CENTER FOR INTERNATIONAL SECURITY
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CISAC's Annual Drell Lecture

Nuclear Nonproliferation and Arms Control: The Road Ahead

Transcript of Remarks as Delivered
by

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With an Introduction by Christopher F. Chyba
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CHRIS CHYBA: Good afternoon. On behalf of the Center for International Security and Cooperation, or CISAC, at the Stanford Institute for International Studies, I welcome you to the annual Drell Lecture with Dr. Mohamed ElBaradei, Director General of the International Atomic Energy Agency. My name is Christopher Chyba and with Scott Sagan I co-direct CISAC, which is a center devoted to producing rigorous policy relevant research, influencing public policy, and training the next generation of specialists in international security. CISAC is pleased to join the Stanford Institute for International Studies and the Stanford Law School in co-sponsoring Dr. ElBaradei's visit out here at Stanford. Please note that Dr. ElBaradei will also speak tomorrow on "Legal Issues and Nuclear Nonproliferation and Global Security" next door at the Law School in Room 180 from 4:00 to 5:30 p.m. That lecture, like this one, is also open to the public.

Joining us today through a special Webcast are fellows and students at seven of the nine University of California campuses. They are participants in the Public Policy and Nuclear Threats Program, a National Science Foundation-sponsored Ph.D. training program administered by the Institute on Global Conflict and Cooperation, a program to which CISAC researchers often contribute as invited speakers. We are happy to have the U.C. campuses joining us.

CISAC's Drell Lecture was established by Stanford graduates Albert (Bud) and Cecily Wheelon in 1994 to address publicly a current and critical national or international security issue that has important scientific or technical dimensions. It was named in honor of Professor Sidney Drell upon his retirement from Stanford. Sid was a founding co-director of CISAC and was Deputy Director of the Stanford Linear Accelerator Center, or SLAC, and we are honored to have Sid Drell with us here today.

Both Bud Wheelon and Sid Drell played historic roles in gathering intelligence and laying the technical groundwork that made arms control possible during the Cold War.

Our distinguished speaker this afternoon has also played, and continues to play, a historic role in arms control and nuclear nonproliferation. Dr. ElBaradei has served for 20 years in high-level policy positions at the International Atomic Energy Agency, the world center for cooperation on nuclear issues, and has held the Agency's top position of Director General since 1997. In this position he oversees all aspects of the IAEA including the nuclear weapons inspections that you may frequently hear or read about in the news, which are part of the Agency's safeguards and verification mission, to help prevent the spread of nuclear weapons. At the same time, he oversees the Agency's program for safety and security to protect people and the environment from harmful radiation exposure, and he also oversees the Agency's science and technology efforts which bring peaceful applications of nuclear science and technology to meet critical needs in developing countries.

Dr. ElBaradei has a distinguished career as a leader in international peace and security and international law making. He holds a bachelor's degree in law from the University of Cairo and a doctorate in international law from New York University School of Law, as well as various honorary degrees. He began his career in the Egyptian diplomatic service, serving in Egypt's permanent missions to the United Nations in New York and Geneva, in charge of political, legal, and arms control issues. He left the diplomatic service in 1980 to take charge of the International Law Program at the United Nations Institute for Training and Research.

We are honored today to have Dr. ElBaradei address a topic of continued concern to all of us here, and indeed to the entire world: Nuclear Nonproliferation and Arms Control: The Road Ahead. I would ask you to hold your questions until after his remarks when we have reserved time for an extensive question-and-answer session which I will moderate. Please join me in welcoming Dr. Mohamed ElBaradei. (Applause.)

DR. MOHAMED ELBARADEI: Thank you very much, Dr. Chyba, for your introduction. According to the president just elected, nuclear proliferation and nuclear terrorism represent the single most important threat to U.S. and global security. I wrote that sentence three weeks ago, well before the election results were known, and yet I knew it would be true, because it was one of the key issues on which Senator Kerry and President Bush, and for that matter, the world leaders agree. That said, fundamental differences of opinion remain on how to deal with this ever-growing menace to our survival. Should we opt for diplomacy or for preemption? What are the relative merits of collective versus unilateral action? Is it more effective to pursue a policy of containment, or one based on inclusiveness? These are not new questions, by any measure, but they have taken on renewed urgency as nations struggle, both regionally and globally, to cope with an extended array of conflicts, highly sophisticated forms of terrorism, and a growing threat of weapons of mass destruction.

