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Good morning. On behalf of the Missile Defense Agency, welcome to this year's Multinational Ballistic Missile Defense Conference.

I want to thank our very gracious conference national hosts, State Secretary Wagner, and our co-sponsor, AIAA, for doing another magnificent job. Thanks also to IABG (Gen. Altenhuy) and Northrop Grumman (Dr. Sugar) for their tremendous support for this important event.

I'm most grateful also that Ambassador Coats made time in his busy schedule to attend our conference this year.

I want to welcome those members of the Bundestag that are present. I would especially like to welcome our Russian partners-Gen Buzshinskiy and Ukraine friends-Mr. Konukov and I thank all of you for making the journey to be here. Now, I would like to ask you all a question-why are we here? What brings this group of nations together? Continued dialogue and the exchange of ideas on missile defense are important, but why are we here? I believe we all recognize a threat that continues to spread. We recognize a vulnerability to our nations, our populations, and our forces which must be addressed. It has been three years since we rolled out the new missile defense program, and it's as important as ever that we remain focused on our mission.

The threat of ballistic missile attack has not diminished. If anything, tomorrow's world will be more dangerous than today's.

I say that because, despite the counter-proliferation successes we're having in places like Libya, weapons of mass destruction, along with the spread of missile technologies and associated expertise, continue to pose grave threats.

We've noted for many years now that states such as North Korea and Iran are shifting their emphasis from short-range to longer-range ballistic missiles.

Earlier this month I read with some concern an article in the *Wall Street Journal* reporting Iran's decision to allocate $1 billion to resume development of long-range missile systems that can reach targets in Europe and the United States.

We've been surprised before. North Korea surprised us in 1998 with the launch of the Taepo-Dong 1. And we should expect to be surprised again.

We know that our potential adversaries may deploy their missiles without the rigorous testing central to our own development practice. That, of course, would significantly reduce our strategic warning time.

Many emerging ballistic missiles states also have shown disturbing interest in the development of nuclear, biological, and chemical weapons. Longer-range missiles carrying these deadly payloads could be used to menace U.S. and allied cities and blackmail our leaders.

In short, there are nations around the world that pose a threat who are collaborating in their developments of ballistic missile capabilities--so the need for missile defense and our collaboration with allies and friends remains compelling.

Our mission is a very straightforward one—which is not to say that it is an easy one. We are to develop and field an integrated layered ballistic missile defense system to defend the US, our allies, deployed forces and friends around the world by defeating missiles of all ranges and in all phases of flight. Therefore we must deal with this threat together, globally and comprehensively.

In pursuit of that vision, we're building layered defenses using an evolutionary acquisition approach. That approach takes into account new threats and emerging missile defense technologies. If there's one thing for certain--the threat won't stay fixed, so neither can we.

That is why our research and development activities remain the heart of our program. We have a very aggressive research and development program to support the development of both near-term and far-term missile defenses.

We're pursuing different technologies while at the same time working to put an initial defensive system on alert this year.

We'll continue to build out the missile defense test bed, which today is anchored in the Pacific Ocean, so that we can test this unique and highly complex system. That system will initially cover eight time zones and engage warheads in space. This integration achievement is unprecedented.

Rigorous testing under increasingly stressing conditions and in the presence of increasingly sophisticated countermeasures remains central to our program.

Our ability to test the ballistic missile defense system will allow us to fine tune it and discover its limitations that we can then correct.

Our research and development efforts are getting results. Initial defensive operations, will feature land- and sea-based midcourse defenses against short-, medium-, and long-range missiles.

These capabilities will be added to existing Advanced Patriot-3 terminal defenses against shorter range missiles.

Our acquisition approach is to add layers to the system to increase performance and effectiveness over time.

In the near term, the first Terminal High Altitude Area Defense (THAAD) batteries will give us an enhanced land-based terminal capability against medium-range missiles.

Boost and ascent phase defense is becoming a larger part of our research and development efforts, and we will see these capabilities being phased into our defenses later this decade and early in the next.

We also are leveraging advanced technology to increase firepower and sensor capability and extend the engagement battle space.

In the out years, Space Tracking and Surveillance System satellites will improve midcourse tracking and discrimination, while Multiple Kill Vehicles placed on a single booster will enable us to counter multiple objects in space.

This important technology work extends to many areas, including lasers and advanced discrimination techniques.

We have this aggressive and broad research and development program for one reason, and one reason only—to get the most capable system out into the field, and on alert.

This year, as I mentioned, we'll begin to meet the bold vision set out a year and half ago by President George Bush.

We're on track to put the initial missile defense system on alert before the end of this year. Many of you in this room have been instrumental in making this happen. In a few short months, we'll be taking another big step towards making missile defense a reality, a goal we've had in the United States since at least 1983.

