official Russian perspectives on nuclear weapons policy generally and tactical nuclear weapons doctrine in particular. While most of the official Russian statements cited here are intended to convey the recent history and current policy evolutions regarding tactical nuclear weapons, there have in fact been debates within the Russian political and military establishments over the development of those policies. At many levels, it is difficult to disaggregate the debate into civilian views versus military views due to the nature of the Russian political system. For example, it would be a mistake to conclude that the official policy documents signed by the Russian president do not represent the military's interests given MOD's direct involvement in the policy making processes. Often, though, the more relevant and interesting debates occur among professional military officers or retired officers.

In 2000, an ongoing debate within senior Russian military ranks between advocates of rebuilding the conventional forces and those wanting to enhance the state's nuclear deterrent capabilities demanded presidential engagement. The roots of this particular debate began in 1997. In May of that year, President Yeltsin fired Minister of Defense Igor Rodionov – a retired general, but a civilian at the time. Rodionov had suggested that NATO expansion might force Russia to increase tactical nuclear forces along its western borders. He was replaced as Minister of Defense by the former chief of the Strategic Rocket

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¹¹⁶ *The Foreign Policy Concept of the Russian Federation*, Approved by the President of the Russian Federation V. Putin, 28 June 2000, provided by the Russian Federation Ministry of Foreign Affairs.

¹¹⁷ Jacob W. Kipp, "Russia's Nonstrategic Nuclear Weapons," *Military Review*, May-June 2001, p. 28.

forces, Marshal Igor Sergeyev. Whereas Rodionov had concentrated on conventional force issues, Sergeyev brought nuclear weapons back to prominence.

The two primary contenders in the 2000 debate were Chief of the General Staff, General Anatoliy Kvashnin and the Minister of Defense Sergeyev. On the one side, Kvashnin was arguing for a reduction in Russia's reliance on nuclear deterrence in favor of investments in conventional forces in order to meet his perception of the threats facing Russia. Kvashnin considered a major war with the U.S. and NATO to be highly unlikely, and in the midst of the second campaign in Chechnya regarded local conflict along Russia's southern region to be a growing concern. He even suggested that the strategic nuclear forces be reduced ahead of their treaty-mandated schedule and earlier than their service life warranty periods.

Sergeyev, on the other side, proposed to consolidate the branches of the Russian military that had strategic nuclear responsibilities, including the SRF, naval and long-range aviation strategic forces and the Twelfth Main Directorate into a single command. Much of the impetus for enhancing the strategic deterrent was derived from what some analysts have called the "Kosovo Syndrome" – a fear that NATO would continue out-of-area operations, which may eventually be directed at Russia. In this case, prominent civilian experts sided with Sergeyev with arguments to not only retain the relatively modern and efficient strategic nuclear forces, but to also further reduce the military's total manpower.

Jacob Kipp, an American military analyst affiliated with the U.S. Army, observed, "The outcome of the debate appears to have been a bureaucratic compromise." For the near term, both Sergeyev and Kvashnin remained in their positions. The strategic nuclear forces would remain on track with treaty mandated reductions. Instead of shifting resources, additional funds were to be added to the defense budget for the conventional forces. The results had further direct relevance to this report since the role of nonstrategic nuclear forces was apparently expanded to further emphasize local conflict de-escalation.

A year later in 2001, though, President Putin moved Sergeyev to a presidential advisory position for "Strategic Stability Issues" and replaced him with a true civilian, Sergey Ivanov. Under Ivanov, military reform, such as moving away from conscription toward a professional force, has taken on new urgency. However, so has the role of TNWs. He and other senior Russian civilian officials have sought ways to enhance Russia's capabilities at the local and regional levels of conflict in order to address threats before they become strategic. For example, Viktor Mikhailov resigned from the Minister of Atomic Energy position in 1998 in part to direct the development of a new generation of low-yield nuclear weapons to be used not only to counter NATO expansion, but to also make limited nuclear strikes during localized conflicts possible. The trend toward further reliance on TNWs became overtly evident in 2001.

I-4.6 The Kaliningrad Controversy

On 3 January 2001, *The Washington Times* disclosed a U.S. intelligence report that Russia had recently moved nuclear weapons to the Kaliningrad Oblast. In the article, the author specifically commented that, "Russia is moving tactical nuclear weapons into a military base in Eastern Europe for the first time since the Cold War ended in an apparent effort to step up military pressure on the expanded NATO alliance." The original *Washington Times* article indicated that the intelligence was dated from June 2000, but a subsequent report in *The Washington Post* quoted a U.S. official as stating, "We have been following the

¹¹⁸ See for example, Nikolai Sokov, "'Kosovo Syndrome' and the Great Nuclear Debate of 2000," Program on New Approaches to Russian Security, Memo No. 181, 2000; Alexei G. Arbatov, "The Transformation of Russian Military Doctrine: Lessons Learned from Kosovo and Chechnya," George C. Marshall European Center for Security Studies, The Marshall Center Papers No. 2, July 2000.

¹¹⁹ Jacob W. Kipp, "Russia's Nonstrategic Nuclear Weapons," *Military Review*, May-June 2001, p. 37.

¹²⁰ Pavel Felgengauer, "Limited Nuclear War? Why Not!" *Segodya*, 6 May 1999, p. 1,2 [provided by Russica Information Inc. - RusData DiaLine (LexisNexis)].

¹²¹ Bill Gertz, "Russia transfers nuclear arms to Baltics; Movement of tactical weapons designed to counter NATO expansion east," *The Washington Times*, 3 January 2001, p. A1.

handling of nonstrategic nuclear weapons at stockpile sites for more than two years, so this is not news to us." One report cited the intelligence data having observed the transport by sea of nearly 100 warheads for the SS-21 Scarab to the Russian exclave. 123 It was widely assumed by western experts that such a move was designed to counter NATO's eastward expansion, as Russian officials had promised to do in 1998.

The Kaliningrad Oblast is unique in several respects. It is physically separated from mainland Russia and lies on the Baltic Sea coast. The exclave is surrounded by Poland to the south and Lithuania to the north and east. Poland was admitted into NATO in 1999 and at the time of this revelation all three newly independent Baltic states had entered discussions to join the alliance. Russians have described Kaliningrad as a *bulwark* against NATO. Despite years of negotiations with Poland and the European Union (EU), the exclave's long-term future remains unclear.

