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### **Why the National Missile Defense Should Not be Deployed**

1. The deployment decision should be delayed until, first on paper and then in practice, the system shows its readiness and ability to intercept missiles and defeat countermeasures.

#### *How NMD is supposed to operate*

2. The latest version of NMD includes 250 ground-based interceptors, ground-based X-band radars, and space-based spy satellites employing IR sensors.
3. In order to detonate, the kill vehicle must hit the target ("hit-to-kill" technology).

#### *Technology is not ready yet*

4. The track record of US's "hit-to-kill" technologies is abysmal.
5. These data underline the necessity to verify the technology is ready before deploying it.
6. To ensure that NMD technology is mature, a prototype of the full system must be successfully tested.
7. The performance of the NMD system in the only "successful" test indicates that kill vehicle's infrared sensor technology is immature.
8. With the current testing schedule, not enough tests will be carried out to give a statistically significant measure of the proposed system's reliability and effectiveness.

#### *Inherent Ineffectiveness of the Proposed National Missile Defense*

9. The performance of NMD under real-world conditions, operational effectiveness, is essential, because the countries employing ballistic missiles will also use countermeasures to try to defeat the missile defense.
10. The inability of the proposed NMD system to defeat even the simplest countermeasures in theory, much less in practice, renders it inherently ineffective.

#### *Biological/Chemical Weapons: Overwhelming NMD with a Large Number of Real Targets*

11. The proposed NMD system will have zero effectiveness against biological/chemical weapons that are delivered in submunitions, another name for small ( $\leq 10$  kg) warheads.
12. Not only will this method of delivery defeat the proposed system, it is much more efficient at dispersing the agent over larger areas than a unitary warhead would be.

#### *Metallized Balloons: Overwhelming NMD with a Large Number of False Targets*

13. Releasing a large number of metallized balloons, only one of which contains the nuclear warhead, can overwhelm the proposed NMD system.
14. The release of the balloons above the atmosphere and the presence of metal coatings render X-band radars useless.
15. The infrared sensors of the kill vehicle can be prevented from discriminating a balloon with a warhead by covering balloons with appropriate surface coatings for daytime attacks or inserting small heaters in them for nighttime attacks.

*Another argument omitted to fit on one page.*

#### *Conclusions*

20. The decision to deploy the National Missile Defense should not be made because the technology has not demonstrated its readiness yet and, more importantly, because the design of the proposed defense makes it vulnerable to very simple countermeasures.