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PRESIDENT OBAMA'S NEW PLAN FOR MISSILE DEFENSES IN EUROPE AND THE IMPLICATIONS FOR INTERNATIONAL SECURITY

COMMITTEE ON ARMED SERVICES
HOUSE OF REPRESENTATIVES

ONE HUNDRED ELEVENTH CONGRESS

FIRST SESSION

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PRESIDENT OBAMA'S NEW PLAN FOR MISSILE DEFENSES IN EUROPE AND THE IMPLICATIONS FOR INTERNATIONAL SECURITY

HOUSE OF REPRESENTATIVES,
COMMITTEE ON ARMED SERVICES,
Washington, DC, Thursday, October 1, 2009.

The committee met, pursuant to call, at 9:07 a.m., in room HVC–210, Capitol Visitor Center, Hon. Ike Skelton (chairman of the committee) presiding.

OPENING STATEMENT OF HON. IKE SKELTON, A REPRESENTATIVE FROM MISSOURI, CHAIRMAN, COMMITTEE ON ARMED SERVICES

The CHAIRMAN. Good morning. Committee meets today to receive testimony on the President's new plan for missile defenses in Europe and the implications for international security.

Joining us today is a formidable panel of witnesses, General James Cartwright, Vice Chairman of the Joint Chiefs of Staff; the Honorable Michèle Flournoy, Under Secretary of Defense for Policy; the Honorable Ellen Tauscher, Under Secretary of State for Arms Control and International Security; and Lieutenant General Patrick O'Reilly, Director of the Missile Defense Agency.

I have to give a special welcome to our friend, former colleague, Ellen Tauscher. It is a thrill to have you back. And we know that you are doing exceedingly well. We appreciate you.

Secretary TAUSCHER. Thank you.

The CHAIRMAN. We thank each of you for appearing.

Two weeks ago, the President announced that he had accepted the unanimous recommendations of Defense Secretary Gates and the Joint Chiefs of Staff to restructure the plan for missile defense in Europe. He said, "Our new missile defense architecture in Europe will provide stronger, smarter, and swifter defenses of American forces and American allies."

And I must say, the new plan sounds familiar. It sounds like very much it came from the bipartisan direction provided by Congress. In 2006, our bill established the policy of the United States to accord priority to developing, testing, fielding the near-term effective missile defense systems, including Aegis, Ballistic Missile Defense (BMD), and Standard Missile-3 (SM–3) interceptor Terminal High Altitude Area Defense (THAAD), and Patriot Advanced Capability-3 (PAC–3) system.

In our bill two years ago, we made it the policy of the United States to develop, test, and deploy effective missile defenses for our forward-based forces, our allies, and our homeland against the threat of Iran's existing and potential ballistic missiles.

Last year, we told the Department to buy more SM–3s and THAAD interceptors to defend against short- and medium-range missiles. In a nutshell, that is what the President and Secretary Gates announced two weeks ago.

In my view, the new plan is comprehensive, it is flexible, it is designed to counter the most immediate threats posed by Iran first, and more quickly protect our allies and our forward-deployed troops in the region than previously planned.

And, notably, it contains important hedges, so if our intelligence estimates are wrong, we will be in a position to fortify the defense of Europe as well as our homeland.

We know that Iran is deploying significant numbers of short-range missiles more quickly than we had previously expected, and deploying some medium-range systems, such as the Shahab-3, that can reach Israel. Also, Iran is developing medium- and intermediate-range missiles that can reach Europe.

We have a moral responsibility to do more rapidly and to deploy defenses that can protect our North Atlantic Treaty Organization (NATO) allies and our forward-deployed forces in places like Aviano Air Base in Italy against the growing threat.

On the other hand, Iran's ability to field an ICBM—that is, an intercontinental ballistic missile—that can reach the United States is still in the future, according to our intelligence professionals, maybe as far away as 2020.

That said, we know that intelligence estimates can be wrong. For that reason, I am pleased that the plan continues the testing of the two-stage Ground-based Midcourse Defense (GMD) interceptor that would have been deployed in Poland under the previous plan. And the Administration plans to continue negotiating with the Poles and the Czechs to reach cooperative agreements to base missile defense systems in those nations in the third or fourth stage of the plan.

Finally, before turning to our ranking member, as well as our witnesses, let me just make a few comments about how this new plan might affect our relations with Russia. While I find it unlikely that calculations concerning our relations with Russia played no part in the decision, I am hopeful, as Secretary Gates wrote in the New York Times, that "if Russia's leaders embrace this plan, then that will be an unexpected—and welcome—change of policy on their part."

It would be an additional benefit if the new plan opens the door to cooperation with Russia on missile defense. Russian cooperation could send a powerful signal to Iran, a point of great importance on the day when negotiations are to begin with Iran.

So a key question for our witnesses this morning is whether the Russians will support this new approach and whether the decision will help create a united front in negotiations with Iran.

Before calling on our distinguished panel, let me recognize my good friend, the Ranking Member, Mr. McKeon from the State of California.

Mr. McKeon.

STATEMENT OF HON. HOWARD P. "BUCK" MCKEON, A REPRESENTATIVE FROM CALIFORNIA, RANKING MEMBER, COMMITTEE ON ARMED SERVICES

Mr. MCKEON. Thank you, Mr. Chairman.

It is a privilege to welcome our distinguished witnesses here today: General Cartwright, Secretary Flournoy, General O'Reilly. In particular, I would like to extend a warm welcome back to the gentlelady from California, our colleague and now Under Secretary of State, Ellen Tauscher, and my native Californian friend.

Secretary TAUSCHER. Thank you.

Mr. MCKEON. Our hearing today focuses on the Administration's decision to scrap plans for deploying a European missile defense capability in Poland and the Czech Republic to protect Europe and the United States.

My colleague has voiced broad support for the Administration's new proposal. Let me say I am skeptical. I think it has some merit but, as I weigh all the costs and benefits of the decision, both quantitative and qualitative, I do not come to the same conclusion. I think there are questionable assumptions, a lot of "ifs," and considerable geopolitical consequences.

A key justification for the Administration's decision is a new threat assessment, which suggests that the threat from Iran's longer-range ballistic missiles has been slower to develop, while its short- and medium-range ballistic missiles (MRBMs) are growing more rapidly than previously expected. It is a sudden change and inconsistent with the frequent briefings, intelligence reports, and testimony the committee has received from intelligence and defense officials.

In March of 2009, General Craddock, then-Commander of U.S. European Command, testified before the committee. And I quote, "By 2015, Iran may also deploy an intercontinental ballistic missile capable of reaching all of Europe and parts of the U.S."

In May 2009, an unclassified intelligence report issued by the National Air and Space Intelligence Center (NASIC) stated, "With sufficient foreign assistance, Iran could develop and test an ICBM capable of reaching the United States by 2015."

Despite this expert testimony and information, there seems to be this certainty within the Administration that the Iranians can't develop an Intermediate-Range Ballistic Missile (IRBM) or ICBM by 2015, and that these are not real threats to be worried about.

Does this certainty consider foreign assistance? Because, as we all know, Iran continues to work closely with North Korea who, themselves, appear to be pursuing ICBMs.

Does this certainty account for uncertainty? Intelligence is a fickle business, especially when a country is determined to mask its activities. Friday's revelation that Iran is building a covert uranium enrichment facility is a case in point. A December 2007 National Intelligence Estimate (NIE) judged that covert uranium enrichment efforts were "halted." Less than two years later, they are not. The NIE also highlighted intelligence information gaps and shortfalls. So I am skeptical when I hear Administration officials talk in such absolute terms that the long-range missile threat isn't as quick to develop.

We are all concerned by the proliferation and growth in short- and medium-range missiles. They are a threat to our allies, particularly in the Middle East and Asia, and to our forward-deployed troops. Thus, increasing our theater missile defenses is incredibly important.

However, as I understood the previous plan, the 10 interceptors in Poland and radar in Czech Republic would be complemented by expanding theater missile defense capabilities such as Aegis, THAAD, Patriot, and Allied systems to cover the shorter-range areas. All NATO heads of state and governments signed on to this basic approach at the April 2008 Bucharest summit.

The testimony submitted by our witnesses also emphasized that the new Phased, Adaptive Approach is more cost-effective, with proven technology, and provides more comprehensive coverage of Europe sooner than the previous plan. I would like to understand these assertions because, frankly, with the information I have before me, I am having a hard time believing them.

According to a 2008 independent report required by this committee, the Czech and Polish proposal was the most cost-effective solution to protect the U.S. and Europe. Another study done earlier this year by the Congressional Budget Office examined sea- and land-based alternatives and came to the same conclusion.

As I understand it, Phase One and Phase Two of the new approach provide only modest coverage of Europe. Of course, this depends on the number of ships available and locations where those ships would be deployed. Given the demands on the Navy's surface fleet and United States Central Command (CENTCOM), United States Pacific Command (PACOM), and United States African Command (AFRICOM) and others, dedicating those ships to the European theater will be challenging, to say the least.

These phases also require the development and acquisition of new sensor technologies.

Let's make one thing clear about this policy: if this new approach is to match its predecessor in terms of dedicated coverage, we will either need new ships or we will have to take ships away from other missions. Protections for most of Europe against medium- and intermediate-range ballistic missiles isn't provided until 2018, and protection of the U.S. against ICBMs until 2020.

Protection of the U.S. requires a new interceptor, the SM–3 Block IIB that I would characterize as a "paper" missile. Should Iran have an IRBM or ICBM capability by 2015, or even 2018, this new approach could leave parts of Europe and the U.S. vulnerable for several years. Are we offering Tehran an open invitation to focus on longer-range missile development?

Aside from the technical and cost concerns, I am particularly troubled by the geopolitical consequences of the Administration's decision, starting with its effect on our relationship with friends and allies. The Czech Republic and Poland, who have troops in Afghanistan fighting alongside U.S. forces, went out on a limb. The U.S. Government made a commitment, and we backed out. I can't express how strong my disappointment is over this.

So how did the Administration inform Prague and Warsaw of its decision? Reportedly by late-night phone calls and hastily assembled diplomatic envoys. Apparently the Czech Prime Minister was

woken out of bed after midnight, and the Polish Prime Minister refused to answer the phone, suspecting what the news might be.

On top of all this, the announcement came on the 70th anniversary of Russia's invasion of Poland at the start of World War II. For a President who has repeatedly stressed the importance of multilateralism and diplomatic reengagement with the world, this unilateral action was abrupt and sloppy, occurring without the consultations promised to both governments.

What will be the second- and third-order effects of this decision? There is what we believe, and then there is what others perceive. The headline of a daily paper in the Czech Republic read, "No Radar. Russia Won." An editorial in a respected pro-business Czech newspaper said, "An ally we rely on has betrayed us and exchanged us for its own, better relations with Russia, of which we are rightly afraid."

Are we signalling to allies that we are willing to compromise our relationships with them in order to better our relationship with Russia or, perhaps, Iran or North Korea? Will allies and friends view U.S. commitments more skeptically in the future? Will Russia and Iran use this decision as an opening to be more assertive in their foreign policy?

The Administration's Russia "reset" policy now seems to have morphed into a Russia "retreat" policy that unsettles our allies and does nothing to discipline Russian behavior. Though the administration has stated this decision is not a concession to Russia, it sure looks like one. Whether the timing was intentional or not, on the eve of Strategic Arms Reduction Treaty (START) negotiations in Geneva, the Administration gave Russia the concession it wanted and got nothing in return.

The President has also sought Russian assistance to stop Iran's nuclear programs, signalling that such assistance would lessen the need for the Czech and Polish sites that Moscow has opposed. Yet we have no indications that Russia will cooperate on Iran, and history should teach us to have very low expectations.

In fact, Prime Minister Putin remarked the day after, "The latest decision by President Obama . . . has positive implications, and I very much hope that this very right and brave decision will be followed by others." What is clear is that the Kremlin expects shifts in U.S. policy without taking any equivalent action. Ceding to Russia in areas that affect our national security interests is dangerous and unwise.

During his April 5th speech in Prague, the President stated, "As long as the threat from Iran persists, we will go forward with a missile defense system that is cost-effective and proven." Let's take stock of where we are at. The threat clearly persists, and I am as yet unconvinced that the new approach is lower-risk and more cost-effective at protecting the U.S. and Europe. Meanwhile, the geopolitical implications resulting from the decision are significant.

Finally, perhaps the ultimate litmus test for the Administration's new approach will be whether it is funded. Will program investments match the Administration's new policy? They are not off to a good start, with a $1.2 billion reduction to the missile defense program in this year's budget. I wait with keen interest the fiscal year 2011 budget request.

Thank you, Mr. Chairman, for holding this very important hearing.

The CHAIRMAN. I thank the gentleman.

We are in the mechanical age today. We have to punch the right button.

I understand the order of witnesses today was requested by the witnesses, who will be out of the proper seniority manner. But we will follow the suggestions of the witnesses today and will be in this order: Secretary Flournoy, General O'Reilly, General Cartwright and, finally, Secretary Tauscher. Again, thank you for being with us.

Secretary Flournoy.

STATEMENT OF HON. MICHÈLE A. FLOURNOY, UNDER SECRETARY OF DEFENSE FOR POLICY, U.S. DEPARTMENT OF DEFENSE

Secretary FLOURNOY. Thank you, Chairman Skelton, Congressman McKeon, and other distinguished members of the committee. I appreciate the opportunity to discuss the Administration's new approach to missile defense in Europe with you today.

We are confident that our new approach represents a dramatic improvement over the program of record. Under the old plan, we were not going to be able to deploy a European missile defense system capable of protecting against Iranian missiles until at least 2017. Under the new plan, we will be able to protect vulnerable parts of Europe, and the tens of thousands of U.S. troops stationed there, by the end of 2011. And we will also be creating a far more flexible missile defense system, one that can be adapted to provide better protection against emerging threats.

As you know, the previous administration had planned to deploy 10 ground-based interceptors (GBIs) in Poland, a European midcourse radar in the Czech Republic, and a Army Navy/Transportable Radar Surveillance-Model 2 (AN/TPY–2) radar elsewhere in the region. The decision to move forward with that particular configuration was made nearly three years ago, based on threat information and the technologies available at the time.

But circumstances have changed since then. First, the intelligence picture has evolved. And second, we have made major strides in missile defense technologies and capabilities in the last few years. We are now in a position to put in place a far more effective missile defense system more rapidly than just a few years ago.

Let me just start by discussing our current threat assessment. The intelligence community now assesses that the threat from Iran's short- and medium-range ballistic missiles is developing far more rapidly than previously projected, while the threat of potential Iranian intercontinental ballistic missiles has been somewhat slower to develop than previously estimated.

In the near term, what this means is that the greatest missile threats from Iran will be to U.S. allies and partners, as well as to our deployed personnel, military and civilian, and their families in the Middle East and in Europe. And, needless to say, this concern is all the more urgent in light of Iran's continued uranium enrichment program.

I just want to underscore, this is the key change in the intel assessment that drove our action: the very real threat of short-range and medium-range ballistic missiles that is developing faster and must be dealt with sooner.

However, as Secretary Gates has noted, we understand—particularly, he understands, given his background—that intelligence projections can be wrong. Iran's priorities and capabilities may change in ways that we can't predict. So our new approach does not discount the potential future threat of an Iranian ICBM. In fact, it accounts for that possibility, the possibility that threats from Iranian long-range missiles will evolve more rapidly than we currently predict.

We will have 30 GBIs deployed in the United States by the end of 2010, which will provide the United States with full protection of the homeland against an Iranian ICBM threat for many years to come.

What is more, the information for the European forward-based TPY–2 radar that remains part of our Phase One plan will significantly enhance the performance of our existing U.S.-based GBIs. And we will also continue to upgrade the GBI over time.

Let me turn to highlight some of the technological changes that have allowed us to develop an improved approach to missile defense. As General O'Reilly and General Cartwright will describe in more detail, improved interceptor capabilities developed in the last few years now offer more flexible and capable missile defense architectures. And we have also significantly improved our sensor technology. This means we have a better variety of options to detect, track, and engage enemy missiles. And, as a result, we have new missile defense options that were simply not previously available.

Our new approach, which the President adopted on the unanimous recommendation of the Secretary of Defense and the Joint Chiefs of Staff, will rely on a distributed network of sensors and SM–3 interceptors which can be fired from both Aegis-capable ships and from land. This means greater geographic flexibility, greater survivability, and greater scaleability in response to an evolving threat. That is exactly what we mean by a Phased, Adaptive Approach.

Before I close, let me just say a few words about how our new approach has been received by our allies. For us, one of the many advantages of the new architecture we are building is that it greatly increases our ability to work with our European allies and partners, and to strengthen extended deterrence and mutual defense. The new architecture provides many more opportunities for alliance-building and burden-sharing between the United States and our NATO partners.

Indeed, the reactions we have gotten from our allies have been quite supportive. NATO Secretary-General Rasmussen has hailed the decision as a positive step, while Polish Prime Minister Tusk described the offering as "a real chance to strengthen Europe's security."

We have already begun our discussions with both Poland and the Czech Republic about their potential new roles in the new architecture. And our Polish allies know, they understand that they have the option of replacing the GBIs from the previous plan with land-

based SM–3 interceptors in the new plan. We will, thus, continue to work with our Polish friends to seek ratification of the Missile Defense Basing Agreement and the Supplemental Status of Forces Agreement.

We are also in discussions with the Czech Republic to ensure that they continue to play a leadership role in missile defense within the alliance. We have several joint projects that are already under way, and those will continue, with our Czech partners. And we are discussing several more, including the possibility of having the Czech Republic host some of the new system's command and control elements.

We certainly welcome Russian interest in the new approach, as well as potential Russian cooperation in sharing data from their radars. But this is not about Russia; it never has been about Russia. Regardless of the Russian reaction, we will continue to do whatever it takes to ensure our security and those of our partners and allies.

Let me end here by underscoring this point. And this is a point that was absolutely critical to Secretary Gates, who had previously, as you recall, championed the program of record. And this point was critical to his deciding to support what he believes is a better new way forward. And that is this: our new approach to missile defense in Europe allows us to provide coverage to vulnerable parts of Europe much faster than the old approach. And when fully deployed in Phase Four, it will be even more capable than the program of record, both for European missile defense and for U.S. homeland defense.

And let me be clear: our new approach allows us to augment our current protection of the U.S. homeland against the long-range ballistic missile threats that may evolve in the future, starting in Phase One with the addition of the forward-based radar.

So, in sum, we are not scrapping missile defense in Europe; we are strengthening it. And we look forward to working with this committee to make this ballistic missile architecture a reality.

Thank you once more for this opportunity to testify, and we look forward to your questions. I am going to hand it over to General O'Reilly. Thank you.

[The joint prepared statement of Secretary Flournoy and General Cartwright can be found in the Appendix on page 55.]

The CHAIRMAN. General O'Reilly, please.

STATEMENT OF LT. GEN. PATRICK J. O'REILLY, USA, DIRECTOR, MISSILE DEFENSE AGENCY, U.S. DEPARTMENT OF DEFENSE

General O'REILLY. Good morning, Mr. Chairman, Congressman McKeon, distinguished members of the committee. I appreciate the opportunity to testify before you today on the technical aspects of the President's decision to use the Phased, Adaptive Approach for missile defense in Europe.

This new proposal is a more powerful missile defense of NATO. It enhances U.S. homeland defense and is deployable to theaters around the world and is more adaptable to respond to threat uncertainties.

The previous proposed missile defense of Europe consisted of four components: a command and control system; 10 ground-based

interceptors, or GBIs, in Poland; an X-band discrimination radar in the Czech Republic; and an X-band precision tracking radar forward-based in southeastern Europe.

Assuming a shot doctrine of two interceptors against each threat missile, this previous missile defense architecture had a maximum capability to engage five intermediate-range ballistic missiles or medium-range ballistic missiles aimed at Europe, or five intercontinental ballistic missiles aimed at the United States from the Middle East.

The most valuable component of the previous architecture to the defense of the U.S. homeland was a forward-based sensor in southeastern Europe, which would provide early and precise tracks of threat missiles from the Middle East heading towards the United States, thus increasing the accuracy of the fire control instructions at our GBIs based at Fort Greely, Alaska, and Vandenberg Air Force Base, California.

We remain concerned about the future Iranian ICBM threat. Therefore, we are retaining the forward-based sensor component in our new Phased, Adaptive Approach proposal to enhance the defense of the U.S. homeland. Moreover, we also continue to develop the GMD system, Ground-based Midcourse Defense, and begin testing against ICBM targets using representative Iranian trajectories.

A significant limitation of the previous European architecture was that the GBIs were used in intercontinental ballistic missile, intermediate-range ballistic missile, and medium-range ballistic missile defense roles. Given the current threat estimate, by 2017 the European-based GBIs could rapidly be consumed by an attack of five Iranian medium-range ballistic missile or intermediate-range ballistic missiles aimed at NATO countries, leaving no GBIs to contribute to U.S. ICBM defense.

Therefore, the previously proposed European defense architecture was insufficient to protect NATO and our forward-based forces and provide redundant coverage of the United States homeland.

Fortunately, we have made significant advances over the last several years in missile defense technologies that enable a Phased, Adaptive Approach to defending Europe. The area of greatest potential is developing faster and more accurate command and control, battle management, and communications systems using a network of many different sensors, especially sensors that can track missiles in the early phases of their flight.

For example, our intercept of the ailing satellite in February 2008 was made possible by combining data from sensors around the world to provide a highly accurate track of the satellite to a modified Aegis weapons system and its SM–3 Block IA missile prior to the ship's radar even seeing the satellite. Although this was only a very limited capability against an inoperable satellite, it demonstrated the significant benefit of networking sensors in a missile defense architecture.

Another example is the most recent intercept test of the Ground-based Midcourse Defense System last December, when we combined the tracks of satellites, early warning radars, Sea-Based X-Band radars, and forward-based radars on land and sea to provide the GMD System with a very accurate track.

Additionally, earlier this year, we demonstrated unmanned aerial vehicles (UAVs) as highly accurate forward-based missile defense sensors and intercept tests.

Furthermore, last Friday, we successfully launched a pair of demonstration Space Tracking and Surveillance System (STSS) satellites that will detect and track ballistic missiles over their entire flight for the first time.

Finally, at our External Sensors Laboratory at Schriever Air Force Base, Colorado, we continue to develop new algorithms and demonstrate combining new sensor data to achieve even more accurate tracks than any individual sensor could produce.

We propose the Aegis Standard Missile-3 Block IA as our primary interceptor in this architecture. It is a very capable interceptor due to its high acceleration, velocity, its proven track record, and our ability to rapidly increase to over 80 interceptors at any one site.

Since we began testing the operationally configured SM–3 Block IA missile in June 2006, we have successfully intercepted a target in eight out of nine times that we have launched the interceptor. Of note, the SM–3s are also more affordable than Ground-based Midcourse Defense interceptors since you can buy four to seven production variants of the SM–3 for the cost of one GBI.

