

# **Preventing Nuclear Terrorism**

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The Center for Strategic and International Studies

Participants:

**Amitai Etzioni**

Professor, George Washington University

**Robert Einhorn**

Senior Adviser, CSIS

**Edward Luttwak**

Senior Fellow, CSIS

## **OPENING DIALOGUE:**

**Graham Allison**

Professor, Harvard University

**Laura Holgate**

Vice President, Russia/NIS Programs,  
Nuclear Threat Initiative

**George Perkovich**

Vice President for Studies,  
Carnegie Endowment for International Peace

Moderator:

**Patrick Cronin**

Senior Vice President and Director of Studies, CSIS

**Patrick Cronin:** Good afternoon, ladies and gentlemen. My name is Patrick Cronin. I'm the Director of Studies here at the Center for Strategic and International Studies. We're now ready to begin an important workshop called Preventing Nuclear Terrorism, Setting Priorities, a workshop that's cosponsored by the Center for Strategic and International Studies and the Institute for Communitarian Policy Studies at the George Washington University. That is an institute, by the way, that is very closely tied to Professor Amitai Etzioni who really has given us sort of an intellectual framework as well as an impetus and encouragement, along with Professor Luttwak, to put on this workshop today on this very important topic.

We were somewhat sort of jokingly talking about Herman Kahn stories before we got started today. Of course Herman Kahn was not only the smartest man in the Army, as he was once called, because he scored so high on the Army entrance exam, but he also was the author of *Thinking the Unthinkable*. Unfortunately, this subject is no longer unthinkable. That's really why we're here today because there is widespread agreement on this. In fact Professor Etzioni in his important monograph called *Preempting Nuclear Terrorism in a New Global Order*, starts off with a very lucid, simple sentence and it says the following: "The combination of terrorism and nuclear weapons poses the gravest threat to national security." The combination of terrorism and nuclear weapons poses the gravest threat to national security -- very straightforward, very simple. I think Don Rumsfeld would write a snowflake saying we wish we could all write that way when we're writing our national security documents. Because there is widespread agreement on this. In fact Graham Allison reminds us in some of his writing about the presidential debate last fall, the first debate. When the two candidates were asked what constituted the single most serious threat to American national security there was a brief instant of agreement between President Bush and Senator Kerry. They both answered, "nuclear terrorism".

We intend to preserve this bipartisan understanding here today, and to march on with an issue about the priorities. Clearly the question for us today, as Professor Etzioni again has put it, what needs more resources than is currently being resourced, and what's relatively over-indulged? In other words, what deserves priority? There's a list of issues, for instance, that could be suggested and it's part of Professor Etzioni's monograph and beyond. Questions such as whether hardening targets is getting too much attention relative to preventing access to weapons of mass destruction. Whether nuclear arms are more dangerous than chemical and biological weapons. Whether securing ready-made nuclear bombs should get priority over highly enriched uranium production. Whether failing states and rogue states are currently prioritized in the right or wrong order. Whether the focus should be on blending down and removing fissile material as was done in Libya, or upgrading the security and inspections of nuclear sites as we're trying to do in Iran. The importance of blending down and removing fissile material as compared to dismantling ICBMs, intercontinental ballistic missiles. Extending something like the Proliferation Security Initiative rather than focusing as much on the Nuclear Non-Proliferation Treaty renewal. A ban on all new construction of highly enriched uranium reactors or supporting new UN resolutions.

Anyway, there are many other issues that our distinguished panelists are going to talk about here today and they're going to try to give some brief opening remarks and then we're going to look forward to a very active discussion. The program erroneously says we'll go until 5:30. We think half past 4:00 should be sufficient to lay out most of the ideas here today. We hope to keep it structured. I'd like to introduce each speaker in turn.

We're going to begin with Professor Amitai Etzioni. He is the University Professor at George Washington University. He's also the Director of the Institute for Communitarian Policy Studies. In 1990 he founded the Communitarian Network, a not for profit, non-partisan organization dedicated to shoring up the moral, social and political foundations of society. For 13 years he was editor of the quarterly journal, *The Response Community*. And he's rightly called the guru of the communitarian movement. He's a distinguished professor who has a record of 20 years as Professor of Sociology at Columbia University. He's also worked at the Brookings Institution as a Guest Scholar; he has been a Senior Adviser to the White House; and he has been the Thomas Henry/Carol Ford Foundation Professor at the Harvard Business School. So it's a great pleasure to introduce Professor Etzioni.

[Applause].

**Amitai Etzioni:** Thank you very much, Dr. Cronin, first of all for making this whole event happen and to Devin Stewart, who assisted so much in bringing us all together.

I can both make some short comments, and justify my being here, in the same few sentences. There is such a distinguished panel of people who dedicate their work to this issue [inaudible] and in effect the only reason I'm going first is to fill the air time as the rest of the stragglers come in. It's really Bob Einhorn who dedicated a good part of his life to this issue, I'm looking forward to listening to this.

I came into this subject most recently when I did a little study on what I consider a global police department which was created by the United States in the wake of 9/11. It's, from a sociologist's viewpoint, a different creature than a United Nations agency or any other intergovernmental organization, even NATO, in the sense that it's much less mindful of sovereignty and the intergovernmental relations. It's much more likely to work directly with local police forces, anti-terrorist units, or for instance simply take the matter in its own hands, like for instance listening to most communication any place in the world without first asking, making a treaty arrangement. In that sense it's simply a true global agency.

When I ask myself where that is going to go next, I know many of my European colleagues at least would just like it to go away. I don't think that's exactly going to happen because the terrorists sooner or later remind us that such an agency may be necessary, at least from the United States' viewpoint.

It became clear to me with the sentences Dr. Cronin kindly read, that the number one issue is the combination, it's hardly my line, of terrorists and nuclear weapons, and therefore the logical next step is not to go only after bin Laden in the caves, but also to see what we can do about terrorists' access to nuclear

weapons, of which the PSI again is an example of something, especially to the extent that it does board ships on high seas, as going beyond normal, traditional intergovernmental relations.

Last, trying still to shed my defensive mode, I did publish in the 1960s a book on the danger of nuclear weapons as kind of a homecoming, in a sense, but my ultimate justification is that I served for three [?] years in the Israeli Commandos and it made an enormous distaste for violence, I assure you.

What I hope we will be able to do today, and I choose my words carefully, I hope, is that instead of having a discussion which will cover this very very complicated and difficult and challenging topic, that possibly many of us will address one issue. And the question is, as you already so well put it, Dr. Cronin, if the resources we command are properly allocated in terms of priorities they need to be. I take it for granted that we're always short on resources and therefore the question, where should we dedicate in context of this issue is a rather important one.

It's not just a question of budgets, it's for instance a question of political capital, for instance when we deal with Russia. And to the degree that we have a leverage on Russia at all, what should we dedicate our leverage to -- upgrade guarding nuclear weapons, to moving the plutonium to France to blend it down, or to ask Putin to become a good democrat. This kind of example of what I mean by allocating not simply financial resources or military assets, but also political capital.

And I just want quickly to run through the list, where I see some of the major priority issues which need discussion. One [inaudible] is this relation between what might be called the three fronts. One front is to try to harden the targets, which is one way to deal with this issue. That is, I think as several people already pointed out, is almost impossible mission just to protect the New York subway. So all our chemical plants is an endless task. Though in some ways it's our first priority. We spend about \$5 billion a year on protecting airlines from shoe bombers and box cutters and nail clippers, and we still spend only a billion and change on the Nunn/Lugar program, so it gives you some sense of what high priority we're giving to protecting one industry from terrorist attacks.

So I would think that while ideally we would give all the resources to everything, if you are living in a world of limited resources, the hardening targets is probably not the best place to dedicate a lot of additional resources.

The second one is going after terrorists before they hit us, and I think actually the most success in this area, they're publicly mentioned every week. And there is a certain logic in it. But again, it's a difficult task because we also reproduce them by various things we do in the world, as in Iraq. So it's not that we're going to drain that swamp, as some people think.

The third mission, and again I very much agree with what's already been said, trying to limit access to nuclear weapons, ready-made ones, and to easy way of making them. It may be a much more delineated topic. But in order to accept that this is a much more doable project and therefore deserves much higher priority, we need to accept the following assumption, and again, I put in all this for debate. One is that not all weapons of mass destruction are equally

threatening, because if you put them all in one box, as often we do, then we will need to have a cop in every biological laboratory over the world and we have to check on not only every container coming in, but every, I don't know, little bottle, and it just seems this kind of definition of the mission immediately makes us in effect throw up our hands and feel that we really cannot make a dent into it.

Second, and I'm hardly the expert on it, but most biological agents, I'm told, are not as threatening as a nuclear weapon, and the same is probably true about chemical agent. So if you accept that just for a moment for discussion, our attention should be focused on ready-made nuclear weapons and the material from which they readily can be made.

Then if you go farther down that road -- and again, much of this I find in the books of my colleagues here, I'm just trying to focus attention on it for our discussion -- is we often, including the 9/11 Commission, treat all the materials as if they were the same, highly enriched uranium, plutonium, and spent fuel. I'm not sure from a terrorist viewpoint they are all the same. We can go into details. Here again I would have to rely on my colleagues. But it seems to me plutonium is more difficult to handle than highly enriched uranium, and therefore I would think that highly enriched uranium deserves priority over plutonium. So again, I wish we could do everything.

I don't want to go through the full list because we hear about them shortly, but I want to emphasize on two which I know there is much more division than the ones I mentioned so far. One, I know we're going to have an interesting discussion, I'm looking forward to it, is the relative importance of rogue states against failing states. Let me be very simple. The difference between North Korea and Iran, and Pakistan and Russia. From my viewpoint, the rogue states, if the issue is nuclear terrorism, are much more problematic -- the failing states are much more problematic than the rogue states. The reasons are several. You can at least think about deterring a rogue state. It has an effective government. It has some sense of self-preservation. We can argue how rational the head of North Korea is, but he went to five months hiding after we unseated Saddam so he may not be completely inattentive to threats. And it seems to be that how to measure and under what condition he would slip a nuclear weapon to a terrorist realizing the consequences.

But if you deal with Russia I think it's fairly self-evident. There is no address. There's nobody you can really sit down with and have a conclusive agreement that if they all sign up, then you be sure that all the loose nuclear weapons and materials are going to be locked down and be under control. There are many independent actors which have access to the material, which have been engaged in private deals and practically everything else, including opening the border to the terrorists from Chechnya. So I would think given that so much of the material is in Russia, given that it's such still semi-anarchic states in this area, it deserves much higher attention than the rogue states.

Pakistan, a similar story I think. We could come out of this meeting and find that the Talibans took over the government. I don't need to finish the scenario.

I see Cronin looking at the watch. I'm going to rush to my second and last

point, I know by far the most easy to challenge, and it should be.

In the end, and there may be some times simplifying things is necessary, there are really two basic concepts and a lot of reiterations and mixes. One is, are we going to say go ahead, build a highly enriched uranium reactor as China just did in Nigeria with full blessing of the United Nations, completely in line with the rules of international regimes and the international proliferation treaty. The non-proliferation treaty.

Let's go, Iran is fine as long as we can inspect what you are doing and maybe you give us the spent fuel after you're done. That's one approach.

It basically goes back to the pre-9/11 assumption that they are responsible governments and if you make a deal with them, they're going to abide by it and you can reinforce it through various kinds of inspections. The opposite model is that we basically say inspections are inherently unreliable. Basically when you find yourself in a situation like Iran is, it's almost a perfect game theory situation where you practically press to both sign a treaty and try to cheat on it. It's just hard to imagine why anybody would not do this given their conflicted needs and purposes. Therefore we are much better off, if we can, have what -- I would make Libya the poster child of the other approach, whatever necessary means, I use that phrase for an understanding of the meaning of it -- encourage a country to give up their nuclear weapons and move the material and not supply them with highly enriched uranium or technology or whatever. Even there, there is no complete guarantee that they will nevertheless cheat.

But the concept, the question how we approach this regime in the future. If you want to say that a good citizen doesn't have this stuff and we make them whole. We give them [inaudible], we give them economic aid, we give them other source of energy, as we tried to do with North Korea. Obviously it's fine, and of course as you all know, and let me close on that, you don't have to cheat. You can build highly enriched uranium for peaceful purposes, a plant, and you give the treaties three months notice or six months notice and you leave the treaty and you can then use the same plan to make nuclear weapons and you're 100 percent legit by the existing treaty.

Now I know that some of us feel you can amend the treaty. That's really from my viewpoint, a secondary viewpoint. If you call it augmenting the existing treaty or you talk about a radical new approach, I think the debate is cleaner if you understand the difference between inspection plus, or trying to convince countries like Brazil, like South Africa, that we're all better off if they don't go down that road at all. Thank you.

**Patrick Cronin:** Thank you very much, Professor Etzioni. That's an excellent beginning. We now are going to turn to my colleague, Robert Einhorn, who not so long ago capped a very distinguished 30 year career in the government as Assistant Secretary of State for Non-Proliferation, and we're delighted that he's leading our non-proliferation work here.

**Robert Einhorn:** Thank you very much, Patrick. I would like to comment on a few of the priorities, a few of the trade-offs that Amitai just mentioned. We didn't rehearse this, but I would like to select or actually pick on two of the trade-offs that he mentioned, and that's the essence of Amitai's strategy in the

excellent monograph he's written, to set priorities. And I agree with him that the number one U.S. national security priority needs to be preventing nuclear terrorism. The question is how you go about meeting that challenge.

So first I'm going to deal with the question of whether you give priority to rogues like North Korea or Iran, or whether you give priority to the failing states like Pakistan or Russia, to use Amitai's categories.

Amitai maintains that so far we have given priority to dealing with the rogues over the failing states. What he suggests is that now we should reverse that priority and worry somewhat more about the failing states. Why? He mentioned it just a moment ago. Because nuclear armed rogues can probably be deterred, whereas the terrorists that breed in failing states cannot. But I have a problem with de-emphasizing the rogues so much. In the first place I don't see why we have to choose between dealing with rogues and failing states. I mean surely the U.S. government has the energy and the attention span to give both of these first order security threats the attention they deserve. But beyond that, I think that de-emphasizing the rogues seriously underestimates the risks associated with rogue countries becoming nuclear powers. Let's take North Korea.

Kim Jung Il is probably deterrable. We don't know that, but I would concede that he's probably deterrable. But number one, we can't dismiss the possibility that North Korea will sell highly enriched uranium or plutonium. We now believe, for example, that North Korea sold uranium hexafluoride, that's the feed stock for enriched uranium, to Libya or to Libya via Pakistan. It's not clear whether they knew they were selling this to Libya, but it doesn't matter. They're prepared to sell very sensitive nuclear material.

Second, we'd have to worry about, once North Korea -- not 'became', it is a nuclear power -- but once it became clear they were a permanent nuclear power we'd have to worry about Japan, South Korea and Taiwan following suit.

And third, North Korea is not just a rogue, it's also a failing state. What will happen after the Kim Jung Il regime collapses, as I'm sure it will some day, what will happen to the nuclear weapons and the nuclear materials on North Korean soil? I think that's a very serious problem associated with a rogue like North Korea becoming a nuclear power.

In addition, I think shifting priorities from the rogues to the failing states overestimates what I think we can achieve with countries like Pakistan and Russia. What, for example, do we think we can achieve with Pakistan if we simply gave it a higher priority in our calculations? Could we demand that Pakistan turn over to us all of its nuclear weapons and fissile materials? Or could we at least insist that they allow us to come in and visit their nuclear weapons facilities and satisfy ourselves that these facilities are subject to the highest standards of physical protection?