Since Russia does not have land access to the district, and Russia does not move nuclear warheads by air, the only viable transport route would be by sea. A subsequent report in *The Washington Times* revealed that the U.S. satellite imagery indicated that the warheads had departed from the St. Petersburg seaport on or about 3 June 2000 and arrived in the Kaliningrad Oblast on or about 6 June 2000. There was some debate in the press as to whether the TNWs moved into the Kaliningrad Oblast at that time were associated with ground, naval, or air forces, but the latter *Washington Times* report indicated that the imagery showed Russia placing the warheads into storage near a military airfield.

At all levels, official Russians denied the assertions. The naval commander of the Russian Baltic Fleet claimed that the region remained nuclear weapons-free and the Ministry of Defense headquarters declared that all TNWs remained in centralized storage sites. However, the Russian denials left sufficient maneuvering room. By using phrases such as *permanent stationing sites* and *nuclear-free zone*, Russian officials did not explicitly state that the territory of Kaliningrad itself did not contain nuclear weapons. Despite President Putin's statements that the media reports were "nonsense," Russian officials remained vague on its TNW deployments.

All of the countries on the Baltic Sea immediately expressed concern. Norway confirmed the U.S. intelligence reports, and NATO apparently had been sharing its intelligence data with Poland all along. ¹²⁶ Once the reports became public, however, Poland and Western European countries called for international inspections of Russian military deployments in the Kaliningrad area. ¹²⁸

Western European diplomats made two inspection trips and one diplomatic visit to Kaliningrad following the controversy. On 12 January 2001, a Polish team inspected a military base in the Russian exclave. On 18 February 2001, a European Union delegation lead by Swedish Foreign Minister Anna Lindh

¹²² Walter Pincus, "Russia Moving Warheads; Tactical Nuclear Arms Going to Kaliningrad Base," *The Washington Post*, 4 January 2001, p. A16.

¹²³ *Helsingin Sanomant*, "New NATO Country Poland to Inspect Kaliningrad Weapons," 12 January 2001. Available at http://www.helsinki-hs.net/news.asp?id=20010112IE1.

Bill Gertz, "U.S. spy satellites pinpoint Russian nuclear arms in Baltics; New photographs refute Moscow's denial transfer," *The Washington Times*, 15 February 2001, p. A1.

¹²⁵ Sergei Yakovlev, "Reports about nuke missiles in Kaliningrad 'nonsense' - Putin," *ITAR-TASS News Agency*, 6 January 2001.

¹²⁶ Deutsche Presse-Agentur, "Russian Nuclear Weapons in Kaliningrad, Norwegian Military Says," Oslo, 7 March 2001 [provided by BC Cycle (LexisNexis)].

¹²⁷ PAP News Agency (Poland), "Foreign minister plays down Russian missiles reports," Warsaw, 4 January 2001, provided by the British Broadcasting Corporation; Bill Gertz, "NATO shared satellite data with Poland on Russian arms," *The Washington Times*, 6 January 2001, p. A2.

¹²⁸ Polish News Bulletin, "Satellite Pictures Boost Fears," 5 January 2001.

¹²⁹ *Helsingin Sanomant*, "New NATO Country Poland to Inspect Kaliningrad Weapons," 12 January 2001. Available at http://www.helsinki-hs.net/news.asp?id=20010112IE1.

accepted Russia's denial of allegations. ¹³⁰ In May, an inspection team of seven Danes, a Norwegian and an American traveled to Kaliningrad. ¹³¹ They had taken advantage of special provisions in the Treaty on Conventional Armed Forces in Europe (CFE) to search for nuclear weapons under the guise of confirming Russia's conventional deployment and stockpile reports.

None of the foreign visits uncovered nuclear weapons in Kaliningrad. Of course, it is difficult to know exactly which facilities the inspection teams visited in comparison to the airfield where the weapons allegedly were being stored. It is also probable that, given the provisions of the CFE Treaty, Russia was not storing the weapons at or near facilities subject to foreign inspection.

Assuming the reports were true, it seems likely that Russia was not *re-introducing* nuclear weapons to the Kaliningrad area, but rather was transporting refurbished weapons there to replace systems that were in the enclave all along. In other words, it is more plausible that Russia had never removed TNWs from the Kaliningrad district, and earlier statements the Russian political and military leadership had made with regard to the withdrawal of all nuclear forces from the "Baltics" could have more strictly meant the three Baltic states of Estonia, Latvia, and Lithuania.

Whether or not Russia violated its earlier pledges, Moscow did a poor job of managing the 2001 controversy. Instead of denying the assertions that it had transported nuclear weapons to the Kaliningrad area, Russia may have served itself better by noting that the Kaliningrad Oblast is Russian territory and that it has the right to conduct its own affairs within the confines of its borders. By denying the existence of the nuclear weapons against what appeared to be credible evidence, Russia not only inflamed the controversy but also provided further anecdotal evidence that the leadership did not have adequate control over the forward-deployed battlefield nuclear weapons.

I-4.7 Other Official Declarations with Respect to Tactical Nuclear Weapons Issues

On several occasions over the past few years, Russian officials have offered statements regarding its TNW policies in fora not discussed elsewhere in this report. For example, in March 1997, U.S. President Clinton and Russian President Yeltsin met in Helsinki, Finland. One of the Joint Statements issued at the conclusion of those meetings suggested that the sides were close to addressing formally the issue of TNWs. It stated that:

The Presidents ... agreed that in the context of START II negotiations their experts will explore, as separate issues, possible measures relating to ... tactical nuclear systems, to include appropriate confidence building and transparency measures. ¹³²

It is remarkable to note, in the context of Russia's TNWs, the consistency of the official statements. With few exceptions, Russian officials have not deviated from reporting on the gradual progress of PNI implementation. Moreover, Russian officials have generally stuck with the formula of reporting on progress by percentages of PNI implementation, as opposed to real numbers.

Russia has continued to refine its policies regarding TNWs. Primarily through multilateral fora such as the Nuclear Nonproliferation Treaty, Russia has continued to publicly support greater controls over tactical forces, despite its contrarian decisions and actions at home. At the 2003 Preparatory Commission

¹³¹ Yury Golotyuk, "Switching Uniforms Doesn't Help - West Inspects Russian Soldiers in Kaliningrad Enclave," Vremya Novostei, 18 May 2001, p. 2 [provided by Current Digest of the Post-Soviet Press, International Affairs; Vol. 53, No. 20, 13 June 2001, p. 16 (LexisNexis)].

¹³² William Clinton and Boris Yeltsin, "Joint Statement on Parameters on Future Reductions in Nuclear Forces," Helsinki, 21 March 1997.