Finally, a key attribute is that we can launch SM–3s from sea or sites on land, which gives us great flexibility in placing the interceptor launcher between the threat and the area you are trying to protect, a key enabler in intercepting threat missiles early in flight.

We are developing a new kill vehicle for the SM–3 interceptor, the SM–3 IB, which uses the same rocket motor as the SM–3 but has a more advanced seeker and fire control system that uses external sensors as well as the Aegis radar. We have already demonstrated the higher-risk components of the new kill vehicle and are planning the first intercept test in the winter of 2011. A more advanced variant of the SM–3, the SM–3 IIA, has been under develop since 2005. This interceptor will have more than twice the range of an SM–3 Block IB.

We propose defending NATO in phases. Phase One would consist of Aegis ships with SM–3 Block IA missiles deployed in the eastern Mediterranean Sea and a forward-based sensor in southeastern Europe. We propose, by 2015, the development and deployment of the SM–3 Block IB missile, which will have greater capacity to use a network of sensors and greater ability to discriminate threat objects. Scores of SM–3 IBs could be deployed at land- and sea-based locations.

By 2018, the deployment of the SM–3 IIA missile, which could defend all of NATO from two land-based site locations and one sea-based location. By 2020, our goal is to develop a higher velocity SM–3 IIB missile to destroy MRBMs, IRBMs, and ICBMs early in their flight from interceptor launch locations within the theater of the threat launch location.

Two land-based SM–3 Block IIB sites would protect all of NATO. The timeline I have presented allows for these missile defense technologies to be tested and proven prior to deployment decisions. An

additional advantage of the Phased, Adaptive Approach is its applicability to missile defenses outside of Europe.

Finally, the addition of radars at Armavir, Russia, and Gabala, Azerbaijan, and cooperative development of missile defense technologies by Russia and other countries are not necessary, but would be welcome.

We are committed to fully funding this program as we prepare for the next budget submission to Congress. However, it is important that we have relief from rescissions and the flexibility to spend unused fiscal year 2009 Research, Development, Test, and Evaluation (RDT&E) and some MILCON—military construction—dollars associated with the previous European site proposal.

I note that both the House and Senate authorizing committees have very presciently included provisions in this year's national defense authorization bill that permit the Department to use fiscal year 2009 and fiscal year 2010 funding for an alternative architecture once the Secretary of Defense certifies that this architecture is as cost-effective, technically reliable, and operationally available as the previous program.

With this relief and some redirections in the fiscal year 2010 funds, we can pursue this new architecture with our fiscal year 2010 budget request.

Executing this approach will be challenging. There will likely be setbacks. But this architecture is no more challenging than the development of other missile defense technologies in which we have been successful. The engineering is executable, and the development risks are manageable.

I thank you and look forward to your questions.

[The prepared statement of General O'Reilly can be found in the Appendix on page 63.]

The CHAIRMAN. I thank the gentleman.

General Cartwright.

STATEMENT OF GEN. JAMES E. CARTWRIGHT, USMC, VICE CHAIRMAN, JOINT CHIEFS OF STAFF

General CARTWRIGHT. Thank you, Chairman Skelton and Congressman McKeon. And thank you for this opportunity.

I have had the privilege of working on the missile defense architecture and the war fighting requirements for over 10 years now, on the Joint Staff as a combatant commander and, now, as the Vice Chairman of the Joint Chiefs.

The congressionally directed Ballistic Missile Defense Review has provided the opportunity to review our objectives, the threat, the combatant commanders' needs, and the technologies available. Our recommendations are not a departure from the objectives. The needs of the combatant commanders, however, reflect an adjustment to the balance of our capabilities in response to the threats that they actually face today and the threats that are clearly visible on the horizon.

My colleagues have laid that case before you. Allow me to address the architecture and the broader implications of our recommendations across all of the combatant commanders.

The objectives have not changed, as I said. They remain: defense of the homeland, defense of our deployed forces, friends, and allies.

We still have a three-tier approach here. We defend the homeland, and the principal weapons systems that we use to defend the homeland are the ground-based interceptors currently based in Alaska and California. We defend the theaters. And this is probably the newest capability that we are starting to field, with the Standard Missile-3 and with the Theater High Altitude Air Defense missile, called THAAD. And we defend point defenses, which are our critical bases, infrastructure where our forces are, population centers, things like that, with the Patriot system. So we have a three-layered approach: the homeland, the theater, and the point defense for critical assets. That is still in place.

What we have now, with the emergence of SM–3 and the THAAD system, is a robust capability at the theater level, which we did not have before. Each of these systems tend to bleed over into each other, so the GBI can, in fact, work at the theater level, which is what would have happened with the system that we would have put in Europe. It would have had the capabilities to work against medium-range ballistic missiles and defend that theater. But it is principally designed in a very sophisticated capability to defend the homeland. THAAD and SM–3 can, in fact, defend the homeland if we put them there; can, in fact, defend at the theater level; and can, in fact, defend at the point level at bases and stations.

So each has a bleed-across. And that is some of the redundancy that is absolutely essential and is critical in the capability that the combatant commanders are asking for. In other words, they don't want to be required to rely on one system for each approach.

The emergence of the PAC–3 and these theater capabilities really started about three years ago. And we started to shift, with the help of this committee, our investment structure across into SM–3 and THAAD, most recently as it has started to emerge. And so the buying out of the PAC–3, so our forces had sufficient of those. Now the investment heavily in SM–3 quantities and in THAAD is critical to our ability to field these Phased, Adaptive Approaches.

We look at the threat from the basis of three points, also. It is a military thing; we have to do everything in threes. But, primarily, we start with the terminal defense, the ability to defend something at the end game. So, as the missile reenters the atmosphere and goes toward the target, that is the terminal phase, principally handled by Patriot, by THAAD, and by SM–3.

The midcourse is the most challenging, generally done outside of the atmosphere for long-range ballistic missiles. That is the terrain of the ground-based interceptor. That is where it works. That is a very difficult place to work because you have to navigate and be able to operate in the atmosphere, leave the atmosphere, deploy the weapon, and then close on the target at very, very high speeds, without the advantage of the air.

And then the terminal is the reentry, a very difficult phase. And we use the Patriot in principle to work that end, along with the SM–3 and the THAAD.

The boost is where we have the most opportunity to be effective. And it is the most difficult to field as a capability. The boost is considered that phase from launch until we generally leave the atmosphere. If you can catch a missile in the boost phase, from an oper-

ational standpoint, it is before it can do much of anything. Any threat missile is most vulnerable in the boost phase. There are many studies out there talking about the boost phase. But it is very short. It is a very kinetically active point; in other words, the missile motors are running at that time. They are staging through. It is a very difficult phase to be in, and you have to close very, very quickly.

What is standing before us out in the 2020 time frame is an operationally relevant capability to start to close the boost phase. That, as the congressman said, is to some extent paper today. But we are on the breadboard. We are testing the sensors, and we are testing the missiles that we believe will give us the capability as a Nation to get at these missiles in the boost phase.

In the boost phase, the missile doesn't care whether it is a short-range, medium-range, intermediate-range, or intercontinental range. It doesn't matter. If you can catch it in the boost phase, you can do something about it there very early in the game. And that, for us, holds the greatest possibility. We are focusing our Research and Development (R&D) to try to come up with a relevant way—an operationally relevant way—to get at the boost phase. That is the thrust of a lot of our work as we move to the future.

We still remain and seek the capability, though, to go after missiles that are either on a pad, which is probably the easiest target and for which most ICBMs—all ICBMs right now associated with Iran and North Korea are pad-launched. In other words, they are very visible, they are up above the ground, and you can go after them before launch if you so desire. We are not advocating preemptive, but it is a physical capability that we possess.

There is also the silo-based. That is a very difficult way and generally reserved for ICBMs of sophisticated countries. But you put them in the ground, and you launch them from silos, and they come out of the ground. It is very difficult to go after that. They can be hardened, and that is a difficult target.

And the more prevalent, now, direction that we see countries going is the mobile capability. In other words, we put these missiles on a tail, drive them around to a point of advantage, and then launch them from someplace remote.

So we still retain, and want to retain, the capability to go after pad-based, mobile-based, and silo-based missiles. We believe that is essential, from the combatant commander's perspective, to be able to get at all three types of missiles. This architecture allows us to do that.

And probably, for the combatant commander, the most significant change in the intelligence that is relevant to them and important to them is this idea of raid, the number of missiles. The systems that we have today, such as Patriot, were designed to engage three, maybe five missiles coming in. Same for our ground-based interceptor. And yet what we are facing today in the short-range fight is hundreds. And what we think we are going to face in the medium-range fight in the very near future is hundreds.

None of the systems that we have today were really built for hundreds. And that includes the SM–3 system, which is the Aegis radar; that includes the Patriot radar and the THAAD radars. What is fundamentally different here is that we have added radar

sensors in to take the existing weapons systems and make them effective against raids, to be able to sort out and make sure that you are not wasting rounds, multiple rounds against the same target because you are in different locations, et cetera, but to actually distinguish against raids.

This is what the combatant commanders most seek. And this is what this radar in the southeastern part of Europe, the same radar that we deployed two years ago into Japan and the radar we deployed this year into Israel, that is the capability of this X-band radar, is to sort through large raid numbers, provide then to either the Patriot or the SM–3 or the THAAD or the GBI exactly which target is assigned to which missile. That is absolutely critical and something we have never had before. That is fundamentally different. And that is why it is so essential to the combatant commanders.

Let me talk a little bit about adaptive and responsive. The command and control system that we have put together is not a command and control system for Europe only. It is a command and control system that is global.

One of the biggest challenges we have today in the physical infrastructure and the physical industrial ability to field these systems is that the missiles have far greater range than the sensors that are organic to them. So an Aegis system and the SM–3, the SM–3 can fly much further than that system can see and guide it. The same is true for Patriot, the same is true for THAAD; obviously, for the GBI because it goes around the Earth.

What we are able to do today in this command and control system is use a sensor that is dislocated from the weapon to actually guide it to the interceptor. That is the capability that will be fundamentally put together as we field this system in 2011, mature as we get to 2015. So, a sensor completely dislocated from the system. That is what we demonstrated when we shot down the errant satellite. The sensor on the ship never saw that satellite until the last second or two. Okay?

And being able to do that means that we do not now have to try to build on every ship or airplane or land base a huge, as we call it, "aperture" in order to see targets that are very, very far away. We can use netting of these sensors in a way that we could never do, because we are in this digital age, and move that data to the missile in an operationally relevant way. That is absolutely critical.

We want to be able to continue to hold that risk, all of those targets that are fixed or relocatable or mobile, but we also want to bring those attributes to our own capability. Once you fix a site, it can only address a certain range of threats, whether it is the missile or the sensor. And so, the system that we are looking at today in differentiation from the ground-based interceptor is called "relocatable." In other words, these SM–3s that would be land-based, can be moved over, probably, think in terms of a couple of months and relocated if the threat has been relocated. So we can move them around.

By putting the system on the mobile platform, which is the Aegis system and the ship, we can move to that threat if it emerges someplace that the intelligence didn't predict it would emerge. And I love my intelligence counterparts, but the one thing I have to live

by as a rule is I can't rely on it. I have a thinking enemy out there. They have a vote. They may emerge in someplace that we don't predict. By having the system on Aegis, on the ship, we can close with the threat wherever it emerges, no matter what the intelligence may have thought two or three years prior. And that is just a fact of life. We have to be able to do that. You will hold me accountable for doing that if we have to defend this Nation.

And so we have to have a mixture between mobile, relocatable, and fixed sites. The fixed sites, actually, are the cheapest. Once you build them, it is much easier to, in fact, sustain them. And I think the congressman's point about ships and the cost of ships and their multiple missions is a fair point. But understand that most of the Aegis systems—depends on which one you look at—have about 140 tubes. And in those tubes can be this kind of missile, can be cruise missiles, can be all sorts of different armaments. It is a very versatile and capable ship. It depends on what mission you assign it to, as to what it goes and does, but it is almost always ready to go do two or three other types of missions at any point in time.

We do not like to anchor a mobile ship to a fixed location for any extended period of time because it does, in fact, diminish its capability broader on a global scale. But if that is what we need, if that is what we need to get redundancy, if that is what we need to move to a threat we didn't predict, it is the most capability that we have.

Let me talk just a little bit more about weapons and sensors. There is another thing here that is very fundamentally different for the combatant commander about this approach to weapons and sensors. It is the ability to pair the right weapon with the right sensor and not have them owned by any one service, not have them owned by any one country, not have them owned by any one who may have been an ally yesterday, may not be an ally today. We can mix and match in ways that, historically, we have never been able to do.

We are trying to move to a system that we call "any weapon, any sensor." We are not there yet. But that is where we want to be for the vagaries of the intelligence that we have to deal with, the real-life fact that the enemy gets a vote in this, and the reality that we are never sure who we are going to have to defend against tomorrow. I mean, I would not have predicted that we were going to be in Afghanistan 5, 10 years ago. It is a fact that we have to deal with on the combatant commander side.

The other part of this that is very powerful, from our perspective, is today many countries own the Patriot system. Those Patriots can be integrated into these sensors and this command and control very easily. Many countries own the Aegis system. We can integrate these missiles and their fire controls into this system very easily.

And the reality is many countries have sensors, radars, et cetera, and have weapons that we can bring in. For instance, in Israel we are integrating their Arrow weapon into this system. We are integrating other countries' radars into this system. We talked briefly about the potential to get the two Russian radars.

This system is agnostic to the source. It basically converts the data into something that can be used, no matter how it was developed and off of what system. The bulk of our radars that we are

using for this system were fielded in the 1970s. And we are using them today for modern weapons and modern threats because we can do that in the digital age.

And this starts to realize for us the ability to bring allies together in fundamentally different ways. Think about a system that you could not afford as a single nation but, because you can band together with your neighbors, you can build a defense. That is a different way of thinking about deterrence. That is what this system starts to offer us.

It takes all three parts: it takes the command and control, it takes the weapons, it takes the sensors. But as we now start to talk to our partners in the Pacific, and you watch the Japanese field their Aegis systems, which are basically joining into this, as you watch the South Koreans do the same, it sends a very powerful message to the North Koreans. As you watch the same thing in the Gulf states, as we now deploy the Patriot systems and as we deploy the SM–3, it is fundamentally changing how they think about their neighbor and how they think about collective defense vis-à-vis Iran.

That is a very powerful approach. NATO has embraced this for that very reason. It is not a U.S.-only approach. It allows them to build their indigenous systems, it allows them to decide who they want to partner with, but it builds a collective defense that no one nation is going to be able to afford.

I appreciate this opportunity. We stand ready for your questions. I really do believe, as do the chiefs, that this is the way to the future. It is also the way to the present and the threats that the combatant commanders are facing today. Thank you.

[The joint prepared statement of General Cartwright and Secretary Flournoy can be found in the Appendix on page 55.]

The CHAIRMAN. General, thank you so much.

The gentlelady from California, who made a multiyear study of this subject and did so well while she was a Member here, we would love to hear from you, Secretary Tauscher.

STATEMENT OF HON. ELLEN O. TAUSCHER, UNDER SECRETARY OF STATE FOR ARMS CONTROL AND INTERNATIONAL SECURITY, U.S. DEPARTMENT OF STATE

Secretary TAUSCHER. Thank you, Chairman Skelton and Ranking Member McKeon. Thank you very much for the warm welcome.

To my distinguished members of the House Armed Services Committee, it is an honor to testify before you today. Let me say before the questions start that I miss you professionally and personally very much, and I thank you very, very much for your service. And I thank you for the opportunity to testify before you today on the President's approach to missile defense in Europe.

I know that the President's decision has prompted much discussion, especially on the cable talk shows and on some editorial pages. Besides restating what my very distinguished colleagues from the Department of Defense have already said, I want to bring a sense of balance to this discussion and focus my remarks on the foreign policy implications of this initiative.

Let me begin by stating very strongly that the Obama Administration is fully committed to deploying operationally effective and cost-effective missile defenses to protect the United States, our de-

ployed forces overseas, and our allies. After months of review and with the full support of his national security team, President Obama decided to bolster our national security and renew our approach to missile defense in Europe today based on the latest intelligence and what we understand the threat to be today.

The Intelligence Community found that the threat of a potential Iranian ICBM had been slower to develop than previously estimated, while the threat from Iran's short- and medium-range ballistic missiles is developing more quickly than previously projected. The Iranian missile launches earlier this week visibly demonstrate the nature of this threat. Our approach provides more effective defenses today against the threat.

The allegations that we decided to cancel or shelve plans for U.S. European based missile defense deployments are simply not true. From a foreign policy perspective, our new approach has a number of advantages over the previous plan.

First, as the threat evolves, the system will evolve to protect all of our European NATO allies. We can't protect some and leave others vulnerable.

Second, our plan will put more interceptors in Europe. Instead of 10 interceptors in 2018, this new plan will deploy scores more. Under the previous plan, if two interceptors were fired at each Iranian ICBM, Iran would need only six missiles to overwhelm the system. The greater number of interceptors under our new plan will complicate Iran's plans to use or threaten to use their balance missiles as coercive weapons.

Third, this system is more mobile and can be deployed more quickly than the previous system, plus we can tailor the number of deployed interceptors to the threat.

Fourth, placing an emphasis on proven capabilities, such as the SM–3 interceptor, will increase the credibility of the United States' commitment in the eyes of our allies and, I might say, our adversaries. Deploying missile defenses with a demonstrated track record of success means that our allies will not have to wonder whether a system can be reliable in defending against a threat.

Again, this new architecture provides an improved opportunity for other allies to participate in the defense of Europe, so it is not a surprise that foreign leaders like Chancellor Merkel, President Sarkozy and Prime Minister Brown have praised our new approach.

We believe the response from the Polish and Czech governments has been positive since our trip to Europe. We will continue our efforts to strengthen our strategic relationship with them. Our bilateral relationships have expanded in both depth and breadth, and we consider both countries, both of whom have participated in operations in Iraq and Afghanistan, to be among our closest and staunchest allies. We remain committed to implementing a range of security and defense dialogues and we have offered both countries the opportunity to participate in elements of our new missile defense architecture.

When we visited Warsaw last month, we offered Poland the opportunity to host a land based SM–3 interceptor site. We will further demonstrate our commitment to Poland by ensuring in the near future that we have boots on the ground, which is what the

Polish government really wants. This could include plans to rotate a U.S. Army Patriot unit to Poland.

With respect to the Czech Republic, the United States will continue to identify areas where our military cooperation could be strengthened and broadened. We hope to conclude soon an agreement that will provide a means for defense cooperation in many areas, and we will continue to work on ballistic missile defense research with the Czech industry.

I want to make a final point regarding Russia. Nothing that we did had anything to do with Russian saber-rattling or their consternation about the ground-based interceptors or the Czech radar. The decision was not part of any trade-off or quid pro quo. As someone who participated in the senior level interagency meetings as part of the decision-making process, I can tell you that President Obama based his decision on the latest intelligence, which calls for a stronger missile defense program that can be deployed sooner. If, as a consequence of President Obama's decision, relations with Russia improve, then we should embrace that benefit.

Mr. Chairman, Ranking Member McKeon, the Obama Administration has made the right choice for the right reasons. As we implement this new program, including the fiscal 2011 budget, I hope you will support our efforts.

I thank you much for your time and I would be happy to take any questions you have.

Thank you, Mr. Chairman.

[The prepared statement of Secretary Tauscher can be found in the Appendix on page 73.]

Chairman SKELTON. I certainly thank you.

I will limit my questions because there are so many here who wish to ask of you today.

As I understand it, three of you, excluding General Cartwright, were part of a delegation to Europe two weeks ago to discuss the President's decision with Polish and Czech and NATO officials. Can you give us a summary of that discussion and the issues raised, particularly by the Poles and the Czechs?

Secretary Flournoy, we will ask you to lead off on that. If the others have comments, we would appreciate it.

Secretary FLOURNOY. Yes, we did go over to Europe and went first to Prague—I am sorry, went first to Warsaw and then to Prague and then to brief the North Atlantic Council.

I think one of the things we had to deal with when we arrived is that there had been a number of leaks in the press, or erroneous and speculative stories in the press, so that we found—despite previous consultations—we found our allies expecting something different than what we were actually going to suggest to them.

So I think part of our meetings was really focused on explaining the new approach to them and correcting misimpressions of what exactly the proposal was.

I think once they understood that, particularly in Poland, we very quickly got into discussions about how they could participate in the new architecture and reaffirmed to them that other elements of previous agreements related to, say, the Patriot rotation and other aspects of our security cooperation remained fully valid and

we, in fact, planned to pursue even broader and deeper cooperation with them.

I think in the Czech Republic, I think that we certainly delivered the news to them that the radar would not be part of the new architecture, but we also hastened to reaffirm the fact that the agreement for cooperation on missile defense would continue, we have a number of ongoing projects with them, and that we would welcome finding new ways for them to participate in the new architecture, and we are already having follow-on discussions with them to identify specific ways that they could play a leadership role in the new system.

Lastly, when we went to the NAC, the North Atlantic Council, I would say that the response was uniformly positive. I think people understood the benefits of the system, they saw greater opportunities for countries to participate, and they saw a real potential for linking and integrating what we are proposing with the work that NATO has already begun on their own missile defense command and control architecture.

I would defer to General O'Reilly and Secretary Tauscher to see if they have anything to add.

General O'REILLY. Sir, I was part of the negotiating teams for the last couple of years and the personnel that we met with in both countries—Poland and the Czech Republic—were the same that I have been sitting across the table from for years. I believe they were greatly comforted from the fact that what we are proposing is very minor changes to the ballistic missile defense agreements that we have already agreed to that we are waiting ratification for.

In the case of Poland, it is changing literally the reference to a ground-based interceptor, capital letters, to a ground-based interceptor, lower case, and other than the annexes, that is the gist of the changes in order for us to continue on with Poland participating in the architecture.

In the Czech Republic, again, we no longer see a requirement for the radar, but there are many opportunities, including facilities which they could host as we have a more distributed system across Europe, especially in our area of command and control, and we have been following up with discussions with the Czech government as they ask more questions about that and seem very interested.

Secretary TAUSCHER. I think that my colleagues won't be surprised to find out that the press got it wrong and that the press speculation, which was generated beginning in the United States and then into Europe, was completely wrong about what the Obama Administration was going to do. So when we arrived very early in the morning in Poland, we found ourselves having to reorient everyone to the fact that we were not killing missile defense in Europe but, in fact, enhancing it and improving it. So that took a couple of minutes.

But I think what you can see, I met with my Polish counterparts just earlier this week. They are in town to finish the negotiations on both the agreement on the basing and on the supplemental Status of Forces Agreement (SOFA), which are important for not only PAC–3 installations, but for this future SM–3 installation that we hope they are going to agree to, and they are increasingly enthusi-

astic about this. Our friends in the Czech Republic are very interested in the number of different things that we are talking to them about.

