

**Remarks by the Director of National Intelligence
Ambassador John D. Negroponte**

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AS PREPARED FOR DELIVERY

Thank you for that very kind introduction, Lee. I'm delighted to be here at the Woodrow Wilson International Center for Scholars this evening and pleased to see many good friends in attendance.

Tonight I would like to focus on a public policy concern that I think is relevant to Wilson Center's broad agenda and narrow it down a bit as I go to address some of my particular policy concerns as Director of National Intelligence.

The issue is America's competitiveness in the fields of science and technology, which was assessed from an economic perspective earlier this year in an excellent report by the National Academies of Sciences and Engineering and the Institute of Medicine.

That report, called *Rising Above the Gathering Storm*, described a world that is being transformed from a scientific and technological perspective at a breath-taking rate of change—and it offered a number of alarming statistics about how America is responding to that change. I'll cite a few of those statistics:

- Some 34% of doctoral degrees in natural sciences and 56% of engineering PhDs in the United States are awarded to foreign-born students.
- In South Korea, 38% of all undergraduates receive their degrees in natural science or engineering. In France, the figure is 47%, in China, 50%, and in Singapore, 67%. The corresponding figure in the United States is 15%.

These statistics should give us pause when we consider the fact that we are living in the midst of a sustained technical revolution.

- Humankind's knowledge base—in simple terms, what we know—has increased exponentially in the last 15 years and access to this new information is expanding considerably.
- The National Security Agency estimates that, by next year, the Internet will carry 647 petabytes of data each day. That's 647 followed by 15 zeros. By way of comparison, the holdings of the Library of Congress represent only 0.02 petabytes.
- This year there are two billion cell phones in use worldwide. By 2009, there will be three billion.

Advances in technology, then, are accelerating, and thanks to globalization, they are spreading. The United States no longer corners the market on technology in general and in fact lags in some very significant segments of the market. State-of-the-art commercial technology is available globally and at very favorable prices. In 1990 we had a positive trade balance for high-tech products in the vicinity of \$30 billion. In 2003, we had a negative trade balance for high-tech products in the vicinity of \$30 billion.

The primary focus of the National Academies' report was on economic competitiveness. My concerns, in implementing intelligence reform, center on national security, which of course includes, but is by no means limited to, US economic competitiveness. Let me give you just a few examples of the challenges we face.

It is well known that young jihadists in Internet cafes, armed with laptops and DVD players, are constantly aiming to further extremist ideology and are attempting to replicate training via the Internet.

Islamic extremist fighters utilize improvised explosive devices and other weaponry, and their methods are becoming increasingly lethal due to technological advances. They are unleashing destruction in Iraq, Afghanistan, and most recently in Lebanon.

In other words, we are confronting adversaries who are achieving exponential improvements in their operations through widely available, cutting-edge technology in which their R&D costs are any CEO's dream: zero.

I could go on in this vein for some time, but I think the point is made that we've got a competitive challenge that will negatively impact our national security unless we take steps to deal with it right away.

The Intelligence Reform and Terrorism Prevention Act of 2004 understood this challenge. It created the position of Director of Science and Technology within my office and established the Director of National Intelligence Science and Technology Committee, comprising the principal science officers from various elements of the Intelligence Community.

These senior scientists have reviewed our S&T performance and identified three categories of "gaps" that we must address: mission gaps, capability gaps, and underlying process gaps. I'd like to talk to you a bit about each of these gaps, and then share with you our efforts to close them.

To cite a few mission gaps, we need to be able to do a better job:

- Locating terrorists;
- Identifying and locating WMD activities by nation states and non-state actors; and
- Protecting the homeland against WMD and cyber attacks.

With regard to capability gaps, we need to address some significant deficiencies. Among these:

- Our collection capabilities are not pervasive and persistent enough. Human intelligence enabling technology is far from where it needs to be.
- Intelligence analysis suffers from a lack of collaborative infrastructure and tools to help minimize analyst information overload; and
- Our ability to foster prudent information sharing remains inhibited by rigid, segregated networks that are too vulnerable to compromise.

Why are we experiencing these and other “gaps”? In part it’s because our investment pattern is weighted very heavily toward big ticket, multiple year programs that yield incremental improvements against current priorities. We are becoming less agile than our targets at exploiting technology—and spending more time and money doing it.

Within the Intelligence Community and in discussions with our oversight committees on Capitol Hill, we are taking major steps to close our mission and capability gaps through process improvements and a very close study of how we can best make use of our resources. Our primary mission in the Office of the Director of National Intelligence is to ensure the full integration of the foreign, military, and domestic dimensions of intelligence into a unified enterprise. Our approach to S&T must be consistent with the integration of the Intelligence Community as a whole.

To foment creative, cost-effective basic research into critical intelligence challenges, we have proposed creating a parallel to the highly successful Defense Advanced Research Projects Agency (DARPA). I would note that the National Academies made a similar proposal vis-à-vis the nation’s energy needs, but again, our initiative would focus exclusively on intelligence questions. The Intelligence Advanced Research Projects Activity (IARPA) would conduct S&T research that:

- Cuts across multiple IC agencies;
- Targets new opportunities that lie in the white spaces between agencies;
- Provides innovations that agencies avoid because of current business models; and
- Generates revolutionary capabilities that will surprise our adversaries and help us avoid being surprised.