I've dealt with the Pakistanis for a number of years and I see little prospect whatsoever that they're going to permit us to come in and that they'll permit us to come anywhere near what they consider to be the crown jewels. Now that doesn't mean we shouldn't be pressing the Pakistani government to give a higher priority, the highest priority to physical protection of their nuclear assets, and it

doesn't mean we shouldn't offer, the United States shouldn't offer to provide non-intrusive assistance in helping Pakistan guard its nuclear assets. It's just that we shouldn't have any illusions that giving nuclear security in Pakistan a higher priority will persuade President Musharraf to conform to our notions of what he should do on the nuclear security agenda. And I think the same thing can be said for Russia.

I'm encouraged by the Bratislava joint statement on nuclear security, perhaps some of the other panelists will comment on that. I hope it's an indication that the Bush administration is finally prepared to give this issue the presidential level impetus that it's always deserved. And even if the Bratislava agreement does result in much greater U.S./Russian cooperation in this area, I think there are limits to how far we can successfully push Putin and the FSB in the area of nuclear security, and I think that's true even if we were prepared to subordinate everything else on the U.S./Russian agenda to nuclear security, as Amitai recommends. And I would agree with him on that point. I think it does deserve to have the highest priority on the U.S./Russian agenda, but I don't know that that's going to have a great impact in what Putin is going to allow us to do.

That's enough about the first issue, reversing the priority between the rogues and the failing states.

Let me say a few words about the second issue that Amitai mentioned. Amitai calls for a radical shift in strategy. He suggests that we replace an approach called controlled maintenance, which has prevailed so far according to him, we replace that with an approach he calls de-proliferation. Controlled maintenance, Amitai says, is based on what Amitai describes as the anachronistic NPT.

Now under that approach you don't particularly worry about countries producing or possessing weapons-useable fissile materials, as long as they pledge that they're not going to use that material to make bombs and they're going to let the IAEA come in and inspect.

Under the new approach of de-proliferation, you don't rely on legal commitments and IAEA inspections. Instead you don't permit the fissile materials to stay in countries where they could fall into the hands of terrorists. That means preventing the spread of enrichment or reprocessing facilities to additional countries, especially in failing states. Moving fissile materials from less secure to more secure countries. Rendering the material non-weapons-useable, for example, by blending down highly enriched uranium. And while the material is awaiting conversion, you upgrade security at the facilities where it's stored.

Now I have no problem at all with these elements of the de-proliferation approach. Indeed, far from being a radical shift in strategy, much of the de-proliferation agenda has been U.S. policy for quite some time. Notwithstanding Article 4 of the NPT, we've always opposed untrustworthy regimes getting enrichment or reprocessing plants, even under safeguards. It was true 30 years ago when we persuaded France not to sell a reprocessing plant to Pakistan. When we invested a lot of political capital in trying to dissuade Germany from selling enrichment technology to Brazil. This has always been part of the U.S. policy. And we've been blending down Russian highly enriched uranium for over

a decade. And we've been at least talking about using Russian weapons plutonium, mixing it with uranium and using it to fuel nuclear reactors. This hasn't begun yet but this has been something on the agenda for about a decade.

For well over a decade we've had a program in place to take back U.S.-origin highly enriched uranium from countries around the world and to convert research reactors to the use of low enriched fuels. Beginning in the '90s we began removing Soviet-origin HEU from a number of countries, from Kazakhstan, from Georgia, from Serbia, and that effort continues to this day. Last summer the Department of Energy announced the GTRI, the Global Threat Reduction Initiative designed to make this global clean-out of highly enriched uranium effective. Security upgrades at Russian nuclear facilities have been going on and have been a priority of the Nunn/Lugar program. And after the Bratislava meeting perhaps this effort will be accelerated.

I'm not saying that these programs even now are getting the priority they deserve. They clearly can be pushed a lot faster than they're being pushed. I'm just saying that proliferation, that de-proliferation has essentially been U.S. policy for quite some time. It's not a big shift.

Just one last point on the NPT, and this too Amitai alluded to. The NPT clearly has flaws. We all recognize that. One of its flaws is that it doesn't preclude, it just precludes the spread of weapons, not the spread of fissile material production capabilities. Another flaw is its rather permissive withdrawal provision. You can withdraw from the treaty in 90 days and kick out the inspectors and you have the material you need for a bomb-making program.

We should do what we can to plug these loopholes but we shouldn't throw away the baby with the bathwater. The NPT performs a number of essential functions for the broader non-proliferation regime. Among them it provides legitimacy that enables us to pursue some tough counter-proliferation or, if you will, de-proliferation measures. Without the NPT we couldn't have established the multilateral export control regimes, we couldn't have imposed Draconian sanctions in Iraq, we couldn't have gotten support for the Proliferation Security Initiative, we couldn't have gotten the IAEA to perform a very intrusive and successful investigation of Iran's 18 year clandestine enrichment program, and I can go on and on.

But to prevent nuclear terrorism we need all the tools in the tool box. We do need de-proliferation steps that Amitai has suggested, but we also need the NPT and we shouldn't dismiss it as an anachronism. Thank you.

**Patrick Cronin:** Bob, thank you very much, excellent. A lot more detail to think about.

Let's continue now with our third panelist, who was also instrumental in putting together today's intellectual framework, that's Edward Luttwak, who's a senior fellow here with CSIS. He's been a consultant to cabinet secretaries. He's a great strategic thinker. His books include Strategy, The Logic of War and Peace, and Coup de Etat, which has been reprinted so many times it makes me think it may be a how-to manual, Edward, but hopefully it's not.

**Edward Luttwak:** You all know the famous quote from Nietzsche,

Friedrich Nietzsche, according to which madness is rare on the individual level, very few of us know mad people, but it's quite common in governments. What he referred to, of course, was war -- governments deciding to invade other countries, doing less research than they would do to choose a particular resort in Mexico to go to as opposed to another. Madness in conflict gets controlled, regulated and diminished and replaced with rationality when the war continues. The war continues, there is action, there is reaction, there is feedback. You observe the enemy, you study, and eventually if the war lasts long enough, you start getting the right tactics, the right methods, the weapons, and you might even get a sensible national strategy on how to end the war.

Well, terrorism is not like that. Terrorism is sporadic, episodic. Something happens, then nothing happens for two years. Something blows up and then nothing happens for three months, which means that you have the madness, but you don't have the correction mechanism, the feedback mechanism of action and reaction and sensible (inaudible).

What does this lead to? It leads to a realm for the free exercise of bureaucratic proclivities, emotionalism, political phenomena, cultural prejudices. And what does that lead to is a tendency to overshoot the culminating point of utility in counter-terrorism. That is, you do too much, overshoot the effectiveness. You have a threat that is episodic, sporadic, and it's emotional, it's enhanced, and so you overreact.

By over-reacting, you could very easily do much more damage than the terrorists have done or could do, and one could argue that current airline security, as mentioned, is a grotesque over-reaction. You'd be much better off to scrap the whole system. Let's throw overboard the aircraft. Once in awhile you lose an airplane, as opposed to enormous costs and inconvenience across the universe of many, many lifetimes lost every day waiting in queues. This is real stuff. And our embassies? Over-reaction and so on.

When you look at this pattern of over-reaction, ask yourself what would not be an over-reaction. That is almost anything that we do, almost anything that we did, almost any expenditure, almost any sacrifice to other priorities that would diminish the probability of having a ready-made nuclear weapon detonated in Red Square, or Manhattan, or the center of New Delhi or Tel Aviv. Interestingly, it wouldn't really much matter where of these four locations the nuclear weapon would blow up. You would initially think it makes an enormous difference, but in terms of the consequences of the day after, it wouldn't actually.

Now it is in regard to that that the magnus of governments is particularly in a sense incapacitated. Remember, conflict makes us mad, but action and reaction, feedback and reality messages coming back from the front drives the rationality, and here, there is nothing. There's only an absence, and that is the difficulty of prioritization.

Now if one accepts, as I do 100 percent, one of Etzioni's opening comments, which is, let's abandon -- very harmful -- this phrase "weapons of mass destruction" that conflates and equates drastically different things... and to me, it's as a matter of rational analysis, it's always been quite striking the fact that when they want to talk about chemical stuff or whatever, they always quote Aum

Shinrikyo, the Japanese group in the Yratchko [ph] station of the subway in Tokyo. When that same group, Aum Shinrikyo, had their building license at Mt. Fuji and the right to purchase construction-grade dynamite, because they needed it for their construction project, and if they had used the ordinary construction-grade dynamite operating at maybe 40 percent of the TNT max equivalent per weight, they could have killed hundreds of people there. Instead, because they used a chemical -- and I think that it is totally agreed, let's leave it aside and prioritize, and if we prioritize to an extreme degree, a degree that would need to be defended in a different debate, you would get right down to the ready-made nuclear weapons and that opens a drastically different perspective on counter-terrorism, because you're not engaged in this mug's game of hardening, the loser's game of hardening, protecting one thing and then you expose another which is obviously against a non-feedback, non-action/reaction is a particular big loser, but you can actually extinguish the threat, extinguish the threat at source. If you can extinguish the threat, define the threat appropriately.

In other words, if you focus down to this very narrowly, as I think one could, as I say, that is what my belief can be actually structured as a full-scale argument. To the ready-made nuclear weapon, be some unauthorized individual getting hold of it and detonating it on Red Square. If you do that, then you're down to a finite number of weapons, not an infinite number of potential terrorists, not an infinite number of potential targets, a finite number of weapons in an even smaller, finite number of locations where administrative measures, physical administrative measures, could extinguish the threat in terms of leaving the weapons only for disposition of the rational authority.

Now this is the attractive prospect. The issue is how you get there. Obviously by cooperative means. We've had the review of some cooperative actions and some, I take note in terms of cooperative actions, the possibilities. I fully accept Mr. Einhorn's definition of the problem and the things and what you would do, but the fact is that we just made a deal with Pakistan involving the authorization to purchase a squadron or so of F-16's, and I'm sure we asked for things and we did not ask for that which is the issue of physical control and such, part of which would work. We are dealing, in other words, with administrative matters, so I would like to pause and look at one particular episode.

I actually don't remember this instant, whether it was Sheremetyevo or Domodedovo, which of the two Moscow airports, but the local security provided by the Russian Federation, FSB, by President Putin, by Ivan Yvanovich down there on the trenches, was this. Two Chechnyan women came in together. Because of the recent theater episode, they were recognized as Chechnyan women and they were taken to the security office. The security officer did not search them, probably because Ivan Yvanova who was supposed to be there for that purpose, was off goofing off doing some other job somewhere else. Did not search them, instead accepted the sum, which I believe was the equivalent of about \$47, and for \$47 put the two Chechnyan women on two separate flights, both of which they were not allowed to be on because they were beyond the last check-in point. The security officer put them aboard the two flights and the two planes blew up and he walked away with \$47.

Now the point about security measures, Pakistan and F-16's is this, that if

at this airport, instead of having the Russian Federation security that had one of the two or three international security companies that do this work that all of you have met at Frankfurt and other international airports, ICS and so on, these women could never have boarded the plane. In other words, if this had been contracted out to a professional organization which follows inflexibly rigid protocols as these do, and have a denied boarding authority on scene, they could never have happened.

The Beslan episode is also administratively interesting. A rumor was spread, a comforting and logical rumor that the Beslan terrorists found the weapons in the school itself because a group of Ingushets, people from Ingushetsia, had come into this Ossetian town to paint, they got the contract to paint the school and they hid the weapons and so on. Now the point is that the Ossetians, as you all know, have always hated the Ingushetsians. They blame them for everything. The issue of them coming in, painting the school and they hid the weapons and so on, that turns out to be a fantasy.

The reality is that the group of people, who were a mixed group, came in and actually drove across the Ingushets Republic into the Ossetian Republic, past at least two if not more checkpoints, and heavily armed men and women went through, were not checked by paying bribes, and again the bribes were only of \$30 or \$40.

Now in regard to the administrative situation in Pakistan, those of you who know Pakistan know that there is an elaborate system in the armed forces to store items, important items like for example apricot jam. Apricot jam is one of the things that officers get in breakfast. So if you want to go and take away a case of apricot jam, you need a chit signed by a supply officer, and the supply officer has to enter it into a register, and then you have to say, one chit apricot jam boxed and so on. Then you go to the store and in the store they have heavily guarded, I mean it's a metal grate and it has to be turned to take the chit to give you the thing of apricot jam. That is the disposition with regard to the physical control of nuclear weapons in the Pakistani armed forces and the disposition...

In other words, what we are now relying upon is the administrative mechanism of control of these weapons, because we certainly do not have a culture of control of these weapons.

There are many people in Pakistan who believe, as you all know, that these weapons are to be not wasted and sitting idly there, but should be properly used to advance the cause and should be removed from storage to do it. And as you all know, what keeps this happening are the administrative measures for the control of apricot jam with possibly two keys instead of three and a chit which is more than one supply officer chit. Maybe the chit needs the signature of President Musharraf or the chit, whoever replaces President Musharraf, possibly in an overnight coup. It could happen at any time.

In other words, what we have here is the only threat where it's not possible actually to overshoot the culminate point of effectiveness in reacting to. Many other terrorist threats, it's very easy to overshoot the culminating point of utility by overreacting, essentially give it all to the terrorists for free. This one is the one where you can't. The barriers against the threat materializing are administrative

barriers administered by these people and people like them, and we do not know what they are doing at this moment to guard nuclear weapons in Pakistan. We do know that President Musharraf's big priority has been to guard himself from assassination, and we also know that the last attempt, in the last attempt they came very close to success because of the breakdown of a whole series of security measures.

In regard to the Russian provisions, we know what happened in one or two Moscow airports, whether it was Sheremetyevo or Domodedovo, I don't care. What I do know is that it failed. So I think we ought to prioritize and I believe we should prioritize in a very narrow degree because of the aforementioned inability to overshoot, which attends all the other prioritizations we have, and that our focus should be administrative and the solution should be a collective one. The argument might conceivably, the argument would not be we, I, me want to control you, but rather us want to control us, and to create the two us. One us is this collective, physical control entity and the other is the us of people who have nuclear weapons, including prominently ourselves. Thank you.

**Patrick Cronin:** Thank you very much. We are halfway there. We're now very delighted to introduce Professor Graham T. Allison who is Douglas Dillon Professor of Government, Director of the distinguished Belfer Center for Science and International Affairs at Harvard University. Of course he was the distinguished Dean of the Kennedy School. He may forever be known as the author of *Essence of Decision*, but his recent book, *Nuclear Terrorism: The Ultimate Preventable Catastrophe*, is ready-made for today's discussion. Professor Allison?

**Graham Allison:** Thank you very much, and it's a great pleasure to be here and let me commend CSIS and George Washington for organizing this session.

I'm especially pleased that new faces are getting involved in this issue, like Amitai and Ed Luttwak. I think the notion of a strategist like Dr. Luttwak, whom I've known longer than some of you in the audience have been alive, and Professor Etzioni whom I read when I was a graduate student, looking at this topic afresh and coming and seeing some big points is very valuable, and I find almost all points to agree with in what they've suggested, rather than disagree, but I'll try to underline.

I think in particular, I appreciate their proposition about the priority of this threat, about the necessity to address it strategically and about the inadequacy of the current response by the U.S. government and other governments, and I try to address all those points in this book that Patrick mentioned, but let me try to go to the topic that we're dealing with today.

