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A Global Assessment of Nuclear Proliferation Threats

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A Global Assessment of Nuclear Proliferation Threats

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Global proliferation threats come from two main sources: large arsenals of nuclear, biological or chemical weapons held for decades by a small group of states, and the small number of weapons newly acquired or sought by several nations or groups that may have strong motivations for using the weapons they have.

The first has been the focus of most non-proliferation efforts since the dawn of the nuclear age almost 60 years ago. President John F. Kennedy summarized the basic problem: "The weapons of war must be abolished before they abolish us." National and international efforts accordingly have focused on eliminating weapons, believing that as long as stockpiles existed, they would someday be used.[1] This assessment deals exclusively with the dangers from nuclear weapons.

New Dangers But No Agreed Assessment

Despite decades of disarmament efforts, global nuclear arsenals remain dangerously high and two new nations are now pursuing nuclear weapons programs. The danger is not just that the nuclear club could grow from the current eight to nine or ten nations, but that a new breach in the nuclear dam could unleash a flood of new entrants, collapsing global restraints and making every regional crisis a potential nuclear crisis. New nuclear-weapon states may be less restrained in their nuclear use doctrines. Further, if North Korea, Iran or other nations in volatile regions develop nuclear weapons production capabilities, they might, willingly or unwillingly, share, sell or otherwise transfer weapons, materials or skills to terrorist groups.

Thus far, we lack a shared international assessment of what the proliferation threats are and the priority that should be assigned to each threat.

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[1] Several presidents and senior U.S. officials have echoed Kennedy's determination to eliminate WMD arsenals. When President Richard Nixon announced his decision in 1969 to unilaterally dismantle the U.S. biological weapons stockpile, he noted "These steps should go a long way toward outlawing weapons whose use has become repugnant to the conscience of mankind. Mankind already carries in its own hands too many of the seeds of its own destruction." President Ronald Reagan dreamed of a world free of nuclear weapons and then-Chairman of the Joint Chiefs Colin Powell told the Harvard graduates of 1993, "Today, I can declare my hope and declare it from the bottom of my heart that we will eventually see the time when that number of nuclear weapons is down to zero and the world is a much better place."

This is so, even though major international actors recognize the importance of a shared assessment. The U.S. National Security Strategy of 2002 declares that the United States must "coordinate closely with allies to form a common assessment of the most dangerous threats." So too, the Council of the European Union noted in June 2003, "An EU strategy against the proliferation of WMD needs to be based on a common assessment of global proliferation threats."[2] Indeed, the need for cooperation extends beyond the transatlantic community and must include other leading states. Russia and China are particularly important as permanent members of the UN Security Council and as sources of proliferation concern.

Without shared threat assessments, it is difficult to focus the political, diplomatic and perhaps military power necessary to persuade or compel recalcitrant actors to comply. Nor can an effective division of labor be coordinated to strengthen the global nonproliferation regime if leading actors do not agree on priorities.

Thus, the first requirement of a new strategy is to develop greater international consensus on threats and the division of labor needed to diminish them. This will not be easy. Threat perceptions depend heavily on geographic position, alliance relations, economic interests, and historical experiences. Russia, China and other nations may see proliferation as a threat more to the United States than to themselves. This puts a great onus on the United States and other leading nations to develop a threat assessment that is convincing to their allies, even if differences remain.

The process should begin immediately. The logical starting points are those government institutions in the United States and Europe already verbally committed to developing a shared assessment. The European Union should accelerate its process, even if this means producing a shared European assessment ahead of the United States. For its part, the U.S. president should require the director of central intelligence to prepare a comprehensive assessment of proliferation threats that the United States could present to its allies. The logical starting point would be NATO, where the United States can share the classified supporting data for the assessment and compare insights with allied intelligence agencies. At the NATO summit in 2005, the allied heads of state should commit NATO to producing a collective proliferation threat assessment for the 2006 meeting. These assessments should also be discussed as a matter of first priority with key allies in Asia and the Middle East.

A draft outline of such an assessment, listing the most pressing threats, is provided below. These are either threats to nations and national populations or threats to the stability of the nonproliferation regime, the collapse of which would greatly increase global security threats.

This analysis is adapted from the new report from the Carnegie Endowment for International Peace, *Universal Compliance: A Strategy for Nuclear Security.* The report is available on the Internet at www.ceip.org/strategy.

