European Capability Initiative

Fact Sheet

MISSILE DEFENSE AGENCY

The mission of the Ballistic Missile Defense European Capability is to provide a defense of Europe against a limited intermediate and longrange ballistic missile attack from the Middle East, and provide additional capability to the current missile defense system located in Alaska and California to defend the United States.

Overview

- Uses multiple sensors, and ground-based interceptors that are capable of detecting, tracking, and shooting down intermediate and long-range ballistic missiles during the midcourse phase of flight.
- Interceptor directly hits the incoming missile by ramming the warhead with a closing speed of approximately 15,000 miles per hour to destroy it. This is called "hit-to-kill" technology and has been proven in a number of flight tests. No explosives are used, only the kinetic energy from the direct collision between the interceptor and the target missile.

Details

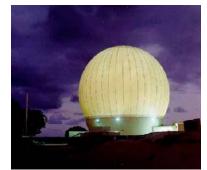
The European Capability Initiative is composed of three main components: interceptor site, midcourse radar, and a transportable forward-deployed radar.

- Interceptor Site: Up to ten silo-based long-range interceptors are proposed for deployment in Poland. The interceptors would be housed in underground silos in an interceptor field about the size of a football field. The interceptor configuration planned for Poland is nearly identical to those in Alaska and California, but with a two-stage booster, rather than a three-stage booster. The two-stage variant is better suited for the engagement ranges and geography for Europe. As with the interceptors based in Alaska and California, these interceptors are designed only for defensive purposes and employ small hit-to-kill vehicles to destroy their targets.
- Midcourse Radar: A midcourse radar is proposed to be deployed in the Czech Republic. This X-Band radar will be optimized to point its narrow beam towards the Middle East in order to detect Iranian ballistic missile threats in flight. The information obtained by this radar will be used to identify and distinguish the missile warhead from other missile parts and potential decoys and countermeasures. Most importantly, it will be used to guide interceptor missiles to the projected trajectory of the ballistic missile warhead. The radar proposed for deployment to the Czech Republic is currently located at Kwajalein Atoll in the Marshall Islands where it has been used to support missile defense tests over the

past 10 years. This radar has successfully operated without any harmful effects to the people in the nearby family housing area or the children in the nearby school.







Transportable Forward-Deployed Radar: Transportable forward landbased radars provide an enhancement to the capabilities of the proposed European interceptor and midcourse radar sites. This type of radar is a high-resolution, X-Band class, phased-array radar based upon the Terminal High Altitude Area Defense missile system used for theatre-type missile defense. Forward based radars, in cooperation with layered sensors, give the European Capability a continuous tracking and discrimination capability with more opportunities to engage the target, resulting in a greater probability for a successful intercept. The radar provides earlier acquisition and more precise tracking data, ovpanding coverage areas to support more sophisticated angagement st



expanding coverage areas to support more sophisticated engagement strategies.

Development

- Upon parliamentary ratification by host nations, construction of an interceptor site and a radar could begin in 2009 with the first interceptors emplaced beginning in 2012.
- U.S. PATRIOT, Sea-Based SM-3, and Terminal High Altitude Area Defense could be made available to provide amplified coverage for areas of Europe that are too close to Iran for effective use of long-range interceptor missiles, as well as future NATO missile defense assets.