The infrastructure required to support initial alert system is almost complete. The first operational interceptor is ready for emplacement in its silo at Fort Greely, Alaska- this should happen this month.

The other interceptors will follow in short order in the coming months. Construction at Vandenberg AFB, California, our second long-range interceptor site, also is on schedule with interceptors scheduled to be emplaced there by the end of the year as well.

Aegis Long-Range Surveillance and Tracking ships also are being readied. As I speak, we have ships in the Pacific being equipped with software upgrades. These ships will be ready for stationing to execute the ballistic missile defense mission very soon.

Aegis missile system ships will give us the capability to move powerful sensors into and around threat sites in different regions and to be on-station to provide surveillance and tracking information to the system. They will do an important job for us—increase the engagement battle space.

Next year we will add Aegis cruisers to the missile system. These ships will be capable of adding Standard Missile-3 interceptors, adding an engagement capability against short- and medium range threats.

The Cobra Dane and Beale Early Warning Radars in Alaska and California have been upgraded for the mission.

Command, control, battle management and communication lines and equipment stand at the ready, and, very importantly, we have trained the people that will be manning the consoles and keeping vigil at Colorado Springs, Colorado and Fort Greely, Alaska.

With events such as Pacific Explorer I and II sea based exercises, and the Missile Defense Integration Exercises, we are incrementally gaining experience with the Ballistic Missile Defense System.

And let's not forget our experience in Operation Iraqi Freedom, where we successfully employed the Patriot system to destroy all threatening ballistic missiles. That combat experience is invaluable.

So keep in mind that as we go through the Progression to Alert schedule of events, we're building confidence in our ability to operate the system. When called upon, we'll be mission-ready.

Now, you're all aware that defense of allies and friends is an integral part of U.S. missile defense mission. Let me take a moment to remind you why the involvement of our international partners is so important to our success.

First, missile defense is an inherently global mission. We cannot escape the fact that ballistic missiles can overfly and potentially impact many countries. Ballistic missiles make national boundaries meaningless.

That is why we emphasize in the Missile Defense Agency this simple axiom—geography counts. It matters where we locate the piece parts of the missile defense system. The role for our allies here is obvious.

Second, we need to present a united front to those who would seek to harm us with ballistic missiles. Our ability to deter attacks and dissuade other governments from investing in ballistic missiles will be significantly enhanced if we can speak through our alliances, friendships, and coalitions with a single voice.

Third, cooperation means pooling our intellectual and financial resources. Over the long-haul, this efficiency in our relationship could help reduce costs. Missile defense is expensive, there's no getting around that. But there may be ways that we can reduce

that burden over time by working together. However, there is no cost as high as that of failure to defeat an attack.

Fourth, our allies bring to the table unique design and engineering perspectives as well as some impressive technologies. We need to be able to tap into this precious intellectual reservoir.

The infusion of new ideas is important in our program. As you all know, we use an acquisition strategy that exploits conceptual and technological breakthroughs to enhance system performance over time.

Our close working relationships with other governments and industries will help ensure that important new ideas for missile defense can be put into action.

And fifth, to build on that point, our international partners may be able to play a very valuable risk reduction role. New acquisition efforts, especially if they involve new technological approaches or push the bounds of engineering, would benefit from alternate or parallel path approaches.

So we're committed to broader and deeper cooperation with our allies and friends across the spectrum of missile defenses.

With the constraints of the Anti-Ballistic Missile Treaty removed, we can now fully explore many different collaborative possibilities.

In the year since we last met in Kyoto, the Government of Japan has put the country on a path to acquire a multi-layered missile defense system.

Japanese Aegis ballistic missile defenses and PAC-3 missiles defenses, integrated by one of the most advanced command and control and battle management systems, will eventually provide a comprehensive defense of their homeland against ballistic missile attack.

This year also has been an exceptionally good one for the U.S. cooperative development relationship with Japan. Japan reaffirmed its commitment to continue our valuable cooperative ballistic missile defense research, which includes development of components for improving the Standard Missile-3 kill vehicle.

As many of you are aware, you must be able to see the target to kill it. Our sensors strategy is to be integrated and multilayered. It is one of achieving over time a capability to view continuously hostile ballistic missiles in all phases of their flight.

Strategically deployed radars and infrared sensors will give us information that we can then feed into our battle management system. The more we know, the more capable the ballistic missile defense system can be.

Our allies are part of this sensors strategy. And they will play an important role as early as our initial system deployment.

In 2003, the United States signed a Memorandum of Understanding on Ballistic Missile Defense with the United Kingdom, and we agreed to implement an annex to upgrade the Fylingdales early warning radar based in the UK.