¹³⁰ *United Press International*, "When President John F. Kennedy went public with the news that the Soviet Union, despite all its denials to the contrary, had secretly installed nuclear-armed missiles in Cuba, the whole world trembled," 18 February 2001 (provided by LexisNexis).

meeting for the 2005 NPT Review Conference, the Russian Foreign Ministry issued a statement that included:

... the elaboration of specific proposals to reduce and limit nuclear weapons should be accompanied by adoption of specific measures also to limit other types of weapons including non-nuclear, as well as by prohibition or limitation of activities with such weapons within the reach of each other's territories. ¹³³

A follow-on statement issued by the Russian delegation to the 2003 PrepCom included:

Russia proceeds from the understanding that it is impossible to consider the issues of tactical nuclear weapons separate from other kinds of armaments. This is why the well-known unilateral Russian initiatives in the sphere of disarmament in 1991-1992 are comprehensive in nature and besides the TNW touch upon other important issues, which have an essential influence on strategic stability. 134

The May 2003 statement went on to state:

An essential argument in favor of the comprehensive consideration of issues related to different kinds of weapons is that, for example, dividing nuclear weapons into strategic and tactical is a very arbitrary process and that fact is vividly testified by an analysis of combat characteristics of the TNW, as well as by the transformation of the role of such weapons depending upon location of their deployment. On our part we believe that removal of the tactical nuclear weapons, for example, from Europe and elimination there of respective infrastructure would become an important practical step ultimately overcoming the vestiges of the cold-war period. Such a decision in our opinion could serve the purposes of strengthening of the Nuclear Non-Proliferation Treaty. ¹³⁵

All of Russia's policy statements, whether codified in official government policy documents or found in international negotiating fora are based on a set of perceived threats to Russian security.

I-5.0 Perceived Threats to Russia's Security: Why Russia Thinks it Requires Tactical Nuclear Weapons

Russia's huge nuclear weapons arsenal continues to play a role in maintaining Russia's political influence in the world. However, Russia does face a number of real and perceived threats to its national security, which it is addressing largely through nuclear deterrence. Russia's 2000 *National Security Concept* described it this way:

"The fundamental threats in the international sphere are brought about by the following factors:

• the desire of some states and international associations to diminish the role of existing mechanisms for ensuring international security, above all the United Nations and the OSCE;

¹³³ Permanent Mission of the Russian Federation to the United Nations and Other International Organizations in Geneva, "Statement by the delegation of the Russian Federation at the second session of the Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons," 28 April 2003.

¹³⁴ Ministry of Foreign Affairs of the Russian Federation Information and Press Department. "Statement by the delegation

¹³⁴ Ministry of Foreign Affairs of the Russian Federation, Information and Press Department, "Statement by the delegation of the Russian Federation at the second session of the Preparatory Committee for the 2005 Review Conference of the Parties to the Treaty on the Non-Proliferation of Nuclear Weapons," Daily News Bulletin, 12 May 2003.
¹³⁵ Ibid.

- the danger of a weakening of Russia's political, economic and military influence in the world;
- the strengthening of military-political blocs and alliances, above all NATO's eastward expansion;
- the possible emergence of foreign military bases and major military presences in the immediate proximity of Russian borders;
- proliferation of mass destruction weapons and their delivery vehicles;
- outbreak and escalation of conflicts near the state border of the Russian Federation and the external borders of CIS member states;
- territorial claims on Russia." ¹³⁶

Each of the regions surrounding Russian territory is detailed below.

I-5.1 The Western Front and NATO Expansion

Does Russia still perceive that there is a threat from the West in view of the current multi-faceted cooperation between Russia and the U.S.? Is there a general belief that the present situation of détente vis-à-vis the West is one essentially characterized by a long-term intrinsic stability, or one more likely to gradually deteriorate into a state of hostile tension between Russia and the West? There are, of course, no simple answers to these questions, since attitudes in Russia towards the West are diverse.

There is little doubt that the principal intention of Putin and his closest associates is to try to achieve Russia's integration into the community of economically prosperous and politically stable Western states, most of which are NATO members. Coinciding interests between Russia and western governments in combating terrorism post 11 September 2001 have deepened cooperative activities. Even though there was an attempt by Putin to exploit the serious fractures within NATO which occurred before, during and immediately after the Iraq war, this attempt was quickly abandoned after the rapid military victory of the U.S.-led coalition (which was unexpected in Russia). The Putin administration also appears to be rather at ease with regard to NATO's inclusion of new former Soviet Republic members. This may be in part due to the Russia-NATO 'Council at 20' agreed on in Rome 28 May 2002, which gave Russia an equal voice, if not a formal vote, in many key transatlantic policy issues.

On the other hand, various conservative elements in Russia feel that too many concessions towards the West have been made, resulting in too few benefits for Russia as well as a diminished military security. Evidence of this can be found in a recent publication by Alexei Arbatov, Deputy Chairman of the Duma Defense Committee, who notes:

Putin's policy of accommodating the United States is under growing pressure and criticism even from his indigenous constituency, power ministries as well as nationalistic conservatives and moderates.¹³⁷

Questions like these lie at the heart of a perceived need – or perhaps lack of need – for TNW as a compensating element for Russian conventional inferiority versus NATO.

There seems to be a tendency among some conservative Russians to regard its relations with NATO more as a zero-sum game of power projection than something from which all states could profit. According to the zero-sum view, an enlargement of NATO is detrimental to the strategic military position of Russia in the eyes of those who tend to see security more in hardware terms of deployed military forces in the

¹³⁷ Alexei Arbatov, "Russian Security and the Western Connection," in John Newhouse, editor, *Assessing the Threats: Instabilities, Proliferation, Terrorism, Unilateralism*, Center for Defense Information, Washington, July 2002.