But I think the most important thing was very late in the day, after now going to two cities, we arrived in Brussels to meet with the NAC, and I think what you see is that our North Atlantic Council members, our NATO allies, are very happy to see we are NATO-izing this system. They are seeing that this is a system that is now not going to protect some in NATO but all of NATO, and it is going to do it sooner against the current threat with proven technologies. And I think it is very clear that they are enthusiastic about this, that they are happy to see that the command and control system that they are developing dovetails very nicely with what we are proposing.

So I think there is a net benefit to everyone. It is being recognized. I think the statements out of Prime Minister Tusk in Poland and Foreign Minister Sikorsky really state that this is something that they are very, very happy to see and that we are working closely with them to go forward and provide more information.

The CHAIRMAN. Thank you. I will limit my questions on that until later.

Mr. McKeon.

Mr. MCKEON. Mr. Chairman, I will hold my questions until later to give our colleagues an opportunity to ask theirs now.

The CHAIRMAN. John Spratt.

Mr. SPRATT. Mr. Chairman, I have been following ballistic missile defense since the days of the Strategic Defense Initiative (SDI). I will tell you how long that has been. General O'Reilly was a Captain at West Point teaching physics in the photon lab when I first started taking an interest in it. You have come a lot farther than I have, sir, with three stars on your shoulder.

This is one of the finest presentations I have heard from both the policy making, foreign policy making realm and from the military realm as well. It is an excellent presentation. Let me just hit the highlights with you as to the cost-effectiveness of the decision you are making.

It is my understanding that the GMD has a cost of around $70 million a copy, is that correct?

General CARTWRIGHT. Yes, sir.

Mr. SPRATT. And the SM–3 IA, Block IA, you ought to come up with a different designation for that so it is easier is easier to get out. In any event, the cost per copy is $10 to $15 million apiece?

General O'REILLY. Yes, sir. The IA versions are $10 million, they are slightly less than that, actually, and then the projected cost of the II series, the IIA and IIB would be $15 million.

Mr. SPRATT. The IIB would be $15 million? It is still about three or four times less expensive than the GMD.

General O'REILLY. Yes, sir.

Mr. SPRATT. So the cost of the chosen system is substantially less. Are you confident in that cost?

General O'REILLY. Yes, sir, we are, because we have produced the SM–3 IA, we are in production now, and a lot of that missile is being duplicated in the IB, and we have a lot of history that we

can rely on for the accuracy of our cost estimates for the projected cost.

Mr. SPRATT. And is the sea-based variant about the same cost as the land-based mobile variant?

General O'REILLY. Sir, they are two different variants obviously, but they are identical in their fire control system and the radar and the launcher components. They are the same. There is some integration costs we spend when we integrate it onto a ship. It is about $45 million to upgrade an Aegis ship, of which there are over 80 today, to upgrade them to have ballistic missile defense capability. And a land-based SM–3, to prepare the site, there is about $150 million for site preparation. And then to buy the same components in total, it is about $350 million for one of those sites without the missiles, which right now we are projecting a minimum of 24 missiles at each site. So that would be $240 million additional.

Mr. SPRATT. In terms of mobility and the effectiveness associated with being able to move, the GMD, as I understand it, is about 25 tons and the SM–3 is about 2 tons?

General O'REILLY. Yes, sir. The GMD is a 25-ton missile. It is 50 feet long. The SM–3 I series missiles are 1.2 tons and the SM–3 II would be a 2-ton missile. All of those SM–3 variants will fit and be integrated into today's Aegis weapons system.

Mr. SPRATT. Are you confident we can find locations in southeastern Europe where these can be optimally deployed?

General O'REILLY. Yes, sir, because the actual capability that we believe we have, our simulations verify that, and our independent assessments show that it actually covers parts of the water around Europe, so that means we have flexibility of where we can place them. It doesn't have to be in one particular country, it just needs to be in the southeastern part of Europe and in the north-central part of Europe, and it can be in many different countries. We have options.

Mr. SPRATT. This is because you have got forward-based radar and sensors?

General O'REILLY. Yes, sir, that is key, having that forward based radar in the southeastern part, or airborne sensors, which we are developing, or satellites.

Mr. SPRATT. For some time we have talked about having a mid-course discrimination system, tracking and discrimination system, Space-Based Infrared System-Low (SBIRs-Low) at one time, I think the acronym now is STSS, and you just launched two STSS's. Does that mean that some of the many problems we have coped with with respect to these SBIRs-Low and the later variants have been overcome now? And to what extent is the STSS a key component of your forward based sensor system?

General O'REILLY. Sir, the STSS is a demonstrator system. We want to demonstrate the engineering required in order to build another system which would be far simpler. The STSS was designed against an old threat, designed where there would be hundreds of ICBMs in the air at any one time, and it was able to cover the entire Earth. We are using these satellites now because they are available, the two of them, to be doing an extensive amount of testing over the next couple of years to verify the requirements to build a much simpler system that is focused on missile defense and

would only cover certain bands of the Earth that we are concerned about, which cover the threat, obviously, as we see it. That would be a far simpler system and we believe much more producible, much more reliable.

Mr. SPRATT. Thank you all for your testimony.

The CHAIRMAN. I thank the gentleman.

Mr. Akin, the gentleman from Missouri.

Mr. AKIN. Thank you, Mr. Chairman. A couple of quick questions. I guess it was a little more than a year ago that we were on the ships and I asked the question, can that SM–3 stop an ICBM? And they said maybe 1 in 100, if you are lucky but, really, you can't do that. So to stop an intercontinental, really long-range, three-stage kinds of missiles, you have to go to your SM–3 Block IIB that you are planning?

General O'REILLY. Yes, sir.

Mr. AKIN. And that missile is going to be ready about what time, 2020?

General O'REILLY. Sir, we have used very conservative planning factors, that we completely test that system. We would start testing the booster portion of it in 2013, 7 years ahead of time. So we have laid in an extensive amount of time to test and deploy this. But we would conduct much of the testing in the 2016 timeframe, a decision in 2018, and then two more years we are projecting before we would deploy it. It is very conservative.

Mr. AKIN. So in a way, the first thing I am hearing is that there is a gamble in what you are proposing, and the gamble is that Iran isn't going to develop an ICBM before 2020?

General O'REILLY. No, sir. We have the Ground-based Midcourse Defense System in Alaska and Vandenberg to protect us today against an Iranian threat.

Mr. AKIN. Will the GBIs in Alaska or California, can they protect against a launch from Iran to hitting our country? Could they go that other way? I thought they were mostly aimed toward—they can go both ways?

General O'REILLY. They can go both ways. Sir, if you look at the Earth from a polar projection from the North Pole, you will see that actually the closest part of the United States to Iran is Alaska, and it is in a prime location for both threats. And that forward-based sensor, that is why it was proposed in the previous architecture and we are keeping it in this one, significantly contributes to our ability to track anything coming out of Iran for missiles being launched, interceptors out of Alaska.

Mr. AKIN. Would the missile, if the missile were launched at, say, a European ally from Iran, would that be an ICBM or would that be more just a ballistic missile?

General O'REILLY. The southeastern part of Europe today is within the range of medium range ballistic missiles. Literally, the range is between 1,000 to 2,000 kilometers, is that class of missile, and that stretches over more than half of NATO.

The threats that we see, the ones we are most concerned about right now, are 2,000 kilometer threats, which today cover most of southeastern Europe. And that is the threat we want to address, as General Cartwright said.

Mr. AKIN. The SM–3 works okay for that?

General O'REILLY. Yes, sir.

Mr. AKIN. The second question I had is, it seems like it is tremendously effective, I mean it is very expensive to have whatever it is, five or six ships on station all the time providing this kind of coverage. It seems like that would be far more expensive.

I have been here nine years, and I keep hearing, "boy, we don't have the ships that we need." And particularly our Aegis class, our missile destroyers, Aegis on the destroyers, there is a tremendous number of requirements for having those working in different places. And now, all of a sudden, we are absorbing, what is it, six of these ships in order to do this particular proposal, as opposed to a ground-based kind of approach.

Doesn't that seem to be very cost-ineffective?

General CARTWRIGHT. I will jump in, if it is all right, sir. For the last five years, we have been doing this in the Sea of Japan. We don't put them on station permanently. Because what we are dealing with is a pad launch system, we can see that very visibly, and so we give ourselves a cushion. We generally send two ships out. It only takes us a couple of days to get them out there, so we don't tie down a mobile system, which is very versatile. We put it there when we know we need it.

The two ships are there, one is on station and the other one is protecting the ship, and they just swap back and forth for relief. But that is generally the way we approach it.

We intend to do the same for this 2011 system; have three different sites, have them able to close in a couple of days to the site once we see something moved to the pad.

Mr. AKIN. You are assuming you are going to have a day or two-warning so you can get in position.

General CARTWRIGHT. What we have seen to date, even with the most responsive systems, is we generally have five or six days.

Mr. AKIN. One last question. That is, my understanding was that you were going to network all of these sensors and radars anyway in SM–3. Is this anything new than what we were planning to do anyway?

General CARTWRIGHT. It is only a maturation of the technology now to move it towards a production capability and an operational capability versus a pure testing.

Mr. AKIN. So this has always been on the drawing board to do this.

General CARTWRIGHT. The scale has changed. And the one thing that has technically changed, as you alluded to earlier, is the 2020 capability, that is new. The ability to get at the boost, or the early flight phase, is new.

Mr. AKIN. Thank you, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

Mr. Ortiz.

Mr. ORTIZ. Thank you, Mr. Chairman.

Secretary Tauscher, good to see you again. We also miss you around here. This place has never been the same since you left.

Secretary TAUSCHER. Thank you.

Mr. ORTIZ. Let me ask both Secretaries if you believe there is a potential opportunity for cooperation with Russia, including the possibility of Russia providing radar data, and do you believe that

such cooperation would be in the best interests of us and NATO? Do you think there is a possibility now that we know they do have missiles, the Iranians? So if you could elaborate a little bit on that?

Secretary TAUSCHER. Thank you, Mr. Ortiz.

I want to restate that nothing that we did had anything to do with Russia, but we were obviously knowledgeable of the ancillary benefits of working more closely with Russia.

The Russians have an agreement with us right now to go forward on a joint threat assessment and a number of things that President Medvedev and President Obama agreed to when they met in July. I will be meeting with my Russian counterparts in about 10 days in Moscow to talk about a number of things, but missile defense is one of those issues.

We have a Russian NATO council that has been moribund but now has been restarted. Our NATO allies are very interested in working and engaging with Russia. Russia shares the same threat we do from short- and medium-range and long-range from Iran. So there are a number of pieces from this.

But I want to make it very clear that while we have an ambitious agenda with Russia, we are negotiating a New START Treaty right now, it is very clear that nothing that we did had anything to do with getting something from Russia. There was no quid pro quo. But it is obvious as there are many things happening that there are ancillary benefits to them.

Clearly the "reset button" that Secretary Clinton had talked about and the relationship between President Medvedev and President Obama is one where we are going to try to work cooperatively on those things we can, and missile defense is one of those things, and we will be talking to them about it in the next few weeks.

Secretary FLOURNOY. Sir, I would just invite General O'Reilly perhaps to comment on the technical aspects of what would be gained from data from Russian radars as part of this system.

General O'REILLY. Sirs, I visited Gabala two years ago and had a firsthand review of the capability of that very large and powerful radar. The frequency is one that allows a great amount of surveillance. It is a very good surveillance radar for an extensive part of that part of the world, very powerful, very large aperture. It is very good for observing missile tests. It is very good for preliminary tracking.

More detailed tracking, you require a more precise radar, and the Russians are building one in Armavir, Russia, and that capability is similar to what we have in the U.K. and our other early warning radars.

So our architecture was designed without those radars in consideration, but they are in a very good location for observing any missile activity in southwest Asia and conducting tracking on the same order of capability, especially from Armavir, early in a missile's flight heading towards the United States.

Mr. ORTIZ. Thank you so much.

Thank you, Mr. Chairman.

The CHAIRMAN. The gentleman from Florida, Mr. Miller.

Mr. Turner.

Mr. TURNER. Thank you, Mr. Chairman. First off, I want to thank all of you for being here. I want to recognize Secretary Tauscher. We do miss you, and we are glad to have you here.

I want to start off with talking of some differences and some agreement. I talked to General Cartwright yesterday and I told him that I agree with what the two generals are saying, I just don't agree with the conclusion. And I think that it is important for us, though, when we have a difference of conclusion, that we at least go down the things that we agree on. I think some of the disagreement comes from, also, a lack of understanding because the terms get confused.

We have short-range and medium-range and intermediate-range and ICBM missiles that are faced towards us. We have Aegis and THAAD and SM–3, IA, IB, IIA and IIB that don't quite exist yet, and the ground-based interceptors. The problem is you get in a discussion of what matches with us what and I think that confuses the discussion somewhat.

So let's go with what we agree on. I think we all agree that Iran has a missile program. They are seeking ICBM missile technology that would reach the United States. They are seeking missiles that are capable of reaching the major population centers of Europe. We all agree. I think we all agree, and I think we believe, that Iran is seeking nuclear weapon capability. So we are looking at the future of missile technology that, perhaps, is nuclear capable.

General Craddock testified that he believed the intelligence indicated that by 2015, they could have the ICBM technology that reaches the United States. Now, I have read the new National Intelligence Estimate that, supposedly, all this new threat assessment is based upon, and I think we could all agree that there is nothing in that intelligence that says that they won't get that by 2015. They could get it earlier, and the intelligence certainly says that.

For the ground-based missile system, General O'Reilly, you previously testified that, upon ratification, it is four years for the radar to go in, five years for the interceptors to go in. I believe nobody believes that that has changed.

So we can all agree that, under the best scenarios, we could have had that system in place by 2015. I believe it could have been 2014 if we had moved a little quicker, but at least by 2015. So the 2015 for GBI and the 2015 for Iran's possible capability match.

Let's go further, then. The White House plan, though, doesn't address ICBMs until 2020. It is right up on their web site. Now, that is not accounting for existing systems and existing programs; that is just the alternate system to the one that was scrapped. That is the comparative. The comparative is what is being scrapped, 2015, and what is going to be provided as an alternative, and by the White House's own statements, that is 2020. Major European population centers don't receive protection until 2018. Again, their 2020 of the White House and 2018 is all compared to 2015.

Now, I love the words "proven" and "tested." We hear that all the time, we need systems that are "proven" and "tested." We all know the SM–3 Block IIA has not been completed and has not been tested. It is intended in this new proposal to be the population centers for Europe protection. And we also know the SM–3 Block IIB,

which is supposed to provide the protection to the United States, doesn't even currently exist. Again, the comparative being to the GBI that would have been going into Europe, which does exist, is a tested system and expected in the two states to have its completed testing by 2012.

We all know, and we agree, that the International Atomic Energy Agency says that Iran has the capability to produce a nuclear weapon. They issued their statement on the same day that the President scrapped this system. We all agree that the missile defense assets that we have in Alaska were intended to be 40 previously, has been cut this year to 30, so as a backup for our protection from ICBMs from Iran it has been reduced from 40 to 30. Its capability has been reduced. And we all agree that it is not really sufficient to protect the United States solely, or the alternative from the White House wouldn't include another plan that bolsters it. The White House is still proposing a system that would, with the SM–3 IIB, that would support it.

So what I want to know is in the 2009 budget, if you look to the 2009 budget, what is new, and what is not new, in what you are proposing? Because it looks as if that what was forecast in 2009 includes substantially what the White House is now touting as a new system. Could you do that comparative for me, please? 2009 until now, and this system.

General O'REILLY. Yes, sir. First of all, the way our architecture is laid out, the GBIs in Alaska are not the backup; they are actually the primary system to defend the United States, the homeland defense.

Second, in 2009, we were not investing in the technologies such as the sensor ones that we have referred to several times as so critical, our UAVs and our integration of that with the rest of our sensored network.

We also were not procuring the THAADs and the Aegis systems, and the number of Aegis systems and numbers of missile that we are investing in now. The investment was $400 million less than it is in the fiscal year 2010 budget for procuring those missiles alone, and then another $200 million for further investment into the Aegis system. So there is an acceleration that wasn't there before that is now, in a greater quantity of both of those.

The CHAIRMAN. I thank the gentleman.

Ms. Sanchez.

Ms. SANCHEZ. Thank you, Mr. Chairman, and welcome all of you and thank you for the work you do for the United States. Of course, I have a couple of questions for our former Member and Under Secretary.

You know, a lot has been said in the papers, and I have been really reading them, about how this is a new direction, how President Obama is changing everything. I think in the 13 years I have sat on this committee, 11 of them have been on the Strategic Forces Subcommittee. The last three years or so were chaired by you, Ms. Tauscher. And I think the Congress actually began to change the course of what was going on with respect to missile defense and, in particular, our short- and medium-range partners and seeking partners.

I remember going to Russia, to Poland and to the Czech Republic with you to discuss these issues with our allies and with those that we wanted to help with this real threat of short and medium range missiles coming to Europe or to the southern portion of Russia. So as I read the newspapers, it surprises me that people think this is a new direction.

I am sorry, I missed part of this because I am also on Homeland and we have had some other meetings going on. But could you just talk a little to what were the last three years and how the Congress actually changed this direction, rather than just one man walking into the room and making a change?

Secretary TAUSCHER. Well, Congresswoman, I will say that President Obama does stand for change and, in the end, it is the President's decision to make the change that has been made. And I think that the Congress certainly in a bipartisan way over the last few years realized that there was a current threat of short- and medium-range missiles targeting our NATO allies, our forward-deployed troops and our friends and family members, and that is why the Congress, who looked at the previous administration's budget submission, made some changes in the investment strategy to increase both the investment in THAAD and in targets and in SM–3.

But I think the reality is that, when this new Administration came in, there were two factors that were real change agents for what has become this new architecture. The first was the intelligence. Every administration comes in and orders a new intelligence assessment on many different things. There are lots of reviews that go on. The President ordered new intelligence and he ordered a new Ballistic Missile Defense Review (BMDR).

When he did that, it was very clear that there were two new data points. The first was that the assumptions that the Intelligence Committee had made about the maturation of the long-range ballistic missile capabilities of Iran had not moved as expected. In fact, the short- and medium-range had moved dramatically further than the long- and medium-range.

Knowing we are protected by Fort Greely and by Vandenberg for both the Korean and the Iranian threat, the other second piece was that the maturation of the technology—especially sensor technology—over the arch of the last few years, made it clear that there was a way to protect now with current proven technology, current threats, our NATO allies indivisibly as opposed to about a third of them being left out in the previous system.

So I think it was the intelligence and the ballistic missile review that really took the President to the place where—the review also included for the first time the combatant commanders, which I think was very fundamentally new. And as General Cartwright has spoken, the combatant commanders have a list of requirements that they wanted to have missile defense meet.

So I think that those are the three different things that caused us to look at a change, and I think the President was compelled by the fact that you could take the architecture to meet the threat, to do it faster, to do it more cost-effectively, you could bring NATO in, you could do all of NATO and you could do it in a way that still

protected the United States against the current threats and the emerging threats.

Ms. SANCHEZ. And, Ms. Tauscher, were there meetings held all along for the last two, three or four years with our allies, with our NATO allies, with Poland, with the Czech Republic, at the congressional, at the administration level, to talk about some of these changes that might occur if, in fact, the data came back and told us there might be a smarter way to do this, or did our allies just get surprised by this?

Secretary TAUSCHER. Well, as I said in my testimony, I think that there was lots of pre-consultation, and there was also lots of speculation and there was also lots of fueling by domestic press and others that, potentially, there might be a change. I think people got ahead of themselves, and the reality is that this is a better system for the current threat and the future threat, one that protects the United States and our allies in a way that is more cost-effective.

Ms. SANCHEZ. Thank you.

Thank you, Mr. Chairman.

The CHAIRMAN. Mr. Lamborn.

Mr. LAMBORN. Thank you, Mr. Chairman. It is good to have you all here today. This is for either one of the Under Secretaries.

To an outside observer, the timing of this announcement is curious. It was done before the Administration's Ballistic Missile Defense Review and the Quadrennial Defense Review were completed. It occurred on the eve of negotiations with Russia on the START follow-on treaty, and we know that President Medvedev has suggested progress on START could hinge on the U.S. giving up its European missile defense plans.

Why didn't we wait to make this announcement until after the Ballistic Missile Defense Review or the Quadrennial Defense Reviews were complete?

Secretary FLOURNOY. Sir, let me take a stab at that. I think the most pressing reason was that we felt that there had been extensive interagency discussion and the architecture that General O'Reilly and General Cartwright have described so well was really emerging as the strongest possible option, and we realized we had an opportunity to not only shape the fiscal year 2011 budget, but to also try to influence where things are right now.

We didn't want to miss either of those budget opportunities. The truth is, if we had waited all the way into early next year when things were formally due, we wouldn't have the same opportunity to make sure the money is flowing in the right direction in support of a new architecture. So that was the primary driver.

But with regard to relationship to START, I think that both President Obama and, actually, it was agreed by Medvedev in issuing instructions to the START negotiators, there is no linkage between START and ballistic missile defense. We refused to acknowledge or accept that linkage from the get-go in these negotiations.

The truth is, any time between now and December is a bad time in terms of that perceived linkage, because the START negotiations are ongoing, and any time we roll out this decision between now and the end of the review, there are some people who would link it to START, even though that is not what drove the decision.

So there was no good time from that perspective. What we did is we said, "look, it is too important not to miss the window." It is very important not to miss the window on influencing the 2010 and 2011 budgets appropriately in this regard.

Mr. LAMBORN. Under Secretary Tauscher.

Secretary TAUSCHER. START is a strategic offensive weapons negotiation, not defensive, and we have a very, very big bright white line that stops anybody from going on that side, and START expires on December 5th. So we are good Americans, we can multitask. Things are happening in a very crowded channel. But we made it very clear that START was not an environment or forum to discuss missile defense, and that is the way we have kept it.

Mr. LAMBORN. Thank you. Now, you have referred to the budget several times. I have a budget question. Why couldn't we have funded both the 10 interceptors in Poland and the radar in the Czech Republic and continued, at the same time, because we can multitask, with expanded theater missile defense? These are not mutually exclusive programs.

If it is a budgetary issue, why are we cutting missile defense by $1.2 billion in the fiscal year that is just starting today, when in the last fiscal year that ended yesterday, we have an annual deficit of about $2 trillion, 1,500 times this $1.2 billion.

Secretary FLOURNOY. Let me clarify. I think the timing of the decision to go ahead and roll out this piece was influenced by the budget calendar. The architecture was not driven by budgetary considerations. It was driven by what General Cartwright and General O'Reilly have described is what best meets both the needs of the combatant commanders and the needs of the Nation in the most cost-effective way possible.

But I will defer to either of you, if you want to add comment on that.

General CARTWRIGHT. My sense here is that from a budget standpoint, to lose a year by not giving you the opportunity to review gave us a window that we wanted to get this to you. Did it have to be the exact day? No. As the other members here have said, the little bit of the misinformation that got out there drove us to believe we needed to clear up some misperceptions.