Patrick mentioned this moment of agreement in the presidential campaign between Bush and Kerry. Vice President Cheney then picked this up as a centerpiece of his stump speech in the last month of the campaign, and actually I think said it best. He said, "the biggest threat we face now as a nation is the possibility of terrorists ending up in the middle of one of our cities with deadlier weapons than have ever been used against us before, nuclear weapons, able to threaten the lives of hundreds of thousands of Americans".

He then goes on, "That's the ultimate threat", and here's the punch line, "For us to have a strategy that's capable of defeating that threat, you've got to get your mind around that concept". So I would say as a starting point, thinking about a nuclear bomb going off in Washington or Moscow or Boston or Los Angeles, and getting your mind around that concept is the right place to start, and I think if one does that, there follows almost everything. In particular, there follows, I think in logic, a compelling overriding categorical imperative, as Ed said, to do everything technically feasible on the fastest possible timetable to prevent such a catastrophe. Because if we, God forbid, fail to do that, which we're currently doing, and if a nuclear bomb goes off in one of our cities, this will, if you try to think about the consequences, be an American altering event, and if this happens a couple of times, which I don't see any reason why if and when it happens one time, it would necessarily have to be a one off, it will be a civilizational threatening event.

So I don't think, as both Amitai and, well indeed all of the panelists said, this is not a case where you can do too much. So if you did a little too much on this one, you would not regret it afterwards. On the other hand, if for the absence of something we could have done, a nuclear bomb goes off in an American city, we're going to have a hard time giving excuses.

Now starting with this idea, a bomb going off in a city, getting your mind around the concept, what then follows from that? What follows from that is a 360-degree approach and multi-layered, but in particular, in the case of nuclear terrorism, the ultimate catastrophe, there's fortunately a strategic narrow on the supply side to this problem, a choke point, which if we choked it tightly enough, we could reduce the likelihood of a nuclear bomb going off in a city to nearly zero, and what I try in part two of my book to do is to organize a strategy, multi-layered, 360 degrees, but the heart of the matter is on the supply side, to take that strategic narrow and choke it as tightly as possible, and I propose that that be done or organized as a strategy under a doctrine of three no's: no loose nukes, no new nascent nukes, and no new nuclear weapons states. So I thought I would try to sort of present the essence of that agenda because that, I think, then gives you answers to the priority questions that Amitai put.

I start, and I have a little handout which I maybe at the end, Angelina, you can give it out after, but basically there's a report card on the first term of the Bush administration, and I organized the report card under the three subjects. No loose nukes, no new nascent nukes, that's new national production of highly enriched uranium and plutonium, the stuff from which a bomb can be made, and no new nuclear weapons states. And in the first term of the Bush administration I judged that they earned about a C- on the loose nukes story, about a C- on the new nascent nukes, where Iran moved from years to months away from being able to produce enriched uranium and plutonium. And they got a D-, it really should be an F, on new nuclear weapons states. That's the North Korea story --

**Male Voice:** Sounds like grade inflation. [laughter]

**Graham Allison:** Yes, which has been a serious problem, very serious problem. But in my course, I grade people fairly until we get to the end, and then I norm the grades so they don't fall too far behind their colleagues in other

courses. [Laughter].

So imagine that the administration wanted to earn A's in each one of these subjects in the second term, and I do imagine that, because I think actually you see a lot of signs that the administration is getting it. I think if you looked at the campaign, when asked the question what's the single most serious threat, Bush said nuclear terrorism. Cheney made this argument during the campaign. When asked at the first press conference about what he needed to meet with Putin for, Bush said because we have serious business to do. There's the issue of nuclear materials that could get into the hands of terrorists. Bratislava said again between the two presidents the kind of promises one would hope for. So I'm in a hopeful mode with respect to the second term, but we should ask ourselves what actions, if they were taken, would earn an A in each one of these categories.

So what I did was make a little chart, and let me just take the essence of it here. On no loose nukes, the essence of that is a global lockdown of all weapons and materials to a gold standard. The U.S. loses how much gold from Fort Knox? Not an ounce. Russia loses how many treasures from the Kremlin Armory? None. So could human beings decide to protect nuclear weapons and the material from which nuclear bombs could be made, as good as gold? And the answer is of course we could, and the only question is why would we imagine that gold or art objects in the Kremlin Armory should be more protected than nuclear weapons? And obviously it shouldn't.

So lock down everywhere on the fastest possible timetable and clean out of anyplace where it can't be successfully locked down, and that's in particular risky research reactors in about 20 developing and transitional countries, a couple of which have already been mentioned. So I try to lay out in the book a strategy in which the U.S. and Russia would in the first instance jointly define a gold standard. Bush and Putin would commit to each other personally that each would bring all of his weapons and material to compliance with the gold standard on the fastest possible timetable and in a way sufficiently transparent that the other would know that it had happened. And then that they would go and round up the other leaders of other nuclear weapon states in what I call for an alliance against nuclear terrorism, but basically some new alliance structure, the mission of which would be minimizing the risks of nuclear terrorism in the first instance by locking down or cleaning out.

I actually go through a mechanism by which I believe that I'm not as pessimistic as Bob Einhorn suggested about what could happen with Russia. I think that unless and until Putin feels existentially the threat of Chechnyans bringing a nuclear bomb to Moscow, he's not going to cause to happen the things that need to happen in the Russian setting. So doing it as a favor to us or because of Nunn/Lugar bribes is not a sufficient motivation in my view. So he needs to feel that, but I think there's some signs that that may be happening.

And in terms of trying to sign up Pakistan, I believe that because you've got India, Pakistan and Israel hanging out there in a non-proliferation structure, the alliance against nuclear terrorism is the right structure to integrate them in and to let them show that they can be good members of that. In fact, I think Pakistan, where I have talked to Musharraf about this topic, would be capable of

being engaged as almost a poster child in it because they rightly feel embarrassed for the actions that A.Q. Kahn took and that put us all at risk. So that's no loose nukes.

No new nascent nukes. Recognize that the ability to enrich uranium or reprocess plutonium is not part of the natural fuel cycle, as Bob has already said, but is in fact producing material that should be thought of as nascent nukes, nuclear bombs just about to hatch. So Iran gets across that line, to be able to enrich uranium and reprocess plutonium. Beyond that point, there's no further bright policeable line between that and nuclear bombs for Iran. So Iran is the test of this case right now. I on this am also optimistic. Whether by good fortune or by strategic intent I don't require to judge, but in any case, the way the Bush administration has played the hand has let this situation mature so that in my view the pieces are now coming into place for a grand bargain for denuclearizing Iran.

In the book, I lay out the elements of that grand bargain, but basically the EU3 wants to pay the bribes and that's fine. The Russians will provide material and take the spent fuel for Bushir, and that's fine in my view. The Americans will have to step up to the table with, among other things, a guarantee that we will not attack Iran to change its regime by force, as long as it complies with the rest of the agreement, and to make this deal work, there needs to be a credible military threat to destroy the enrichment and reprocessing facilities in the absence of agreement. That is, if Iran persists in attempting to complete these, and I would think Central Casting gave us an ideal character in Ariel Sharon. So I see all the pieces in place for this, and I think it's just a deal there to be done, and I hope the Bush administration is going to do it. If this deal can be done, which I think it can be, I believe then one could imagine shoring up the whole non-proliferation regime so that nobody else will get in the enrichment or reprocessing business. There's a little complication about Brazil, but I'll leave that one to the side for a second.

Finally, no new nuclear weapons states. This requires facing up to the reality of what's happened on the Korean peninsula while we've been sleeping. I would say that if North Korea becomes a nuclear weapons state, comes to be accepted as a nuclear weapons state, with a nuclear weapons production line, this will be judged by historians as the single greatest strategic failure in American national security policy.

I think two terrible things will happen if this course of events continues. First, and I recognize nuclear North Korea will lead in rather short order to a nuclear weapons program in Japan and in South Korea and maybe in Taiwan. That will be a bad local event there, but it will be hugely destabilizing in the area, and it still won't be the worst thing.

The worst thing will be the likelihood that North Korea will sell a nuclear bomb or the material from which a nuclear bomb can be made to somebody like bin Laden and that he'll bring it to a place like Washington or Boston. Now one could say, well he'll certainly know that he could never cross that red line, to sell nuclear material to a terrorist who could then bring it here to use. I mean that seems almost inconceivable, but as Bob has said, they've already crossed that

red line. The uranium hexafluoride found in Libya almost certainly came from North Korea, maybe the middle-manning done by A.Q. Khan. So that's not a red line that they have observed in terms of their previous behavior.

How to get North Korea to freeze where it is now so that it doesn't produce additional material and to get on a track for first freezing and then backing down is a more complicated issue. In fact, maybe it's too hard, but in the book I lay out a strategy for attempting to do that, too. It will give most people heart failure, but I would recommend it and would play it out today and I don't think it's a problem that is getting better by waiting. I think it's a problem that's getting worse by waiting and I think we close our eyes to it at our peril.

So my bottom line in conclusion from this is nuclear terrorism is a preventable catastrophe. The subtitle of my book says the ultimate preventable catastrophe. It's preventable by a checklist of actions that are feasible and affordable and the core of that multi-layered, 360-degree strategy is to choke the supply side, and the organizing framework for the choking the supply side is a doctrine of three no's.

**Patrick Cronin:** Professor Allison, thank you very much.

We now turn to somebody who's been trying to prevent this catastrophe, and that's Laura Holgate, who's Vice President for Russia/New Independent States Programs at the Nuclear Threat Initiative, whose distinguished CEO, Senator Sam Nunn, happens to be the Chairman of the Board here at CSIS, I should add.

Laura Holgate managed the Cooperative Threat Reduction Program at the U.S. Department of Defense and at the Energy Department, she was also the Director of the Office of Fissile Materials Disposition, among other things.

**Laura Holgate:** Thanks very much and thanks to the conveners and those who have gone before me for saying a lot of the things I would have said and therefore I can be more short with you all and we can get to the discussion phase more quickly.

The first thing I want to really commend this exercise for is putting this notion of a priority setting right at the heart of the discussion. This has been desperately needed, and I just want to say a few words about this broader issue of priority setting in the context of threat reduction or preventing proliferation.

First of all is the challenge that there are no really good structures to address this prioritization process in the U.S. government itself and even internationally. You look at the calls from the legislature over the last decade for a non-proliferation czar and the responses that you've seen from the administrations of both political characters to those calls. You look at the lack of a clearly stated vision for the proliferation threat reduction programs and how they compare and contrast with each other, how they reinforce either, the lack of a common voice expressing this integrated strategy or any integrated strategy within the U.S. Government, and I think you begin to see why making some of the trade-offs that are positive in this list of questions becomes almost impossible just structurally within the U.S..

Now broadening the scope geographically and internationally, as you look

at the growing role of other countries in supporting threat reduction activities around the world and you see that structures like the Group of Eight, Global Partnership Against Weapons of Mass Destruction and its predecessors in the nuclear, the Non-Proliferation Disarmament Cooperative Initiative and so on, these are informal coordination mechanisms in which nations come and tell each other something about some of the things that they're doing, but it does not operate to an agreed set of priority activities, nor are there mechanisms to make tradeoffs or even clear divisions of labor among those countries as to who might do what within this assistance context. So I would say that that's one of the causes of the symptoms that we see of poor or absent priority setting.

The second point that I'd make on the priorities issue is that when you think about priorities, I think some of the flaws in the questions and in the broader discussion is that there's not an adequate breadth of consideration of what priorities actually mean and what it means to allocate against priorities.

The first point I want to make is that it's not just money. It's political capital; it's resources associated with people, how many staff jobs you have, what talent you have, where it gets in the diplomatic traffic, where it sits on the talking points as presidents interact over summits. These are also resources, and priorities can be detected by them and need to be reflected in them, and that's part of how we need to be making judgment. But if we don't broaden the scope of things that we're talking about broadly enough, we risk creating fratricide among valid non-proliferation programs, and I think we need to look at not just, you know, trade-offs, for example, between the PSI and the NPT, but looking at the broader U.S. government defense budget or even more narrowly things about pursuing new nuclear weapons as compared with preventing weapons in other peoples' back yards.

These are the kinds of trade-offs we need to be looking at, and we need to be thinking about that not in a zero sum game. You also see this challenge when you're looking at, you know, the debate over the geographic expansion of Nunn-Lugar sort of traditionally, which was aimed initially at the former Soviet Union. You start talking about doing those kinds of activities in other countries, yet the budgets don't expand. This is the kind of problem. As we reflect the priorities, we need to broaden the size of the pie that we're trying to slice up to reflect those priorities.

The other challenge that we have in thinking about this is we, it's not clear who the 'we' is when we're talking about the different pieces of the agenda. Different actors have different roles to play in executing these activities. One big question is what does the U.S. do with itself, with its own weapons, with its own materials, with its own people and dealing with its own weapons of mass destruction legacy, and then what do we do in cooperation to address those risks in other countries? Similarly, what are other countries' responsibilities as sovereigns to take care of these materials on their own? To what degree do they then permit or are they open to or are we able to interact with them in making up the difference between what they can and will do on their own and what they need to do to protect the global security.

And here I would say in the second category of thinking about what other

countries do to address these issues, that it's sometimes hard to determine exactly what other countries are doing. There's a distinct lack of transparency, and I would say Russia is of great concern here not only because of the large role they play in this proliferation arena but because of the closed and closing of elements of knowledge about how they operate with their materials and their weapons.

So the final point I'll make on the priority setting question is that often the distinction between ends and means is not clear, and when we talk about certain activities that need to be undertaken, sometimes we don't understand exactly what it is that's trying to be accomplished by that certain set of activities, and I'll just give an example. One of the traditional tools in the tool kit, the Nunn/Lugar tool kit, is trying to interact with some of the people that have knowledge about weapons, the classic weapons scientist who knows how to build a bomb but doesn't know how to feed his family.

First of all, I think that's become a cartoon threat, but the tool that was developed to deal with that is something called the International Science and Technology Center which provides a monthly stipend to certain scientists who have weapons knowledge as a way to prevent them sharing that more broadly. That's had some effect, some of it beneficial, but now all of a sudden we're transferring that same model to Libya as a source, as a way to deal with the proliferation threat that Libya faced. Yet what's clear just to me reading the newspapers is that the Libyan scientists did not know how to assemble the ready-made materials they got from A.Q. Kahn. They don't seem to have made very much progress on any indigenous programs, so it's not clear to me what knowledge is in these Libyan scientists' heads that you're worried about wandering off. Yet we might be engaging them for other reasons, not as an end but as a means, as a reward for Libya having taken the right step. That we want to provide alternative jobs for these scientists, not because we're worried about what they know that they might tell somebody else, but because we want them to not be left out of the reward system that Libya gets for having done the right thing globally.

So here we're looking at a particular tool. Sometimes it's an end, sometimes it's a means. We've got to be really clear which piece of the problem we're trying to solve.

Let me just respond to a couple of the trade-offs in the questions that were put here and then I'll come back and I'll end with a few comments on my sense of what the priorities should be.

The second question that others have addressed on this balance between nuclear, biological and chemical, absolutely they're different, but I worry a little bit about a removal of the biological weapons issue into some tertiary or quaternary level. I think radiological and chemical may belong there, but I think the level of societal impact of an effective biological attack rises to the same catastrophic level of effect of an actual nuclear device going off anywhere in the world. I think the challenge, though, is you have two different approaches to dealing with those problems. Clearly the nuclear agenda is amenable to a prevention set of actions and I think we've heard a powerful explanation that you almost can't do too much

on prevention. If you're looking at the biological issue there, I think it's almost impossible to even ever begin to do enough on prevention. Yet I think we can do enough on response: preparing to detect, treat, manage attacks. It is doable and it has the intermediate benefit of if you never have an attack, you're much better set up to deal with naturally occurring infectious diseases which are recognized globally as being one of the threats irrespective of the terrorist aspect.