¹³⁶ National Security Concept of the Russian Federation, Decree No. 24 of the President of the Russian Federation, 10 January 2000.

vicinity of Russia than in software terms of political accord. And there is indeed a belief among some circles in Russia that the present détente with the West could well be of a passing nature. An example was provided by Ivan Safranchuk, formerly an analyst in the PIR Center for Policy Studies in Russia and now director of the Center for Defense Information's Moscow office, who noted:

...in the long run the development in the West of new generations of weapons and new ways of conducting military operations can be seen in Russia as a threat. 138

If this is the prevailing view in large segments of Russia, TNW are likely to be retained for, if nothing else, reasons of prudence. Those who argue along these lines in Russia often refer to the fact that the U.S. still deploys some 150 - 180 TNW (B-61 bombs) among seven NATO allies and that there seems to be little incentive to withdraw these mostly symbolic weapons for the moment. These are, incidentally, considered strategic by some Russians, since they can be loaded on aircraft within reach of Russian territory. For instance, Vyacheslav Shport, deputy chairman of the Duma's Committee on Industry, Construction and Science-Intensive Technologies, points out:

All Russian [tactical] nuclear weapons are situated on our national territory and Russia has no infrastructure to use these weapons beyond the national territory. The United States has not removed the TNW outside of its national territory. A significant arsenal is still deployed within reach of the Russian territory. Moreover, the Unites States maintains near the Russian border some infrastructure for its TNW. Naturally, we cannot ignore this fact ... Thus U.S. TNW deployed near Russian frontiers play the role of [a] strategic component. 139

Statements like these seem to indicate that Russian TNW are seen as bargaining chips in future negotiations aiming at the withdrawal of these NW to the U.S.

What would be the role of TNW if there were to be a serious future deterioration in the relationship between Russia and NATO and how would this affect the present arsenals? One can only speculate, guided by official statements in recent Russian national security documents. It is stated in the Military Doctrines of 1991, reiterated 2000, that the objective of the (first) use of nuclear weapons would be to:

... selectively paralyse enemy conventional forces and key military objects, if the threat of defeat of our own forces in a major non-nuclear war appeared. ¹⁴⁰

Such a military or counterforce use of NW, however, might well be preceded by a *demonstration* use of NW for de-escalatory purposes. As discussed elsewhere in this report, the use of TNW is seen by some as a better alternative than using strategic NW in this regard, since they are less prone to lead to a massive nuclear exchange than the use of strategic NW. ¹⁴¹ As an example of "demonstration" use, single strikes against unpopulated areas or secondary military installations, designed to minimize the loss of life is mentioned.

On the other hand, the following statement in *The Foreign Policy Concept of the Russian Federation* of 28 June 2000, states:

¹³⁸ Ivan Safranchuk, "An Array of Threats to Russia," in John Newhouse, editor, *Assessing the Threats: Instabilities, Proliferation, Terrorism, Unilateralism*, Center for Defense Information, Washington, July 2002.

¹³⁹ Yuri Fedorov; "Control of Tactical Nuclear Weapons: Some Problems & Prospects," *Pugwash Meeting No. 270*, Sigtuna, Sweden, 24-25 May 2002.

¹⁴⁰ Aleksei Arbatov, "Voyennaya reforma: Doktrina, voyska, finansy," *Mirovaya ekonomika i Mezhdunarodnie otnosheniya*, No. 4, April 1997, p. 7.

¹⁴¹ V.I. Levshin, M.E. Sosnovskiy, and A.V. Nedelin, "Voyennaya mysl," May-June 1999, Moscow, pp. 34-37.

While the military power still retains significance in relations among states, an ever greater role is being played by economic, political, scientific and technological, ecological, and information factors. 142

Implied is the growing value attached to other factors than military power by Russia's political leadership, a pill that arguably could be difficult to swallow for at least the more conservative part of Russia's military establishment.

There is no apparent contradiction between what is stated in the *Military Doctrine* and what can be found in the *Foreign Policy Concept*. From both points of view, maintaining and perhaps modernizing the TNW arsenals might well be considered an attractive alternative to alleviate Russian military concerns about its insufficient military capabilities in comparison to NATO over upgrading and modernizing its conventional defense to a level more compatible with that of NATO, due to cost advantages. To what extent this can be achieved without full scale testing – i. e. without violating Russia's compliance with the Comprehensive Nuclear Test-Ban Treaty (CTBT) – is another matter. It is, however, not inconceivable that a significant modernization might be achieved without testing in view of the high level of NW technology that still exists within Russia together with its vast experience of previous testing.

A special problem for Russia is posed by the Kaliningrad exclave due to the expansion of NATO and the EU, as mentioned earlier. According to Putin, TNW do not remain in Kaliningrad. In view of the previously discussed attention in Western news media to this matter provoked by the articles in *The Washington Times* and in *The Washington Post*, we note again that Russia does not violate any law or agreement by storing NW in the Kaliningrad area since this is a part of Russia. Possible transports of nuclear warheads in and out of this area will most likely be more problematic after Lithuania has joined NATO and the EU. We surmise that the issue of TNW warhead storage in the Kaliningrad area might well reappear in the future.

In conclusion, Putin's relaxed attitude towards NATO's eastward expansion has been remarkable, highlighting the degree of trust in and wish for cooperation with western governments by Putin and his closest associates. Even so, conservative elements in Russia stress the need for prudence in its relation with the West, and in particular the U.S. Since Russia was opposed to the war between Iraq and the U.S.-led coalition before and during this war, voices in Russia arguing for more caution in its relationship with the U.S. will likely be more influential than before the war. Furthermore, the high level of command, control, communication, and intelligence capabilities, and the ensuing real time precision targeting ability demonstrated by the U.S. left deep imprints on assessments within Russian military circles. As previously noticed, an incentive for Russia to retain its TNW might well be found in a wish to hedge against a future expansionist NATO, regardless of all other threats that might worry Russia.

I-5.2 The Eastern Front and the Issue of China

The situation on the Eastern Front poses special problems for Russia for the first time in over 150 years ¹⁴⁵ The traditional imbalance with regard to population densities and immigration along the Eastern border prevails and is probably accelerating. For the moment, though, these negative factors for Russia are fully compensated by the 1995 formation of the *Strategic Partnership for the 21*st *Century* between the two states, the new treaty of friendship signed by Presidents Jiang and Putin in July 2001, the Russian arms

¹⁴² *The Foreign Policy Concept of the Russian Federation*, Approved by the President of the Russian Federation V. Putin, 28 June 2000, provided by the Russian Federation Ministry of Foreign Affairs.

¹⁴³ Marcus Warren, "Putin denies Kaliningrad nuclear arms reports," *Telegraph* (London), 1 August 2001.

¹⁴⁴ Walter Pincus, "Russia Moving Warheads; Tactical Nuclear Arms Going to Kaliningrad Base," *The Washington Post*, 4 January 2001, p. A16.

¹⁴⁵ Hans Binnendijk and Ronald Montaperto, "Strategic Trends in China," Institute for National Security Studies, U.S. National Defense University, 1998.

sales to China, the border settlement between the two countries, ¹⁴⁶ and the bilateral no-first-use agreement with respect to NW.