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[2] Council of the European Union, *Basic Principles for an EU Strategy against Proliferation of Weapons of Mass Destruction,* June 24, 2003.

NUCLEAR TERRORISM IS THE MOST SERIOUS THREAT

While *states* can be deterred from using nuclear weapons by fear of retaliation, *terrorists* who have neither land, people nor national futures to protect, may not be deterrable. Terrorist acquisition of nuclear weapons poses the greatest single threat to the United States.

The nexus of greatest danger comes at the intersection of terrorists and state stockpiles of nuclear weapons and fissile materials. It remains very difficult for a terrorist group to produce nuclear weapon material on its own. Therefore, the security and elimination of state stockpiles of weapons and weapon-usable materials must become the primary objective.[3] So-called outlaw states represent only one potential source of these weapons. An excessive focus on these states can divert attention from threats that are seemingly less frightening but, in fact, are more immediate.

The most likely targets for terrorists include storage areas in the former states of the Soviet Union and Pakistan, and weapon-usable fissile material kept at dozens of civilian sites around the world.

The former Soviet states possess thousands of nuclear weapons and hundreds of tons of loose nuclear material that remain inadequately secured. International programs to eliminate and secure these stockpiles have had great success but bureaucratic obstacles and inadequate funding impair them.

Pakistan already has provided highly sensitive equipment and know-how to North Korea, Iran, and Libya. Pakistan also has terrorist organizations and radical fundamentalist groups operating within its borders. National instability or a radical change in government could lead to the collapse of state control over weapons and nuclear materials and to the migration of nuclear scientists to other nations or to the service of other groups. Until proven otherwise, Pakistan must be seen as a proliferation threat.

A similar risk of collapse is true for North Korea. There are no mechanisms in place to locate, let alone secure, North Korea's nuclear materials, facilities and scientists in the event of a government collapse.

There is also a substantial risk of terrorist theft or diversion to other countries from the nuclear stockpiles in more than forty countries around the world. Many of these caches of materials consist of HEU that could be used in nuclear weapons or further enriched to

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[3] Former senator Sam Nunn notes that "acquiring weapons and materials is the hardest step for the terrorists to take and the easiest for us to stop." Sam Nunn, "Address to Carnegie International Non-Proliferation Conference," Remarks in Washington, D.C., November 14, 2002, available at www.ceip.org/.les/projects/npp/pdf/conference/speeches/nunntranscript.pdf (accessed April 27, 2004)

weapons grade. There are also significant stockpiles of plutonium that could also be used in a weapon, though with more difficulty.[4]

REGIONAL CONFLICTS THREATEN NUCLEAR USE

The focus on terrorism should not obscure the danger that regional wars could lead to nuclear catastrophe. Though relations are currently warming between India and Pakistan, the decades-long conflict between the two has made South Asia for many years the region most likely to witness the first use of nuclear weapons since World War II. There is an active missile race underway between the two nations.

In Northeast Asia, North Korea's nuclear capabilities remain shrouded in uncertainty but presumably continue to advance. Miscalculation or misunderstanding could bring nuclear war to the Korean peninsula. Though unlikely, there is a risk that conflict could erupt between Taiwan and China, drawing in the United States and potentially escalating to nuclear weapon use across the Taiwan Straits.

In the Middle East, Iran's quest for nuclear weapons, together with Israel's nuclear arsenal and the chemical weapons of other Middle Eastern states, adds grave volatility to an already conflicted region. If Iran were to acquire nuclear weapons, Egypt, Saudi Arabia or other nations might also initiate or revive nuclear weapon programs. Israel's nuclear weapons, while not an immediate security threat to these states, may be seen as such by some states and they politically impede efforts to persuade Middle East nations to abide by nonproliferation commitments.

THE RISK OF REGIME COLLAPSE

There are also dangers inherent in the maintenance of thousands of nuclear weapons by the United States and Russia and the hundreds of weapons held by China, France, the United Kingdom, Israel, India, and Pakistan. While each state regards its nuclear weapons as safe, secure, and essential to its security, each views other nations' arsenals with suspicion. The possibility of accidental or inadvertent use remains. A decade after the Cold War ended, thousands of warheads in the United States and Russia are on hair-trigger alert, ready to launch in 15 minutes. The centrality that each nuclear weapon state accords to its nuclear weapons raises the value other nations perceive in these weapons. Recent advocacy by some in the United States of new battlefield uses for nuclear weapons even in nonnuclear conflicts further expands their perceived utility. Russia, France, India and Pakistan match this advocacy with policies that also envision using nuclear weapons to counter conventional military threats or chemical or biological weapons use.

