Union of Concerned Scientists
Citizens and Scientists for Environmental Solutions

December 6, 2004

Open Letter on Missile Defense to Prime Minister Paul Martin of Canada

Rt. Hon. Paul Martin
Office of the Prime Minister
80 Wellington Street
Ottawa ON K1A 0A2 Canada

Dear Prime Minister Martin,

We are writing to call your attention to serious technical problems with the missile defense system the United States is currently building, as well as dangers associated with pursuit of this and future missile defense systems.

The Union of Concerned Scientists has conducted technical analyses of the U.S. missile defense program for over a decade. Our analysis clearly shows that the missile defense system currently being fielded will not provide protection against long-range ballistic missile attacks. However, the system will have a significant capability to attack satellites in low-earth orbit and may spur the development of anti-satellite weapons by other countries. Moreover, desires for space-based missile defenses increase the motivation for the U.S. development of space weapons. If the United States continues to pursue robust ground and space-based missile defenses, this will have negative impacts on international relations and undermine cooperative approaches to security.

The Ground-Based Midcourse Defense (GMD) system the United States is currently fielding remains in early stages of development. As our May 2004 report *Technical Realities* shows, the testing program for this missile defense system remains in its infancy; tests thus far have been highly controlled. Moreover, the system being fielded is vulnerable to very simple countermeasures. As a consequence, there is no technical justification for deployment of the system: it has no demonstrated capability and will be ineffective against a real attack by long-range ballistic missiles.

The Bush administration has no plans to carry out adequate testing of the system, and technical analysis shows that even future, expanded versions of the system would be vulnerable to enemy countermeasures and therefore unable to provide a real defense.

While the GMD system will not provide protection against missile attacks, its deployment will nonetheless have serious negative impacts on international security.

First, the system will have a much greater capability to attack satellites in low-earth orbits than to intercept missiles. Unlike ballistic missiles, satellites travel on predictable orbits and the attacker can choose the time of the attack. This inherent anti-satellite (ASAT) capability is certain to be recognized by other countries and lead to justifiable concerns on their part.

Second, the U.S. pursuit of these capabilities raises concerns in China, which sees itself as a possible target of both missile defenses and anti-satellite weapons. While China has adopted a wait-and-see policy toward these developments, they sew distrust and undermine international cooperation, while providing incentives for China to expand its nuclear missile force and develop its own ASAT systems.

Third, the missile defense program is contributing to the cooling of U.S.-Russian relations. In response to the forthcoming deployment, over the past year Russia has announced tests of new defense-evading warheads and missile defense interceptors. Whether or not these announcements are accurate, they do reflect Russian concerns about U.S. intentions. This lack of trust likely contributes to, for example, the lack of full Russian cooperation with the United States in efforts to adequately secure its vast stocks of nuclear weapons and weapon-usable fissile material. Thus, the fallout from the U.S. missile defense program could be a continued risk of nuclear terrorism.

Fourth, the missile defense program is already proving to be a major political driver for U.S. development of space weapons. Many missile defense proponents in and out of the government see space-based missile defense interceptors as the ultimate goal of the program. Indeed, the United States is developing space-based interceptors, and the Missile Defense Agency (MDA) has announced plans to place prototype interceptors in a "space test-bed" later this decade. While a few such interceptors will clearly not provide a defense against missiles, their deployment will be an important symbol of U.S. intentions to deploy weapons in space. Such interceptors could at the same time have significant ASAT capability.

Finally, the pursuit of a missile defense program undermines support within the United States for diplomatic approaches to addressing threats from long-range ballistic missiles. At the same time the United States is deploying a missile defense system aimed specifically at North Korea, it has neglected efforts to negotiate limits to North Korea's ballistic missile program, which is a far more effective way to stop long-range North Korean missiles from being fired at the United States. North Korea has observed a fully verifiable moratorium on missile flight tests since 1998, and taking steps to keep this moratorium in place should be a top U.S. and international priority.

We appreciate your attention to these issues.

Respectfully,

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Technical Realities: An Analysis of the 2004 Deployment of a U.S. National Missile Defense System, is available at www.ucsusa.org.