But we clearly have taken several issues out of the QDR, out of the Ballistic Missile Defense Review and out of the space review, and brought them forward to get us to not lose a year in the debate in moving to any direction change that the department might want to take.

So that really gave us this opportunity. We took advantage of it from the standpoint of the budget calendar, not from the standpoint of cost.

To your issue of concern about should we do both. We are conscious. Even though our numbers are large, we are conscious about being good stewards of the resources that you give us. We are going to continue, or we plan to continue, to do the testing necessary to ensure that that two-stage ground-based interceptor, in fact, is real, not just paper, and that if all else fails, as Congressman Turner talked about, we do, in fact, have a way to look at this which was along the lines of the original program.

Also, that radar that we were going to put in the Czech Republic physically exists. It is sitting on Kwajalein Island. We understand the technology to take it from its current technology to what we need if we had to deploy it. So we have not ceded or given up, but we have, in fact, changed our focus.

Mr. LAMBORN. Thank you.

Mr. SPRATT [presiding]. Mr. Reyes.

Mr. REYES. Thank you, Mr. Chairman. To our former colleague, we miss you too, but we are terribly proud of the job you are doing in your new position. Welcome to all of you and thanks for your work.

I have a question for both General Cartwright and General O'Reilly. The United States has already deployed a forward-based radar in Israel, and we have cooperative missile defense programs with that country. The main missile threat to Israel comes from Iran's growing number of medium range missiles. The new architecture is intended to defend against these same kind of Iranian missiles.

So my questions are, overall, how would you describe the impact of this new strategy, the new architecture, on Israel's security? That is number one. And, number two, can you tell us whether the new architecture will help improve the ability to defend Israel against an Iranian missile threat or missile attack?

General CARTWRIGHT. I will start, and then I will let General O'Reilly chime in.

The system was put there last year to allow us to begin to do the testing and the integration work that is going on, not only with the Patriot systems that we have historically deployed to Israel, but as we start to move, as we speak today, the command and control system for the THAAD has also now been moved out so we can start to integrate those pieces and the Aegis piece.

So what that radar brings to the capability to defend Israel as we move to the future is, as I talked about in my statement, this ability to get at the large raids, number one, so multiple missiles coming in towards Israel; and then, number two, to be able to see further than the organic sensors of any of those systems.

So now they can see out much farther, assign inbound threats to specific weapons and specific sensors within Israel's footprint, and defend the country much more effectively. That would also reduce the number of missiles that we have to build, because now we don't have to build two and three for every threat coming in. We can actually be much more efficient. So from a warfighting standpoint, that is what this is going to do.

The second piece is as we looked at the future, that ability to see further than the organic sensors is the testing and the integration that will go on. So a sensor not necessarily associated with a weapon, being able to see farther, pass that information to the weapon or the sensor that supports that weapon, and get that missile off sooner so that it is destroyed before it gets anywhere near the friendly nation is the second piece that brings.

I will defer, then, to General O'Reilly.

General O'REILLY. Sir, I would just like to add the fact that this architecture, one of the fundamental capabilities and attributes of this architecture to protect Europe is applicable to any theater in

the world. It is mobile, and our capability on Aegis ships can quickly move into that region. We are already proposing them to be in the eastern Mediterranean, and they can provide an entire additional layer of defense over Israel, as well as the enhanced sensor capability that General Cartwright was referring to.

Mr. REYES. Very good. Thank you, Mr. Chairman. I yield back.

The CHAIRMAN [presiding]. I thank the gentleman.

Mr. Fleming.

Dr. FLEMING. Thank you, Mr. Chairman, and I want to thank the panel. You are obviously very engaged and very expert on this information. I thank you for your preparedness on this.

I hear what you are saying, and I will let you sort out who should answer this question, by the way. I hear what you are saying about, perhaps, the lagging development of ICBMs from Iran and also the need to kind of shift towards the mid-range. But, you know, our intelligence has never been 100 percent, and there needs to be a margin of error. I hear what you are saying about, we have got the backup systems in Alaska. We also know that no system is 100 percent, things do get through.

So that brings us to the question of North Korea. Some believe that North Korea is pursuing ICBM capability. It has also been reported that North Korea supplied Iran with 18 BM–25 IRBMs in 2005. Does this new threat assessment account for the possibility that Iran could receive foreign assistance and that that, through osmosis, could occur a lot faster than predicted, and do you believe North Korea would share any IRBM or ICBM technology it has developed with Iran?

General CARTWRIGHT. I would be happy to start and then let members join in here.

For the ICBM threat, our primary capability still resides in Alaska and California. That we have never ceded and are not going to.

The systems that the Iranians and the North Koreans have demonstrated thus far are pad-based. So in other words, there is only a certain number of pads, two in North Korea, three or four in Iran, so their ability to generate large numbers is still very nascent and will take time.

The capability to move from where they are today, even with assistance—and I am a worry wart, so I am where you are on worrying about this—the next steps are extremely visible. In other words, they have to occur up above the atmosphere where everybody in the world can watch them. Those are the steps that allow you to take that last stage, separate a weapon from that last stage, get it to a stable configuration, find a place over the Earth to penetrate the atmosphere, survive that penetration with both the reentry vehicle (RV), the vehicle and the contents, and that is a very violent activity, survive the heat in the reentry, and then actually find something you would impact. Each of those steps is very visible, so we will know when they move forward.

The one that I probably worry the most about is their ability to move from a pad system to a mobile system, to an erector. Then they can be in places that we don't necessarily watch every day. So if I am to worry about something, that would be it. But, again, they would have to go through these other steps before they can move to the mobile configuration.

As we set this new system up——

Dr. FLEMING. Could I clarify something? When you say it is very visible, are you talking about in terms of testing and predicting?

General CARTWRIGHT. Yes, sir. So, unlike what we have done up until today, where much of this engineering occurs in labs or in test places, this is something that has to be a launch, it has to occur, it is very visible, and everybody in the world can pretty much watch it and watch the progress there.

Because we can see that, and because this system is leading anything else that we have had, the system we are proposing, by five to seven years, I am much more comfortable that if they surprise us, one, we will see it, two, we will have the lead time to actually field it. And I will let General O'Reilly jump in, but we are being conservative. If we field, much as we did with the GBI because of the threat earlier than all testing is complete, then we will have to do that. I will certainly come here and recommend that, because something is better than nothing to defend. But the next steps tend to be very visible.

Secretary FLOURNOY. If I could just add, given my boss's background in the intelligence world, he asked exactly these questions: What if the intelligence is wrong? What if they gain assistance and the ICBM threat emerges earlier? So he was very keen on, A, ensuring that the GBI defense we have of the homeland now remains; two, that we go ahead and put forward in Phase One, the earliest part of this new architecture, the forward-based radar to enhance seeing what is coming from Iran; and, three, that we really focus on developing this new capability in Phase Four that should give us the ascent phase capability, which is a game changer.

And, finally, that we keep the development of GBI, the two-stage GBI on the books as a hedge in case things come earlier, in case there is any kind of technological challenge with the later models of the SM–3.

So those things together are what made him comfortable in answering your question and going forward with this new architecture.

The CHAIRMAN. I thank the gentleman.

Mr. Andrews.

Mr. ANDREWS. Thank you, Mr. Chairman.

General Cartwright, I am not surprised but heartened to hear that you are a worry wart. I am glad we have a panel of worry warts that are eminently qualified. Certainly our friend and colleague, Secretary Tauscher, welcome back.

The public record of our intelligence suggests that Iran has not demonstrated the capability to use an intermediate range missile. Let's assume that that is wrong. Let's assume we are completely wrong about that and that Iran either is quickly developing that capability or has it now.

I want to compare the old plan that we were operating under to meet our obligations to our interests and allies in Europe—Central Europe—and then the new plan under which we are going to meet our obligations to our allies and interests in Central Europe.

If it were 2012 and the Iranians launched an intermediate-range missile with a nuclear warhead at Central Europe, under the old plan, what could we do about it?

General CARTWRIGHT. Nothing.

Mr. ANDREWS. Nothing. My understanding is, the reason for that is that the deployment date for the old plan was around 2017, is that correct?

General CARTWRIGHT. We started originally at the 2015 timeline. Because of challenges that we have had in basing and other things, 2017 to 2018 now would be realistic.

Mr. ANDREWS. There is a history of slippage on that date, isn't there?

General CARTWRIGHT. Yes, sir, there is.

Mr. ANDREWS. And under the new plan you are proposing, we would have deployable capability in 2011, is that correct?

General CARTWRIGHT. Yes, sir.

Mr. ANDREWS. So we would have in place in 2012 some assets that would help us deal with this threat, if I understand it. So let's talk about what those assets are.

It is my understanding that under the old plan, it was essentially 10 missile silos, is that correct?

General CARTWRIGHT. Ten silos that would be based in Poland was the plan.

Mr. ANDREWS. Ten silos based in Poland. And the new plan relies upon Aegis ships, which have SM–3 block IA missiles, it relies on the AN/TPY–2 radar and a THAAD element as well. Is that essentially correct?

General CARTWRIGHT. Yes, sir.

Mr. ANDREWS. So it is sea-based and it is mobile land-based.

General CARTWRIGHT. Yes, sir.

Mr. ANDREWS. Which of those two do you think is more vulnerable to attack from the enemy if, in fact, it had the ability to do these intermediate changed missiles?

General CARTWRIGHT. A fixed site.

Mr. ANDREWS. So the fixed site wouldn't be deployed until 2017 or 2018 and, in your opinion, it is more vulnerable than the sea-based and mobile land-based system. I want to ask you, is that a fair statement?

General CARTWRIGHT. Yes, sir.

Mr. ANDREWS. Then the other thing I want to ask you is about cost. Now, I will say this to you. It is my view—and I think it is almost universally held here—that if there is an imminent threat to this country and its people and its interests and its allies, cost should not be a consideration. We need to do what we need do.

But since there are options that we have, it is my understanding—and maybe Secretary Tauscher would be the best person to answer this—that is there is a qualitative difference in cost between the new plan that you are presenting and the old plan. My understanding is that the cost is about $70 million per missile? Or is it per silo?

Secretary TAUSCHER. Actually, it is General O'Reilly that is better at this, but it is about $70 million for the GBIs.

Mr. ANDREWS. And it is about $10 million——

Secretary TAUSCHER. $10 million to $15 million for the Block IIA, yeah.

Mr. ANDREWS [continuing]. For the new plan.

I want to talk about flexibility, as well. My understanding is that the weight of the missiles under the old plan, the system under the old plan, is about 25 tons. Is that right?

General O'REILLY. Yes, sir.

Mr. ANDREWS. And the new? What does the new one weigh?

General O'REILLY. 1.2 tons for an SM–3 Block I series and 2 tons for an SM–3 II.

Mr. ANDREWS. So if the Iranians ramped up their capability in a hurry and we had to be more flexible in a hurry to deal with that capability, which of these two options is best, from your point of view, General O'Reilly?

General O'REILLY. Sir, the new option.

And the reason I proposed as my recommendation to go forward with this Phased, Adaptive Approach was the rigidity, which you are referring to, of the previous approach. The threat does change, and our ability to react to it. If there are intermediate-range missiles, even if we had the system in 2012, the first five missiles would consume those GBIs.

Mr. ANDREWS. And the final question I would ask is that this is the first phase of, if I understand, a four-phased approach that would further buttress and bulk up this. Is that right, Secretary Tauscher?

Secretary TAUSCHER. Yes, it is. This is why it is phased and adaptive, is to deal with not only the threat but the emerging technologies and to match those as best we can.

Mr. ANDREWS. Thank you.

I yield back, Mr. Chairman.

The CHAIRMAN. I thank the gentleman.

Mr. Franks.

Mr. FRANKS. Well, thank you, Mr. Chairman.

And I thank all of you for being here. General Cartwright, I have just a profound respect for you. And, General O'Reilly and Secretary Flournoy and, of course, Secretary Tauscher, I am grateful that you are here.

I want you to know that I believe all of you are committed to the cause of human freedom in America, and so I hope you will grant me diplomatic immunity. There is no intent on my part to challenge anyone's motivation here because I believe you are all committed to this country.

Let me just start by saying, General Cartwright, I completely embrace all that you are saying, in terms of the geometric increase in the threat of short- and medium-range missiles and the complexity and the array that we face, and some of the array challenges. That is one of the reasons why some of us have been a little bit upset that one of our boost-phase systems in Airborne Laser (ABL) has been cut back. That is a real system turned into a paper one. It is almost the opposite of what we have been talking about today.

But I think probably the thing that is of the greatest concern to me today is that this new approach has been juxtaposed with the old approach. And I think that is a false dynamic, because the new approach was essentially anticipated by the previous administration. We have been moving in this direction. I find, quite sincerely, very little in the new approach that is truly new. I think we have

been moving in this direction, again, thanks a lot to General Cartwright and the philosophy that he has embraced, and along with General O'Reilly. And so I don't see a great deal of new.

I think really what the debate here is, is the elimination of the GBI site in Europe which, essentially, was to provide a redundancy protection for the U.S. homeland. And to be able to throw in some potential protection for Europe was a freebie and a good thing.

And my greatest concern is Iran's march toward becoming a nuclear-armed nation. And I truly believe that one of their great goals, of course, strategically and tactically, is to be able to threaten and hold at risk American assets, American homeland. And that if, indeed, we were able, within the timeline offered, to demonstrate to them that we could intercept those both at the level of Poland—which, if you draw a line right between Iran and New York, you go right across Poland. And that may say something about your physics, Mr. O'Reilly. They may have been correct.

The reality is that I believe that this new system that we talk about that was already on the books will still come too late to play much role in the calculus that Iran has in moving forward with their nuclear program. And I think that the European site would have devalued their program to an extent that perhaps—perhaps—some of our sanctions might have had some effect.

So I guess then the concern that I have—let me just quote General O'Reilly. "The ballistic missile defense system is daily becoming more global. The defense of deployed forces, allies, and friends against short- to medium-range ballistic missiles in one region, theater, will be buttressed by additional standard SM–3 interceptors, more Aegis BMD engagement-capable warships, the addition of initial THAAD fire units, additional sea-based terminal interceptors." Tying these assets together, as Mr. Cartwright said, "will be a global command and control battle management and communications capability."

And, of course, the Bush Administration's budget turned over to the Obama transition team includes plans to field over 400 SM–3 and THAAD interceptors by 2016. And I don't see in this new approach that there is going to be a lot above that by 2016.

So my greatest concern is simply this: in terms of protecting the homeland, the European site would have offered us some redundancy protection from long-range Iranian missiles. I think we all agree with that.

And I am asking you, General O'Reilly, in terms of the timeline, are we having an additional risk to this country for any period of time because of the loss of the European site?

General O'REILLY. Sir, no, I don't believe we are at greater risk because of the insufficiency, as I just testified, I believe, of our previous architecture.

Mr. FRANKS. Let me interrupt you. You testified that 2015 in the last situation. So you think that this new system is going to be able to provide the redundancy that the European site would by 2015?

General O'REILLY. I don't think the old system would provide the redundancy that you are referring to. It is very questionable. And the concern is, as the intelligence assessments are showing, the number of intermediate-range missiles and medium-range missiles has grown to an extent that just having 10 interceptors over there

would very quickly be consumed. And the secondary launch at the United States, those GBIs would—I am very concerned that they would ever be available for us.

The CHAIRMAN. I thank the gentleman.

Mr. Marshall.

Mr. MARSHALL. Thank you, Mr. Chairman.

Mr. Spratt mentioned that his history with this issue went back to SDI. And I have to acknowledge that my history goes back to my father having General O'Reilly's job when I was in Vietnam and right after I got back from Vietnam. So my history is longer; certainly not as informed as Mr. Spratt's. But I have been in favor of missile defense for years and years now, and I happen to be a Democrat.

And I think the good news that comes from this debate is kind of like mayors—I was a former mayor—we used to talk about how there is not a Republican or a Democrat way to fill a pothole. The good news that comes from this debate and that should be clearly understood by the country is that both Democrats and Republicans are in favor of missile defense. The technology has matured to the point where we don't argue about whether we should spend our money doing this. We argue about what is the best system, how should we spend our money doing this?

I think it is extremely unfortunate that the Administration made the mistake—well, I guess it wasn't the Administration. I think we here in the House made the mistake of cutting the Administration's request for missile defense for this year's budget. That was a real tactical error. Because, you know, to ordinary folks out there, it simply suggests that the current Administration, or at least the current Congress, isn't as committed as the prior Congress was to the subject of missile defense. And that is just not so. But there is no way you can explain the cut any other way, at least to ordinary Americans, than this current Congress is just not as committed. So it is really unfortunate that we did that.

It would be great if somehow we could reverse that in the, sort of, waning days here and free up the money to let you all do what you want to do. I accept from this testimony that you are all sincere, that you sincerely think this is the direction we should be headed in.

And, frankly, General Cartwright, you have been in your post now for, what, three years? So you were a pre-Obama Administration person. Ms. Flournoy—you know, General O'Reilly, you have been doing this, and so you are pre-Obama Administration. And I accept that you are sincere in your description of having rethought all of this. I just think it is really unfortunate that we managed to cut the budget.

If I could, I would like to ask how the new architecture—and I know this is focused principally on Europe—how the new architecture protects us from an electromagnetic pulse (EMP) threat, a Scud missile launch from a scow somewhere in the ocean. I think that that is something that we really need to be thinking about a lot.

It is one of the reasons why I requested language in the current authorization bill asking that the Department of Defense conduct a study of putting small nukes, nuclear power facilities, hardened

nuclear power facilities, in all of our military bases around the country. I think that can be done, actually, with the private sector paying for it if they are sized in a way that gives power back into the grid. So I think it is a win-win, basically, for America. But from a national security perspective, I think it is very important, given the EMP threat.

So, comments about what the, sort of, new world that you all are talking about here that most folks couldn't possibly understand unless they spent years studying this subject, this new world will enable us, as far as protection against EMP threats, rogue missiles, just one missile.

General CARTWRIGHT. I would like to touch on, kind of, both of those issues, and then I will cede to the other members here.

I worry about this because the reality is, the spectrum that we are dealing with is an ICBM to a terrorist. The weapon and the lethality is now exportable at both ends. And it is actually easier to deliver, unfortunately, at the more rudimentary end. And so, much of what we are trying to accomplish in the Quadrennial Defense Review is to make sure that we are, in fact, looking at both ends of this spectrum.

At the terrorist end, which is generally the most challenging, how do you handle someone who really doesn't value their own life, much less the value of anyone else's life? And, generally, Clausewitz, you know, Sun Tzu, it is "take that objective away from the enemy." And so, much of what we are doing we put in the role of consequence management, of protection, just by the daily way we do business, how we build our buildings now, these kinds of initiatives that would talk about protected and hardened power, protected and hardened communications that would allow us to make sure that, even if—God forbid, that occurs—any enemy of the United States would understand that would not change our resolve or our ability to carry out that resolve.

And that is the way I approach every day. Much of what we are doing in the Quadrennial Defense Review on this side of the equation goes to these issues about, how do you take the objective away?

The CHAIRMAN. I thank the gentleman.

Mr. Wilson, please.

There is a series of votes, a 15-minute and two 5-minutes. These will not be the last votes for the day, however. There is a possibility we can finish. But, if not, we will come right back.

Mr. Wilson.

Mr. WILSON. Thank you, Mr. Chairman, for your leadership in this important hearing.

Madam Secretaries, General, thank you for being here.

Under Secretary Tauscher, I was grateful to be the first Member of Congress in the Congressional Record to praise your confirmation.

I am just so concerned. I support a strong missile defense. I was taught by my predecessor, the late Congressman Floyd Spence, chairman of this committee, Armed Services Committee, that we have real threats; they need to be addressed. I believe, as Ronald Reagan said, that we can develop a bullet to hit a bullet. I am concerned this Administration is weakening missile defense.

At the same time, Iran is proving its capabilities of developing nuclear weapons. Over the weekend, what a message, as they sent missiles with their new technology. I believe the fanatics who have hijacked the country of Iran—a great country, a historic country, ancient Persia—when they carry signs that say, "Death to Israel, Death to America," they mean it.

And I am particularly concerned—particularly Secretary Tauscher knows—I have a deep, personal affection for the people of Bulgaria, Romania, for Greece, for India. And with the missile tests this week, all of them are at risk. They are concerned. Ordinary Americans, as Congressman Marshall said, are concerned. Why are our enemies rejoicing?

I would like to point out—and, Madam Secretary, I understand you recently returned from a trip to Europe to discuss missile defense. And while you were there, I would like to know the concerns of NATO officials, particularly from Eastern Europe, our new courageous allies.

I have a personal interest. My daughter-in-law, Jennifer Miskowitz-Wilson, from New Jersey, is a very proud Polish-American.

What did our allies, our great courageous allies, say?

Secretary TAUSCHER. Well, Congressman Wilson, let me first say, I don't think that this should be a question of false choices. Let me say that what President Obama has put forward is a system that will deal with current threats now, will deal with our European allies now and protect them against what we saw just this week is a robust Iranian short- and medium-range threat.

The sense that we either have GBIs or we have this, is a false choice. The United States is currently protected against a long-range—and the North Korean threat by this system that is in Fort Greely and in Vandenberg. So, as General O'Reilly testified last year, the GBIs in Poland were a redundancy. The system is going to include the opportunity to deal with a future Iranian long-range threat against the United States as a redundancy.

So I think that these false choices have got to be put aside in favor of what we think is a very robust system that deals with the current threat now and protects NATO allies first, in a phased way, and then indivisibly.

When we saw our European allies, it was very clear that they had no idea what the Obama Administration's plan was going to be. We explained it to them. And, as you can see from the comments by Chancellor Merkel, President Sarkozy, our NAC members were very, very enthusiastic about it.

Our Polish and Czech friends had to absorb what we told them, and we are in consultations with them. We have offered the Poles a future piece of the SM–3 deployment. The Czechs we are working on on a number of different things.

So I think that what you see is, universally, our European allies have moved past the debate about what is going on and have absorbed and really appreciate what we are doing. And I think that that is really the opportunity for us to move forward on a system that can deal with current threats now.

Mr. WILSON. General O'Reilly, our missile defense cooperation with Israel and with India have been mutually beneficial with tech-

nology. We know how talented the people are of Israel and India—large number of engineers.

In your view, will the new missile defense architecture improve our ability to defend Israel and India from an Iranian missile attack?

General O'REILLY. Sir, yes, from the point of view that this is a mobile system and it is very flexible. So it has applicability for deployments around the world.

What is key is our ability to integrate with the host-nation command and control systems and what they are trying to contribute to missile defense.

And, in the case of Israel, we have clearly shown over the last year that we have a fully interoperable system, between our radar and their Arrow system. And we have shown that again off the coast of California earlier this year when we were testing, with all of our systems that we are proposing here working with the Israeli systems.

Mr. WILSON. I am concerned for Israel and India.

