

NATO Ballistic Missile Defence (BMD)

Programme

NATO is developing a capability to protect the Alliance's European populations, territory and forces against ballistic missile attacks, as decided at the Lisbon Summit in November 2010.

“The threat to NATO European populations, territory and forces posed by the proliferation of ballistic missiles is increasing. As missile defence forms part of a broader response to counter this threat, we have decided that the Alliance will develop a missile defence capability to pursue its core task of collective defence.

The aim of a NATO missile defence capability is to provide full coverage and protection for all NATO European populations, territory and forces against the increasing threats posed by the proliferation of ballistic missiles, based on the principles of the indivisibility of Allied security and NATO solidarity, equitable sharing of risks and burdens, as well as reasonable challenge, taking into account the level of threat, affordability and technical feasibility, and in accordance with the latest common threat assessments agreed by the Alliance.”

Lisbon Summit Declaration, November 20, 2010

Key Functions

When fully operational around the end of this decade, the capability will be built around a command and control system which enables five key functions: planning; monitoring; information sharing; interception; and consequence management.

NATO is developing the command and control system, based on an expanded version of the Alliance's Active Layered Theatre Ballistic Missile Defence system for the protection of deployed forces. Allies will provide sensors and interceptors.

PLANNING: given the very short time period over which missile defence engagements can take place (a matter of minutes, sometimes of seconds), planning and anticipation are crucial for the development of an effective defence. A key part of the NATO capability will therefore be to plan, prepare and position assets as needed.

MONITORING: some NATO Allies own, or are acquiring, satellites which can detect the launch of a ballistic missile, and radars on land or on ships which are capable of detecting and tracking such missiles. These sensors will be linked in to the NATO command and control system.

INFORMATION SHARING: the command and control system enables NATO to bring together all the available sensor information, build it into a comprehensive and real-time operational picture of the BMD situation and share it with sensors and weapons systems provided by Allies.

INTERCEPTION: weapon systems and interceptors provided by Allies will be linked in to the NATO command and control system together with the various sensors, allowing NATO commanders to take appropriate and timely action, if necessary, to respond to a ballistic missile attack.



CONSEQUENCE MANAGEMENT: NATO will support national authorities to mitigate and manage the consequences of a missile attack or intercept. This can cover a range of measures before, during and after the event, including providing timely information to allow the national authorities to warn their population, and delivering capabilities to support national response activities.

Evolution

The NATO ballistic missile defence capability will evolve over time. Its coverage will be progressively expanded and extended until it reaches the goal of full coverage and protection for all NATO European populations, territory and forces with the Full Operational Capability.

Three key milestones are expected:

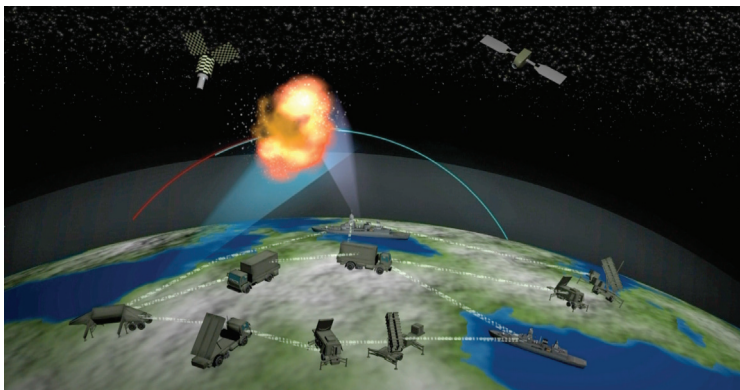
INTERIM CAPABILITY: the “start-up” capability. The basic command and control capability has been tested and installed. Allies have agreed the rules under which the capability will be operated. Sensor information is received, compiled and shared through the NATO command and control system. This gives NATO missile defence commanders a comprehensive and real-time operational picture, allowing them to use the available missile defence assets effectively. Elements from the US European Phased Adaptive Approach constitute the primary assets available to the system.

INITIAL OPERATIONAL CAPABILITY: more sensors and weapons systems belonging to a variety of Allies have been made available to the system. NATO has an upgraded and enlarged command and control. The system is capable of handling more targets and more complex attacks over a wider area.

FULL OPERATIONAL CAPABILITY: a wide range of sensors and weapons systems belonging to a variety of Allies has been made available. NATO has the command and control necessary to fully support its BMD mission. The system is capable of handling more targets and more complex attacks, and provides full coverage and protection for all NATO European territory, populations and forces.

Full Operational Capability is expected around the end of the current decade.

Participation



In September 2009, the United States announced plans to make BMD sensors and weapon systems available to NATO. That plan is called the European Phased Adaptive Approach. It includes a forward-based radar hosted by Turkey in the context of the NATO BMD capability, US Aegis ships in the Mediterranean that will eventually be based in Spain, and interceptors hosted by Romania and Poland. The US declared Phase 1 operational in early 2012. Independently, France plans to develop a space-based early warning system and a long-range radar. The Netherlands announced plans to upgrade four ships with missile-defence radars, and Germany offered its Patriot Air and Missile Defence

systems as their respective contributions. Germany also hosts the command and control structure for NATO BMD at Alliance Headquarters Air Command Ramstein. Further contributions are expected.

Cost

NATO is paying for the development of the command and control system. Since 2006, NATO has spent 150 million euros for theatre missile defence. The additional cost, to be spread over the rest of the decade, is estimated at 650 million euros for the theatre missile defence system, plus less than 200 million euros to expand the theatre missile defence system to cover NATO's European populations, territory and forces. All such costs are divided between the 28 Allies.