So I don't want to let the biological agenda off the hook. It's just a very different agenda. It's not related to materials protection accounting and senses and sensors and the traditional techniques of prevention that are so effective and important in the nuclear arena.

The debate over full-up bombs versus materials I want to complicate a little bit. I'm not in, I'm not insensitive to the logic, but I think when you're looking at a lot of the full-up nuclear weapons that we're talking about, for terrorists, even terrorists with some inside knowledge, it's going to be very difficult for them to actually get that bomb to go off in a way that is more than a radiological device. You look at some of the more sophisticated weapons, they have to go up in a ballistic missile and come down before they'll fire. Even some of the smaller ones, some of the older ones, the tactical weapons that people worry about which are certainly portable and more concerning from a terrorist perspective, may not be that easy to either fire by an unauthorized mechanism or to mine for the material that's in there. You may end up killing yourself, not that that's a problem but not in the place that you want to kill others. So I want to say it's not necessarily such an easy trade-off.

The second thing is that when you're looking at least at Russia, which has the largest stockpile of weapons, that I do believe that the Russians have done a better job protecting their weapons than they have protecting their materials over the last 15 years. The officers have had a stronger security culture, they've been better paid, they've been hand picked and by and large, they've been relatively more successful. It doesn't mean the threats don't exist and as was pointed out earlier, permanent opportunities for improvement, but I think on balance, while the bombs have to be protected to absolute standards, the Russians have done comparatively better on that than they have on materials.

The final point I'll make on this is that the design process for an improvised nuclear device is significantly more simple than trying to make someone else's design of a bomb go off, and given the relative availability of HEU, the relative availability of a gun-type design which we found in the caves in Afghanistan, I think that a terrorist determined to create a nuclear blast may find it easier to go and improvise a nuclear device rather than trying to detonate a full-up bomb that they've stolen from somewhere else.

My priorities, differently organized but not necessarily inconsistent with what's been said elsewhere. I would point out that I think that these can all be pursued, the four-point list I'm about to state on nuclear issues, can be pursued in parallel because they all have to be done quickly and more or less in the same timeframe but with cascading resources, that you make sure you do everything under step one that I'm going to propose in terms of the resources, financial as well as human and political, and then apply any that are left to the rest as they

flow.

The very first one has got to be secure all material in every form, wherever it exists, or remove it to somewhere where it can be secured. This implies sustainability; it implies a security culture of the people responsible; and it implies transparency, at least as to the adequacy of each state's ability to secure.

The second point would be to make progress towards eliminating bomb-usable material in civil use, whether HEU in research reactors, or power reactors, the separation of plutonium as a treatment, a waste treatment approach, so on.

The third point would be limit and phase out production capacity, including dual use production capacity, and this drives you towards some of Elbairday's [ph] proposal on multilateral fuel cycle facilities and the kind of solution that Graham has offered to deal with the Iran problem of using Russian supply and fuel treatment.

And fourth, to eliminate stockpiles of fissile material. What doesn't exist doesn't have to be protected, but you can't avoid the security or discount shutting off some of these supplies, proceeding on those first, without getting to, without making sure that you've done all of that before you start worrying about the very expensive and long-term activities on elimination.

I will point out, however, that there is an interesting feedback loop between the third and the fourth priority in terms of limiting production. The elimination of fissile material usable in weapons does yield material usable for power production, and so you can begin to very directly supplement or replace uranium enrichment with the uranium blended down from Russian and U.S. and other weapons around the world. So there is a reinforcement on that point, and so I'll look forward to the rest of the discussion and how other people see their priorities. Thank you.

**Patrick Cronin:** Wonderful, thank you.

Well, last but by no means least, George Perkovich, who's the Vice President of Studies at the Carnegie Endowment for International Peace. He was for more than a decade at the W. Elton Jones Foundation where he was Director of Programs and Director of the Secure World Program. He's a tremendous writer, including the prize-winning book, *India's Nuclear Bomb*. So George, over to you.

**George Perkovich:** I do want to thank Patrick and Dr. Etzioni and CSIS for organizing this event. I have the either very unfortunate task of, in an afternoon on a Friday coming last in line, but I'm going to see it as an opportunity and basically consider that my colleagues have covered the rent, covered the car payment, and I've got a little bit of money left and I'm going to gamble here and not talk about things that they already talked about which I think are right on in terms of the focus, the need to focus on the supply side and denying availability and accessibility to terrorists of nuclear weapons and/or fissile materials, and I think you've heard a lot of wisdom from all of the previous speakers. Many of the recommendations that they've made are in a new volume that I think's available outside that my colleagues and I at the Carnegie Endowment have produced on dealing with nuclear proliferation.

So I'm not going to talk about that and instead, as I suggested, I'm going to gamble a little bit and say that as we focus on the supply side, as we all have earlier today, we also ought to look at the demand side of the problem, and that that can't be ignored at least as much as it's being ignored I think in many of the policy domains that we have in our political discourse.

One way, and the most obvious way, to deal with the demand side is to kill the terrorists, and so I think that that is what we are focusing on. That's to the good. Anything that can improve the capacity to identify, capture or kill people with blood on their hands from terrorist organizations clearly is a vital demand-side strategy, but you also have to recognize that some of our actions also in essence politically reproduce more than you can capture and kill, and so the strategy has to be in everything that you're doing to diminish the overall supply of terrorists rather than to augment it through your actions. And to that end I think you have to deal with some broader regional, bilateral security issues, and then a normative issue that I'll get to at the end.

Clearly it will be easier to minimize the terrorist problem if Palestinians themselves decide that they no longer need to and should commit terrorism. That, in turn, requires greater progress, and there is progress being made, but greater progress in the context of the Israeli-Palestinian dispute.

But the overall terrorist problem, at least as it comes from Islamic groups, will be minimized if it ends in the case of Palestinian organizations. Relatedly, there is a crying need for a regional security strategy and forum for the Persian Gulf. The U.S. obviously is the major actor in the region. Now the steward, if you will, of Iraq, we have obviously a still undefined relationship with Iran, and you have all the actors in the region basically wondering what the strategy is, what U.S. ultimate intentions are, and then varying degrees of severe fear amongst the actors, without a sense of what is the long-term security future that they have. So if you travel in United Arab Emirates, you have people whispering into your ears. If you're an American, this happened to me, "You should bomb Iran. Destroy their facilities". And you go to other countries in the region and they're worried about Iran. They're worried about elements in Iraq. Other people will tell you, is the U.S. going to turn Iraq into a permanent military base and what does that mean for our security and our future. You have tremendous uncertainty, in other words, over what the environment, the security environment, can be in the Persian Gulf, what the U.S. role in that is going to be.

That question of the U.S. role then plays to the issue that the Islamist organizations play on in terms of foreigners on the territory of the state that's supposed to be the guardian of the holy sites, and this is a politically motivating issue that if you want to get at the demand side you at least have to address, and also if you want to get at the Iranian problem, you have to address this issue, and there's almost nothing happening in this regard in terms of U.S. policy.

Then I'll switch to Pakistan, a state that's been highlighted here very appropriately, I think, as a major source of concern. My own sense is -- and one can kind of go through this, it would take longer than I have here, and my colleague, Hussein Hakani [ph] will have a book out in the next couple of months that documents this -- it's a path-breaking history of Pakistan. But I don't think

you can get at the Pakistan problem without restructuring the ISI, the intelligence services in Pakistan, and that you can document basically how the Islamist parties and Jihadi organizations were basically created by the machinations of the Pakistani army and the intelligence services beginning in the 1950s, and it is that organization primarily that helps keep alive the Kashmir conflict, that if any state entity knew what A.Q. Kahn is doing, it would have been the intelligence services. The Taliban were created by these people. So much that we worry about rightly in Pakistan has its kind of, you can trace it back to this intelligence service, which is the monster that's eating the country, and if you don't take that on, not to say that it's easy to do, but if you don't take that on, then all facets of this terrorism problem will remain significant.

The U.S. government has thus far refrained from taking that on because, guess what? I mean just the report yesterday about failure of the intelligence community, we rely almost exclusively for our intelligence in Pakistan from the ISI, and that cooperative relationship between our intelligence services and the ISI severely limits your capacity to then try to bring down that agency in Pakistan. But if you want to solve this problem, you have to attend to it.

To relate it to another facet of the terrorist problem, and it's one that certainly would concern New Delhi, it ought to concern us -- and this is the Jihadi threat in Kashmir, which again is tied to the ISI, but if you're worried about nuclear weapons going off, this is part of the dynamic that you have to address.

Lastly, and kind of the biggest gamble in what I'm going to say, is in our discourse, we say that we assume that terrorists would use nuclear weapons or nuclear materials if only they could get their hands on it. I think even if you believe that, it's actually counter-productive to say that we assume they would use it because we ought to be doing the opposite, which is to try to build up the norm against using any nuclear material or nuclear weapon. You don't want to routinize it. You want to make it more clearly abhorrent. Why do I say that? Well even terrorist organizations, even the most seemingly nihilistic terrorist organization, al-Qaida, speaks to a narrative. It justifies its action in terms of a variant of just war doctrine. So for example if you look at their early targeting, they targeted military facilities. They didn't target civilian facilities. Later on, they moved to target civilian facilities, but even 9/11, the Pentagon was a military target. It was the heart of the military.

So when they started dressing, and early on, Osama bin Laden focused on Hiroshima and Nagasaki as the epitome of illegitimate action because it targeted women and children indiscriminately and so that was an example of what they wouldn't do. Later on when the conflict escalated and became more dramatic, they felt a need to get a Fatua, to get a religious ruling to address the possible use of weapons of mass destruction, and again, to say that it would be just, to frame it in a way that it would be just. I've read the Fatua. It's a chilling document, but it attempts to be rigorous.

The point is that even the worst terrorist organizations fundamentally recognize that targeting civilians is wrong, that targeting innocent civilians is wrong, and it seems to me that ought to be much clearer in our approach to this. And the last point, it becomes very problematic because we want to be saying

that using nuclear weapons would be wrong because it targets innocent people, and that is the definition of terrorism. It then complicates, it complicates the way we pursue our own nuclear policy and this general effort that we ought to have on the demand side basically to make any community in the world, whether it's Egyptian society, Pakistani society, any society, basically say that it would be wrong. It would be unjust to use nuclear weapons, and I think on the demand side, we can do a lot more to build social kind of outrage at that prospect. Let me stop there.

**Patrick Cronin:** Thank you. Would you just join me a minute and give a hand to our panelists here? [Applause].

We're going to get a dialogue going here in just a minute, and I wanted to just make a couple of announcements. First, of all just to thank Devin Stewart who's sitting up here and Emily Prior who's not here today, for helping to put together what has just been a fantastic panel discussion, but we're only halfway there. We're looking forward to this discussion and dialogue with you as well.

Secondly, we're not going to pause, so I want to invite you throughout this talk to go up and get coffee or sodas, there are restrooms just outside the back there. I know there are many experts in the room and we really are hoping that you will stand up, wait for a microphone, introduce yourself and make a comment or ask a question. But first let me see if there are any very brief responses from the panelists from what they have said.

Professor Etzioni?

**Amitai Etzioni:** As you said, I thought it was an excellent discussion, very much focusing on the priority issues.

I just want to make two points, two sentences. The question, if North Korea will or did cross the red line by selling nuclear material. To cross the red line, somebody has to draw it. So I didn't hear that we said at any point if you do that we're going to get really upset, the way the Israelis did, for instance if Iraqi tanks are going to move into Jordan. So you can't cross the red line unless there is one.

But it points to a much deeper issue which Professor Allison raised. Do we have in our cupboard the military response for North Korea or for Iran if somebody does something which really upsets us, and let me leave that question standing.

Finally, I couldn't agree more with the excellent example Robert Einhorn gave about where de-proliferation has been done for 10 years, but in the end of the day I still think it makes a difference what we're after, given all kind of circumstances. Are we after what Clinton tried to do in North Korea and say you give it up and you better do something else; or what we're trying to do with Iran or did try to do with Iran and say you may build highly enriched uranium and we'll supervise it. We're changing though.

But these are, in the end of the day, very different models.

I close here with the line, the old famous line about Mrs. Lincoln, "Otherwise, how did you like the play?" [Laughter]. If we say as long as a treaty allows you to quit after three months, et cetera, it's really murderous. So the

question is if we would change that, should we move to a completely different regime.

**Graham Allison:** One small point. I think what Amitai says is right. Those of us who have worked on these topics for a long time I think can find precedent for many of the things that need to be done now in things that we've already done, and obviously there's a lot of history here we can learn from. But I think that a reason for being especially concerned now is that if North Korea becomes a nuclear weapon state which on the current course it will do in the next year or so, a recognized nuclear weapons state, or as Bob said, long term with a production line. And if Iran gets across the line that it's about to get through, then what I think we've known as the non-proliferation regime, which was an overlapping set of constraints the centerpiece of which was the non-proliferation treaty, will itself erode and unravel rather quickly, I fear. So that four or five years from now this will be an incredibly different discussion and what had been put together and was held together by kind of patchwork and well, it didn't quite work for India and Pakistan and then somehow nothing terrible happened so we think well, maybe we'll just keep patching up the pieces and it will keep holding. Myself, I think actually it may unravel rather quickly and we might find ourselves in a situation in which you don't see just one nuclear bomb going off in a city, but in which terrorists who would be otherwise able and willing to kill at the maximum of their capability, will find themselves with capability to kill beyond what we can tolerate as a civilized people and then civilization becomes a whole different question.

**Patrick Cronin:** Let me look out in the audience and see if I see a hand. Sir, if you'll just wait for the microphone and then introduce yourself.

**Question:** Gerald Post, George Washington University.

I was really quite struck that the emphasis in the panel for the most part really was concerned with nuclear proliferation and its hazards and with the exception of the presentation by Perkovich there was little attention to the terrorists. And in particular terrorist motivation to do this, which terrorists might, what are the constraints against them?

I had the opportunity of presenting to the IAEA at a special session on nuclear terrorism suggesting that for the large majority of terrorists this would be highly counter-productive. And to follow your line, what are the themes that could be pursued to make it more counter-productive? The incarcerated terrorists we've interviewed in our program find for the most part this an abhorrent idea. Just to note that. Kalashnikov was the notion, and several quoted the Koran saying the Koran forbids poisoning the earth and living things.

So I do think much more attention needs to get addressed to the demand side, and in particular to focusing on within the spectrum of terrorists who are the terrorists that we need to focus especially on? In terms of al-Qaida, which was thrown out several times here, I'm sure we all recognize al-Qaida has really evolved or devolved in several ways. Some talk about the new generation of al-Qaida, al-Qaida 2.0, and this being more an ideology than an organization and the real concern has been addressed to the so-called Global Sulafi Jihad which is much less able to make use of such weapons in some ways in terms of

resource, organization and so forth.

So I just wanted to address that, that we really need to be thinking much more about that demand side, and I applaud your addressing this. But needing to go beneath that level at which you presented that in terms of motivation, motivations against what are the end points you made. For every terrorist killed or captured there's a terrorist assembly line, ten more waiting in line. What can we do to inhibit that assembly line and to be working on these long-range strategic aspects?