Thank you.

The CHAIRMAN. I thank the gentleman.

We will recess until the third vote is over and come right back, and we will take up and hopefully finish very quickly.

[Recess.]

The CHAIRMAN. The gentleman from Pennsylvania is recognized. We are back in session. So you are recognized for five minutes, Mr. Sestak.

Mr. SESTAK. Thank you, Mr. Chairman.

General, I hope I am not redundant on these questions. I had to step over to the Education Committee.

Can I ask you a question? You had spoken about, when missiles take off they are pretty similar. It is kind of like a telephone pole going up. It is a pretty easy shot.

Now, let's say that this system that the Bush Administration wanted to have in Europe—which, it wasn't going to shoot it as it goes up. When the Russians shoot a missile, they have a lot of decoys in them.

My understanding is that, if the Iranians happened to put a bunch of decoys on this missile and you don't get it in the ascent phase, that the Bush Administration's proposal in the Czech Republic and Poland wouldn't be able to handle that threat. Is that correct?

General CARTWRIGHT. The radar, first in the——

Mr. SESTAK. The combination of the radar—the 2017 system.

General CARTWRIGHT. You are exactly right, in that in the ascent phase you can't really deploy a bunch of decoys, and that is why the missile is so vulnerable—I mean, among other things. It is relatively predictable.

In the system that was originally planned, which would be the ground-based interceptors in Poland and the radar in the Czech Republic, the radar in the Czech Republic had one function, and that was to discriminate between the RV and decoys as it left the atmosphere when they would be deployed.

And so that was the value of that radar at the time. It really had no other function. And just to put one more piece on there, that intercept had to occur while it was in the range of that radar.

Mr. SESTAK. Correct. Well, my understanding is you would have had to need a second radar site in order to do that discrimination, not just one. Is that correct, General?

General CARTWRIGHT. Only from the standpoint that that radar has to be queued. And that is what the radar down in the southeastern part——

Mr. SESTAK. Correct. So you would have had to have had two radar sites. So the system you were originally going to plan would have had to have another radar, then, for that discrimination.

General CARTWRIGHT. When we got to the point at which the Iranians would be able to——

Mr. SESTAK. To do that.

General CARTWRIGHT [continuing]. Decoys.

Mr. SESTAK. The second question I have is multi-mission tasking. My understanding is Navy ships tend to be able to handle submarine threats, missile threats from aircraft, surface threats, and others. Is this just one more threat that a well-planned crew could do, multi-mission?

General CARTWRIGHT. It is. But to be fair also, when you dedicate the radar, when they set up the—technical, but when they set up the energy fences, this mission consumes all of the radar's activity. So that is why we keep the second ship out there, is to make sure that we have——

Mr. SESTAK. And if I am not wrong, is it a flip of the switch, basically, that switches it from——

General CARTWRIGHT. Speed of light.

Mr. SESTAK. Speed of light. So it is a nanosecond to go from one mission to the other.

General CARTWRIGHT. Yes.

Mr. SESTAK. My third question is, General, you had mentioned there was a shoot-shoot-look-shoot strategy. You know, I think you take two shots or something?

General O'REILLY. Yes, sir. This architecture supports that. And our focus is to have that first shot as early as possible.

Mr. SESTAK. I guess my question is, as you go further down the road—you have 30 GBIs in Alaska, correct?

General O'REILLY. Yes, sir.

Mr. SESTAK. If you wanted to, I mean—to get those two shots, if you had to, could you just add another 30 to get 3 shots? Or do you just want to get the ascent phase?

General O'REILLY. What you are referring to are two different systems, sir. The one in Alaska is a midcourse system that only engages after apogee.

Mr. SESTAK. I understand.

General O'REILLY. So it only engages at the end. The GBI system that we were proposing for Europe also is a midcourse. We would have to wait until after the apogee, the highest part of the flight of a missile even coming into Europe. So if we had two opportunities, the first opportunity is a very limited one, only against certain trajectories towards the United States that you could have had that intercept.

Again, as I testified before, I am very concerned about having those missiles available, because there is a very large number of missiles that are threatening Europe now that you would want to use every missile you possibly had. And under the old architecture, you would be engaging those shorter-range missiles actually with the GBIs. And it is very quick to set up a scenario where they wouldn't be there for either shot.

Mr. SESTAK. So if I were to walk out of this hearing—I think I have only have four seconds—I could walk out saying that in the first two years we will now cover Israel, the Middle East, troops, southeastern Turkey, from short-range and medium-range, which we wouldn't do under the 2017 system of the Bush Administration.

General O'REILLY. Sir, southeastern Europe—not just Turkey, but Europe.

Mr. SESTAK. Southeastern Europe. And that we are going to basically use a multi-task ship that, with a nanosecond, can go from one mission to the other.

General CARTWRIGHT. Yes, sir.

Mr. SESTAK. And that radar is only against missile threats. You could still move around and use its other systems for antisubmarine at the same time, even if you are doing ballistic missile threats. Correct?

General CARTWRIGHT. That is correct.

Mr. SESTAK. And then move them anywhere you want in the world.

General CARTWRIGHT. That is correct.

Mr. SESTAK. And then the key is the second radar site for the discrimination.

Thank you.

The CHAIRMAN. Mr. Coffman.

Mr. COFFMAN. Thank you, Mr. Chairman.

In looking at the maps for the coverage of Phase One in 2011, Phase Two in 2015, the coverage that would provide for Europe, do Phases One and Two provide full coverage to those European countries within range of Iran's short- and medium-range missiles?

General O'REILLY. For the short- and medium-range during this period of time, yes, the coverage would be there.

Mr. COFFMAN. You wouldn't need Aegis in the Black Sea to be able to provide that coverage?

General O'REILLY. Not for the NATO countries that we are referring to.

Mr. COFFMAN. Uh-huh. Given Moscow's nonsensical concern that ground-based interceptors in Poland could be fitted with nuclear warheads and pose a threat to Russia, what is to say they are not going to be concerned with having a greater inventory of mobile SM–3 interceptors capable of intercepting all ranges of ballistic missiles deployed throughout Europe? Will this new approach be equally problematic for Russia?

General O'REILLY. Sir, if you are referring to the ability to—their concern that these GBIs could be used offensively?

Mr. COFFMAN. No. Let me go in another direction.

Tell me if—the Administration's focus has now shifted over to address the intermediate-range concerns, saying that they are the

first capability that Iran will have. So now you have shifted in that direction.

Now, tell me what the environment will look like when you go to long-range—I mean, when they do develop long-range ballistic missiles, which we have intelligence that they are developing, then what, then, are you proposing to address that threat scenario?

General CARTWRIGHT. I think, you know, kind of start from a technical side, is the SM–3 IIB, in particular, because it will have a capability of getting them before they get out of the ascent phase. So that is the first shot.

The second shot, then, is to be able to use this missile, the ground-based interceptors that are in the United States, to catch them in the exo-atmospheric portion of the architecture.

If we were very convinced and very threatened in the United States—in other words, they fielded a large number of them very quickly—we could add the SM–3 or the Patriot or the THAAD to defending the United States in areas that we felt were appropriate for that, based on the threat.

So we would be able to cover it in all three regimes of flight.

Secretary FLOURNOY. Let me just add, though, I would not characterize this as a shift of focus. We are pursuing what we think will be a more effective enhancement of the homeland defense piece, both with the radar in Phase One and the ascent phase capability in Phase Four. But, in the meantime, to deal with threats that are already in existence, we are adding a more responsive set of systems that can deal with the shorter- and medium-range threats that are there now.

Mr. COFFMAN. What will the Administration be asking for in subsequent budgets, in terms of missile defense? What can the Congress expect to see?

Secretary FLOURNOY. I defer to General O'Reilly. He is the keeper of our program.

General O'REILLY. Well, sir, we are in development, as I said, in the preparation for this next budget. But you will see investment continue that we started in the fiscal year 2010 proposal for the sensors and the networks and the SM–3 variants and the development of the unmanned aerial vehicles that are key to this architecture, continued development in that area. At the same time, expanded testing of the land-based SM–3 options and of the SM–3 IB will begin flight-testing a year from now.

And in the area of developing the SM–3 IIA, we will continue that work. We are having a flight test. Our work with the Japanese is to have our first flight test in 2014. So there will be funding for that program, as well as the other aspects of the missile defense capability, including enhancing the capability of the GMD system in Alaska and Vandenberg.

Mr. COFFMAN. Thank you.

The CHAIRMAN. I thank the gentleman.

Ms. Davis.

Mrs. DAVIS. Thank you, Mr. Chairman.

And thank you to all of you for being here and for your expertise.

And, of course, I also want to welcome, as all my colleagues have, our great friend and colleague, Secretary Tauscher. And I know she knows how prideful I feel in her being here.

And it is great to have you all.

I want to turn for a second, because we are very pleased, I think, that we have this interagency approach today. And there is a strong diplomatic piece to it, and we understand that. And I wonder, then, if, Secretary Tauscher, you could particularly, I think, respond, and if others want to join in.

We know, through your prepared remarks quoting NATO Secretary-General Rasmussen, the role that NATO will be playing. And I think part of the question is, how is that going to be different? What has changed? What do we anticipate in their involvement? And, also, what role do we think the NATO allies will be playing in a kind of cost-sharing effort to ensure the wealthier nations are contributing to the success of this strategy? Could you comment on that for us?

Thank you.

Secretary TAUSCHER. Thank you, Congresswoman Davis.

I want my colleagues from the defense department to talk about some of the burden-sharing opportunities, which are important. But I think, suffice it to say, there was a lot of criticism of the Bush Administration for what was considered to be bilaterally negotiating with the Poles and the Czechs. We are very grateful that the Poles and the Czechs stepped up.

That was a criticism, I think, that was overblown. The truth of the matter is that we have Article V considerations that are very, very important to us. We believe that the defense of New York is the same as the defense of Warsaw. An attack on Prague is an attack on Peoria.

So we know now, because of the threat analysis that we have and the assessment that we have, that these short- and medium-range threats that are holding at risk American forward-deployed troops, American assets and NATO allies are significant. Just the test this week of the Iranian short- and medium-range missiles show that we have risks right now that we have got to put assets against.

And I think that we have a very robust engagement with our NATO allies. So NATO-izing this process not only gives us a chance to use indigenous technologies developed by our allies, but also burden-sharing, but the kind of centralized command and control that is very necessary to protect our assets, to work with our allies, and to have, we hope, future cooperation with Russia, through the Russia-NATO Council, so that we have a very big network system that can protect everybody, including our forward-deployed troops, against these threats.

Perhaps Michèle would add.

Secretary FLOURNOY. I would just add, I mean, one of the real strengths, or appeals, of this new system is that it has a broad variety of ways that other countries can participate.

There are NATO countries that already have the Aegis ships. They could choose to upgrade those with ballistic missile defense capability and contribute that way. There are countries who are interested in acquiring the kind of UAVs that could be used as sensor platforms. There are countries that may step up and become SM–3 missile sites.

There are countries that are already contributing to NATO's command and control system, the all-BMD system that is being designed, which is going to link the, sort of, lower-tier defense to the, sort of, middle- and upper-tier defense. And, of course, there is opportunity for a co-development of systems going forward, as other countries in Asia have already participated with us.

So there are just a lot of different ways that countries can chip in, both individually and as part of——

Mrs. DAVIS. One of the questions might be whether we, in fact, gain greater leverage with this new architecture in bringing—certainly, there are many technologies already in place and efforts. But I think what would be helpful to know is whether—and we may not know that for a while—but whether this really does even truly enhance, as you are saying, the relationships in a new way. I don't know whether——

Secretary FLOURNOY. We got very strong feedback from the NAC that they like the fact that this is truly about the indivisibility of NATO in terms of a defense for all. I don't want to name names because it is premature, but there were a number of representatives who came up and said, "We want to be part of this and we want to talk about how." So I think that was very positive.

Mrs. DAVIS. And do we know whether that changes the message that this is also sending to our adversaries?

Secretary FLOURNOY. Absolutely. I mean, I think General Cartwright has spoken before about how this contributes to deterrence.

I don't know if you want to jump in on that point.

General CARTWRIGHT. If you are a single country and everybody around you is contributing to a defensive capability, it has to affect you. That is point one.

And then point two is their opportunity to contribute in ways that are so different than a U.S.-only system.

Mrs. DAVIS. Thank you.

The CHAIRMAN. I thank the gentlelady.

Mr. Langevin.

I have Mr. Langevin, Dr. Snyder, Mr. Taylor and, I believe, Mr. McKeon, who withheld his questions earlier, should be recognized.

Mr. LANGEVIN. Thank you, Mr. Chairman.

I would like to welcome the panel here today. And thank you all for your very thoughtful, comprehensive testimony and for this very flexible and comprehensive plan on missile defense that you presented to us today.

I particularly, like my other colleagues, want to welcome back Secretary Tauscher and thank her for her great service on this committee for so many years. And I am honored to have followed her as the chairman of the Strategic Forces Subcommittee and hope to follow in the very high standard that you set, Secretary. So, welcome.

Secretary TAUSCHER. Thank you.

Mr. LANGEVIN. We have touched on a number of important things already that I had questions about, or concerns, and some of them have been already answered, in particular how we will interact now with Poland and with Czechoslovakia. And, clearly, you laid out that there will be ongoing involvement on missile defense with them, so that should allay any fears that people have

that we are not continuing on in our cooperation with missile defense with them.

We have also talked about cost. And I want to talk a little more about capabilities of the system and comparisons. Just to recap again, for one GBI, $70 million; for an SM–3, depending on which version, anywhere from $10 million to $15 million.

Could we also talk about, in terms of the site, if it was a land-based SM–3 site versus a GBI site, the cost and personnel required for either one of those sites? I think that is something important to highlight.

General O'REILLY. Sir, the previous GBI site that was proposed, it was a large complex, it was a missile field, had missile assembly buildings and so forth, had a large contractor support team that was there. So the total number of the site personnel was around 450 people at any one time manning that site.

In contrast, the land-based SM–3 site is much smaller. As far as site prep goes, it is pads of concrete, primarily and fences, security, and so forth. Its population—and this is very early—but our estimate is it is somewhere around 70 people. So it is a significantly smaller footprint even though you could have upwards of 80 interceptors at the same site where we previously had 10.

To build one of those missile fields, for example, a GBI is a five-year construction period. This, to prep the site, would be less than a year.

Mr. LANGEVIN. And let's talk about, were there to be an attack—obviously we are primarily concerned about Iran—but if there were to be an attack, they are obviously not going to launch one, two, or three missiles. You talk again about the number of short- and intermediate-range missiles and how quickly the system could be overwhelmed if we only had 10 GBIs. You laid out how we would launch two GBIs for each missile that is launched, so how quickly it would be overwhelmed and what flexibility the SM–3 system would offer to meet the threat.

General CARTWRIGHT. Well, the raid size issue is something that we worry about, particularly from the standpoint that it would overwhelm the sensors and then overwhelm the weapons very quickly and then leave them vulnerable, or leave that area vulnerable.

The new system, both in the affordability side of the equation but more from an operational standpoint and the ability to address large raids, as we have watched the Prophet series exercises which are ongoing right now in Israel—I am sorry, in Iran—you generally are seeing half a dozen or so, similar to what we see on the 4th of July from North Korea, where they will launch half a dozen to a dozen missiles. That could quickly overwhelm the GBI system.

And what we will be able to do with the SM–3 in the early stages is to address those weapons with SM–3s in Europe. When we move to the 2020 system, we will not only be able to address them in the terminal phase and in the exo-atmospheric, trans-atmospheric areas, but we will start to go after them in the ascent phase, very early in the game, which allows the problem to be simplified substantially and allows us to get at those systems very early in the flight, which means we don't waste second and third missiles going after them.

Mr. LANGEVIN. General O'Reilly, could I ask you, the testing—where and how you test the SM–3 missile as its development continues. And do you have the range facilities and authorities you need to conduct the planned testing? And can you talk about how this would protect Hawaii, if that is a test site?

General O'REILLY. Well, sir, Hawaii is where we do most of our testing in the Pacific. And that would be the likely location for this, because we want to integrate that testing with THAAD and Aegis on ships and our GMD system. So all of those systems come together in the central Pacific, so the Pacific Missile Range would be an ideal site for this testing.

And, as you said, it has a redundant—or it has an additional attribute, that if you are there and you have this capability you are testing, it would be there for other uses for defense also, as we have done in the past with our systems that we test there in the Pacific.

The CHAIRMAN. I thank the gentleman.

Dr. Snyder.

Dr. SNYDER. Thank you, Mr. Chairman.

Thank you all for being here. As I have listened to this this morning and read through the testimonies earlier, it brings home, once again, that you all are doing a great job in working through this very difficult challenge.

But the reality for Iran is they are not safer by pursuing the nuclear program, they are not safer by pursuing their missile program. You know, I am one of those people that think there is a lot that, eventually, Americans and Iranians will do together as people that will be very, very productive. But somehow they are off on this tangent that it will somehow help their national aspirations for their people by pursuing these programs. And I think it is very clear from the work you all are doing that it will not help them. And I think that is the unfortunate side of what they are doing. But I hope at some point their leadership will recognize they are not safer by pursuing these programs.

General O'Reilly, in his written and oral statement, used the phrase that what you are all about is that this will enhance U.S. homeland defense. And there are some people on the committee today that have said they are concerned it will weaken it. I don't get that. I just don't see where what you are saying here in any way puts us at risk of weakening U.S. homeland defense.

Somehow we think that when we set up a program, even though it is a—all these programs are multiyear, that we can never learn from a changing world or changing technology, I mean, I just don't get it, why we would think that somehow you all are going to make changes that you are going to sit there and testify, after years and years of service to your country, that this enhances U.S. homeland defense when, in fact, it weakens it. I don't get it. I mean, I don't get it. I think a lot of this is just technological change.

I wanted to ask, Secretary Tauscher, I think I will address you, put these questions to you, with regard to the discussion that has been going on about Poland and Russia. And I understand what you all have testified to, that you have reached out to folks, that there was some misinformation, and you feel like it is moving in the right direction.

But there are clearly some voices being heard from Poland that think they were mistreated. And so, would you explain to me why they might think that?

Secretary TAUSCHER. Well, Congressman Snyder, I can't speak for them, but I will tell you that every effort was made to pre-consult and to consult, but there was a lot of leaking going on. And there was a sense that, once the President made the decision, that we had to get out there and do it. And, literally, within hours of the President making the decision, we were on planes going to see them.

We are enormously grateful that the Polish Government and the Czech Government worked with the previous administration on what was called the program of record. But things have changed. They have changed significantly. The threat has changed. We have a big commitment to our NATO allies and forward-deployed troops. It is clear that the current threat is from short- and medium-range. The United States is currently protecting——

Dr. SNYDER. And I understand all that. But I want us to be—I mean, when some of us met yesterday, and we have had discussions through the last several weeks with Poles, and there are, at a minimum, some misunderstandings that are persisting.

And so I want to understand better why they may have the view—which you all don't agree with, and you are going to try to rectify and, I think, will get straightened out—I think the relationship between Poland and the United States is and will be very strong for decades to come—but why they might be thinking that this was not helpful to their foreign policy.

Secretary TAUSCHER. Well, I will tell you that, under the previous administration, the Polish Government and the Czech Government stepped up smartly to support the United States in our ambitions to put both the 10 GBIs in Poland and the radar site in the Czech Republic against public opinion. Public opinion in both countries was significantly against it. So both governments used a lot of political capital to support the ally, the United States, and have had a lot of dissension politically domestically.

Dr. SNYDER. So they took their political hits domestically. They also took some hits from Russia, which wasn't very excited about these missiles there.

Secretary TAUSCHER. That is right.

Dr. SNYDER. So is the basic underlying problem they paid the price and now we are backing off? Is that how you perceive the——

Secretary TAUSCHER. Well, I think what happened was, in anticipation of the BMD Review being released, there was a lot of domestic U.S. speculation as to what the characterization of that would be, and they were wrong. The characterization coming out of the United States, picked up by the press in Europe, was that we were canceling the program. If you remember, in the first 24 hours, there was completely misinformation disseminated, and it was affecting the political environment in Poland.

Dr. SNYDER. Which gets back to the basic point that this, in fact, enhances security both for Europe and the United States.

Secretary TAUSCHER. Exactly. And I think that is the message that everyone has now.

Dr. SNYDER. Thank you.

The CHAIRMAN. I thank the gentleman.

Mr. Taylor.

Mr. TAYLOR. Thank you, Mr. Chairman.

And, like everyone else, I want to welcome back our former colleague. And I, as an American, think we are very lucky to have you first as a congresswoman and now serving in this capacity.

Secretary TAUSCHER. Thank you.

Mr. TAYLOR. You know, in the past 20 years, under both Democratic and Republican presidents, we have seen the Spanish ask us to give up a huge air base at Torrejon. We have seen the Philippine Government ask us to give up tens of billions of dollars of infrastructure in their country. The Panamanians asked us to give up tens of billions of dollars of infrastructure in their country. Our fellow Americans in Puerto Rico asked us to give up Vieques, and then we made the decision, "Well, there is no reason to have Roosevelt Roads if we can't have Vieques." And, most recently, the Government of Ecuador that, just 10 years ago, begged us to build an airfield at Manta is now asking us to give that airfield back to them.

And in each instance they are our host, and in each instance as the guest, when they ask us to leave, as the good guys we are as a Nation, we leave. And we leave all those things behind.

So, going to the decision for more mobile units, initially going to a sea-based unit, I commend you. Because these nations that are now asking us to spend a lot of money in their countries are one regime away from asking us to leave. Those huge investments on the part of the American people, just like we saw in Spain, the Philippines, Panama, Puerto Rico, which are fellow Americans, just go to waste.

Obviously, I come from shipbuilding country. Obviously, I support putting as many of these things on ships as you can because you don't have to ask someone's permission to use the ocean. And if you look at every potential threat out there, it is on an ocean.

And for my colleagues who are rightfully concerned about Iran, I would remind you that the Iranians don't have any carriers anywhere near our country. The Iranians don't have any submarines anywhere near our country. The Iranians don't have troops on two countries bordering our country. And I would think that the Iranians are very much aware of the three things that I just said and that that should be on their thoughts every day if they ever think of doing something as foolish as sending a missile towards the United States of America or any of our troops.

So having said that, I am just curious how much, if any, did those things we gave up in Spain, Panama, the Philippines, Puerto Rico, play into the decision not to make huge capital investments in somebody else's country where they could ask us to leave at any moment?

General CARTWRIGHT. I will start, Congressman.

For me, diversity is just absolutely essential, because you do not know tomorrow where you will be, who your friend will be, exactly what the right posture towards a threat will be. The mobile aspect of this and then the relocatable aspect of this gives us a really powerful blend.

And we are talking today about Europe, but I am equally focused on the Pacific. The North Korean threat, obviously, is a part of this dialogue. But there is not a lot of land mass out there. And to be in the right place to defend this country is going to, probably, have to be from the sea.