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[4] For a more complete treatment of this issue, see *Universal Compliance: A Strategy for Nuclear Security* (Carengie Endowment Report, June 2004). Available at www.ceip.org/strategy.

The development of new warhead designs in the United States could soon lead to new nuclear tests. The five NPT nuclear weapon states have not tested since the signing of the Comprehensive Test Ban Treaty (CTBT) in 1996, and no state has tested since India and Pakistan did in May 1998. New U.S. tests would almost certainly trigger tests by other nations, collapsing the CTBT, which is widely seen as a pillar of the nonproliferation regime.

To the extent that the leaders of a given state are contemplating acceding to U.S. or international nonproliferation demands, these leaders may feel a strong need for equity so that they can show their publics that giving up nuclear aspirations and capabilities is fair. It is more difficult to demonstrate such equity when nuclear weapon states reassert the importance of nuclear weapons to their own security, develop new uses for nuclear weapons, resist progress toward disarmament, or make veiled nuclear threats.

If the number of states with nuclear weapons increases, the original nuclear-weapon states fail to comply with their disarmament obligations, and states such as India gain status for having nuclear weapons, it is possible that Japan, Brazil, or other nations will reconsider their nuclear choices. Most nations will continue to eschew nuclear weapons, if only for technological and economic reasons, but others may decide that nuclear weapons are necessary to improving their security or status. The result would destabilize the international security and political system.

Table One: Global Proliferation Threats

Nuclear Terrorism and Transfers	**Regional Proliferation and Conflict**	**Breakdown of Nonproliferation Regime**
Terrorist acquisition of nuclear weapons or materials.	North Korea as a new nuclear-weapon state.	Development of new nuclear weapons and doctrines for battlefield use, leading to new tests.
Diversion of nuclear weapons or materials from national arsenals (other than by terrorists).	Iran as a new nuclear-weapon state.	Threats to use nuclear weapons against non-nuclear states.
Nuclear black market and cooperative proliferation involving states (secondary proliferation).	Conflict between India and Pakistan leading to nuclear war.	End of reductions in global nuclear stockpiles; toleration of new nuclear-weapon states.
Collapse of government control over nuclear arsenals in Pakistan or North Korea.	Military conflict between China and Taiwan, drawing in the United States.	Collapse of the Non-Proliferation Treaty and emergence of new nations armed with nuclear weapons.

NOTE: This table presents the threats in order of urgency. Those near the top are more urgent than are those at the bottom. Those on the left are more urgent than are those on the right. But even the least urgent threat—collapse of the non-proliferation regime—is extremely serious and cannot be ignored as action is taken to counter the present danger of terrorist use of a nuclear weapon.

List of published studies and papers
All papers and studies are available as pdf-files at the Commission's website: www.wmdcommission.org

No 1 "Review of Recent Literature on WMD Arms Control, Disarmament and Non-Proliferation" by Stockholm International Peace Research Institute

No 2 "Improvised Nuclear Devices and Nuclear Terrorism" by Charles D. Ferguson and William C. Potter

No 3 "The Nuclear Landscape in 2004: Past Present and Future" by John Simpson

No 4 "Reviving the Non-Proliferation Regime" by Jonathan Dean

No 5 "Article IV of the NPT: Background, Problems, Some Prospects" by Lawrence Scheinman

No 6 "Nuclear-Weapon-Free Zones: Still a Useful Disarmament and Non-Proliferation Tool?" by Scott Parrish and Jean du Preez

No 7 "Making the Non-Proliferation Regime Universal" by Sverre Lodgaard

No 8 "Practical Measures to Reduce the Risks Presented By Non-Strategic Nuclear Weapons" by William C. Potter and Nikolai Sokov

No 9 "The Future of a Treaty Banning Fissile Material for Weapons Purposes: Is It Still Relevant?" by Jean du Preez

No 10 "A Global Assessment of Nuclear Proliferation Threats" by Joseph Cirincione

No 11 "Assessing Proposals on the International Nuclear Fuel Cycle" by Jon B. Wolfsthal

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