**Patrick Cronin:** Few have plumbed the depths of the terrorist psyche as Gerald Post, but I think Ed Luttwak wants to respond at least.

**Edward Luttwak:** I actually completely disagreed with the presentation by Mr. Perkovich. I refrained from saying it because I was hoping it would just go away, but after this intervention... [Laughter].

As it happens, I spent two and a half years recently working half my time overseas, physically on the ground with a police team in this subject.

First of all, the demand side approach is wrong in principle because the terrorists are generated in places, he said oh, let's deal with the Palestinian issue, let's deal with the Gulf issue, let's deal with the Arabian issue. Yes, and what about the Chechnyans who are the most likely to do it? What about the new terrorism, semi-new terrorism in Yatai in Northern Malaya or Southern Thailand, you call it. Mindenao terrorists. None of these care about Arabia, they don't care about the Gulf, they don't care about any of these. They're totally irrelevant. And in Kashmir there have been any number of different terrorist phenomena, some of which are very tied and others less tied.

The second thing has to do with appealing to their sense of values. So you say to them you can't use nuclear weapons because otherwise they'll kill all the women and children. There's a danger that these people might be able to read and write. If they can read anything they'll know that all of our nuclear weapons fall in two categories in terms of targeting. One was the evil weapons that were counterforce targeted, aimed at other peoples' ballistic missiles. They were very bad. Then there were the good ones which were aimed at women and children and a few men as well. In other words, none of the demand approaches work and none of the demand oriented approaches work.

For example, for a long time people were watching the beards in the Pakistani army, watching officers, counting beards, doing a beard count. Well as it happens, they know about that, the bearded ones. And now the people who cause the greatest concern to the current authorities there are the ones without beards because the ones that are really evil and contemplate mass murder, they can also contemplate cutting their beard. [Laughter].

In regard to the Chechnyan demand. Well, you may recall, some of you, that during the Yeltsin thing there was Ruslan Hazbalatov [ph], Speaker of the Duma. He was an urbane, sophisticated, good looking, well dressed man who rather favored Italian tailoring. So there are many Chechnyans, they come in many different varieties. The whole population of Chechnya today is 900,000 inside Chechnya. Plenty of them, all over the system.

Remember first the demand side approach is wrong because they emerge from all places that you never heard of. Secondly is wrong because in terms of identification of strength, it's not there. You cannot identify it. And the ultimate thing is, you're looking at a thousand disbursement points for your effort versus the finite number of items that they can get hold of so it's wrong on all counts. The only thing we can say is that our war in Iraq has done a lot of help because it provided a venue for all these guys to go to. That's why they don't go elsewhere in Europe or anywhere else.

But if you're going to do that kind of, that's a clever thing in retrospect in terms of if you value that terrorism, except it's not important terrorism --

**Edward Luttwak:** As Dr. Einhorn said, this isn't a dichotomous choice, and to be only focusing on the supply side without also attending to the demand side, one needs to be reducing the demand as one is blocking the supply.

There is no finite demand to reduce. This is totally unpredictable. They emerge in other places unrelated and so on and you can't identify them as such.

**Patrick Cronin:** George, do you want to add a word?

**George Perkovich:** It seems to me there are a bunch of things going on here, but if we were talking originally about terrorists who had more than local region capability and ambition, that distinguishes some of the groups that you're talking about from the groups that we're talking about.

**Edward Luttwak:** It's a very transient boundary. It depends on if you secure one set of targets it goes somewhere else. If the Egyptian government cracks down, they pop up in Afghanistan. So that is the mistake of the motivational approach is that it presumes there is something new about this.

There has always been in the margins of macro conflict, there has always been volunteers. Always. And they brush them off. And you can continue to brush them off except because of this other and unrelated phenomenon that we have come up with portable, physical objects that can do this mega destruction.

**George Perkovich:** I guess I would say two things. One is you were rightly talking about on the margins that these things always pop up, but I thought we're in a moment of perception at least where it's not on the margin, it's in the core. And then there is this narrative, this set of narratives, at least with the core that we're dealing with.

But the other thing is that on the demand side, much of what I would say or argue is not directed at the terrorists themselves, but rather at the society from which they're recruiting or to which they're appealing, to mobilize against our interests or policies, who may not share the same --

**Edward Luttwak:** That's also wrong because you have a billion people who are angry at you and yet there's not a billion terrorists or 100 billion terrorists or a million terrorists. The number is so small within the larger number, that treating the larger number has no effect on the smaller number. Particularly when you sit and talk to these guys and discover that their motivation was not foreign policy at all, but it was because of the fact that their father hit them. Or something of the kind. Then you discover why. If it's a million people in war, you're dealing with a million people. So there is this action and reaction at the mass level so it's

significant. But in terrorism we don't have that. If all the angry people were terrorists then yes, you would be 100 percent right, or even 90 percent of them or 10 percent of them or 5 percent of them or 1 percent. But it's not. It's 0001. And when you look at the motivations of these terrorists you realize how distant foreign policy is.

If our foreign policy caused any of the above, Latin America would be the source of terrorism. We have been invading, beating and brutalizing, discriminating. Right now in Colombia doing damaging, harmful things to a lot of them, and no terrorism from there. It tells you how unrelated this is.

**Male Voice:** We call them narco-terrorists.

**Patrick Cronin:** We're not going to settle that right now, but --

**Male Voice:** ...trying to settle these things...

**Question:** Bill Galston, Interim Dean, University of Maryland School of Public Policy. I'd like to renew the question, or one of the questions, that Professor Etzioni posed to Professor Allison because I think it's quite important and deserves an exploration. The conventional wisdom is that one of the problems that we're dealing with with regard to both Iran and North Korea is that we don't really have very good military options. I'm not talking about morally good now, I'm talking about likely to achieve their objectives. And in the case of Iran, and this is a question, in the case of Iran the reason it is said that we don't have very good military options would also apply to Sharon and the Israelis. That is if we're not dealing with an above-ground Osyric [ph] style single installation but some say two or three dozen well-fortified underground installations, then what is the military option? And if we don't really have one, then how does that affect the rest of the calculus?

**Graham Allison:** Let me try to address that. And there's no doubt a dispute about this topic, but I agree completely with the proposition that this is central and that if there is no military option, in my view there's going to be no solution to this problem.

In the case of Iran, which is the easier of the two, and we can do North Korea after, but each of them take a little time. I describe in some detail in the book a bit about both. I'd say in the Iranian story it's conceivable that there are some facilities that we have no idea where they are. Those are the ones that are impossible to destroy. Everything else is destroyable, I believe, by a credible military attack. If one were trying to persuade Iran by virtue of agreement, not for the purpose of attacking Iran but for the purpose of getting them to agree, then what you need to do is pose a credible military threat, not do it, so then you've got to think about what it is to orchestrate the posing of a credible military threat.

I would say from my unclassified review of this subject, there's about 15 aim points. Many of them are well protected. Not so underground that they couldn't be destroyed, or if they were not destroyed on the first occasion, the second. I spent some time in the month of January in Israel talking to Israelis, just comparing notes, just informally, and there's no question that that target set's been looked at by Israel very carefully. There's no question that it's been looked at by the U.S. very carefully.

The Iranians, whom I've also talked to about the subject, say well you have no credible military threat. I say let me tell you, I think there's about 15 targets and I think they could be destroyed. They say, well would you be sure you would get all the targets? I said no, I don't think I'd be sure, but how many days did the U.S. bomb Iraq after 9/81 before we went to war with Iraq in 2003? And by my count it was several thousands separate days in which we bombed Iraq. So this doesn't need to be a one time occasion. You can go back and bomb them tomorrow and the next day and the next day and the next week and the next month.

Then you say what kind of a world are you talking about in which you just go bomb people or somebody goes and bombs people? I say well, that's a very dangerous world and it's very problematic. So you've got to work your way through that whole logic chain. But in my view I think this is a credible, I think you can pose a credible military threat.

In the case of Israel, just to be clear, I didn't volunteer Israel. I think Ariel Sharon volunteered himself. He makes the statement regularly, as does his Defense Minister, as does his Chief of Staff, so they've said this is across their red line, absolutely. And while undoubtedly some Israelis would prefer for Americans to do it, and I would say if you're looking for a credible threatener, say I'm thinking of a guy whom I really believe would pull the trigger, I think Ariel Sharon just comes perfectly for me right out of Central Casting for those purposes. If it needed to be ultimately some collaboration between the U.S. and Israel in it to make it a credible military threat I'd go that way as well. But in any case I would not have Iran operating those enrichment and reprocessing facilities.

What would be the effect of a U.S. or Israeli attack on the facilities if it came to that, which I do not think it would. I think if it's a credible military threat to destroy the Iranians will agree, as opposed to persist. But if there were a credible military threat to destroy and if one had to conduct the attack ultimately, then there could be many many terrible consequences. So when you try to think how can Iran deter the U.S. or deter Israel from such an attack we're into yet another level of the discussion and we could go there too if we had time. But I think since the deal is done it's what can be done with a credible military threat, I believe that credible military threat can be posed. In the North Korean story I think it's much more complicated.

**Patrick Cronin:** Bob Einhorn, do you want to add a word?

**Robert Einhorn:** I don't think we have very good military options in either North Korea or Iran, but fortunately I don't think the Iranians or North Koreans really believe that. I think the Iranians especially think that we believe we have military options in Iran.

I don't know what 15 targets, Graham, you're talking about, but I believe the U.S. intelligence community is quite convinced that in addition to Iran's declared nuclear facilities they also have a clandestine, deeply hidden program. And if they truly believe that, then you can strike any number of declared targets but you're not going to have any decisive effect in setting back Iran's nuclear program. And if you're not going to do that, I'm not sure why you'd want to

undertake this enterprise. Because in getting to the second part of it, the retaliation, I think the Iranians have lots of good retaliatory options, and not necessarily in a conventional military sense, but there are all kinds of asymmetrical threats they pose to the U.S., including right next door in Iraq where they can manipulate the Shia in Iraq to go against American interests.

So I think there are really not very attractive military options, but as I say, the Iranians may not believe that and that's a good thing if that leads them to be more cautious.

**Graham Allison:** Let me do one footnote, Bob, to see if we agree or disagree, because I think it's a very important point of the answer to Bill's question.

There is currently a negotiation going on with the U.S. encouragement, about stopping the work at enrichment and reprocessing facilities which we do know what they are, and there's a big exercise going on to that end. That's either, in your view, pointless because it's about production lines one, two and three but not four, five and six which you don't know where they are, or it does have a point. Which is your view?

**Robert Einhorn:** I think it has a point, and I'll tell you why. I don't think that the Iranians have necessarily mastered the art of enriching uranium, and I think they really want to resume open R&D activities. They want to make a centrifuge cascade operate effectively. They want to do that openly. Before they do that and feel they've mastered the technology, they may be reluctant to go into a large-scale, clandestine program. I believe they are prepared to do covert operations but I think they want to know what they're doing first. So that's why I think the European exercise is valuable if it has the effect of postponing Iranian confidence in their centrifuge technology.

**Patrick Cronin:** Let's go back out to the audience here.

**Question:** Jerry Epstein, CSIS.

This is exactly on the same point, I just want to throw out an anecdote. I was at a conference in Israel I believe in 1996 and heard a talk that really stunned me. Maybe it was just for the benefit of the visiting Americans. I'm not sure I have all the details right, but I do believe it was Ifryan Snaf [ph] that gave a talk. I think he was either the Deputy Defense Minister or shadow Defense Minister. He basically made the same points. He said a nuclear armed Iran would be an existential, intolerable threat to the state of Israel. And he said there are no conventional options. I took away from that that Israel is not only promising a first strike against Iran, but a nuclear first strike against Iran.

**Patrick Cronin:** I should add that Jerry is hoping to run our homeland security program so he's straying beyond his turf here. But does anybody have a response to that, or are you just going to take it as a comment?

**Graham Allison:** My impression from more recent conversations was that they were not thinking of nuclear weapons as a way of attacking these facilities. And I think the weapons which they sought from the U.S. government called bunker busters, which are non-nuclear bunker busters, were not for the purpose of attacking things with nuclear weapons, but were for non-nuclear attacks.

**Question:** Richard Whites, the Hudson Institute.

Laura mentioned briefly in passing at the end of her talk the so-called redirect programs, or trying to convert former weapon scientists to non-weapons work. The material that I've read, the studies on the effect of those programs are mixed and I wasn't sure what the panelists thought about them. I notice it wasn't on the list of the priorities being circulated by the lead speaker Etzioni.

**Laura Holgate:** I'll just jump in and extrapolate a little bit on the general point that was kind of a bigger discussion than my point on ends and means. When the programs to deal with the human element of proliferation were invented in '92-ish timeframe, they were dealing with a version of the threat that focused on rogue states acquiring large arsenals with full indigenous production capability and remote ballistic missile programs. We were worried about Russian scientists running off to Baghdad, Tripoli, Pyongyang, pick your capital of rogue state concern.

In the intervening years we've seen two interesting things. One is that those rogue states are not the premier nature of the nuclear threat today. We're talking about terrorists instead. And the other thing is we haven't seen nearly the kind of mobility in the Russian top-level scientists that people feared. Part of that is because some of them were getting some of these sort of stipend type support from these programs, but I think another part of it, under-accepted and under-recognized, is that a lot of these very top scientists were professional, they were loyal, they were nationalistic, they liked living in their closed cities which were still somewhat more elite and manageable than any other economy they could easily imagine. They are homebodies. And they're racist. They don't like working for people like those places. We should celebrate and be grateful for this. But as the Russian economy improves, as these closed cities -- let me be clear that the argument that I'm making is purely about the nuclear issue here. As the wages improved, we don't have the sort of economic desperation scenarios around these closed cities and these facilities any more. What we have are vastly overstaffed complexes with massive quantities of fissile material. And it's not the perfect miniaturizable bomb design that goes on the front end of a ballistic missile that is the thing that stands between bad guys and nuclear capability. It is 100 kgs or less of HEU. The janitor knows where that is. The lathe operator at these places knows where that is. Those are the people we need to be sure have no longer access to the material or to information about how that material is managed at those facilities.

So I would say yes, people are still part of the problem but they're a problem in a different way and it's different sets of people, and we need to reorient what had been code named brain drain programs. That was never a good term. It's even less a good term to characterize them now. We need to redirect them to be in support of material security. We need to lower the total number of people who have access to materials and information, remove their security clearances, get them out of the lab, onto the local economy. That's a whole different agenda from what the ISDC was designed to do, and their commercialization approach is steps in the right direction but it doesn't fix the problem.

**Patrick Cronin:** If I can comment just briefly on this, and it's the same logic but a different problem.

Nuclear scientists and engineers in other countries are, some of them anyway, are of concern and in some of the countries that we know about that have nuclear weapons, there aren't capabilities or programs even to monitor the movements of their key scientists and engineers and so there aren't systems when they leave the country that that is known, let alone where they're going. So part of the logic, if you want to secure this know-how as well as potential access to material would be to get an agreement amongst at least the eight states that we know have nuclear weapons, what their standards are in terms of information and monitoring those key people.

**Robert Einhorn:** I think the people problem is important. The janitor is important if he has the keys and the whereabouts and so forth. But I think people with real expertise, it doesn't take very many of them, to give a terrorist a real hint on how to do things or how to enable locking mechanisms and so forth. I think that's very important.