The treaty on the nonproliferation of nuclear weapons (NPT) remains in my view the global anchor for humanity's efforts to curb nuclear proliferation and move towards nuclear disarmament. There is no doubt that the implementation of the NPT continues to provide important security benefits by providing assurance that in the great majority of nonnuclear weapon states, nuclear energy is not being misused for weapons purposes. The NPT is also the only binding agreement in which all five of the nuclear weapons states have committed themselves to move forward toward nuclear disarmament.

Still, for all of us who have been intimately associated with the implementation of the treaty for over three decades, it is clear that recent events have placed the NPT and the regimes supporting it under unprecedented stress, exposing some of its inherent limitations and pointing to areas that need to be adjusted. Today, I would like to discuss

some of the lessons that can be taken from recent experience, and a number of possible ways for moving forward.

Of all the recent actions to address nuclear proliferation and other security concerns, the most dramatic have taken place in Iraq. Naturally, it remains too early to judge the final outcome of the Iraq War, but I believe there are some insights to be gained already from the events that led up to the war, and those that have transpired since.

The first point to be made is that the inspections were working. The nuclear inspection process, while requiring time and patience, can be effective, even when the country under inspection is providing less than active cooperation. When international inspectors are provided adequate authority, aided by all available information, backed by a credible compliance mechanism , and supported by international consensus, the verification system works. The report recently issued by the Iraq survey group confirms the conclusions the IAEA was providing to the United Nations Security Council before the war, when we said we had no, that we had found no evidence to suggest that Iraq had reconstituted any element of its former nuclear weapons program.

But inspections are only of value when the results are accepted in good faith and taken into account in future actions. Unfortunately, the Iraq inspection process was not given the time required, nor were its findings given due recognition. It is true that the record and mode of behavior of Saddam Hussein's regime did not inspire much confidence, but it is also true that we have not seen any clear and present danger involving weapons of mass destruction after months of intrusive inspections.

The second point to be made is that we need to exercise maximum restraint before resorting to military force. In 1841, the U.S. Secretary of State Daniel Webster characterized preemptive military action as being justified only when the prospect of an attack made clear that, quote "the necessity of that self-defense is instant, overwhelming and leaving no choice of means and no moment for deliberation." Unquote. Naturally, times have changed, but the exhortation for restraint expressed in those words remains in my view quite valid.

The Iraq experience should tell us that unless extreme conditions exist to justify preemptive action against a suspected weapons-of-mass-destruction program, diplomacy in all its forms, including maximum pressure coupled with credible verification, should be the primary avenue of choice. In my view, loosely defining what justifies preemptive action by individual nations could become an invitation for all countries to use force in a garden variety of situations and render a severe setback to the U.N. Charter effort to limit the use of force to cases of self-defense of the type Webster describes and to enforcement actions authorized by the Security Council. And in this context, I should recall Henry Kissinger's remark, quote, "It is not in the American national interest to establish preemption as a universal principle available to every nation."

The third point to be made is that no one gains when we are divided on crucial issues such as the use of force. Like the international community as a whole, the Security Council was deeply divided in its views in the run-up to the Iraq War. And after years of collective decisions on Iraq, the Council's role and authority was set aside by the decision of the coalition to take military action. But one lesson has been made very clear by the Iraq experience. When the international community and the Security Council are divided on matters of war and peace, everyone loses. The coalition lost in credibility in some people's eyes by proceeding to use force without endorsement of the Security Council. The United Nations lost in credibility as the body driving the actions against Iraq on behalf of international legitimacy and as a result has come to be perceived in some quarters, particularly by many in Iraq, as an adjunct of the coalition force and not as an independent and impartial institution. And perhaps it is the Iraqi people who have lost the most. After years of suffering under a brutal dictatorship and after enduring the hardship brought on through an extended period of sanctions, they have had still more misery brought on by the ravages of war and the unforeseen and extended period of insurgency and civil disorder.

Of course the Iraq experience is the most glaring recent case relevant to nuclear proliferation and security, but unfortunately, not the only one. The IAEA's efforts to verify undeclared nuclear programs in Iran, Libya, and the Democratic Peoples' Republic of Korea have also provided considerable insight and a number of lessons. The first lesson is that for nuclear proliferation to be successful, IAEA inspections must have adequate authority. The any time/any place authority granted by the Security Council in the case of Iraq was extraordinary, and it is not likely that countries would voluntarily grant the IAEA such a blanket right of an inspection. Moreover, the IAEA's authority under the nonproliferation treaty is limited to verifying that nuclear materials have not been diverted for nonpeaceful uses, and we have no clear-cut mandate to search for weaponization activities per se, unless we have reason to believe that nuclear material has actually been diverted to those activities.