And so, as we look at the entire globe, these mobile systems, both in their flexibility to adjust to changes in the geopolitical side of the house but also to adjust to changes in the threat and where that threat will come from, are absolutely an essential element that, for me, can't be compromised.

We have to have a mobile—yes, a mobile system costs more than a fixed-base infrastructure. But that investment is generally easily returned in its flexibility.

Mr. TAYLOR. Thank you.

Ms. Tauscher, do you want to comment on that?

Secretary TAUSCHER. Well, Mr. Taylor, thank you for those warm remarks. But I think that I can only echo what General Cartwright has said.

But I will say that, once again, we are very aware of how our allies have stepped up, and we are very aware of our Article V commitments to our NATO allies. The program of record would not have protected, even in its final stages, all of our European allies. And our system begins to protect them now.

So I think that we shouldn't get into the job of picking false choices. This is a very comprehensive, flexible system that is adaptive, that deals with the current threat, with proven technology now. And I think that that is a characteristic that the President understood. I think that we hope that we get support from the Congress.

But, in the end, it gives us the kind of flexibility not only to deal with the basing issues but also to the threat, which is really, I think, what the American people need to have confidence in.

Mr. TAYLOR. Thank you.

The CHAIRMAN. Thank you very much.

Mr. McKeon, the gentleman from California, wrap it up.

Mr. MCKEON. Thank you, Mr. Chairman.

I think this has been a very, very good hearing. And I think there are lots of things we agree on, as Mr. Turner pointed out. I think there are lots of things we disagree on, as has also been pointed out. But, as Mr. Spratt and Mr. Marshall said, I think we have come a long way on the debate.

I remember when Reagan talked about SDI and how loony-tune he was and how crazy he was. It would be very interesting if he could come back and hear the debate we just had today and how both sides are supporting missile defense.

We still have differences. Sadly, I think some of them are partisan. Sometimes I sit here thinking, could a Republican say something, one thing nice about President Clinton, could a Democrat say one thing nice about President Bush that they did in their eight years, respectively?

I still have some concerns, and, you know, we will work on those, we will address those as we move forward. I do have concerns about how we treated Poland and Czechoslovakia in this. I know the Poland Ambassador yesterday said that he felt they had been

knifed in the back. So we haven't completely salved that problem yet. I think we still need to work on that, and hopefully we will.

I think people that are our allies should feel good about being our allies. And I understand that sometimes you have to move in ways that don't take care of all the problems. But I hope we can reach out to them and make sure that they fully have bought into this and can feel good about it. And I hope that we can continue talking about this and move forward.

I, again, like Mr. Marshall, wish that we had not cut missile defense by $1.2 billion in the budget if these new programs—as General Cartwright just said, the mobile system is going to cost more. Now, there has been a lot of talk about it is cheaper, but it is going to cost more. And if there was a change made in direction, we should have kept the money in there and put it toward that, because we haven't totally handled all of the money situation.

So thank you. Thank you for what you are doing. Thank you for your service to America. And we will continue to talk about this.

And thank you, Mr. Chairman.

The CHAIRMAN. Mr. McKeon, thank you very much.

A special thanks to the panel for your outstanding remarks today in answering the questions. I think that this has been one of the best hearings that we have had.

We have one 15-minute vote and two 5-minute votes.

Mr. Wilson.

Mr. WILSON. Mr. Chairman, I would like to indicate that I will be sending a letter expressing concern about the new plan for Guam, Hawaii, Alaska, the Philippines, and Taiwan.

Thank you.

The CHAIRMAN. With that, we thank you again.

[Whereupon, at 12:34 p.m., the committee was adjourned.]

A P P E N D I X

October 1, 2009

PREPARED STATEMENTS SUBMITTED FOR THE RECORD

OCTOBER 1, 2009

Opening Statement of VCJCS and USDP
HASC hearing on European Missile Defense
Oct. 1, 2009

Thank you, Chairman Skelton, Congressman McKeon, and members of the Committee. We appreciate the opportunity to discuss the Administration's new approach to missile defense in Europe, and to set the record straight that the Obama Administration is committed to deploying timely, cost-effective, and responsive missile defenses to protect the United States, our deployed forces, as well as our friends and allies against ballistic missiles of all ranges.

We are confident that our new approach represents a dramatic improvement over the program of record. Under the old plan, we were not going to be able to deploy a European missile defense system capable of protecting against Iranian missiles until at least 2017. Under our new plan, we'll be able to protect vulnerable parts of Europe and the tens of thousands of US troops stationed there by the end of 2011. We'll also be creating a far more flexible missile defense system, one that can be adapted to provide better protection against emerging threats. And finally, we'll be able to enhance protections for the U.S. homeland against possible future threats from long-range ICBMs.

Before going into details, I would like to place this decision about European missile defense in context. As you know, we are in the midst of several major defense reviews, one of which is a congressionally-mandated review of our approach to ballistic missile defense. DOD is leading that review, with active participation from the intelligence community and a number of other agencies. That review is comprehensive and ongoing; it examines our strategic and operational approach to missile defense not just in Europe but around the world.

The review is moving forward based on four key principles:

1) We must ensure that US missile defenses are responsive to the threats we face today and are likely to face in the future, that the technologies we use are proven and effective, and that our defenses are cost effective;
2) We must maintain and improve defenses for the US and our allies against potential missile attacks from countries such as Iran and North Korea;
3) We must renew our emphasis on protecting US deployed forces and their dependents in theater, as well as US Allies and partners against regional threats; and

4) We must continue to make missile defense an important feature of our international cooperation efforts.

The results of the Ballistic Missile Defense Review are not due back to Congress until January, but as we began our in-depth analysis, it became clear very early that circumstances had changed fundamentally with regard to missile defense in Europe, so that we would need to make some significant adjustments to the previous administration's plans.

Let me start by discussing what has changed since early 2007, when the previous administration decided to seek deployment of ground-based interceptors in Poland, a European Mid-Course radar (EMR) in the Czech Republic, and an AN/TPY-2 radar elsewhere in the region. The decision to move forward with that particular configuration was made nearly three years ago, based on the threat information and the technologies available at that time.

Circumstances have changed significantly since early 2007, however.

First, we now have a rather different intelligence picture than we had three years ago, particularly with regard to Iranian capabilities. And second, we have made major strides in missile defense technologies and capabilities in just the last few years. We are now in a position to put an effective missile defense system in place far more rapidly than we were a few years ago, one that will be far more flexible, adaptable, and capable.

The intelligence community now assesses that the threat from Iran's short- and medium-range ballistic missiles is developing more rapidly than previously projected, while the threat of potential Iranian intercontinental ballistic missile (ICBM) capabilities has been slower to develop than previously estimated. Iran already possesses hundreds of ballistic missile capable of reaching neighbors in the Middle East, Turkey and the Caucasus, and is actively developing and testing missiles that can reach further into Europe. Our intelligence assessments indicate that the continued production and deployment of these more capable medium-range missiles has become one of Iran's highest missile priorities.

In the near-to mid-term, what this means is that the primary threat posed by Iranian missiles will be to US allies, our 80,000 deployed forces in the Middle East and Europe, and our civilian personnel and the many accompanying families. And needless to say, this concern is all the more urgent in light of Iran's continued uranium enrichment program. Iran continues to defy international obligations, and there continues to be reason to fear that Iran is seeking a nuclear weapons option.

We hope that won't come to pass. But obviously it increases the urgency of developing a truly effective missile defense system in Europe for the protection of NATO territory and population and the US homeland. Missile defense is not a substitute for the critically important diplomatic efforts the U.S. and the international community are already engaged in with Iran, but strong missile defense can complement diplomatic efforts by providing an effective deterrent.

As the Secretary of Defense has noted, we understand that intelligence projections can be wrong, which makes it all the more important for us to have a flexible and adaptable missile defense system that can evolve with the threat. Iran may change its priorities and capabilities and ways we can't entirely predict. So we remain very concerned about Iran's potential to develop ICBMs in the future, and part of our approach is to maintain and improve robust homeland defense capabilities to ensure that we can effectively counter any future ICBM threats, whether they come from Iran or North Korea or any other adversary.

But I'll come back to that in a moment. I've described the changed intelligence assessments that lead us to consider short and medium-range missiles the greatest near-term threat. As I mentioned, however, the threat assessment is not the only thing that has changed since the program of record was planned nearly three years ago. The second thing that has changed is the technologies and capabilities available to us.

Technological developments over the past several years have led to new capabilities, demonstrated in multiple tests. Improved interceptor capabilities now offer us more flexible and capable missile defense architecture, and we have also significantly improved our sensor technologies. That means we now have a variety of better options to detect and track enemy missiles and guide the interceptor in-flight to enable a successful engagement. As a result, we now have new and proven missile defense options that were not available even a few years ago.

The previous plan, approved in early 2007, relied on two large, fixed missile-defense sites, with 10 ground-based interceptors in Poland and the EMR in the Czech Republic. It was designed to identify and destroy up to about five to ten long-range missiles, and as noted, the radar and interceptors called for under the old plan would not have been in place until at least 2017.

Our new approach, which the President adopted on the unanimous recommendation of the Secretary of Defense and the Joint Chiefs of Staff, will rely on a distributed network of sensors and SM-3 interceptors. The SM-3 IA has had eight successful tests since

2007, and it is more than capable of dealing with current threats from even multiple short and medium-range missiles. It and future variants also have many advantages over a Ground Based Interceptor (GBI). The SM-3 is much smaller, weighing only about 1 ton compared to the GBI's 20 tons. Because it is smaller and fits inside a vertical launch canister, it can be fired both from Aegis capable ships and, starting with the SM-3IB, from land.

The capability of having a missile defense system that can integrate sensors and interceptor sites located both at sea and on land offers us geographic flexibility that was unavailable under the previous plan. Furthermore, the resulting distributed network is more survivable in the case of an attack than the single large radar and single missile field of the previous plan. The SM-3 IA and IB, at around $10 million per interceptor, are also much cheaper than a GBI, which costs around $70 million per interceptor. This means that we can deploy scores of SM-3 interceptors, again enhancing our defensive capabilities. Since Iran already possesses hundreds of short and medium range ballistic missiles, this improved defensive capability is critical.

Our new plan for European missile defense involves a phased, adaptive approach. As our capabilities and technologies continue to improve, the architecture will evolve and become ever more capable. Specifically, we are phasing in SM-3 upgrades over time. Each SM-3 upgrade will provide more capability for countering Iranian threats, meaning each upgrade will be able to defend an increasingly larger area.

Phase 1 of our approach to missile defense in Europe is already underway; the SM-3 Block IA is already deployed in the fleet. In this first phase of our plan, we can provide SM-3 Block IA capable warships when necessary for the protection of parts of southern Europe. To enhance protection in Phase 1, we will also rely on a forward based sensor, probably a TPY-2 radar. We expect that full Phase I missile defense capability will be possible in 2011.

By including a forward based sensor in Phase 1, we are retaining one of the most significant contributions to the defense of the United States from the previously proposed architecture. The forward based sensor will not only help protect the region, but will also contribute to the defense of the United States homeland by providing early and precise track data to our Ground-Based Interceptors in Alaska and California.

In Phase 2, to be completed by 2015, we intend to use a more advanced version of the SM-3 interceptor, the SM-3 Block IB, which is already under development. We will deploy this at sea and on land. By adding the land-based sites, we will significantly

increase coverage of NATO against ballistic missiles from Iran without having to increase the number of Aegis BMD ships – a much more cost effective approach.

In Phase 3, we will introduce a new, more capable version of the SM-3, the Block IIA. The SM-3 Block IIA will provide full coverage of NATO against short, medium, and intermediate range ballistic missiles. We expect to deploy the SM-3 Block IIA by 2018.

In the final phase, Phase 4, we expect to field an even more-improved SM-3 missile that has anti-ICBM capabilities. This ascent-phase intercept capability will further augment the defense of the US homeland from potential Iranian ICBM threats. This phase is planned for 2020.

It is important to note that the SM-3-based defense against any Iranian ICBMs will be *in addition* to the GBI-based defense we already have deployed in the United States, at Fort Greely and Vandenberg AFB. As noted previously, these U.S.-based defenses will be made more effective by the forward-basing of a TPY-2 radar – which we plan by 2011.

We currently have the ability to defend the United States (including the East Coast) against any Iranian ICBM, and with the TPY-2 deployment planned in Phase I and continued improvement of the GBIs, this defense will grow even stronger in the next several years.

While we expect the SM-3-based approach to ICBM defense to be effective on its own, we also will continue to improve our existing GBI-based system here in the United States and conduct tests of the 2-stage GBI in the near-term. The SM-3s ascent-phased intercept capability in Phase 4 would mean that, unlike the previous administration's GBI-based system, Iranian missiles would have to defeat not one, but two very different kinds of missile defenses. This is something I want to underline, since it has at times been misunderstood: we are *already* capable of countering all current Iranian missile threats to the US homeland, and *this will not change*. Our defenses of the US homeland will only grow stronger as we proceed with our new approach.

But back to Europe: Over time, we plan on one land-based site in southern Europe and one somewhere in northern Europe. Given the flexibility of the architecture, there are a number of options for land-based sites that would provide the same capability, including in Poland. The mix of sea-and land-based systems makes our new approach far more capable and adaptable than the program of record, because we can move sensors and interceptors from region to region as needed. This approach also allows us to scale up our defenses, if necessary, by deploying additional SM-3 interceptors much faster and at

lower costs than by adding the program of record's much heavier Ground Based Interceptors and their associated silos.

In times of crisis, the system can "flex" by surging Aegis capable ships to the area for more protection and to serve as a visible deterrent. This approach also allows us to deal with a wider range of potential missile tactics, such as salvo launches. The previous GBI architecture could intercept about five to ten missiles at most; the new plan's distributed network will be able to cope far more effectively should an adversary fire many missiles simultaneously.

Similarly, replacing the fixed radar site with a mix of sensors that are airborne, seaborne and ground-based will allow us to gather much more accurate data, and will offer better early warning and tracking options combined with a stronger networking capacity. Finally, because it relies on a distributed network of sensors and interceptors, the new approach is more survivable— less vulnerable to destruction or disruption--than the previous plan, which relied on a single large radar and a single interceptor field.

It should be crystal clear that those who say we are "scrapping" missile defense in Europe are, as Secretary Gates has said, "either misinformed or misrepresenting the reality of what we are doing." In fact, we are replacing the previous plan with a phased approach that delivers more effective and more robust capability *sooner.*

To sum up: the new Phased Adaptive Approach offers many advantages over the previous plan for European missile defense. We will now be able to defend the most vulnerable parts of Europe 6-7 years earlier than the previous plan. Our new approach will be also able to cover all NATO territory and populations, rather than leaving some allies exposed to short- and medium-range threats. And we will move toward a new additive approach to defending the United States against any future Iranian ICBM – while continuing to enhance our existing GBI-based defenses. Overall, our new approach allows us to better respond to existing threats now—and to better prepare for future threats as they emerge.

Those who assert that the new plan doesn't uphold U.S. security commitments to friends and allies, particularly Poland and the Czech Republic, are far off the mark. This is a better defense for Europe as well as for the United States. All of our missile defense efforts will be complementary of and interoperable with those being developed by NATO, and the new architecture we are creating provides many opportunities for alliance-building and burden-sharing between the United States and our NATO partners. NATO Secretary General Rasmussen has hailed our decision as "a positive step"; Polish

Prime Minister Donald Tusk said it offers a real "chance to strengthen Europe's security."

We remain firmly committed to strong bilateral relationships with both Poland and the Czech Republic and have already begun discussions with both nations about their potential roles in the new missile defense architecture. In the coming weeks, we will have numerous strategic discussions with the Poles on missile defense and our security arrangements. It is prudent that we continue to seek Polish ratification of the missile defense basing agreement and supplemental Status of Forces Agreement.

We are also in discussions with the Czech Republic to ensure that they continue to play a leadership role on missile defense within the Alliance. We have several joint projects already underway with our Czech partners, and are discussing several more.

Two weeks ago, in addition to visiting Warsaw and Prague to discuss the Phased, Adaptive Approach, I briefed the North Atlantic Council on our new approach and emphasized that we will pursue missile defense in a NATO context. The response was very positive, as evidenced by the NATO Secretary General's comments last week that "It is my clear impression that the American plan on missile defense will involve NATO…to a higher degree in the future…This is a positive step in the direction of an inclusive and transparent process, which I also think is in the interest of…the NATO alliance."

This phased adaptive approach better meets our security needs, and our security commitments to our European allies and partners. Russia's positive response to date is a useful collateral benefit, though we are not sure whether and how it will affect their perspective on missile defenses. We welcome Russian interest in our new approach as well as potential cooperation in sharing data from their radars. But this is not about Russia, and regardless of Russian reactions, we will continue to do whatever it takes to ensure our security and that of our European partners and allies.

In closing, it is important to note that the strategic thinking behind our new approach to European missile defense will also be valuable as we continue to address missile defense issues in other regions.

Because the type of system we are planning in Europe can be easily adapted to different geographic constraints, it can be applied in various regions around the globe, if necessary. In fact, a scaled-down version of this approach is already being used for the defense of Japan against North Korean missile threats, and for the defense of Israel against an Iranian missile attack. Because the assets of this system are either mobile or

transportable, the new approach provides future flexibility to reposition interceptors and sensors if the geopolitical environment changes. And because the systems will be upgraded over time, the new approach provides a natural evolution to match the threat.

As the President said, "our new missile defense architecture in Europe will provide a stronger, smarter, and swifter defense of American forces, and America's allies. It is more comprehensive than our previous program. It deploys capabilities that are proven (SM-3 IA) and cost-effective. And it sustains and builds upon our commitment to protect the U.S. homeland against long-range ballistic missile threats. And it ensures and enhances the protection of all of our NATO allies."

Thank you for your time. We will continue to work with you as we move forward on the Ballistic Missile Defense Review, and I look forward to your questions.

Unclassified Statement of

Lieutenant General Patrick J. O'Reilly, USA

Director, Missile Defense Agency

Before the

House Armed Services Committee

Regarding

Missile Defense in Europe

Thursday, October 1, 2009

Embargoed Until Released by the
House Armed Services Committee
United States House of Representatives

Lieutenant General Patrick J. O'Reilly, USA
Director, Missile Defense Agency
Before the
House Armed Services Committee
October 1, 2009

Good morning, Mr. Chairman, Mr. McKeon, distinguished Members of the Committee. I appreciate the opportunity to testify before you today on the technical and programmatic details of the President's decision to use a Phased Adaptive Approach to enhance missile defense protection for the United States and Europe for our friends, Allies, our forward deployed forces, civilian personnel, and their families there. This new proposal would provide a more powerful missile defense capability for NATO, enhance U.S. homeland defense, would be applicable in other theaters around the world to counter a growing ballistic missile threat, and would be more adaptable to respond to threat uncertainties and developments. With the Phased Adaptive Approach, we are not scrapping or diminishing missile defense – rather we are strengthening it and delivering more capability sooner.

In 2006 the Defense Department proposed a long-range missile defense of Europe that consisted of four components: a command and control system; 10 Ground Based Interceptors (or GBIs) in Poland; an X-

band discrimination radar in the Czech Republic; and an X-band precision tracking radar forward based in Southern Europe. Assuming a shot doctrine of two interceptors against each threat missile, the 2006 proposed missile defense architecture provided an upper-tier missile defense to intercept five Intermediate Range Ballistic Missiles (IRBMs) aimed at Europe, or it could intercept five Intercontinental Ballistic Missiles (ICBMs) aimed at the Continental United States from the Middle East. The most important component of the 2006 proposed architecture to the defense of the U.S. homeland was the forward based X-band radar in Southern Europe, which provided early and precise tracking of threat missiles from the Middle East, increasing the accuracy of the fire control instructions to our GBIs based at Fort Greely, Alaska and Vandenberg Air Force Base, California. We remain concerned about a future Iranian ICBM threat; therefore, we are retaining the forward-based X-band radar of the 2006 proposed European missile defense architecture in our new Phased Adaptive Approach proposal. We will also continue to improve our domestic GBI-based system and conduct research and development for the two-stage GBI in the near term.

Under the Phased, Adaptive Approach, we propose defending Europe in phases starting with the area most vulnerable to today's Iranian

missile threat: southern Europe. Phase 1 would consist of Aegis ships with Standard Missile (SM)-3 Block IA missiles deployed in the Mediterranean Sea and a forward-based sensor in southern Europe. This will provide protection across much of the southern tier of Europe against Iranian medium-range ballistic missiles.

We propose by 2015 the deployment of the SM-3 Block IB missile, which will have a greater capacity to use a network of sensors and greater ability to discriminate threat objects. Once this technology is proven in our test program these interceptors would be deployed at land- and sea-based locations and extend protection against medium-range ballistic missiles launched from the Middle East.

By 2018, the deployment of the SM-3 Block IIA missile, an interceptor with greater range currently being developed, could defend all of Europe from land- and sea-based locations. By 2020, our goal is to leverage the lightweight kill vehicle technology developed in the now terminated Multiple Kill Vehicle program to develop a higher velocity SM-3 Block IIB missile that would destroy ballistic missiles early in flight, during the ascent phase, from many hundreds of kilometers from the threat launch location. This missile would still fit on today's Aegis launch system. With that capability, two land-based SM-3 Block IIB sites could protect all of Europe. The

timelines I have presented allow for missile defense technologies to be tested and proven prior to deployment decisions.

A significant limitation of the previous European architecture was that the GBIs were used in both ICBM and IRBM defense roles. Although we have only tested the GBIs against IRBMs (ranges less than 5,000 km), it is currently our only interceptor designed against ICBMs. The earliest operational date of the 2006 proposed architecture is 2017 and more likely 2018 considering the host nation approvals that would have been required to construct the facilities. When deployed in 2017 the European based GBIs could be consumed by an attack of 5 IRBMs aimed at NATO countries, leaving no two-stage GBIs to contribute to U.S. ICBM defense. Therefore, the previously proposed European Defense architecture is insufficient to counter large raid sizes. Under the Phased, Adaptive Approach, the SM-3 Block IIB would be able to accommodate a large IRBM and ICBM missile threat and diversify the technology that we are using to counter Iranian ICBMs, providing a layered defense.

We have made significant advances in missile defense technologies that enable the Phased Adaptive Approach. First, the interceptors we are developing are smaller, faster and have greater on-board discrimination capability. The sea-based Aegis BMD SM-3 interceptor would provide a

very capable weapon for this particular mission due to its high acceleration, burn out velocity, proven track record (for the SM-3 IA), and our ability to rapidly increase the number of interceptors at any launch site. Since we began testing the operationally configured SM-3 Block 1A missile in June 2006, we successfully intercepted the target in 8 out of 9 attempts. We are also taking a deliberate approach to the development and testing of the next generation kill vehicle for the SM-3 interceptor, the SM-3 1B, which has a more advanced seeker and a fire control system that uses external sensors as well as its ship's radar. We have already demonstrated the higher risk components of the new kill vehicle: the solid propellant Divert and Attitude Control System, new seeker, and fire control system with good results. The first test of the SM-3 1B is scheduled for the winter of 2011.