As far as the science and technology programs, I think the best thing about them is that they help us keep track of these people. Look, you can have a contract to do a job during the daytime but there's nothing that says you can't moonlight and help Iran in the evening. But if you can keep track of them I think you're ahead of the game. What we're doing with Iraqi former weapon scientists and Libyan former weapon scientists, I think even Libyans can be of help to some terrorists and I think it's worth at least keeping track of them. And I think that's what these programs help to do.

**Question:** Ira Shore, Physicians for Social Responsibility.

A number of consensus points here about what needs to be done. I wonder what the consensus is on the panel to Graham Allison's points about the grading that the Bush administration got in the first term, and that missing ingredient of where is the political consensus? To put this on the top as a priority, the political system, either in the administration or Congress, and I think both Democrats and Republicans can be faulted for this. I would like to hear from the panel as folks who work on these issues intellectually, why you think the political system is not responding with the passion that you're bringing to this issue, both intellectual, and your time and your energy. Why isn't the political system responding? What stands in the way?

**Amitai Etzioni:** There's a few comments on this issue. I think Professor Allison was generous in his grading. The high point of the Bush administration came in the campaign speeches. But beyond that, when Secretary Abrams went to Vienna to announce the new threat reduction initiative, he committed a \$20 million over 18 months and not all of those \$20 million were new money. You just have to let it sink in for a moment. They learned the Dick Morris trick of announcing initiatives because the press can't tell the difference between a million and a billion, so they get the same headlines. [Laughter]. So \$20 million of... well, maybe fix up the [inaudible] reactor in Ghana.

What happened in Pakistan as I see it was this. The Democrats were criticizing the Bush administration for not capturing bin Laden. So in the same

week we found out about Khan's misbegotten deeds, the Bush administration was asking Pakistan to engage in a special drive to catch bin Laden and the trade-off was to accept the theater that Kahn was punished symbolically as long as they will keep hitting, trying to find bin Laden. So the priority was clearly political, which is not that surprising in an election year. But it's really very consistently, the F-16s they were just given in, quote, "reward for fighting terrorists". And they were earlier blocked because Pakistan went nuclear. So any way you look at it.

As far as Putin is concerned I want to make a comment about earlier priorities here again. To ask Putin to go democrat, and I've been to Moscow recently, is really asking him to give up power. At least he believes, unless he doesn't allow free press and so on and so on, he will not be able to hold on. I don't think he's very likely to respond to speeches about human rights. The idea that he would work harder in preventing nuclear weapons which also the Chechnyans could get, that's something if President Bush would have given a high priority you could see something happening.

The other point was made by Holgate earlier. Again I think if I may add a line because it didn't sink in. There is still nobody dealing with this issue. I mean the Department of Energy has its program, State has its program, the Pentagon has a program, they keep sniping at each other and trying to restrict Nunn/Lugar or quarrel about which one gets what dollars. So at the minimum we would have somebody in the White House who's in charge in a big way. So anyway you look at it, I think we haven't really accepted that there is a new world.

Powell's line about Brazil, 'These are good people basically' -- I'm paraphrasing, 'These are good people. Therefore it's okay for them to have nuclear facilities' - it's complete mislearning about everything we know on the subject.

One more sentence about this demand side. I think there's a little more of a point than we let stand. Let me give an example. If we could get Pakistan and India to solve the Kashmir problem, which it's not something to be taken lightly, I'm sure. But there have been various suggestions about a control line and so on and so on. We would face a situation that Pakistan cannot even think about giving nuclear weapons up because India has such a huge conventional superiority, and it's somewhat like Israel with some of its neighbors. If you want to even think about going in that direction you have to have... I agree, it requires a leap of imagination. Have an international force guaranteeing the border. New border between two nations. Then at least you can start talking about it.

More generally put, defining conflicts is one way of reducing the demand side. Iran sees itself surrounded by United States in Afghanistan, in Iraq, and whatever they think about Israel. And the notion that we are not willing to sign with North Korea a non-aggression treaty surely gets their attention.

So I agree actually with Edward that defining all the terrorists in the world is something I wouldn't want to undertake. I would start by closing the University in Hamburg. [Laughter]. But defining states I think is something more doable.

**Edward Luttwak:** I'm so, not so completely unsympathetic to the idea of being harsh on the current administration, but let us remember that the first

president who put nuclear terrorism very much was Bill Clinton who made the speech at the United Nations whose centerpiece was nuclear terrorism as a threat, which was then followed by absolutely nothing. [inaudible] Why is that? It's not because these people are all silly and we're all intelligent. It's because as the discussion today, we have not quite got there. We have not got there to a persuasive operational scheme in regard to even the narrow threat that I really focus on which is the unauthorized people controlling fully developed nuclear weapons which they, the ones that they can actually detonate. Many of them they couldn't detonate. Even in regard to that we don't actually have an operational scheme. I suggested one in a throwaway line, the collective control of all nuclear weapons, including we show you ours, you show us yours kind of thing. We delegate it to a human institution that works with reliability, for example, of the keepers of the Hermitage. The people who were starving and freezing in the bad years of mismanagement of the Yeltsin era, but prevented any sales of Heritage treasures. It can be done on a global basis. We don't have persuasive operational schemes, so this is not the silliness of this or that administration. We don't have a scheme. There was somebody, people came up with a scheme to invade Iraq. It might have been a very silly scheme, as I believe, but nevertheless they had a scheme. Let's do this.

Okay, we don't actually have a scheme, and even the discussion among very like-minded people on this panel shows considerable disagreements which means not 'the' scheme, but any number of competing schemes and so on.

Finally there's another problem and that is the problem to do with our own political language and normal modalities of behavior. That is that Americans are very practical people. Very proud of their [inaudible] and practicality. But when it comes to the U.S. government there is a disconnect between... we're very good at the level of high principle and so on. When it comes right down to the specifics, the operational specifics, there is a great vagueness. It reminds me, Baumgard's sitting in the back. The U.S. Army has a lot of very good schemes. One thing the U.S. Army has never done is actually to train its soldiers in a detailed specific manner that our counterparts like the British do, teaching them how to stand by a window, and how to do this and how to do that. And it boils down to this, and I think it does exactly as Holgate said. The threat now is the Chechnyan trader operating in the former closed city.

By the way, all the traders you see if you visited recently in the closed cities are in fact Caucasians. They're the ones who deal every day with the janitor. The janitor and the machine lathe operator and so on whose brother maybe was an Air Force guy who knows how to activate. When you visit these towns in Russia the people there on the ground are all Caucasian traders because these towns are not huge and the distribution chains which have began to modernize distribution in Russia, department stores and so on, don't actually reach most of those places. That guy deals with the janitor, and we need to interpose an administrative system, Allison's gold standard. But that's where the U.S. government traditionally is not good at. That final step. Even in the armed forces because we get the principles 'righter' than anybody else on the planet. When it comes to these administrative things it doesn't really work at the operational level and this is of course what you read when you read through all

those reports about intelligence. It's actually doing it. Actually down at the last level. That's where we tend to be amateurish because we believe that you get it right in the macro and you use the macro systems and the things, you can do it right.

**Question:** James Kittfield from National Journal Magazine.

I wonder if the panel would address this idea of America's ability to actually lead on this issue right now. Carnegie has made much of this idea that we have to devalue nukes and that the Bush administration's idea of building new bunker busters sort of runs counter to that. But it seems to me that if you look at the Bush administration's actions in the first term, withdrawing from the ABM, building a missile defense system, proposing new nukes, rejecting the CTBT and then announcing a doctrine that we're going to go after this nexus of terror and WMD using Iraq as a test case, and then kind of being stymied by the fact that North Korea and Iran and the other axis of evil didn't actually do what we hoped which would be sort of scared straight.

So now we're left with your proposal. It seems like everything I've been hearing proposed requires a lot of international buy-in. Can we with our posture as it is now convince people to buy into our proposal, or do we need to devalue nukes in some way? You talk to the Bush administration and they will say we're a nuclear have. We do value nukes. They're very clear about this. The arms control people say well, that attitude's never going to get buy-in for our more strengthened regime. Could the panelists sort of address this idea?

**Graham Allison:** I think it's a very good question and I struggled with this when I was doing my doctrine of three no's and even some of my colleagues at Harvard like John Holdren says we need a fourth no which is basically no nukes at all.

In the last chapter of the book I have a discussion of that. What I would say is that I can't imagine getting to an operational plan of action for getting to zero nukes, but I can certainly see a course of action that would be seriously devaluing nukes and even pushing nukes out of international politics in any visible role, and I believe if we started from the proposition we're trying to do everything feasible to prevent a nuclear bomb going off in an American city, and we appreciate that that has an absolute priority, the consequence of that logically is that we subordinate some other objectives. And then the objectives that would be subordinated would be the nuclear aspirations of some people in the Bush administration including the opposition to CTBT. You want to put up all the barriers you can and CTBT is one. The notion that we need some additional nuclear weapons or nuclear tests, which seem to me to be a negative with respect to the efforts to get enough of a global coalition working uphill, recognizing that that's what we're doing. I don't think that that agenda, and I think there's a half dozen items on it, would have any direct impact on the ambitions of North Korea or Iran. I think the Bush administration is exactly right. That's not why Iran or North Korea is pursuing nuclear weapons and if the U.S. tomorrow credibly destroyed every nuclear weapon in the U.S. I think actually Iran and North Korea would be more interested, not less interested.

But I think if we're trying to get the Indonesians, for example, or others to

help us squeeze North Korea, then having a coherent posture makes good sense and I think this is all going to come to a head just next month as we come up to the NPT review. So this is not just an abstract discussion. I think it becomes very concrete.

**Robert Einhorn:** I think we can be okay without devaluating our nuclear weapons too much but I think where we run into trouble... in other words if we keep things kind of the way they were five years ago. But if we revalue nuclear weapons a lot by resuming nuclear testing and designing and testing low yield nuclear weapons, big earth penetrating, new warhead, and so forth, then I think we get into trouble. I don't think we affect the calculations of the Irans and North Koreans, but I think it's much more difficult to get a lot of countries around the world on our side when we're asking them to do some difficult things on export control and PSI and all the rest of it.

**Laura Holgate:** I'd just like to draw your attention to a speech from Senator Nunn at the Press Club a couple of weeks ago, and then a similar speech at the IAEA in London, both of which are available at NTI.org, that actually goes through a very specific set of proposals about U.S. and in some cases U.S./Russian nuclear policy designed specifically to create better mood music, if you will, for achieving these broader non-proliferation goals, just as an agenda for one set of actions that might help.

**Question:** Charles Ferguson, Science and Technology Fellow at the Council on Foreign Relations.

I commend the panel for focusing on what I think is the highest priority approach, that is securing the nuclear material. But let me try to uncover what I think is a hidden assumption. That is that terrorists haven't already obtained this material. So let's assume if that's the case, what can we be doing to try to stop them from actually using the material? Should we spend more efforts on interdiction and detection? Graham Allison correctly mentioned that we need a 360-degree, multi-layered approach, but his talk mainly focused on securing material. So I'd like the panel to one, address the issue of trying to detect these materials, and even though the detection isn't perfect maybe that's enough to raise the barrier to make these terrorists think twice about using the material. And then if they actually do use the bomb, what do we do in the day after? Should we be improving our attribution capabilities to try to figure out where this material came from? If we can do that effectively is there some type of deterrence relationship we can put in place to prevent this from happening?

**Graham Allison:** Great question and it could be a whole other topic. I think unfortunately we're going to revisit deterrence again. I think it's great intellectual work to be done on the topic because if you try to think about deterring somebody who first is seeking to commit suicide, you certainly can't do it simply by threatening to kill them. And secondly, if they have no return address this becomes a complex issue. But it doesn't mean that a lot of the logic of the Cold War don't makes sense. So I think there's lots to do in this arena.

First, in the nuclear forensics area one would like to be able to credibly threaten that if a state transferred a nuclear weapon it would itself be responsible for the use of that nuclear weapon. Now that seems like a pretty harsh statement,

but I remind you that in the Cuban missile crisis, when there were Soviet nuclear warheads in Cuba, the Kennedy administration debated this and in the first speech Kennedy said it will be the policy of this government to regard any nuclear weapon launched from Cuba as a launch by the Soviet Union to be met with a full retaliatory response. Everybody knew exactly what that meant.

So I would say if we knew for sure that North Korea sold a nuclear weapon to Osama bin Laden who brought it to New York, why should we treat it different than if North Korea had launched that weapon itself? So that's one piece of it.

A second piece is in terms of the multi-layer. I think the only part that offers much hope after, if terrorists have got this material, is intelligence that identifies the terrorist group and the location of the weapon or the material at point or in transit, and I think that's where then this WMD Commission report that's just out reminds us what a perilous state we find ourselves in, because in the absence of spies who are individuals who would be within those organizations, who would know about this, the chance that some magic gizmo is going to pick this up from somewhere is approximately zero. So we're in a period right now, I would say, of maximum danger as we think about this issue because not having very many spies, and certainly not of the kind that infiltrated al-Qaida as we can look and see, it's going to take some significant period of time to rebuild that capability. In my view that also then says recognizing the danger, subordinate other objectives. So I would be borrowing as much information, or trading as much information from people who have it, holding my nose to some other things that they are otherwise doing. I think that has a lot to do in terms of relations with Russia and China if one had a prioritized set of interests in preventing nuclear terrorism.

**Question:** Diane Perlman. I'm a clinical and political psychologist, co-chair, the Committee on Global Violence and Security for a division of APAN. I'm also part of a group of NGOs working to present to the delegates at the 2005 review of the NPT.

I'd like to talk more about the demand side and maybe reframe it a little bit. The supply side is a lot about the physical conditions and physical stopping it. The demand side would be more, at the psychological level. There are many forces that lead to the evolution of nuclear terrorism, physical and also collective psychological forces, individual increasing recruitment, desire for proliferation and I think one question is how you deal with dangerous people, and what increases desire in population and individuals to acquire these and to take action? In systems theory it's called second order change versus first order change, dealing with the system instead of the symptom.

There are different levels of psychological issues and one of the - well, the question that just came up about U.S. policies and I think we can't ignore that as part of the demand's increasing the desire for the acquisition of nukes that many countries, North Korea, Iran, India said that they would sign the NPT, but how come you reserve the right to protect your sovereignty with nuclear weapons and we can't? In Iran they say Israel and Pakistan have nuclear weapons and it's -- you know, we have to look at the meaning of nuclear weapons in these countries

as a source of power, ego, some sense of sovereignty that they don't want to be dominated. So this is more a psychological statement than a political statement.

Our refusal to sign 'no first use' increases desire, and we can't just assume that carrots and sticks and ultimata and coercion is going to overpower that.

The other issue is like humiliation, rejection, despair, envy, and asymmetrical power. So I think we need to look at some of these issues, consider this as part of the demand side.

**Patrick Cronin:** Anybody want to respond to that?

All right, thank you for that comment.

**Edward Luttwak:** I'd like to respond to the previous thing about interception. On September 10, 2001, as you all know from these reports, the top operational priority of the FBI as a whole was to shut down methamphetamine labs. They were so successful that in the previous year they shut down more than 2,000 in California alone. It shows you what the priorities were.

Since that time the priorities have changed in the FBI, but the people who were able to structure those priorities of shutting down a thing of which there were 2000 in California alone, shut down in one year, are still there. They have not emptied out and fumigated the building as some of us recommended.