Not only will this radar continue to enhance UK defenses and assist missile defenses in Europe, but it will also significantly enhance our ability to engage long-range ballistic missiles launched against the United States from the Middle East. This midcourse radar will be part of our initial defensive architecture.

It will work in tandem with the Greenland Thule radar, which we recently gained the consent of Denmark and the Greenland Home Rule Government to upgrade. We will proceed to integrate this midcourse radar into the missile system as well.

Recalling that our mission is to defend against ballistic missile threats of all ranges, other NATO allies, and NATO itself, are also taking significant steps in the missile defense mission area. The Netherlands will be the first nation outside the United States to introduce the new PAC-3 interceptors into their Patriot force structure. The trilateral partners in MEADS are close to an agreement to proceed into signing and development of that new capability. The recent Summit at Istanbul gave clear support and push for the ballistic missile defense system work at NATO – by both the materiel development community and by the Military Authorities as well as by all the other Alliance stakeholders.

Our strategy also involves putting smaller sensors forward in the regions near threat launch sites, whenever that is possible. Sensors positioned and on alert 24 hours/7

days a week on the territories of our allies in and around Southwest Asia and Asia Pacific will allow us to get an early track on hostile missiles launched out of those regions.

Data relayed to the battle manager from forward deployed radars will significantly improve the performance capability of the system, for the defense of the United States and also for the defense of allies in these regions. We're currently holding very encouraging discussions with a number of allies on this subject.

We'll also enhance the system over time by adding interceptors to the missile defense inventory.

Since 2002, the United States has consulted with several European allies to explore the possibility of hosting a third long-range interceptor site. This site would supplement ground-based midcourse defense sites in Alaska and California.

This third site would enhance defenses against mid- to long-range ballistic missile threats by providing some new defense capability for Europe as well as some redundancy in the overall midcourse defense layer. The discussions currently underway look very promising.

I mentioned earlier that our deployment strategy for missile defense is to add layers over time. The more layers there are, the more shot opportunities we can have. And the more shot opportunities we have, the more potent our defenses.

Boost and ascent phase defense holds much promise, and so development work over the next several years will be focused on developing these capabilities.

They would provide a revolutionary, high-payoff improvement to the system. Boost and ascent layer defenses, especially if they are mobile and flexible, would significantly improve overall effectiveness.

Currently we're developing two program elements in this area, a high energy laser capability, the Airborne Laser, and a new kinetic energy interceptor, or "hit to kill" capability, the KEI which I mentioned earlier. These represent parallel paths and complement each other.

While Airborne Laser brings revolutionary technologies to the system, KEI will focus on mature technologies. This initial KEI capability will be able to perform ascent

and midcourse intercepts from the land or sea, while future KEI blocks will look at other basing modes and strive to enhance our midcourse and terminal defenses. You'll hear more detail about our KEI activity later this week.

Suffice it to say right now that I believe this area of missile defense is one where we want to tap the reservoir of ideas in the international community. We will also be looking to provide additional risk reduction towards the initial capability.

There is a great deal of industry interest in this work. It is also obvious that international industry has a great deal of relevant experience and capability to offer. We'll have a decision soon on our approach for the involvement of allies and friends in this program. We received many encouraging responses to the request for information we issued earlier this year.

We're still examining a number of possibilities and avenues of cooperation for this work. We're anxious to bring this forward and to foster new relationships with our international partners, both in government and in industry. We will bring this to a conclusion this fall. As our budget posture becomes clear.

In closing let me just say that we've come a long way in the world of missile defense under General Kadish's leadership. We are deeply indebted to him for his vision and personal dedication to this important work over the past five years.

It's especially noteworthy that, on his watch, we've made good progress in our relationships with our allies and with our plans to partner with government and industries abroad. He also would be the first to remind us that there remains a long, tough road ahead.

Missile defense is technically challenging, to be sure. Many of us here today also know that cooperative development and multinational partnering have their own set of daunting challenges.

Indeed, a lot of hard work remains to be done. But let's also keep in mind that we're still in the early stages. These things take time.

We need to remain focused on our vision. We're fast approaching a major milestone in missile defense this year, initial defensive operations. This is only the beginning.

Our aggressive research and development program reminds us that the missile defense system will evolve over time and become increasingly capable of protecting the United States, our troops, and our allies and friends.

We're no longer simply doing experiments—we're now actually making a mark on history by implementing layered missile defenses. We can all be proud of this achievement.

Your expertise and dedication is fundamental to our continued success and fundamental to meeting the challenges the future holds for us all.

Thank you all for attending the conference this year. I'm certain you'll make it a success. I look forward to having discussions with you and listening to your-viewpoints-I hope you enjoy your stay in Berlin.