The area of greatest opportunity for increased missile defense capability involves our achievements in developing faster and more accurate Command Control, Battle Management, and Communication capabilities, which combine data from a network of many different sensors (especially sensors that track missiles in the early phases of their flight), rather than using single large radars. Key to our successful intercept of the ailing satellite in February 2008 was our ability to combine data from sensors around the world and provide a highly accurate track of the

satellite to an Aegis ballistic missile defense ship and launch the modified SM-3 1A prior to the ship's radar seeing the satellite. We have had many other demonstrations of these capabilities to date, to include the most recent intercept test of the Ground-based Midcourse Defense system last December, when we combined the tracks of satellites, early warning radars, Sea Based X-band radar and forward-based radars on land and at sea to provide the GBIs with a very accurate targeting track. Additionally, we have also demonstrated the capability of Unmanned Aerial Vehicles as highly accurate forward-based missile defense sensors in the Navy's "Stellar Daggers" series of intercept tests last spring. Last week, we launched a pair of demonstration Space Tracking and Surveillance System (STSS) satellites that will detect and track ballistic missiles over their entire flight. Over the next few years we will conduct several tests using the tracking capabilities of these STSS demonstration satellites, including the launching of an interceptor from an Aegis ship, to intercept ballistic missile targets. Finally, at our External Sensors Laboratory at Schriever Air Force Base, Colorado, we continue to develop new algorithms and combine new sensor data to achieve even more accurate tracks than any individual sensor could produce.

A more advanced variant of the SM-3 has been under development since FY 2006. This interceptor will have the range to defend all of NATO from only a few small sites. This SM-3 is also more affordable than GBIs (you can buy four to seven production variants of the SM-3s (IA or IB) for the cost of one GBI). But the key attribute is that we can launch SM-3s from sea or sites on land, which gives us great flexibility in locating the interceptor launch point between the origin of the threat launch and the area we are trying to protect – a key enabler to intercepting threat missiles early in flight. One advantage of land-based SM-3s over the previous GBI missile field proposal is that they can be relocated if the direction of the threat changes rather than waiting the more than five years needed to construct a new GBI missile field.

I would note that the new Phased Adaptive Approach offers greater opportunities for our close allies, including Poland and the Czech Republic, to collaborate on the missile defense architecture — by hosting sites or providing funding or capabilities that could be linked to provide a network of missile defenses. Likewise, the radars at Armavir and Gabala could augment the proposed sensor network and that type of cooperation could perhaps be a catalyst for Russia to join countries participating in our cooperative development of missile defense technologies.

An additional advantage of the Phased Adaptive Approach is that efforts over the next several years to develop, test, and procure the sensor, command and control, and interceptor upgrades for deployment of this architecture have application in the United States and theaters other than Europe.

We are committed to fully funding this program as we prepare for the next budget submission to Congress. However, it is important that we have relief from rescissions and the flexibility to spend the unused FY 2009 RDT&E and some MILCON dollars associated with the previous European Site proposal. With relief from some of the constraints placed on our FY 2009 budget and some redirection of FY 2010 funds, we believe we can pursue this new architecture within our FY 2010 budget request.

I would note that both House and Senate authorizing committees very presciently included provisions in this year's National Defense Authorization bill that permit the Department to use FY 2009 and FY 2010 funding for an alternative architecture once the Secretary of Defense certifies that this architecture is as cost-effective, technically reliable, and operationally available as the previous program. I believe the President's new plan meets these criteria and would strongly reinforce NATO's overall approach to missile defense.

My assessment is that executing this approach is challenging, but no more challenging than the development of other missile defense technologies. It is more adaptable, survivable, affordable, and responsive than the previous proposal, and it enhances the resulting defense of the U.S. homeland and our European Allies. There will be setbacks, but the engineering is executable and development risks are manageable.

I look forward to discussing the specifics of the Phased, Adaptive Approach with Members and staff in this and other forums.

Thank you and I look forward to your questions.

Opening Statement of Ellen O. Tauscher
Under Secretary of State for Arms Control and International Security
House Armed Services Committee Hearing on European Missile Defense
October 1, 2009

INTRODUCTION

Chairman Skelton, Ranking Member McKeon, distinguished members of the House Armed Services Committee, thank you for the opportunity to testify before you today to discuss the President's decision to proceed with a new approach for European ballistic missile defense (BMD).

Much has been written about the President's decision, so I welcome the opportunity to set the record straight and restate what my colleagues from the Department of Defense (DOD) have said -- that the Obama Administration is fully committed to deploying timely, cost-effective, and responsive missile defenses to protect the United States, our deployed forces overseas, as well as our friends and allies from ballistic missile attack, and most importantly for today, our friends in Poland and the Czech Republic.

In my remarks today, I will focus on the foreign policy aspects of this initiative, and provide you my assessment of what our next steps should be in implementing our vision and decision.

Let me begin by saying that there has been the misconception, in some of the reporting both in the United States and overseas, that President Obama has decided to "forego," "cancel," or "shelve" plans for U.S. European-based BMD deployments. The implication is that we have abandoned our NATO Allies in

Europe – that we do not intend to abide by our Article 5 obligations with NATO, and that we have de-valued our treaty obligations to allies or other security commitments to friends.

Nothing could be further from the truth. As Secretary Clinton recently said:

> "...we are increasing that capacity and focusing it on our best understanding of Iran's current capabilities...we would never, never walk away from our Allies. We have recommitted ourselves to our Article 5 obligations under NATO."

FOREIGN POLICY BENEFITS OF THE PHASED, ADAPTIVE APPROACH

The President's decision to move forward with a new approach to European missile defense, outlined today in detail by my colleagues from the Defense Department, was based on the latest intelligence and what we understand the threat to be TODAY. The intelligence community assessment is that the threat of potential Iranian intercontinental ballistic missile (ICBM) capabilities has been slower to develop than previously estimated, while the threat from Iran's short- and medium-range ballistic missiles is developing more rapidly than previously projected. Our new approach provides more effective defenses against today's threat.

From a foreign policy perspective, our new approach has a number of advantages over the previous plan.

First, as the threat evolves, the system will evolve to protect **ALL** of our European NATO allies, not just some of them. One of the key limitations of the previous plan was that it failed to provide any protection to our allies who

currently face a threat from Iran's existing force of short- and medium-range ballistic missiles. Remember, the NATO Alliance is 60 years old and it has thrived because it is based on the principle of the indivisibility of security, namely, that an attack on one is an attack on all. As Secretary Clinton stated, "An attack on Warsaw is an attack on New York City. An attack on Prague is an attack on London or Paris or Berlin." We can't protect some and leave others vulnerable to potentially hostile states.

Second, our plan will put more interceptors in Europe than the previous administration's plan would have. Instead of 10 interceptors by 2018, this new plan will deploy scores more. Under the previous plan, if you fired 2 interceptors at each Iranian ICBM, Iran would have needed only 6 missiles to overwhelm the system. And because this system is more mobile and rapidly deployable than the previous plan, we will be able to tailor the numbers of deployed interceptors to the threat. This larger inventory will provide an extended deterrence benefit to the United States and our European allies. The greater number of interceptors will complicate any Iranian calculus to use, or threaten to use, its ballistic missiles as coercive weapons.

Third, I believe that placing an emphasis on "proven" capabilities, such as the Aegis SM-3 IA interceptor, can only increase the credibility of the United States commitments in the eyes of our Allies, and, I might add, our adversaries.

Finally, this new architecture provides an improved opportunity for other allies to participate in the system. Some allies already have assets – such as Aegis ships - that could be integrated into this system, should they decide to participate. In addition, in 2006, NATO initiated the Active Layered Theatre Ballistic Missile Defense (ALTBMD) program, with the objective of providing a common

command and control function for the protection of NATO deployed military forces. The United States will continue to advocate the expansion of the ALTBMD to include the protection of Allied populations and territory.

The Administration's "Phased, Adaptive Approach" to a European-based BMD architecture calls for fielding capabilities in phases that keep pace with the development of the evolving threat to Europe and the United States. The flexibility inherent in such a phased approach will provide our allies and us the opportunity to also "pace" our defense investments, buying only as much BMD as is needed, and ensuring we make prudent and cost-effective investments in self-defense.

This is good news for the NATO Alliance. By pacing the threat and deploying BMD systems to protect Allies as they become threatened, we avoid a key problem with the previous plan, which created the impression that there might be "two-tiers" of security among NATO Allies.

NATO

Since President Obama announced the decision on September 17, you've probably read a lot of opinions and press reporting regarding European reactions. I think the public reaction of foreign governments has been overwhelmingly positive to the President's decision. For example, I know that Chancellor Merkel, President Sarkozy, and Prime Minister Brown each made very complimentary remarks after the President's speech. Anders Fogh Rasmussen, NATO's Secretary General, welcomed the decision and stated that the:

> "...fact (is) that NATO will play a more prominent role in the U.S. plans for missile defense in Europe. That is a positive step. Now we will sit down

together and continue our work within NATO on how we can protect ourselves against missile threats based on the principles of solidarity and indivisibility of security."

Our new phased, adaptive architecture will shift the United States in a direction that is more consistent with the position approved by NATO Allies in the Strasbourg-Kehl Summit Joint Declaration on April 4, 2009, which stated that:

"...missile threats should be addressed in a prioritized manner that includes consideration of the level of imminence of the threat and the level of acceptable risk."

We believe that NATO Allies should work together to develop a capability that protects all NATO territory, starting with the most imminent threat, while being flexible and adaptive to incorporate expanded and/or upgraded capabilities to responsively adjust in a timely fashion as the threat evolves. We fully intend to work through NATO and hope that NATO will be able to move quickly in building a consensus on our proposed way-ahead.

POLAND AND THE CZECH REPUBLIC

We are very grateful for the considerable time and energy the Polish and Czech governments expended to support the previous U.S. planned system. As President Obama said in Prague on April 5, 2009:

"The Czech Republic and Poland have been courageous in agreeing to host a defense against these missiles."

As a result of these efforts, our bilateral relationships have expanded in both depth and breadth, and we consider these countries – both of whom have participated in Iraq and Afghanistan – to be among our closest and staunchest Allies. We remain committed to implementing the range of security and defense dialogues that were agreed upon in the 2008 Declarations on Strategic Cooperation, and look forward to bilateral strategic consultations with Poland the Czech Republic that the United States will be holding in the very near future.

As Secretary Clinton has said, Poland is "one of our closest allies." Poland was one of just three countries that entered Iraq with U.S. forces in 2003. Polish forces have served in Afghanistan since the onset of the NATO mission in 2004. When the United States asked NATO members to increase their troop contributions, Poland was the first to say "Yes." Poland is contributing in Afghanistan both in terms of combat troops, where 2,000 Polish troops lead the security effort in Ghazni Province, and development projects, where the Poles work closely with our U.S. Provincial Reconstruction Team in Ghazni. In short, Poland stands with us in dangerous places with dangerous missions, and has increased its contributions. The United States and NATO have important decisions to make on transatlantic and European security, on dealing with proliferation threats, on defense modernization, and on relations with Russia, to name just a few. It is fundamental that Poland and the United States move forward in tandem.

Promoting Poland's defense modernization and NATO interoperability is a top security priority for the USG. Our security assistance relationship with Poland is strong and growing. The Administration has requested a $20M increase in Foreign Military Financing (FMF) for Poland in FY10 for a total FMF allocation of $47M. These FMF funds help Poland to fulfill its force modernization goals, as

well as to procure equipment necessary for deployment alongside U.S. forces in Afghanistan. In FY09, International Military Education and Training (IMET) funds brought more than 60 Polish personnel to the United States to attend training and education courses alongside U.S. and foreign soldiers.

We will further demonstrate our commitment to Poland by continuing with plans to rotate a U.S. Army Patriot unit to Poland once a bilateral Supplemental Status of Forces Agreement is agreed, ratified, and implemented.

Czech contributions to U.S. global priorities have been far beyond what might be expected from a country of its size. In addition to an ongoing deployment in Kosovo, the Czechs have made oversized contributions to NATO efforts in Afghanistan, running a highly-praised PRT in Logar and providing security presences in Uruzgan, Kandahar and Kabul. The U.S. will continue to work with Czech partners to find solutions to its challenges and to identify areas where our military cooperation could be strengthened and broadened. One potential area that we are examining is military airlift, a critical area that has been identified by NATO as essential for joint operations.

The Administration has requested a $4M increase in Foreign Military Financing (FMF) for the Czech Republic in FY10 for a total FMF allocation of $7M. FMF funds for the Czech Republic help to support defense reform efforts as well as provide soldier equipment necessary for future deployment. Over 70 Czech personnel attended training in the United States under the International Military Education and Training Program (IMET). The Administration is seeking a $450K increase in Czech IMET for FY10 to continue to deepen this critical relationship.

On October 31, 2008, we signed the U.S.-Czech Ballistic Missile Defense Framework Agreement and hope to conclude soon the U.S. –Czech Research, Development, Test and Evaluation agreement, which will provide a means for defense cooperation not just in BMD but in other areas of mutual defense. We will continue to work on BMD research and development projects with Czech industry.

We also are looking at ways that Poland and the Czech Republic can participate actively in our BMD system as shaped by the U.S. "Phased, Adaptive Architecture" approach.

During my visit to both Poland and the Czech Republic, we offered to each country the opportunity to participate in our new BMD architecture. During our September 17 meeting in Warsaw, we offered Poland the opportunity to host a land-based SM-3 interceptor site that would, should it go forward, have many more interceptors than the ten fixed, ground-based BMD interceptors previously agreed upon. We believe the Ballistic Missile Defense Agreement signed by the Bush Administration could still be used to allow for basing of this new system in Poland.

We are also examining ways for the Czech Government, should it agree, to participate actively in this new missile defense architecture. We hope to demonstrate to the Czech Government our commitment to the Czech Republic's security through our continued dialogue on this and other issues.

RUSSIA

The one final point I'd like to address is our bilateral relationship with Russia. You've heard numerous Administration officials – including President Obama himself – explain candidly that the decision was simply 'not about Russia.'

As someone who sat in the senior-level interagency meetings as part of the decision making process, I can categorically tell you that the President's decision was based on the factors I outlined above – the Intelligence Community's updated threat assessment as well as progress over the last few years in BMD technologies and capabilities. The decision was not part of any trade-off or *quid pro quo* with Russia for a post-START Follow-on Treaty or any other on-going negotiation with Russia.

This was a decision about the nature and magnitude of the existing and near-term threat and the optimal system to defend against it that is supported by all elements of our military.

If, as a consequence of the change in the direction of our European-based BMD plans, Moscow now understands that our future BMD deployments will not pose a threat to Russia's strategic deterrent, and thus is now open to cooperation, including in BMD, then that is an added benefit to our initiative. But we have never linked BMD with progress in any other area.

The United States, NATO, and Russia have a common and urgent interest in BMD cooperation to counter emerging threats. We seek to expand our cooperation with Russia across the board, including in the field of BMD. We are interested in, for example, developing laser and optic technologies and conducting joint analyses of alternative U.S.-Russia-NATO BMD architectures for defending against common, regional threats. The United States is interested in exploring the mutual benefits associated with Russia's proposals initially offered in 2007-08 for sharing data from the Russian-leased, Azerbaijani-owned early warning radar at Qabala, and the early warning radar at Armavir in southern Russia.

In addition to this, in effect, joint monitoring of threats from the Middle East, we also want to cooperate with Russia in other types of early warning cooperation. The U.S.-Russia Joint Data Exchange (JDEC) and Pre-Launch Notification System (PLNS) agreements signed in 2000, but not yet implemented, are examples of the enhanced cooperation we would like to achieve with Russia in the joint monitoring and the pre-notification of ballistic missile, as well as space launch vehicle, launches.

Furthermore, we are discussing with Russia how to provide each other with timely notification of long-range BMD interceptor launches via the Moscow-Washington Direct Communications Link (popularly known as the "Hotline") in the event that the United States, or the Russian Federation, launches in the future long-range BMD interceptors to counter, for example, intermediate- or intercontinental-range ballistic missiles. The risk is that a U.S. Ground Based Interceptor (GBI) launched from Ft. Greely, Alaska, or Vandenberg Air Force Base, California, to defend against either an intermediate- or intercontinental-range ballistic missile launched against the United States might be mischaracterized by the Russian early warning system as on an azimuth and trajectory heading toward the territory of the Russian Federation. These initiatives provide important means for preventing such a false warning of ballistic missile attack being generated by either the U.S. or Russian early warning system.

I look forward to begin discussing the above ideas under the auspices of the President's Bilateral Commission and its Working Group on Arms Control and International Security, which I co-Chair with my Russian counterpart, when we meet in Moscow later this month.

CONCLUSION:

As President Obama said on September 17, the United States is fully committed to deploying BMD systems which are adaptable and responsive to the emerging threats of the 21st century. We live in a very dynamic security environment, one where new threats can materialize more rapidly. This requires that we review our previous assumptions to ensure that our plans still provide for the security of the American people, our military forces overseas, and our friends and allies.

As a result of the most recent intelligence analysis, the national security team recommended to the President that we change our approach to BMD in Europe. The Phased Adaptive Approach will not only provide protection to those of our NATO Allies who are currently threatened by short- and medium-range ballistic missiles launched out of the Middle East, but its inherent flexibility will enable the United States to adapt more rapidly to a complex and dynamic threat environment characterized by the spread of weapons of mass destruction, and ballistic missiles of increasingly greater ranges, payloads, and sophistication. Our Phased, Adaptive Approach to European BMD is capable of growth to respond effectively, timely, and responsively as the threat evolves.

We remain committed to our Polish and Czech Allies. As I mentioned, we have a number of potential opportunities to explore in the field of BMD and other areas of security and defense cooperation.

In sum, we have not abandoned our NATO Allies. To the contrary, our new approach will strengthen the Alliance's ability to deter, and if necessary, defeat ballistic missile attacks from Iran.

As always, we will remain closely engaged with Congress as we move forward on this important issue. Mr. Chairman, members of the Committee, I look forward to your questions.

QUESTIONS SUBMITTED BY MEMBERS POST HEARING

OCTOBER 1, 2009

QUESTIONS SUBMITTED BY MR. WILSON

Mr. WILSON. As we discuss the current threat of ballistic missile attacks in Eastern Europe and the Middle East or Persian Gulf, how will the redeployment of sea-based missile defense systems from the Pacific affect the United States' ability to protect its interests in the Pacific, such as Guam, and its allies, including the countries of Japan, the Philippines, South Korea, and Taiwan? What feedback have you received from government officials in these countries since President Obama's decision to recommit missile shields from the Pacific?

Secretary FLOURNOY. The new European-based ballistic missile defense (BMD) program—the Phased, Adaptive Approach (PAA)—in no way abandons or degrades our commitments to our important friends and allies in East Asia, nor does it compromise the missile defense capabilities provided to our military commanders in the Pacific. The PAA will leverage missile defense assets that in some cases have yet to be permanently assigned to a particular region and, in other cases, will be purchased in future budget requests. European-based BMD would not rely on assets and capabilities already in place in the Pacific.

The decision to pursue this new European BMD architecture was driven, in part, by early conclusions from the ongoing Ballistic Missile Defense Review (BMDR). The BMDR, which will be presented to Congress in January 2010, will address the central aspects of our ballistic missile defense program, including the methodology for the allocation of BMD assets. As we move forward with decisions on where to deploy those assets, we will ensure that the Combatant Commanders in the Pacific, Europe, the Middle East, and elsewhere are fully involved. We will also continue to consult with our Allies.

Mr. WILSON. Further, the United States has over 325,000 American military personnel, not to mention their dependents, stationed in the Pacific. I am concerned that the re-allocation of sea-based missile defense platforms away from our nation's largest area of responsibility jeopardizes their safety. As the President's new missile defense architecture was developed, what consideration was given to the safety of Americans in the Pacific Theater, including in Guam, Alaska, and Hawaii? It would be a severe risk management mistake to sacrifice security in the Pacific in order to attempt to realize the potential cost savings attributed to a new missile defense architecture, some elements of which are not even invented yet.

Secretary FLOURNOY. The new European-based missile defense program in no way abandons or degrades our commitments to our important Allies in East Asia, nor does it compromise the missile defense capabilities provided to our commanders in the Pacific. Missile defenses in Europe will leverage assets that in some cases have yet to be permanently deployed to a particular region or, in other cases, will be purchased with future budget requests. European-based missile defense will not rely on assets and capabilities already fielded in the Pacific.

Mr. WILSON. As we discuss the current threat of ballistic missile attacks in Eastern Europe and the Middle East or Persian Gulf, how will the redeployment of sea-based missile defense systems from the Pacific affect the United States' ability to protect its interests in the Pacific, such as Guam, and its allies, including the countries of Japan, the Philippines, South Korea, and Taiwan? What feedback have you received from government officials in these countries since President Obama's decision to recommit missile shields from the Pacific?

General O'REILLY. As head of the Missile Defense Agency, I am responsible for technical aspects of the Ballistic Missile Defense System including the development, testing, and fielding of the architecture's components. I defer to my colleagues in Office of the Secretary of Defense and the Department of State who are in a better position to respond to questions that have policy or diplomatic implications.

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Mr. WILSON. As we discuss the current threat of ballistic missile attacks in Eastern Europe and the Middle East or Persian Gulf, how will the redeployment of sea-based missile defense systems from the Pacific affect the United States' ability to protect its interests in the Pacific, such as Guam, and its allies, including the countries of Japan, the Philippines, South Korea, and Taiwan? What feedback have you received from government officials in these countries since President Obama's decision to recommit missile shields from the Pacific?

General CARTWRIGHT. The new European-based BMD program—the Phased, Adaptive Approach (PAA)—in no way abandons or degrades our commitments to our important Allies in East Asia, nor does it compromise the missile defense capabilities provided to our military commanders in the Pacific. At this point, no redeployment decisions have been made, and no orders have been given to redeploy Pacific-based ships based on the Presidential decisions on European Missile Defense.

The decision to pursue this new European BMD architecture was driven in part by early conclusions from the ongoing Ballistic Missile Defense Review (BMDR). The BMDR, which will be presented to Congress in January 2010, will address the central aspects of our ballistic missile defense program, including the methodology for the allocation of BMD assets. As we move forward with decisions on where to deploy those assets, we will ensure that the Combatant Commanders in the Pacific, Europe, Middle East, and elsewhere are fully involved.

Mr. WILSON. Further, the United States has over 325,000 American military personnel, not to mention their dependents, stationed in the Pacific. I am concerned that the re-allocation of sea-based missile defense platforms away from our nation's largest area of responsibility jeopardizes their safety. As the President's new missile defense architecture was developed, what consideration was given to the safety of Americans in the Pacific Theater, including in Guam, Alaska, and Hawaii? It would be a severe risk management mistake to sacrifice security in the Pacific in order to attempt to realize the potential cost savings attributed to a new missile defense architecture, some elements of which are not even invented yet.