Aside from growing internal tensions of social and economic nature, China's primary regional concerns are related to the Taiwan issue, a few unresolved disputes in the South Chinese Sea, and apprehensions regarding the situation in the Korean Peninsula. There is little or no risk for conflicts of interests between Russia and China in these regions. Hence, there are no indications that China has any interests other than cultivating a friendly and relaxed relationship with Russia – at least not for now:

China, for its part, is not interested in deteriorating relations with Russia, bearing in mind Beijing's differences with the United States and the potential exacerbation of the problem of Taiwan. Russia is a source of advanced military technologies for Russia. Under these circumstances, in the near future China will not be a source of military threats to Russia and will not have reasons for hostile actions against Russia (e.g. interventions in the Russian Far Eastern provinces). 147

Alternatively:

At present, Sino-Russian relations are as close as they were in the mid-1950s. In part due to indigenous mutual interests, but to a greater extent it is a result of Western policy toward Russia. 148

There seems to be a reluctance in Beijing to confront the U.S. as well, most likely due to a Chinese awareness that maximising economic opportunities as a World Trade Organization member requires an international environment of minimal diplomatic tensions. Nevertheless, Beijing understands that dealing with the Taiwan issue ("one state, two systems") more proactively runs an obvious risk of impairing the political climate vis-à-vis the U.S. How China is going to reconcile these two opposite goals remains to be seen. The awareness that relations with the U.S. could quickly deteriorate if China were to choose to exert more control over Taiwan might well be a prominent reason for Beijing to cultivate friendly relations with Moscow.

In the long run, however, there is a growing power projection problem for Russia in this part of the world. The root of this problem is China's rapidly growing economy and industrial and military modernization. These trends have allowed China to become an increasingly more dominant regional political and military force in the future at the expense of Russia while at the same time natural resources are more abundant north of the border. As noted by former U.S. Deputy Secretary of State Strobe Talbott:

Siberia and the Russian Far East are as rich in resources as they are barren in population, while the opposite is true on the Chinese side of the Amur and Ussuri Rivers. That discrepancy is a recipe for [future] tension and even conflict. 149

Alexei Arbatov makes a similar observation:

China remains a profound concern for Russia due to China's growing economic and military power and its proximity to Russian Siberia and Russia's far east. Although

¹⁴⁶ See for example, Yuri Fedorov, "Sub-Strategic Nuclear Weapons: Russia's Security Interest and Prospects of Control," *Yaderny Kontrol Digest*, Vol. 7, No. 4, Fall 2002, p. 21.

¹⁴⁷ Yuri Fedorov, "Sub-Strategic Nuclear Weapons: Russia's Security Interest and Prospects of Control," *Yaderny Kontrol Digest*, Vol. 7, No. 4, Fall 2002.

¹⁴⁸ Alexei Arbatov, "Russian Security and the Western Connection," in John Newhouse, editor, *Assessing the Threats: Instabilities, Proliferation, Terrorism, Unilateralism*, Center for Defense Information, Washington, July 2002.

¹⁴⁹ Strobe Talbot, "From Prague to Baghdad: NATO at Risk," *Foreign Affairs*, Vol. 81, No. 6, Nov./Dec. 2002, p. 52.

depopulated, economically depressed, and defenseless, these areas are also extremely rich in natural resources. ¹⁵⁰

In a recent article, Ivan Safranchuk formulates the same apprehension as follows:

As China develops, it is likely to review its relations with Russia, raising anew the possibility of conflict. China must, for example, deal with its growing population, and it may well try to acquire new territories, perhaps even expanding into Russia. Furthermore, natural resources, especially fuel, are in short supply in China, and demand for them is expected to rise in the second quarter of this century. ¹⁵¹

Due to limited manpower resources and a general weakness with regard to conventional arms, it is evident that Russia has, or soon will have, a severe shortage of border guards and regular military units in its far east. An obvious solution is to compensate with TNW, something that most likely is also being considered within conservative military circles in Russia. While being very cautious on the subject, Yuri Fedorov in his article about Russia's sub-strategic nuclear weapons notices:

A hypothetical conflict with China is one of the major arguments in favour preserving Russia's large nuclear arsenal, especially as far as sub-strategic weapons are concerned. 152

In the same article, Fedorov makes the observation in the case of a future possible conflict with China:

Russia [will find] itself in quite a difficult situation. On the one hand, the threat or limited use of sub-strategic nuclear weapons [in a hypothetical conflict with China] to contain [a Chinese] expansion to the Russian territory may provoke a Chinese nuclear strike against numerous targets in Siberia and the Far East. On the other hand, Russia's conventional forces may not be able to repel a Chinese massive attack. 153

There is no reason to doubt the sincerity of China's longstanding declaratory no-first-use policy with regard to its NW, at least not for the time being. It is a fact that China's limited NW arsenal gives China few, if any, credible alternative choices. One can discern some concern in Russia, as well as in other states, over the fact that China is modernizing its TNW and strategic NW arsenals, eventually allowing it to move from a minimal deterrence posture to a limited deterrence posture. Washington's withdrawal from the ABM treaty and its possible development of a ballistic-missile defense (BMD) shield is believed by many Russians to have accelerated this process. A major reason for Russia's concern is that limited deterrence, which in this case is equivalent to a limited counterforce TNW capability, is difficult to reconcile with a no-first-use policy due to the inherent "use them or loose them" dilemma complicating actual military planning.

Some of this concern is implied in Fedorov's writing when he discusses possible future scenarios:

However, in case of nuclear attack, China will not wait for a nuclear strike against its armed forces or large military facilities and may make a pre-emptive strike. ¹⁵⁴

¹⁵⁰ Alexei Arbatov, "Russian Security and the Western Connection," in John Newhouse, editor, *Assessing the Threats*: *Instabilities, Proliferation, Terrorism, Unilateralism*, Center for Defense Information, Washington, July 2002.

¹⁵¹ Ivan Safranchuk, "An Array of Threats to Russia," in John Newhouse, editor, *Assessing the Threats: Instabilities, Proliferation, Terrorism, Unilateralism*, Center for Defense Information, Washington, July 2002.

¹⁵² Yuri Fedorov, "Sub-Strategic Nuclear Weapons: Russia's Security Interest and Prospects of Control," *Yaderny Kontrol Digest*, Vol. 7, No. 4, Fall 2002.

¹⁵³ Ibid.