The same thing in regard to the Central Intelligence Agency. I don't know if you read this last report but the worst thing of all is this book Anonymous. When you read Mr. Anonymous you realize that this fellow who was celebrated bright man is an idiot himself. In other words, we have a predictable result of the fact that it was not a national priority to have very good people in that agency. We had many other priorities, and it became one of these American institutions that was not getting an in-flow of Ivy League people. And I don't know of a single American institution that is effective when it doesn't have an in-flow of Ivy League people. [Laughter].

Now the in-flow of Ivy League people --

**Patrick Cronin:** That's the nicest thing Ed has ever said about Ivy League people. [Laughter]. At least in the same word.

**Edward Luttwak:** Whatever we take seriously in our society is demarcated by that issue of recruitment. Where we don't take seriously, we don't have. Now I consider West Point the equivalent, if you like. [Laughter]. You could do that.

That has changed since September 11th, and if it has changed and if we take the trend line of 1941 when we set up the OSS, and we pursue that trend line, it means that in about 20 years we'll have a decent intercept capability.

But the episode that we would like to avoid is the one that could well occur much less than 20 years.

**Question:** -- the people that devised the Iraq war strategy, that Ed was critical of earlier were all Ivy League people and --

**Edward Luttwak:** I did not know that. [Laughter]. I'm amazed.

**Patrick Cronin:** That's helpful.

Yes, sir?

**Question:** Alexander Meligashuli, Center for Nonproliferation Studies, Monterey Institute of International Studies.

I have a couple of questions. First of all I want to thank the panel for the presentations. It was very informative and insightful. I have three questions to you.

First I would like to ask the panel members to comment on the recently passed by UN Security Council Resolution 1540 that actually deals with some of these issues including strengthening export controls and making sure that each individual country is actually responsible for increasing the physical security of sensitive facilities.

Another question to you is how would you evaluate, you were talking about the grade system. How would you evaluate thus far such initiatives as Container Security Initiative, Mega Ports Initiative, and the Proliferation Security Initiative? That goes along with the comment regarding the layered approach.

The final question is actually to one member of the panel. You mentioned the closed cities, and I was wondering how would you characterize the relationship between United States and Russia within the larger nonproliferation arena? Because you mentioned that on the Russian side now there is a sense that the opportunity window is closing, despite of the Bratislava Summit Statement. Thank you.

**Amitai Etzioni:** I want to address just one part of your question, and that concerns the United Nations Resolution 1540. I think it's actually an important example. I think it's October 28th and that's actually one of the reasons I got interested in this area. The way I look at it like this. If you talk about, you're in the middle of forming some kind of new global order after 9/11, and there's been obvious tension between United States using force and those who believe, and I choose my words carefully, those who believe that the United Nations is the source of legitimacy of soft power, and that we all would be better off if United States would act only with United Nations blessing.

Now it has usually been painted as an opposition. Here is brute force, here is soft power. If you look at it though a second time, you find out that just as it's beneficial if people with hard power have the blessing of the soft power people, you also have to have the other way around. So the genocide in East Timor wasn't finished by United Nations Resolutions, it was finished when Australia marched in there. And in Sierra Leone until the Brits marched in.

The same thing is happening here. It's good to know that we have here conversion. The United Nations increasingly is in effect providing the legitimacy of what the PSI in effect is doing. But we should not forget the importance of having straight force. And we are not in complete, clearly, what the PSI is actually doing. Are they boarding ships on high seas? Are they waiting, German ships in Italian ports. But I wish they would because unless there is more robust stuff on the other side --

Anyhow, to make a long story short, the dance of getting together

therefore is underwriting this international blessing, debt resolution moves us in the right direction as much as one resolution can do.

By the way, there are others. So I think it's actually a very interesting example of where we need to go.

**Robert Einhorn:** I think also 1540 is a potentially very useful vehicle. All countries are obliged. This was a resolution adopted under Chapter 7, and all countries are obliged to bring export control systems, physical protection systems, criminalization of certain activities up to international standards, so it's potentially very useful. The question is whether it's a resolution that's just going to be forgotten about or whether it's going to be vigorously pursued. I think there's an opportunity now to make something of it and really put a lot of pressure on countries that resist strengthening their control systems.

On PSI, I come prepared to support PSI, it's a good thing, and so forth. It's nothing new. Throughout the '90s when I was involved in this, whenever we had precise actionable intelligence that some illicit cargo was on this ship, we knew where it was, at this port, and we were lucky enough that that port was in an allied country then we were able to take action. We often did. There were a lot of successes and some failures, and so forth. There's nothing really new in PSI other than systematizing it, routinizing it, creating the political expectation that in the event all these things align properly you'll get cooperation from other partners, and that's a good thing, to routinize it and multilateralize it. But this is no panacea. The number of times that you're going to have beautiful intelligence, precisely where it is, when it is, and at a port or in territorial seas that you can get at it, is very very rare. So it's no panacea at all.

And to Amitai's question, right now we've taken, the U.S. has taken a very cautious approach and have not tried to break new ground in terms of international law. I think we should be a little bolder and try to get, to treat illicit trafficking in nuclear materials as the slave trade or piracy and so forth and try to make new international law that creates new authorities to intercept on the high seas.

**Laura Holgate:** Just a thought on 1540 before turning to U.S./Russian relations. To really make 1540 work in the future, as everyone said, it's a great start. It needs a permanent structure instead of a two year implementation structure. There needs to be some objective basis against which national reporting is analyzed and judged to be either adequate or not, and then there needs to be some real will, political will, to actually act on the enforcement capability that is inherent in the chapter seven basis for the document.

What horrifies me is to find out in talking with State Department colleagues that they are not even really prepared to use this tool very effectively because they felt they broke so much china to achieve it and that now it doesn't have that much value for U.S. policymakers. Furthermore, that people working on similar kinds of concerns in the context of the physical protection convention, don't even talk to the people on 1540 and it hadn't even occurred to one person whom I asked about whether 1540 helps them do what they need to do on the convention for physical protection, they said they hadn't even thought about that.

So I think it's a cool, wonderful, great tool, universal, enforceable,

mandatory, all this, and we've got to make the most of it. But it's got to be embedded in other things. It can be an overly thin reed.

On U.S./Russian relations on "nonpro" broadly, I do worry that we may be in a moment of closing, or a trend of narrowing windows of opportunity for cooperation. To the degree that Russia's financial concerns in the early mid '90s caused them to be more amenable to U.S., what they perceived as sort of fetish around these concerns that they didn't themselves share, that will decline over time.

I think Graham hit it just right. Until Russians from the top to the bottom internally, I have a friend who calls it cardiac knowledge, like really get it, that they are at risk for their own behavior, and that they are responsible and that they have the tools, either in their country or by assistance from others to solve that problem -- until that is realized, I think it's just going to be treading water, if we're lucky.

There may be some opportunity, maybe the Bratislava is the beginning of that. Maybe President Bush's willingness announced in December to be a little bit more reciprocal in terms of access and transparency. There are some points of light, but whether they're a trend or outliers, I think is very much yet to be determined and it could go either way.

**Question:** Thanks. I'm Ed Lymon from the Union of Concerned Scientists.

I wanted to comment on the Priority 3 on this list which no one has really said anything about. You asked if we agree that plutonium should be given priority over -- or highly enriched uranium should be given priority over plutonium once you get priority over spent fuel. You say they're all treated as if they are of equal danger.

The first thing is that that last statement is inaccurate. Both national and domestic safeguards and physical protection standards do not treat spent fuel with the same priority they treat highly enriched uranium and plutonium. There are graded safeguards and they appropriately only consider the potential for sabotage of spent fuel in most cases, and security and safeguards are much weaker over spent fuel than they are over weapons useable materials -- HEU and plutonium. So that isn't exactly an accurate statement.

That said, I strongly disagree that there is any technical basis for degrading the threat posed by plutonium compared to highly enriched uranium. When I looked at the paper you wrote where you explained that you thought the radiological hazards associated with handling plutonium were a major consideration, I would respectfully submit that that's not the case. That the radiological hazards associated with plutonium are not a formidable enough barrier that there would be any basis for grading safeguards in that way.

On the other hand I think the logic behind treating plutonium as somehow less of a threat than HEU is a very dangerous principle in that it gives a free pass to countries like Japan, France and other countries engaged in reprocessing to continue to produce large quantities of plutonium on the order of tons per year on the basis that somehow it's not as great a concern as HEU.

When you look at the commercial facilities that possess highly enriched

uranium, very few of them have quantities comparable or sufficient to make an implosion device, not to mention an actual gun-type device whereas the facilities where large quantities of plutonium are stored have the amount that could, have enough to make dozens or hundreds of nuclear weapons.

So plutonium, it is appropriate to maintain plutonium and HEU standards the same.

In that context I wanted to ask Professor Allison who spoke of the gold standard that the U.S. and Russia should be establishing, unfortunately things seem to be trending the opposite direction. Only two weeks ago the Nuclear Regulatory Commission issued a decision in which it said that fuels, what are called mixed oxide fuels, which are mixtures of plutonium and uranium, do not deserve the same level of protection as pure plutonium because, and this is a direct quote from the decision, that "they are not attractive to terrorists from a proliferation perspective".

So the basis for their claim is that fuel assemblies in which plutonium has been diluted are so large, heavy and unattractive that terrorists shouldn't be interested in them, and for that basis we don't have to protect them as if they were pure plutonium even though each assembly contains several bombs' worth of plutonium. So I wanted to ask your opinion of that direction, how that might impact your proposal for a U.S./Russian gold standard that's exportable. Thank you.

**Robert Einhorn:** I would agree with the questioner. I don't think we should make distinctions in terms of priority between say highly enriched uranium, weapons grade plutonium, reactor grade plutonium. I would put them all in the same category. Sure, gun type devices may be easier to make work and implosion devices, but still at this level, and if terrorists can get help from any weapons designer from a former weapons state, then the terrorists can make plutonium into a workable device, too. So I really wouldn't make any distinctions.

**Graham Allison:** I agree completely with Bob, and I think that basically, I saw that sort of regulation and it seemed to me to go in the wrong direction. I think one starts with just the notion of a bomb and the various ways you can have a bomb, and then stuff from which you can make a bomb, and all that stuff is stuff that has to be secured as good as gold, I would say. So I think actually if we ended up having a joint U.S./Russian effort to define a gold standard, which I hope might be done in this working group that was announced at Bratislava, it would find actually that there's some work on the American side from some of the practices that we've been engaged in, that would have to be improved. I think, for example, the decision that was finally taken about moving nuclear material out of the TA18 facility at Los Alamos was a good idea before and it's a good idea now. It should be part of moving to a gold standard. So I would be perfectly fine raising our standards at the same time. I don't think the most likely source of a nuclear bomb is going to be out of an American source because I think there are relatively still big gaps between the level of security at some facilities in Russia and the level of facility in the U.S.. But if all of that was raised so that it was as hard to get nuclear weapons as to get gold out of Fort Knox, I would think we would make a good investment.

**Edward Luttwak:** The key to Fort Knox is that there's one Fort Knox.  
[Laughter].

The gold standard refers to the unicity of it. That's why they have the Hermitage, we have the Armory, and what happened in the Provincial Museum in Samara is that every one of those gold pieces disappeared. All of them. Not one is left in Samara.

**Graham Allison:** Ed is absolutely right. The logic of this is you concentrate in a few facilities. Now one of the dangers, given that there's still some residual concern about those as targets, is it can't be maybe just one or two, but it's perfectly possible to have a small number, but certainly not Samara.

**Patrick Cronin:** This is the old Mark Twain line, to put all your eggs in one basket, then watch that basket.

**Amitai Etzioni:** I'm very much interested in the issue. If you can leave your e-mail, if you have to leave before it's over, otherwise I want to ask you for it. I'd like to stay in touch with you about this issue.

But I very much agree, if we can eliminate plutonium and highly enriched uranium and spent fuel, and put them all in Fort Knox or burn them, blend them down, why wouldn't we do that?

But the world I see is the extreme opposite in which we try to move things with \$20 million chips. Or, you know, we may close one little plant. So then the question stands, is there any difference between these three materials?

Now I grant you what you said that one wasn't beautiful and the other ugly. But for instance you mentioned Japan and France. Sure I would like -- I don't know. Maybe they should use solar instead. But do I spend my nights worrying at the moment about what Japan and France does as against what Nigeria and the Congo do, or Russia?

So the question I think stands. Are there any differences between them? And if you have limited resources, really we have very strictly limited, do we even have to take account of relatively small differences in danger?

**Robert Einhorn:** But not on the basis of the difference between HEU and plutonium. You do it on the basis that France has better security than Ghana.

**Amitai Etzioni:** That's one criteria. But the criteria you mentioned in passing, building an implosion device or grand device for a terrorist. Again, surely I'm not an expert and you are. I'm told by people who do this daily, obviously at some point we'll have experts who want to talk to you more, that it's more difficult to build one than (inaudible) for terrorists.

Anyhow, all I'm saying is if there are any difference between the three, not just how to safeguard it but in terms of how easy it is to transport them, can you put plutonium in your suitcase as easily as you can put highly enriched uranium? Can you -- if there are differences, even not huge, given the tightness of resources I think we need to take them into account.

**Edward Luttwak:** There are differences, of course. But the modalities of the differences do not correspond to the actual access by the bad guys to those modalities. Weight is very different. But if all along you were going to send it by

ship, you are weight insensitive. That's the problem. And that is why one has to -- There is a real issue of different (inaudible).

By the way, the Fort Knox thing. Remember the one weapon we should not be concerned -- under this heading, not other heading -- is the very modern, highly developed weapon with all the powers on it, all that, that they have in some respectable, good old-fashioned ballistic missile silo and it can sit there. It's the other stuff we worry about, because if terrorists get hold of one of those weapons, nothing will happen.

Voice: Basically where you're going, your logic is right. It's how close to a weapon or how big a hurdle between this and the weapon? That's the test. And for highly enriched uranium and plutonium, the answer is a short step. So those are the two categories you're interested in. Spent fuel is an entirely different subject.

**Patrick Cronin:** We're moving toward closing but you've been very patient so I want to pass the mike around and get a few comments and questions and ma'am, starting with you.

**Question:** Thank you very much. Resa Mullitz from Booze Allen Hamilton.

I wanted to probe a topic that Ms. Holgate brought up in terms of U.S. government structure for addressing this issue and making it a priority, and comments made by Mr. Luttwak about mentioning different agencies that deal with this issue.

It seems like the discussion assumes that the U.S. approach to countermeasures is very monolithic when in fact there are experts in counter terrorism and nonproliferation, scientists as well across various agencies in the government. I was wondering if you'd comment about improving coordination across agencies and making this truly a counterterrorism and a nuclear issue, and how do we coordinate a truly unified response in making this a U.S. policy initiative and coordinated response.

**Patrick Cronin:** We're going to take a few more questions and we're going to let the panelists answer that question and --

That gentleman was waiting.

**Question:** Josh Handler, U.S. State Department. Actually my question was very much like yours and perhaps to extend it a little bit further, today this Intelligence Commission is recommending a new nonproliferation center. Perhaps you may have some ideas about that. What would you include in it, what wouldn't you include in it, if you think it's a good idea.

**Question:** My name is Jon Howard. I am working at Energy Agency [?] as a (inaudible) Fellow. I'm studying North Korea.

As Mr. Einhorn touched on this issue a little, but let me make it more clear. My question is related to the priority between rogue states and failing states. According to recent analysis of North Korea, North Korea is a rogue state as well as failing, about to fail. Then what should I do? According to the argument of Mr. Etzioni, failing state is worse than rogue state. Then we should help Kim Jung Il to keep his power? To go back to rogue state? But if North Korea is failing it

means, you know, the alternative of forcing North Korea to see the hope of democracy more, more democratic. I think there is a paradox.