General CARTWRIGHT. At this point, no redeployment decisions have been made, and no orders have been given to redeploy Pacific-based ships based on the Presidential decisions on European Missile Defense. Future decisions regarding the deployment of Missile Defense assets will be made in full consideration of all U.S. responsibilities for the defense of citizens, forces, friends and allies, and with input from the Combatant Commanders in the Pacific, Europe, the Middle East, and elsewhere.

Mr. WILSON. As we discuss the current threat of ballistic missile attacks in Eastern Europe and the Middle East or Persian Gulf, how will the redeployment of sea-based missile defense systems from the Pacific affect the United States' ability to protect its interests in the Pacific, such as Guam, and its allies, including the countries of Japan, the Philippines, South Korea, and Taiwan? What feedback have you received from government officials in these countries since President Obama's decision to recommit missile shields from the Pacific?

Secretary TAUSCHER. Our plans will in no way reduce our missile defense capabilities in the Pacific. The Phased Adaptive Approach (PAA) does not take sea-based Ballistic Missile Defense (BMD) capabilities deployed in the Asia/Pacific region and re-deploy them to Europe. Under the President's plan, we will substantially increase the deployment of proven missile defense capabilities to counter the most likely missile threats. The President's FY 2010 budget requests increased funding beyond the Bush Administration's plan for key missile defense assets to include making six additional Aegis ships BMD-capable.

We have received positive feedback from government officials in the Pacific region about the President's plan. We believe that the proposed "Phased, Adaptive Approach" architecture has applicability to other regions of the world. The United States will discuss with our allies and friends worldwide about how we can further enhance regional security and stability by countering the threat of ballistic missiles with effective, timely, and responsive defensive capabilities.

Mr. WILSON. Further, the United States has over 325,000 American military personnel, not to mention their dependents, stationed in the Pacific. I am concerned that the re-allocation of sea-based missile defense platforms away from our nation's largest area of responsibility jeopardizes their safety. As the President's new missile

defense architecture was developed, what consideration was given to the safety of Americans in the Pacific Theater, including in Guam, Alaska, and Hawaii? It would be a severe risk management mistake to sacrifice security in the Pacific in order to attempt to realize the potential cost savings attributed to a new missile defense architecture, some elements of which are not even invented yet.

Secretary TAUSCHER. I understand, and fully share, your concern for the protection of U.S. citizens who live in the Pacific region and our military forces deployed there. Our plans will in no way reduce or degrade our missile defense capabilities in the Asia/Pacific region. We will maintain our Ground-Based Interceptors in Alaska and California to protect the continental United States and Alaska and Hawaii against long-range missile attacks from Iran or North Korea. The Phased Adaptive Approach (PAA) does not take sea-based Ballistic Missile Defense (BMD) capabilities deployed in the Asia/Pacific region and re-deploy them to Europe. Under the President's plan, we will substantially increase the deployment of proven missile defense capabilities to counter the most likely missile threats. The President's FY 2010 budget requests increased funding for key missile defense assets to include making six additional Aegis ships BMD-capable.

QUESTIONS SUBMITTED BY MR. TURNER

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach:

a. What were the specific locations (or are the planned locations) for missile defense assets in Europe, including ship stations and land-basing sites, and interceptor inventories required to provide coverage for each of the four phases?

b. What level of coverage (e.g., percentage) is provided for Europe in each of the four phases?

Secretary FLOURNOY. The new European-based ballistic missile defense (BMD) program—the Phased, Adaptive Approach (PAA)—will be fielded over four phases between now and 2020.

Phase I, to be deployed in 2011, will use existing missile defense systems to defend against short- and medium-range ballistic missiles. Phase I will focus on the protection of Southern Europe by utilizing sea-based Aegis missile-defense-capable ships and interceptors (the SM–3 Block IA). The first phase will also include a forward-based radar that will augment homeland defense capabilities already in place in Alaska and California.

Phase II, to be deployed in the 2015 timeframe, will enhance our capabilities by fielding a more advanced interceptor (the SM–3 Block IB) and additional sensors. In addition to sea-based locations, Phase II will include a land-based site in Southern Europe.

Phase III, to be deployed in the 2018 timeframe, will improve coverage against medium- and intermediate-range threats. Phase III will rely on an upgraded Standard Missile-3 (the SM–3 Block IIA), which is already under development, at sea- and land-based sites, and will extend coverage to all of Europe.

Phase IV, to be deployed in the 2020 timeframe, will provide a capability against a potential intercontinental ballistic missile threat to the United States. This phase will leverage yet another upgrade to the Standard Missile-3, the Block IIB. All four phases will include upgrades to the missile defense Command and Control system.

Although specific interceptor inventories and locations for the sea- and land-based sites have yet to be determined, the Administration is working these matters as part of several internal processes, including the Ballistic Missile Defense Review, studies on the global allocation of ballistic missile defense assets, and formulation of the Administration's budget request for fiscal year 2011. Although it is premature to discuss the specific force structure of missile defense capabilities around the world, it is important to understand that the PAA will field a significantly larger number of interceptors and sensors in Europe by leveraging proven, mobile, and more cost-effective platforms like AN/TPY–2 radars, airborne infrared sensors, and Standard Missile (SM)-3s.

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach, were any cost estimates on the new approach conducted? If so, what are the estimated costs of the new four-phased approach?

Secretary FLOURNOY. Several factors were taken into consideration when revising the approach to European-based ballistic missile defense, including the cost of the system in relation to the capabilities it will provide. The bottom line is that given the capabilities required to be responsive to the threat that we face today, the re-

vised approach utilizes mature, proven sea-based and land-based missile defense capabilities that are more cost-effective than the components of the previous plan.

As General Cartwright and General O'Reilly stated in testimony before the Senate Armed Services Committee on September 24th and the House Armed Services Committee on October 1st, the Standard Missile-3 (SM–3), at around $10 million apiece, is much cheaper than the Ground-Based Interceptor, which costs approximately $70 million per interceptor. The SM–3 also provides the flexibility to deploy the system on sea, land, or both. Inherent in this flexibility is the ability to manage the costs associated with maintaining a deployed system more effectively.

Mr. TURNER. Given the increased reliance on Aegis ships in the European theater, what additional requirements are expected to be placed on the U.S. Navy and what impact would this increased reliance have on the Navy's ability to meet its worldwide missions and needs?

Secretary FLOURNOY. The new European missile defense program in no way abandons or degrades our commitments to other important friends and allies around the world. In particular, the revised approach in Europe does not compromise the missile defense capabilities provided to our military commanders in the Pacific, where Aegis ships and Standard Missile-3s are an integral part of our missile defense architecture.

As the Department works through the global allocation of missile defense assets to meet the warfighter's needs, the Military Departments, including the Navy, and the Combatant Commanders responsible for individual regions around the world are all fully involved in the planning for employing these assets. We are also working closely with the Military Departments—in particular the Navy—to ensure that their mission requirements are fully funded.

Mr. TURNER. Secretary Flournoy and General Cartwright, you both indicated that development and testing of the two-stage Ground-Based Interceptor (GBI) that was planned for Poland will continue. For how long (or until what specific milestones) does the Department plan to continue development and testing of the two-stage GBI? Will it be a hedge should the SM–3 Block IIA or IIB interceptors run into problems or delays, and if so, will there be a down-select in the future between the two-stage GBI and SM–3 Block IIA or IIB interceptors based on the progress made on each?

Secretary FLOURNOY. Development and testing of the 2-stage Ground Based Interceptor (GBI) will continue in order to provide a hedge against long-range threats that could potentially emerge in the future. However, we believe, as does the Joint Staff and the Missile Defense Agency (MDA), that the Standard Missile-3s (SM–3) currently under development, as well as the SM–3 Block IIB that will be developed as part of the European-based missile defense system, will provide a sufficient capability against all ranges of ballistic missile threats.

Although MDA can better address the specific development and testing schedules for the 2-stage GBI, I will note that there is currently no plan for a "down-select" between it and the SM–3 Block IIA or IIB, primarily because there is no plan at this time to enter into production of the GBIs. Currently, all planned activities for the 2-stage GBI are developmental in nature.

Mr. TURNER. NATO's missile defense architecture efforts to-date assumed that the previous approach would be "linked" with other NATO missile defense efforts. What is the schedule and plan for revising NATO's missile defense architecture to incorporate this new approach and, with the U.S. now providing "more comprehensive" coverage of Europe, what role and contribution will our European allies have? Does the Administration intend to seek NATO support for its new approach similar to that expressed in the April 2008 Bucharest Summit declaration?

Secretary FLOURNOY. Work is underway at NATO to examine the possible expansion of the scope of NATO's Active Layered Theater Ballistic Missile Defense (ALTBMD) system beyond the defense of deployed forces, to include the defense of Allies' territory and populations. The U.S. plan for gaining NATO support includes asking Allies at the December Meeting of Foreign Ministers to affirm that missile defense for NATO territories and populations is an appropriate and viable mission for the Alliance and, in the same spirit as the Bucharest Summit declaration, that the new U.S. Phased Adaptive Approach (PAA) is a valuable contribution to that mission. The role and contribution of European Allies would be to expand ALTBMD's common-funded C2 backbone to include coverage of NATO territory and populations into which U.S. and other Allied national contributions would be connected. An Alliance decision on the expansion of ALTBMD could come at the fall 2010 NATO Summit in Lisbon. The United States will encourage Allied contribution of national systems already acquired or that may be acquired in the future, such as various types of interceptors, sensors, and sites for the deployment of missile defense assets.

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach:

a. What were the specific locations (or are the planned locations) for missile defense assets in Europe, including ship stations and land-basing sites, and interceptor inventories required to provide coverage for each of the four phases?
b. What level of coverage (e.g., percentage) is provided for Europe in each of the four phases?

General O'REILLY. With the exception of Poland, which has recently agreed to begin negotiations over hosting a land-based site during Phase 3 of the European Phased Adaptive Approach (EPAA), determinations for specific locations for European missile defense components are pending conclusion of consultations with potential host nations and NATO. It would be premature to announce EPAA locations prior to the completion of these discussions. Similarly, specific interceptor inventories necessary to provide missile defense capabilities in each of the four phases are subject to internal Defense Department deliberations which will closely consider operational, programmatic and budgetary requirements for the EPAA.

Assuming continued growth in Iranian ballistic missile capabilities, the EPAA will unfold in the following stages over the coming years:

- Phase 1—2011 timeframe; existing/maturing systems v. SRBM/MRBM threat
  - Use ship-based SM–3 Block IA interceptors operating in the Mediterranean Sea to provide missile defense coverage for Southern Europe.
  - Deploy an AN/TPY–2 sensor in the region to detect, identify and track incoming threats.
- Phase 2—2015 timeframe; enhanced missile defense systems v. SRBM/MRBM threat
  - Use the more advanced SM–3 Block IB interceptor, deployed in the Mediterranean Sea and on a land-based site in Southern Europe, to enhance coverage of Southern Europe.
  - Begin deploying a distributed network of sea-, land-, and air-based sensors to augment the AN/TPY–2 or the Airborne Early Infrared Sensor.
- Phase 3—2018 timeframe; improved area coverage v. MRBM/IRBM threat
  - Use SM–3 Block IIA interceptors, deployed on sea and on two land-based sites (this phase adds a second site, which Poland has agreed to host), to provide coverage for all of Europe.
  - Continue to deploy forward based sensor(s).
- Phase 4—2020 timeframe; capability v. potential ICBM threat

If the ICBM threat evolves:

  - Use SM–3 Block IIB interceptors, deployed on two land-based sites, to augment the defense of the U.S. against a potential ICBM threat and protect all of Europe.
  - Sea-based SM–3 Block IIA would provide surge capacity

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach, were any cost estimates on the new approach conducted? If so, what are the estimated costs of the new four-phased approach?

General O'REILLY. MDA is currently building the FY11–15 Future Year Defense Plan (FYDP) and out-year funding profiles to reflect the new architecture. These will be available with the release of PB11. The below chart reflects MDA's proposed plan for FY09 and FY10 RDT&E European Component funding.

Section 235 of the FY 2010 National Defense Authorization act authorizes MDA to use RDT&E funds for the President's new Phased Adaptive Approach that were authorized and appropriated in FY09 and requested in FY10 for the former European Missile Defense program of record, following the submission of a report to Congress from the Secretary of Defense certifying certain conditions.

FY09 RDT&E Unobligated Funds	**$M**
European Interceptor Site	173
European Midcourse Radar	64

FY09 RDT&E Unobligated Funds	$M
European Communication Support	22
FY10 RDT&E Budget Request	
European Component	51
FY09 Unobligated and FY10 Request Total	**309**

Current FY10 RDT&E Requirements	$M
Aegis Ashore Development and Test	244
Systems Engineering	26
Total Current FY10 RDT&E Required	**270**

Mr. TURNER. Given the increased reliance on Aegis ships in the European theater, what additional requirements are expected to be placed on the U.S. Navy and what impact would this increased reliance have on the Navy's ability to meet its worldwide missions and needs?

General O'REILLY. As head of the Missile Defense Agency, I am responsible for technical aspects of the new architecture including the development, testing, and fielding of the architecture's components. I defer to my colleagues in the Department of the Navy who are responsible for answering questions that concern the Navy's ability to meet its missions.

Mr. TURNER. NATO's missile defense architecture efforts to-date assumed that the previous approach would be "linked" with other NATO missile defense efforts. What is the schedule and plan for revising NATO's missile defense architecture to incorporate this new approach and, with the U.S. now providing "more comprehensive" coverage of Europe, what role and contribution will our European allies have? Does the Administration intend to seek NATO support for its new approach similar to that expressed in the April 2008 Bucharest Summit declaration?

General O'REILLY. As head of the Missile Defense Agency, I am responsible for technical aspects of the Ballistic Missile Defense System including the development, testing, and fielding of the architecture's components. I defer to my colleagues in Office of the Secretary of Defense and the Department of State who are in a better position to respond to questions that have policy or diplomatic implications.

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach:

a. What were the specific locations (or are the planned locations) for missile defense assets in Europe, including ship stations and land-basing sites, and interceptor inventories required to provide coverage for each of the four phases?
b. What level of coverage (e.g., percentage) is provided for Europe in each of the four phases?

General CARTWRIGHT. a. Specific asset locations were not determined during the development of the four-phased approach. The flexibility inherent in the approach allows for a range of options regarding asset placement and ship stations. Specific shore locations will be determined during bilateral and NATO negotiations. Similarly, interceptor inventories were not specified, as these can be adjusted to provide the desired capacity as the threat evolves.

b. Coverage areas vary based on threat missile type and launch site. However, NATO strictures direct 100% protection of all member nations from anticipated threats and the four-phased approach to missile defense in Europe is designed with that goal in mind.

Phase I, to be deployed in 2011, will use existing missile defense systems to defend against the assessed threat from short- and medium-range ballistic missiles. Phase I will focus on the protection of Southern Europe by utilizing sea-based Aegis missile-defense-capable ships and interceptors (the SM–3 Block IA) and a forward-based radar that will augment homeland defense capabilities already fielded in Alaska and California.

Phase II, to be deployed in the 2015 timeframe, will field a more advanced interceptor (the SM–3 Block IB) and additional sensors. In addition to sea-based locations, Phase II will include a land-based site in Southeast Europe.

Phase III, to be deployed in the 2018 timeframe, will improve coverage against medium- and intermediate-range threats with a second land-based site and an upgraded Standard Missile-3 (the SM–3 Block IIA), and will extend coverage to all of Europe.

Phase IV, to be deployed in the 2020 timeframe, will provide a capability against a potential intercontinental ballistic missile threat to the United States. This phase will leverage yet another upgrade to the Standard Missile-3, the Block IIB.

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach, were any cost estimates on the new approach conducted? If so, what are the estimated costs of the new four-phased approach?

General CARTWRIGHT. The initial stages of the four-phased approach were designed to be met within current FYDP allocations for MDA and the Services. In coordination with the Joint Staff, Military Services, Missile Defense Agency, and other missile defense stakeholders, the Department of Defense is currently building next year's budget request. The fiscal year 2011 budget request that will be released to Congress in February will include estimated funding profiles through fiscal year 2015 to reflect the new European missile defense architecture. The below chart reflects MDA's proposed plan for FY09 and FY10 RDT&E European Component funding.

Section 235 of the FY 2010 National Defense Authorization act authorizes MDA to use RDT&E funds for the President's new Phased Adaptive Approach that were authorized and appropriated in FY09 and requested in FY10 for the former European Missile Defense program of record, following the submission of a report to Congress from the Secretary of Defense certifying certain conditions.

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Current FY10 RDT&E Requirements	**$M**
Aegis Ashore Development and Test	244
Systems Engineering	26
Total Current FY10 RDT&E Required	**270**

While we are still working through the total estimated costs for the revised European-based missile defense system, we will begin buying many of the components in the Administration's budget request for fiscal year 2011.

Mr. TURNER. Given the increased reliance on Aegis ships in the European theater, what additional requirements are expected to be placed on the U.S. Navy and what impact would this increased reliance have on the Navy's ability to meet its worldwide missions and needs?

General CARTWRIGHT. The new European missile defense program in no way abandons or degrades our commitments to other important Allies around the world. In particular, the revised approach in Europe does not compromise the missile defense capabilities provided to our military commanders in the Pacific, where Aegis ships and Standard Missile-3s are an integral part of our missile defense architecture.

As the Department works through the global allocation of missile defense assets to meet the Warfighter's needs, the Military Services, including the Navy, and the Combatant Commanders responsible for individual regions around the world are all fully involved in the planning for employing these assets. We are also working closely with the Services—in particular the Navy—to ensure that their mission requirements are fully funded.

Mr. TURNER. Secretary Flournoy and General Cartwright, you both indicated that development and testing of the two-stage Ground-Based Interceptor (GBI) that was planned for Poland will continue. For how long (or until what specific milestones) does the Department plan to continue development and testing of the two-stage GBI? Will it be a hedge should the SM–3 Block IIA or IIB interceptors run into problems or delays, and if so, will there be a down-select in the future between the two-stage GBI and SM–3 Block IIA or IIB interceptors based on the progress made on each?

General CARTWRIGHT. MDA intends to continue to develop and test the two-stage GBI. Future decisions on the program will be informed by the results of those tests. The SM–3 program is a separate effort from 2-stage GBI. There are currently no plans to make adjustments to the SM–3 development program based on the results of 2-stage GBI testing or development, primarily because there is no plan to enter into production of 2-stage GBI's.

Mr. TURNER. NATO's missile defense architecture efforts to-date assumed that the previous approach would be "linked" with other NATO missile defense efforts. What is the schedule and plan for revising NATO's missile defense architecture to incorporate this new approach and, with the U.S. now providing "more comprehensive" coverage of Europe, what role and contribution will our European allies have? Does the Administration intend to seek NATO support for its new approach similar to that expressed in the April 2008 Bucharest Summit declaration?

General CARTWRIGHT. The United States will provide Phased Adaptive Approach (PAA) capabilities over time and will seek a NATO decision to provide a C2 backbone through expansion of the Active Layered Theater Ballistic Missile Defense (ALTBMD) program to link Allies' missile defense assets. If NATO adopts the mission of missile defense of Allies' territory and populations, the PAA would be the U.S. contribution to that effort. Allies will have opportunities to contribute national systems already acquired, or that may be acquired in the future, such as Aegis sea-based systems, PATRIOT, MEADs, THAADs additional upper-tier interceptors, sensors, sites for the deployment of missile defense assets, and support or defense functions for PAA assets. The PAA is consistent with the Strasbourg-Kehl tasking to address threats in a prioritized manner and aligns to 2008 and 2009 NATO summit declarations, and we therefore anticipate support for the PAA in NATO communiqué language from the upcoming NATO Foreign Ministerial in December 2009.

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach:

a. What were the specific locations (or are the planned locations) for missile defense assets in Europe, including ship stations and land-basing sites, and interceptor inventories required to provide coverage for each of the four phases?

b. What level of coverage (e.g., percentage) is provided for Europe in each of the four phases?

Secretary TAUSCHER. The Phased Adaptive Approach (PAA) is responsive to the existing threat and will incorporate relevant technologies quickly and cost-effectively to respond to evolving threats. Upon completion of Phases One and Two, the PAA will be able to defend NATO members threatened by short- and medium-range ballistic missiles. Phase Three will counter the threat from intermediate-range ballistic missiles and enhance protection against short- and medium- range ballistic missiles. Phase Four will add coverage against the potential future intercontinental ballistic missile threat to the United States.

Details regarding specific locations of Ballistic Missile Defense assets, the required inventory of interceptors, and the level of defensive coverage provided to Europe would need to be provided by the Department of Defense in a closed session.

Mr. TURNER. In the analysis supporting the decision on a new four-phased approach, were any cost estimates on the new approach conducted? If so, what are the estimated costs of the new four-phased approach?

Secretary TAUSCHER. The Department of Defense is working through the total estimated costs for the four-phased approach, which will be reflected in the President's Budget Request for FY 2011.

Mr. TURNER. Given the increased reliance on Aegis ships in the European theater, what additional requirements are expected to be placed on the U.S. Navy and what

impact would this increased reliance have on the Navy's ability to meet its worldwide missions and needs?

Secretary TAUSCHER. The Phased Adaptive Approach (PAA) does not take sea-based Ballistic Missile Defense (BMD) capabilities deployed in the Pacific and redeploy them to Europe. Under the President's plan, we will substantially increase the deployment of proven missile defense capabilities to counter the most likely missile threats. The President's FY 2010 budget requests increased funding for key missile defense assets to include making six additional Aegis ships BMD-capable.

Mr. TURNER. NATO's missile defense architecture efforts to-date assumed that the previous approach would be "linked" with other NATO missile defense efforts. What is the schedule and plan for revising NATO's missile defense architecture to incorporate this new approach and, with the U.S. now providing "more comprehensive" coverage of Europe, what role and contribution will our European allies have? Does the Administration intend to seek NATO support for its new approach similar to that expressed in the April 2008 Bucharest Summit declaration?

Secretary TAUSCHER. At the April 4, 2009 NATO Summit in Strasbourg/Kehl, Heads of State and Government tasked NATO to develop recommendations comprising architectural alternatives for a possible NATO missile defense system. They also requested an evaluation of the policy, military, and technical work related to a possible expanded role of the Active Layered Theatre Ballistic Missile Defense (ALTBMD) program beyond the protection of deployed forces to include territorial missile defense. This work remains on schedule; responses to these taskings will be considered at the Lisbon Summit in 2010.

We have offered the Phased Adaptive Approach as a U.S. contribution to a potential NATO missile defense effort. At the upcoming NATO Foreign Ministerial on December 3–4, we will seek NATO endorsement of the PAA. We have asked NATO members to consider contributing their own missile defense capabilities to a potential missile defense system for the protection of NATO territory and populations.

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