¹⁵⁴ Ibid.

We conclude that for the moment and perhaps for another decade or so to come, China is not likely to be regarded as an immediate threat by Russia, nor to announce a posture of limited nuclear deterrence. It is evident, however, that there exists a widespread apprehension in Russia that an economically and militarily stronger China might well present a future threat to Russia in view of Siberia's rich natural resources and sparse population. A perceived future Russian conventional arms weakness vis-à-vis a growing China, might well be a strong factor in favour of a continued Russian reliance on its TNW – and for that matter – strategic NW arsenals for a long time to come.

I-5.3 The Southern Front and Central Asia

The border of most concern to Russia at present is its Southern Front. Ethnic, cultural, religious, economical, and political differences seem to combine in creating a complicated pattern of tensions including low-level armed violence and elements of terrorism. According to one Russian analyst:

In the last ten years Russia has been trying to convince everybody of its peaceful intentions, but the military strategy has not changed a lot. The major mission of the armed forces is still retaliation of a large-scale aggression with the help of nuclear weapons and inflicting devastating damage to the enemy. [...] It has always seemed unlikely that someone would ever dare to attack Russia protected with the nuclear umbrella.[...] The major threat to the national security today are Chechen militants and Islamic fundamentalists, rather than NATO with its new members. ¹⁵⁵

Worded in a different way, Ivan Safranchuk makes the following observation:

Russia's problem in the south may in general be regarded as establishing a Russian identity in relation to Moslem people both inside and outside Russia's borders. ¹⁵⁶

There is also concern in Russia over increasing tension between Islamic fundamentalism and non-Islamic interests in Central Asia and the potential for a tendency towards destabilization in these regions, which would affect Russia.

Putin's apparent acquiescence to the U.S. deployment of troops in the former Soviet republics of Uzbekistan, Kyrgyzstan, and Georgia post 11 September 2001 seems to indicate a coinciding Russian interest with the U.S. efforts in combating mainly Islamic separatist tendencies with geographical connections to these parts of Russia. Needless to say, the U.S. military presence in these areas is met with resentment in large segments of the Russian society – segments that extend beyond traditionally conservative nationalistic and communist spheres. Russian apprehensions might well be enhanced by the U.S. involvement in oil and oil transport issues in the Caucasian region. A key reason for Putin's acquiescence, however, might be found in his address to the Duma in April 2000, when he declared:

... major challenges to Russia, taking into account the global situation, today will originate from local conflicts. Russia will be pulled apart not with nuclear weapons or nuclear threat. We witness today the attempts of pulling Russia apart – local conflicts. 157

From a military point of view, Russia's prolonged difficulties in Chechnya and apprehensions for future conflicts in the area indicate the need for more modern, efficient, and appropriate conventional arms capabilities rather than maintaining huge stocks of NW.

¹⁵⁵ Nikolai Petrov, "War Against an Improbable Enemy," *Kommersant-Vlast*, July 25, 2000, pp. 18-19.

¹⁵⁶ Ivan Safranchuk, "An Array of Threats to Russia," in John Newhouse, editor, *Assessing the Threats: Instabilities, Proliferation, Terrorism, Unilateralism*, Center for Defense Information, Washington, July 2002.

¹⁵⁷ Unattributed and Untitled Article, *Kommersant*, April 15, 2000.

Barring an escalatory situation of a local or regional conflict within Russia's Southern Front or in Central Asia with a concomitant perceived need for NW in order to de-escalate the crisis, it is difficult to discern any useful role for TNW in this region. The nature of conflicts in this part of the world – non-regular guerrilla-type warfare combined with terrorist actions – does not present the kind of political and military situation where there seems to be a mission for any type of NW. If there were to be a major intervention by some NW state or alliance supporting the "militants" and/or encouraging separatist tendencies, NW options might well be considered in Moscow. Since there are no signs of any such outside interventions for the moment, however, there is little incentive for Russia to contemplate the use of any type of NW in conflicts at its Southern or Central Asia borders.

In the long-term perspective, one would expect that there should also be some second thoughts in Russia regarding the prospect of nuclear proliferation in the Middle East just as there are concerns in other parts of the world. In particular, a prolonged conflict with the Moslem population in Chechnya might well generate increasing anti-Russian sentiments in the Middle East, even though the situation in the region seems to have improved after the referendum in March 2003. However, Russia's efforts in helping Iran to construct the Bushehr nuclear power plant (even taking into consideration that this plant cannot be used to obtain weapon grade plutonium) indicate that its concern for nuclear proliferation in the Mid-East region is less than its desire to make profits from exports of nuclear power plant technology, at least for time being.

I-5.4 Other Russian Security Concerns

To the extent that it is possible, Russia is likely to continue its long-standing policy of power projection in adjacent regions. In particular, we might well see persistent efforts to balance global or regional powers such as the U.S., China, and, to some extent, India against each other. Since Russia has few means to influence the political situation in its neighbourhood other than the implicit weight of its huge NW arsenals, this might well be another reason why Russia might want to retain its TNW. While these NW are non-strategic vis-à-vis the U.S., they are certainly viewed as strategic by Russia's neighbours.

I-6.0 Future Prospects for Russian Tactical Nuclear Weapons

I-6.1 Implications for European NATO Countries

One factor that is likely to have a major influence on the future prospects of Russian TNW arsenals is apprehension among more conservative Russians that NATO will continue its eastward enlargement, provided that the cohesive forces of NATO can overcome the centrifugal forces, which emerged in connection with the war against Iraq. This is in contrast to the European Union's eastward enlargement, which may have little or no immediate effect because of the European Union's focus on economic, political, and social integration at the expense of its military and security related dimension. In the medium and long-term perspectives this might well change, however, as the European Union cannot postpone dealing with these issues much longer as evidenced by the recent draft of a new *Strategic Doctrine*.

Ronald Asmus, Senior Adjunct Fellow at the Council on Foreign Relations, notes that European attitudes on Russia can be divided into three overlapping categories:

1. West European countries that feel secure and want more autonomy from the U.S. and an expanded European-Russian cooperative agenda. (A recent example is the split within NATO over the war against Iraq and its aftermath between France and Germany on the one hand and the U.S. and Great Britain on the other. Russia's siding with France and Germany with regard to the war against Iraq is noticeable in this respect.)