To foster the indispensable element of speed in moving research into practice, we have initiated the Rapid Technology Transition Initiative (RTTI). Our objective here is twofold:

- Assist the S&T components of the sixteen Agencies and elements of the IC to rapidly get their best-of-breed technologies into the hands of users; and
- Reinvent and reinvigorate S&T across the IC, within the strategic framework of Speed, Synergy, and Surprise.

To ensure maximum return on the overall S&T investment within the IC, we have developed a unified IC S&T Investment Plan. This fulfills an important provision of the Intelligence Reform statute and already has generated valuable new insights on three key issues:

- Collecting all that we need, everywhere, all the time;

- Coping with analyst information overload; and
- Effectively sharing and protecting intelligence.

For example we are making some transformative breakthroughs in S&T analysis, particularly within the processing of voluminous data.

- Computer-assisted linking of data on foreign terrorists is helping us disrupt plans for attacks in this country.
- Pattern analysis is helping us find the insurgents who are building IED's in Iraq.
- Computer modeling is helping us uncover foreign activities that have been hidden underground to defeat US satellite imagery.

I can tell you that information technology is allowing our collectors and analysts to work more closely as a team. Today's technologies allow for far-flung collectors to combine the strengths of many different sensors and platforms, bringing perishable information home in time to protect the nation.

Last but not least, I would return to some of the data I cited with regard to the S&T human resources other nations are developing more quickly than we are. Science and technology—basic research and practical applications of that research—clearly are a function of human capital. That's as true in the field of intelligence as it is in business. Good scientists do good research.

We therefore have instituted numerous programs to attract, retain, and motivate scientists and technologists of the first rank. Through our Fellows program, for example, we provide leading IC researchers with untied funds to develop and pursue projects of their choosing. In our Ambassadors program, we enhance synergy across the Intelligence Community and the social networks of key technologists by assigning them for one year to other agencies.

By means of other rotational assignments and our new joint duty requirement for promotion to the senior ranks of the Intelligence Community, we are promoting an "expeditionary" mentality that brings researchers into contact with field and operational challenges. There have been many pay-offs already. If we are more effective in dealing with a major challenge such as locating high-value terrorists, it is at least partly due to the innovations of some of our most senior and most creative scientists.

So, yes, we do face a daunting set of challenges in today's world, and they are different challenges from those of the last century—not only because our adversaries are different in kind and character, but also because their weapons and technical resources are different in kind and character. There are ways in which we can maintain and extend important advantages, however, if we act with a sense of urgency and if we embrace the imperatives and inevitability of change. From the perspective of dealing with international terrorists, proliferators of weapons of mass destruction, and unfriendly states that are masters of denial and deception, revolutionary advances in science and technology are essential.

As I noted earlier, we need to ensure that when it comes to S&T, speed, surprise, and synergy are on our side. This has to be a priority for us as we implement our comprehensive program of intelligence reform, and it is.

Before I close, I want also to talk about an entirely different subject. Last Sunday's newspapers carried stories about a classified National Intelligence Estimate (NIE) completed last April, entitled *Trends in Global Terrorism: Implications for the United States*. These stories left the incorrect impression that this NIE dealt principally with the relationship between Iraq and international terrorism.

In fact, the Estimate provides a broad, strategic framework for understanding the trends that will define the primary international terrorist threats to United States interests over the coming five years. It attempts to describe a process that started years ago and is continuing. The discussion of Iraq represents a small portion of the overall NIE.

To provide some context let me elaborate on how I have generally characterized our assessments on previous occasions, often before Congress, and in ways consistent with April's NIE:

- United States-led counterterrorism efforts have seriously damaged the leadership of al-Qa'ida and disrupted its operations; however, we judge that al-Qa'ida will continue to pose the most significant threat to the Homeland and US interests abroad by any single terrorist group.
- The global jihadist movement—which includes al-Qa'ida, affiliated and independent terrorist groups, and emerging networks and cells—is spreading and adapting to counterterrorism efforts. Several underlying factors are fueling this, including entrenched grievances such as corruption, injustice, and fear of western domination, leading to anger, humiliation, and a sense of powerlessness; the Iraq jihad; the slow pace of real and sustained economic, social, and political reforms in many Muslim majority nations; and pervasive anti-US sentiment among most Muslims—all of which jihadists exploit.
- The global jihadist movement is becoming more diffuse and that the threat from self-radicalized cells will grow in importance to US counterterrorism efforts.
- The Iraq jihad is shaping a new generation of terrorist leaders and operatives. However, should jihadists leaving Iraq perceive themselves, and be perceived, to have failed, fewer fighters will be inspired to carry on the fight.
- Vulnerabilities in the jihadist movement have emerged that could begin to slow the spread of the movement. They include the limited appeal of the jihadists' radical ideology, the emergence of respected voices of moderation, and criticism of the violent tactics employed against mostly Muslim citizens. Countering the spread of the jihadist movement will require coordinated multilateral efforts that go well beyond operations to capture or kill terrorist leaders.

- Greater pluralism and more responsive political systems in Muslim majority nations would alleviate some of the grievances jihadists exploit. Over time, such progress, together with sustained, multifaceted programs targeting the vulnerabilities of the jihadist movement and continued pressure on al-Qa'ida, could erode support for the jihadists.

As you can see, this is a very broad summary of trends in global terrorism. But that is the point. An NIE provides a comprehensive assessment of major issues facing the United States, providing the best intelligence we can develop for policy-makers.

Thank you very much.