**Male Voice:** That's exactly what South Korea is doing.

**Patrick Cronin:** Good question.

**Question:** Good afternoon, Justin Zorn from George Washington University. Just a very quick question. Would signing the CTBT really affect America's ability to stop nuclear terrorism in any meaningful way?

**Question:** [Jerry Post]. To comment and amplify the comment by Graham Allison that the issue may be less important in deterring terrorists than deterring states which can pass these weapons to terrorists, and you cited the declaratory policy of Kennedy. The run-up to the Iraq war, the self-evident statement kept being made that we have to stop Saddam Hussein before he passes these weapons to the terrorists. It was a totally absurd and unlikely possibility. Any one who had thought at all about Saddam, a very self-protective individual, with a terrorist with no fixed address and the states with a fixed address, this is a highly unlikely possibility, especially strengthening that kind of policy you've suggested.

Which leads me to that North Korea question. Mr. Einhorn, you suggested that if Iran was difficult I think that North Korea was particularly difficult. And why does credible military response get limited to attacking the sites where the nuclear weapons may or may not be, and with the assumption of these underground sites?

Kim Jung Il, here's an interesting piece of intelligence from the strange unclassified source of Hennessy Fine Spirits Corporation. [Laughter]. Kim Jung Il spent in the decade 1989 to 1999, between \$650,000 and \$800,000 a year on their finest cognac.

The issue of being able to throw out ones' hands and say to Kim Jung Il, you know, you're a clever fellow, you've got us, we have no idea where you've kept all these weapons, but we have a sense you value your rather hedonistic lifestyle in Pyongyang and that's our first target, why isn't that a credible military response?

**Patrick Cronin:** We've got five good questions, some related, and you may want to just have another final word, but starting with you, George Perkovich.

**George Perkovich:** I'm just going to comment on a couple of the questions. The question about what [signs] seem to be really effective for terrorism, I think not the way that you meant it but let me give a couple of examples of how I think it would affect it.

We've talked a lot here about trying to strengthen both standards, but also the will to enforce restrictions on technology and so forth. I think to build that will for strengthened enforcement, then the willingness of the strongest state in the system to constrain itself affects political will. So we find there's resistance to strengthening these regimes because people say you're a hypocrite.

Another example is if you want to broaden the legitimacy of PSI, which all of us here I think agree we should -- we'd like to be able to interdict at the high

seas, have that be relatively uncontroversial. Many countries in the world that would have to agree to that point to our position on the CTBT and say we're not going to do things to broaden your writ because you're not doing the things we care about. It may be childish or whatever, but it's a political reality.

Similarly, the President had a very good initiative to try to tighten the rules on the fuel cycle. Get agreement that new states wouldn't acquire and be allowed to acquire uranium enrichment of plutonium reprocessing capability. Very important thing. That's gone nowhere. Nobody has joined that effort. Again, in part because of the sense of you guys want to change one set of rules but you refuse to comply with the already existing set of rules that we value. So screw you when you want us to change the rules. But not in the direct sense that you asked in your question.

On the question the gentleman here asked about the difference between rogue states and failing states. I think there's a broader problem and we touched upon it here, and it does relate to the nuclear terrorism -- U.S. policy, in many ways of which I'm sympathetic, has focused on regime change ultimately. That is an element of the administration, says that's the way to solve this problem. But we haven't sorted through the problem of transition when you have a state apparatus that has nuclear weapons or nuclear material, and when there's a transition in the control over that apparatus, over an indefinite amount of time, how you manage the [polling].

So it happened in Iraq, for example, with the looting out of the nuclear facilities in Iraq. It is something we've worried about in Russia. This was a transition. It is something we would worry about in Pakistan. And it's certainly something that we'd be worried about in North Korea. Not an easy problem, but it's one germane, I think, to the general issue here that deserves more attention. I'll stop there.

**Patrick Cronin:** Laura Holgate, your summation.

**Laura Holgate:** I'll just respond to the question on organizing the U.S. government, and without the benefit of having read today's report I won't be directly responsive to Josh's question. But I should be clear about the, to what problem is a reorganization or the coordination issue a solution? And my comments that I made earlier were specifically in the context of this broad agenda of threat reduction sort of assistance or cooperation or whatever. And the programmatic side of things.

I actually think the U.S. government has done a reasonably good job of getting the policy coordination straight. The NSC in the administrations I've either been in or observed has done a good job of making sure the talking points are shared across the agencies and sort of the big picture stuff on policy coordination has been gotten mainly right.

So I'd say the two big chunks of wrong or problem or challenge is on implementation of programmatics and then the intelligence. And I don't understand enough about intelligence business to have a lot of views on that.

So specifically in the context of the programmatics, the challenge that we've had is that there has not been an interagency process that identifies -- I

mean, we've been talking about priorities -- that identifies what are the key threats, what are the tools the U.S. government has to address those threats in order of priority? Who in the government is best equipped to manage and interact with those tools or to execute those tools? And how do we then resource those tools in a way to be sure that the primary priorities get the money they need before the secondary priorities get money? How do we collectively evaluate the effectiveness of these tools as you go through program oversight and process? That requires a rigor, a consistency, and a structure that does not exist.

It's happened in moments where individuals have chosen to make that a priority. And when it happens it can be very effective. But there's nothing that sort of outlasts that individual interest.

What is also clear, however, is that it cannot be imposed on any administration from the outside. Congress has tried multiple times. Each version of the administration that they've tried to effect has been resistant. This has to be seen as a priority by the people actually in the administration. And you can think of any number of ways to structure and to create the kind of agency-wide accountability, the kind of presidential voice that the leader of this process needs to speak with, the ability to move resources across agencies as program priorities evolve, even within a fiscal year. The ability to sit at the table with OMB as budgets are being blessed and approved and analyzed. Those are some of the characteristics.

You can think of a lot of ways in which you could create a structure that would have those kinds of characteristics, and it's got to be a way that works with the personalities and operating style of an administration.

But we've been working with Bob Einhorn and some of the other folks here at CSIS to do a little itty bitty analysis of what a structure might look like and that will be coming out in a little bit, so watch this space.

**Patrick Cronin:** Graham Allison, final thoughts?

**Graham Allison:** The organization, I agree entirely with what Laura said so I think I won't go back over that.

I would say on Jerry Post's point about trying to think about how to deter rogue states, I think the likelihood that any state attack us with a nuclear weapon launched on a missile is nearly zero. You always have to worry about somebody becoming suicidal, but they would know that it's a suicidal act. So that wasn't mad. It actually has many disadvantages but at least we know what that picture looks like.

So I would say for states' transfer of nuclear weapons, we should come as close as possible to that, and that requires then a nuclear forensic capability to be able to identify the source of the bomb from which I'm only then sampling radioactive debris after the bomb's gone off, or uranium hexafluoride if that's what I'm finding in Libya or somewhere else. That's hard to do but not impossible, but needs to work up that curve rather fast. So I think there's quite a lot to do.

And then thinking about the other targets, I would say in trying to play out the North Korean hand, the one thing that Kim Jung Il seems to me to have

wanted persistently and wanted most is to survive as a regime. It would seem to me that we have the unilateral capacity to destroy that regime. So we can make a credible threat to his survival, and it seems to me that in the case of a bomb going off in an American city that's a good thing to remind him, that after that his regime would not survive. He should know that vividly. Then you can work through backing up the pieces.

The final point I think goes to a couple of points that were made, and it goes back to the 1540. I think that the U.S. has many disadvantages right now for pursuing a robust agenda for preventing nuclear terrorism, and in order to do so successfully I think it's got to make persuasive the proposition that a nuclear bomb can go off in your city. So that this is not something you're doing to protect Americans from, but that you're protecting, if you're the Indian Prime Minister in Delhi, if you're Musharraf you're worried about your own regime, and even about Islamabad.

So I think it is actually quite a feasible proposition. If you start, go back to Cheney's point, wrap your head around a bomb going off in a city. You can think about Washington, but you can also think about other cities. So I think we have quite a lot of work to do in trying to get other leaders to see that this is as great a danger to them as it is to us, or that it indicates a grave danger to them, and that the things they should do to protect the nuclear weapons and materials in their own countries are things they should be doing for their own well being, not just for the U.S.

So I think the Pakistani case is one of the most interesting in this regard, and I think what Ed said earlier about Musharraf -- Musharraf has come very close to being assassinated twice now in the last year and a half. He has a good wrap about Pakistan's nuclear weapons being totally secured, nothing to worry about. In my back and forth with him on this, I've said why should I imagine that the nuclear weapons in Pakistan are more secure than the President of Pakistan? It seems highly unlikely to me. [Laughter].

So I'm more interested in the nuclear weapons, actually, than I am in the President of Pakistan. Though I'm interested in him too because he's the best hope we have in that situation. So he ought to be able to become part of the solution to this problem with us, and it seems to me what we need is a framework for that, and that's why this alliance against nuclear terrorism or whatever one would call a new institutional arrangement that would have the parties themselves all committing themselves to be securing these weapons and material, I think could be a common undertaking that the Bush administration could help launch. It couldn't force people to do it, but it could persuade them.

**Patrick Cronin:** Dr. Luttwak?

**Edward Luttwak:** About the proposal for the new nonproliferation center, I was surprised by that because the unemployment rate is actually going down in this country. And as an employment measure it doesn't seem very effective.

I can visualize Einhorn in all the years of work saying oh, if only I'd had a new nonproliferation center to give me more guidance, advice, and so on. [Laughter].

So the question is, what would Einhorn have wanted? I think what he would have wanted would have been intelligence. Intelligence would have made it easier for Einhorn to do his work. And I think if one comes up with operational schemes as I think we should do, if we accept this priority then you come up with a series of operational schemes. One of these operational schemes would be to adopt, for example, to impose the rules of international corporations impose on our intelligence system.

When ABB (inaudible) wanted to sell these radium power plants they told the sales department you will either pass a test in Arabic within six months or you'll be out on your X. We are unable to enforce this. So that ten years into a confrontation with Iraq we have nobody -- Exactly. Twenty years in confrontation with Iran, three people there. So ABB can do it, OmniTel did it for the Egyptians when they went into the Egyptian cell market with ArabsCom. Everybody can do it except us. And this also reflects priorities. Accurately so.

During the Cold War we had an intelligence priority in terms of photography, overhead, intercept, and that kind of stuff, and we bloody well achieved it. We achieved it very nicely. Then if we dump this -- In other words it's not that Bush is a bad guy, that Clinton was a bad guy. It really was the lack of the intellectual capital of putting together an architecture of operational schemes. So it's rather like President Roosevelt wanting to intervene in World War II, but nobody came up with this notion of transferring people from here to England and from England across the channel to do it. That is the actual prevailing situation. And creating new places in the U.S. government would not help. It's one of the moments where we need to get it together and exercise the rigorous prioritization which is not always easy because, as you saw from the demand side discussion and debate that was here. So things have to be excluded as well as things to be included.

But then one comes up with this architecture, then the architecture gets implemented and we can put it against a test of what Einhorn would have wanted to have. And there are so many things he wouldn't have wanted to have.

**Patrick Cronin:** Bob, you're set up here. Go ahead.

**Robert Einhorn:** I'm not going to answer Edward's question. Just a few scattered points.

One on Pakistan, no one really has touched on this. The assumption universally is that Pakistani nuclear materials, nuclear weapons, are inadequately secured. They're vulnerable. I don't know if anyone has any real information on that other than the Pakistani Army and perhaps ISI, but it's interesting. Every one assumes it. There are reasons to be worried about it -- the assassination attempts, the growth of Islamic militancy in Pakistan, all of that.

**Edward Luttwak:** And the extensive stealing of fuel which has been reported in the last six months from the Pakistani Army even though the fuel is guarded by a double system of chits. You need two chits, not just one like for the jam.

**Robert Einhorn:** I don't know about Africa, jam and nuclear weapons, but I think there are reasons to believe that the Pakistanis see the jam and the

nuclear weapons differently. But we just don't know.

On the question of do we need a nuclear terrorism czar or something like that. The U.S. government is always resistant to czars of any sort and I think a nuclear terrorism czar would cut across so many different institutions, new and old, that it would be unworkable.

I think Laura is right, though, if you had some kind of a programmatic coordinator in the White House to make sure that the billion plus dollars we spend every year on Nunn/Lugar type programs are coordinated effectively, I think that would be a good thing to do.

**Laura Holgate:** And that it be more than a billion a year, would be another impact.

**Robert Einhorn:** On the question of priorities in North Korea. Sure, the Bush administration is right. The best solution would be the safe collapse of the North Korean regime and that's the most reliable, durable way of getting at the nuclear problem. The difficulty with that is that you may not have a safe collapse, you may not have an early collapse, you may have chaos, and you may not have chaos for another ten years during which time the North Koreans may have done some very dangerous things, including some things we talked about like selling nuclear materials.

In North Korea, we've always had two very bad choices to make. One is to pressure, hope for collapse and take the risks there, including the risk that it will take a long time, and the other one is to negotiate a deal that no one feels very comfortable with. Between those two bad choices, I would try to negotiate the best deal I could. But anyway, that's my own preference.

On the way of deterring Kim Jung Il by going after his cognac reserves -- as someone who's dined with Kim Jung Il and probably had some of that cognac, I think that's an interesting way to go.

Just a final point, just to thank Amitai who has focused I think a very good discussion by really getting us to look at the priorities. I think that's the right question, and I think this audience has been terrific in really keeping us on that theme.

**Patrick Cronin:** Bob, good comments.

Professor Etzioni, have we done what you sought for us to do today?

**Amitai Etzioni:** Very much so, and I have pages of notes and I have to relearn about plutonium and all kind of stuff.

Just quick, two closing comments. One about the notion that if you're going to get a better regime in Iran or North Korea that's going to help us treat the problem, I spent ten days with a reformer in Iran two and a half years ago as their guest, and I don't have the slightest doubt that if they take over tomorrow they will be just as nuclear as the Mullahs and they will tell you so. The thing is the national pride, priority, and so on and so on. So I would not count on a regime change in that sense to solve the problem.

But the last word on priorities. I think we all are very indebted to Professor Allison for giving us such a complete map of the (inaudible), and it's very very

useful to know where we are and what's missing. But I also want in closing to give you a feel for how far we are from taking the first steps so we won't get too complacent here.

To take the more general security issue, we still haven't fixed the no-fly zone. We still can't get that straight. We still can get people off it and we still don't understand why if you're so dangerous you can't fly we don't arrest you in the first place. We still haven't fixed the driver ID cards, which are used as de facto national ID cards, and you can still get one in every state. You can get 49 for terrorists and one for yourself. We still haven't done that. The FBI doesn't have a computer yet which can connect the dots.

Let me close here with a story which alone is to get our attention, not just priorities, we need to move a little off our backside. I serve on the Markle National Task Force on Security Information and the head of the antiterrorism center came and gave us a little briefing. Again, I've been there, just tell you what he told us.

He said that all the ways agencies do give the information to the center, they have to have different computers linked to each agency, but they cannot share it with the other agencies without prior permission. So the information still doesn't flow from the CIA to the FBI to the NSA. Now come on! This is four years.

I close on the line of Mark Russell, when the Catholic church after 463 years finally revoked the excommunication of Galileo. Mark Russell says, "What's the rush?" [Laughter].

**Patrick Cronin:** A final point of consensus is you've been a great audience, this has been a terrific panel. Thank you very much. # # # #