- 2. Countries largely in Central and Eastern Europe that feel essentially secure but still want to preserve or expand the trans-Atlantic link and feel hesitant towards an independent European agenda with Moscow. (Also this was evident during the recent Iraq war.)
- 3. A few East European countries, which might fear a Russian neo-imperial revival, and for which Western integration remains the top priority. 158

After the two important enlargement meetings in November 2002 and December 2002, ¹⁵⁹ countries in the first and second category are – or soon will be – members of NATO and/or the European Union, whereas countries in the third category will not. Many of these have a strong desire to join the alliance as well as the European Union and might feel alienated as bilateral relationships for closer cooperation are beginning to appear among members of NATO or the European Union and Russia.

Russian NW will no doubt influence NATO decisions about its deployment of TNW outside the territories of its NW state members and possibly also have an effect on NATO's deployment of troops and conventional arms within the new member states invited to join NATO at the Prague meeting. In addition, it might conceivably influence decisions within the U.S. about its future military presence in Europe.

It is an open question if, and in that case, to what extent European NATO countries will demand more transparency from Russia regarding its TNW, their deployment and storage as well as dismantlement of operationally withdrawn warheads, in the near future. Elevating these issues are bound to bring attention also to U.S. TNW deployed in Europe, something the U.S. and most likely NATO countries (Turkey in particular) hosting these weapons wish to avoid.

In the medium to long-term perspectives, though, demands of more transparency and continued reductions of those Russian TNW intended for deterrence of and possible use against European members of NATO are bound to re-emerge. One reason is the commitments made by the NW states within the NPT context to pursue disarmament efforts in good faith according to Article VI of this treaty, restated even more strongly in the Final Document of the 2000 NPT Review Conference.¹⁶⁰

Another factor is related to the present détente between Russia and the U.S. and the fact that these two countries have repeatedly declared that they are no longer enemies. There was an attempt by some members of the New Agenda Coalition (NAC) to raise the issue of TNW disarmament negotiations at the NPT PrepCom meeting in Geneva in May 2003, which, however, was not wholly supported by the major NW states.

We conclude this section by assuming that in the short and medium term perspectives, Russia will see a need to maintain at least part of its former huge arsenals of TNW as a hedge towards (unlikely) deteriorating relations with NATO and the U.S. In the long term, however, Russia is likely to deemphasize the need for these weapons in its western regions provided the present relaxed relationship with the European Union and the U.S. continues. Supporting this view is a frequently voiced European belief that European security would be significantly enhanced were Russia to become more integrated into the European economic and political spheres. The importance of pursuing efforts to such effects within Europe has been stated by, for example, Thérèse Délpèch, director of strategic affairs at the French Atomic Energy Commission and senior research fellow at the Center for International Studies (CERI - Fondation Nationale des Sciences Politiques). In a recent publication, she observes:

¹⁵⁹ NATO's enlargement decided upon in Prague and the European Union enlargement decided upon in Copenhagen, respectively.

¹⁵⁸ Ronald Asmus, "Central Europe's Perspective" in "Russia in the International System," U.S. National Intelligence Council, *Conference Report CR* 2001-02, June 2001, p.42.

Step 6 among the 13 steps agreed upon under Article VI in the *Final Document* of the 2000 NPT Review Conference states: [...] An unequivocal undertaking by the nuclear-weapon States to accomplish the total elimination of their nuclear arsenals leading to nuclear disarmament, to which all States parties are committed under article VI.

Europe's shared interests with Russia are considerable: the prospect of having Russia not only in the same geographic, but also in the same political and economic space may be described as major European ambitions in the decades to come. ¹⁶¹

Since, according to Délpèch this will take quite some time, she continues:

The question today must be less about bringing Russia into NATO and the European Union, and more about simply understanding each other's security concerns. [Many] Russians live on the borders of unstable regions, southward and eastward. In the coming decades, Russia may face significant security threats from these neighbours. It makes sense for Russia and the European Union to cooperate in dealing with such threats. 162

I-6.2 Implications for Non-NATO European Countries

Some European states that are not members of NATO can be expected to continue to insist on more transparency and further reductions of TNW in Russia. There are several reasons for this conjecture:

- 1. Russia's obligations as party to the NPT.
- 2. Concern that Russian TNW could be used to threaten or intimidate a non-nuclear weapon state on a future occasion, and that the non-legally-binding nature of the negative security assurances given by Russia to such states do not provide sufficient guarantees against this possibility.
- 3. Concern that Russian TNW and/or fissile material might fall in the hands of terrorists for subsequent use against a non-nuclear weapon state.
- 4. Concern that accidents or human errors within Russia might cause explosions of one or more TNW with consequences for at least neighbouring non-nuclear states.
- 5. Concern that a nuclear war might be initiated by unauthorized or accidental explosion of TNW.

Several of the arguments given above are equally applicable to NW states other than Russia, and European non-aligned states can be expected to insist on more transparency and further disarmament efforts from other NW states as well. It seems unlikely that Russia will yield much to further NW arms control and disarmament pressure generated by predominantly non-aligned European states, unless other NW states, most notably the U.S., indicate a wish to do so. We do not consider this likely to happen in the near term perspective, however, as will be discussed more in detail below. Hence, we surmise that efforts pursued by non-aligned European states to enhance transparency and disarmament activities regarding Russian TNW are likely to have little or no short-term effect.

I-6.3 Implications for the United States

Russian TNW are traditionally less important to the U.S. than its strategic NW, since they do not threaten the continental United States. As a consequence, there has been little incentive in the U.S. to raise them as an arms reduction issue after the unilateral presidential initiatives of 19991/1992. An exception was the 1997 Helsinki accord between presidents Clinton and Yeltsin, where it was agreed that further reductions of TNW should be negotiated in connection to future START III talks. These efforts have since been

 ¹⁶¹ Thérèse Delpech, "A Safe and Secure Europe," in John Newhouse, editor, Assessing the Threats: Instabilities, Proliferation, Terrorism, Unilateralism, Center for Defense Information, Washington, July 2002.
 ¹⁶² Ibid.

nonexistent as there is no mention of TNW in SORT, nor in the open version of the 2002 U.S. *Nuclear Posture Review*.

There are concerns in the U.S. regarding the lack of transparency of Russian TNW, which is related to various safety issues associated with the storage, handling, and transport of these weapons. This, in turn, is coupled to the question of how prone these weapons are to fall into the hands of terrorist organizations or states hostile to the U.S. and its allies. Hence, it was a major breakthrough for the U.S. at the G-8 summit meeting in Canada in June 2002, when the other G-8 states promised to give Russia considerably more assistance in further safeguarding its nuclear arsenals than they have done in the past. ¹⁶³

We conclude that the U.S. is unlikely to push issues other than transparency and enhanced security with regard to Russian TNW. This is largely due to the political sensitivity attached to the presence of U.S. TNW in some European NATO countries. The present situation therefore is likely to remain more or less unchanged, at least for the time being.

I-6.4 Implications for China

While there are few indications to western observers of any Chinese reaction to Russia's TNW forces, one has to assume that they are being considered in the ongoing modernization of the Chinese nuclear arsenals and their corresponding delivery systems. Even so, there is no reason to suppose that China will change its present "no-first-use minimal deterrent" posture any time soon, given the apparently modest rate at which its NW systems are modernized and expanded. In addition, abandoning a "no-first-use" doctrine requires substantial investments in modern command, control, communications, and intelligence systems, something that can only be done at the expense of other – for example, economic – priorities.

Little is known outside China about the Chinese tactical nuclear forces (i.e., weapons that cannot reach the U.S.). Since these are weapons that could be used to deter Russia from using its TNW in a hypothetical conflict between the two countries, it is likely that the Chinese have an interest in maintaining and modernizing these weapons and their carriers. This seems to be particularly true for its missile systems, because China is the only country in the world today known to be developing new short, medium-, and long-range missiles.

Since China seems to modernize and, in contrast to Russia, only marginally decrease the size of its armed forces, it is highly unlikely that China will feel conventionally threatened by Russia during the foreseeable future. Hence, we conclude that the main repercussion of Russia's TNW in the future is to impose upon China a military status quo relationship along their common border. We surmise, however, that a continued presence of Russia's TNW might well encourage China to maintain and possibly enlarge and modernize its TNW arsenal. If it does, this will most likely proceed in a measured, slow way due to the present emphasis on economic growth rather than armament in China.

I-6.5 Implications for Central Asia and Russia's Southern Region

Central Asia and Russia's South are Russia's most problematic geographic regions at present. Even so, Russia has little or no use for its TNW with regard to neighbouring countries in these regions, except possibly for Turkey. Hence, the threat of Russia's TNW is most likely seen as marginal or non-existent in these countries compared to the threat posed by Russia's conventional capability.

Iran and Iraq, of course, do not belong to the category of small or economically insignificant states. Since these countries historically have not been included in Russia's – or for that matter the Soviet Union's –

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¹⁶³ For additional information, see Charles L. Thornton, "The G8 Global Partnership Against the Spread of Weapons and Materials of Mass Destruction: Background, Analysis, and Recommendations," *The Nonproliferation Review*, Volume IX, Number 3, Fall-Winter 2002.

inner sphere of interest, there is in all likelihood little concern in these states over Russia's remaining TNW. While one cannot totally disregard the possibility that Iran's apparent intention to become a NW state to some extent is influenced by Russia's TNW, other factors are or have been far more significant in this respect. The end of Saddam Hussein's regime has eliminated what seems to have been the major reason for Iran to acquire nuclear weapons. Whether this is sufficient for Iran to abstain from acquiring NW in the future remains to be seen.

In conclusion, we surmise that the future arsenals of Russia's TNW will continue to have a marginal impact in Central Asia and the region southwest of Russia.

I-7.0 Conclusions to Part I

The specific roles of Russia's TNW arsenal are not explicit in any of the three important documents published in 2000 (*The National Security Concept*, *The Foreign Policy Concept of the Russian Federation*, and *the Military Doctrine*). The reasons are not entirely clear, but may partly be related to a lack of agreement as to the specific military uses in various contingencies of TNW. One problem, which will be discussed more in detail in Part II, could be associated with launch authority – that is, should release authority of some TNW be pre-delegated to a commander in the field or should it be centralized to the Russian National Command Authority (NCA) in a hypothetical future armed conflict? Another might be related to differences in opinion as to the specific use of TNW compared to the use of Russia's strategic NW.

Nevertheless, it is our belief that Russia is likely to maintain a sizable fraction of its present TNW arsenal for the foreseeable (short and medium term) future – that is, for as long as the warheads are regarded as sufficiently safe and reliable given a life extension program. Maintaining TNW, once procured, is a cost-effective and vital defense component, in part due to the dual capability of their delivery systems. This conjecture is corroborated by a statement made by Russia's Defense Minister Sergei Ivanov in a lecture to the Russian Military Sciences Academy in January 2003:

A key direction in army development involves maintenance of nuclear forces on a level that guarantees deterrence of aggression against us and our allies. 164

All nuclear warheads have a limited guaranteed life expectancy time. To what extent phased out non-strategic warheads – that is, warheads beyond their life expectancy time – will be replaced/completely remanufactured is a moot question due to lack of transparency. From the point of view of external threats, NATO with its superior conventional capability and formidable nuclear capability presents a sufficiently strong motive for Russia to maintain at least some of its TNW capability. This view is likely to have been further reinforced after the U.S.-Iraq war.

For the foreseeable future, Russia is likely to maintain at least part of its present TNW arsenal due to the very existence of NATO. There is little doubt that Russia appreciates its present `Council-based` relations with NATO, in which the "war against terrorism" is a major common interest. Yet, one can discern apprehensions in many Russian articles that a change for the worse in some distant future regarding its relationship with NATO cannot be ruled out. Prudence or hedging then calls for keeping an arsenal of NW – strategic as well as tactical. These views are presumably held primarily within conservative circles within as well as outside of the military community.

Apart from perceived potential future threats from NATO or China, it is difficult to identify additional reasons for Russia to maintain its TNW arsenal. The problems along its southern front and in Central

 $^{^{164}\} Unattributed\ and\ Untitled\ Article, \textit{Agentsov}\ \textit{Voyennykh}\ \textit{Novostey},\ Moscow,\ 20\ January\ 2003.$

Asia, while of significant magnitude, are of a nature where NW are of little deterrent, let alone military, use. A possible exception might be if nuclear proliferation were to occur in the Middle East combined with rising anti-Russian sentiments among Moslems in the area. This, however, does not seem to be of much concern to Russia at the moment.

Finally, it can be expected that European and other non-aligned states are going to insist on more TNW transparency as well as further TNW disarmament efforts from Russia and other NW states – in part due the obligations under Article VI and the Final Document of the 2000 NPT Review Conference. That having been said, it seems unlikely that Russia will yield much to TNW arms control and disarmament requests by predominantly non-aligned European states unless other NW states, in particular the U.S., indicate a penchant to do so.