Nonetheless, within the NPT framework, adequate authority can be achieved in those countries that accept the so-called "additional protocol" as a supplement to the NPT safeguard agreement. The additional protocol provides the agency with significant additional authority with regard to both information and physical action. As illustrated by the IAEA's experience in Iraq before the first Gulf War, without the authority provided by the protocol our ability to verify nuclear activity is mostly limited to nuclear material already declared, with little authority to verify the absence of undeclared or clandestine nuclear material or activity. By contrast, our recent efforts in Iran and elsewhere have made clear how much can be uncovered when the protocol is applied.

The second lesson is that international efforts to limit the spread of technology through the use of export controls have left much to be desired. The most disturbing insight to

emerge from our work in Iran and Libya has been the revelation of an extensive illicit market for the supply of nuclear items. The relative ease with which a multinational illicit network could be set up and operated demonstrates the inadequacy of the present export control system. The fact that so many companies and individuals could be involved-- more than two dozen companies by last count--and that in most cases this could occur apparently without the knowledge of their own governments, points to the shortcomings of the national system for oversight of extensive equipment and technology.

It also points to the limitation of existing international cooperation on export controls, which relies on informal arrangements, does not include many countries with growing industrial capacity, and does not include sufficient sharing of export information with the IAEA.

But more importantly, it is time to change our assumptions regarding the inaccessibility of nuclear technology. In a modern society, characterized by electronic information exchange, interlinked financial systems and global trade, the control of access to nuclear weapons technology has grown increasingly difficult. The technical barriers to mastering the essential steps of uranium enrichment and to designing weapons with that method have eroded over time. Much of the hardware in question is "dual use" and the sheer diversity of technology has made it much more difficult to control or even track procurement and sale.

The only reasonable conclusion is that the control of technology is not in itself a sufficient barrier against further proliferation. For an increasing number of countries with a highly developed industrial infrastructure, and in some cases access to high enriched uranium or plutonium, the international community must rely primarily on a continued perception of security as the basis for adherence of these countries to their own nonproliferation commitment--and security perception, as we all know, can rapidly change.

In fact, a country might choose to hedge its options by developing a civilian nuclear fuel cycle, legally permissible under the nonproliferation treaty, not only because of its civilian use but also because of the latent nuclear deterrent value that such a program could have, both intrinsically and in terms of the signal it sends to neighboring and other countries.

The unspoken security posture could be summarized as follows: We have no nuclear weapons program today because we do not see the need for one, but we should be prepared to launch one should our security perception change, and for this, we should have the required capacity to produce the fissile material as well as other technologies that would enable us to produce a weapon in a matter of months. Obviously, the narrow margin of security this situation affords is worrisome.

The third lesson as amply illustrated by the North Korean situation is that the international community cannot afford not to act in a timely manner in cases of noncompliance and before available options are narrowed. Beginning in the mid-'80s, North Korea took seven years to fulfill its obligation under the nonproliferation treaty to conclude a safeguards agreement with the Agency. In 1992 shortly after this agreement was concluded and the IAEA began inspections, we sounded the alarm that North Korea had not reported its total production of plutonium. From that time forward, despite the agreed framework with the United States, North Korea has been in continuous noncompliance with its NPT obligations, and has not allowed the IAEA to fully verify its nuclear program. At the end of the 2002, North Korea capped its noncompliance by ordering the IAEA inspectors out of the country, dismantling the monitoring cameras, breaking IAEA seals and, a few weeks later, declaring its withdrawal from the nonproliferation treaty.

Naturally, all of these actions were promptly reported by the agency to the Security Council, but with little or no response. This lack of timely action may have complicated finding a solution, and may have conveyed the message that breaking the nonproliferation norms with impunity is a doable proposition, or worse, that acquiring a nuclear deterrence would bring with it a special treatment.

Lesson 4: Insecurity breeds proliferation. It is instructive that nearly all nuclear proliferation concerns arise in regions of longstanding tension. In other words, nuclear proliferation is a symptom, and these symptoms will continue to persist and worsen as long as we leave unaddressed the underlying causes of insecurity and instability, such as chronic disputes which continue to fester (we have in mind such disputes like in the Middle East, the Korean Peninsula, the Indian Subcontinent), the persistent lack of good government and basic freedom, a growing divide between rich and the poor, a newly-perceived schism based on ethnic or religious differences.

It is in this context that I have begun to stress not only the value but also the limitations of the IAEA role. While the Agency can use verification effectively to bring to closure questions of compliance with legal and technical requirements, the long-term value of this effort can only be realized to the extent that they are enforced by all other components of the nonproliferation regime, and followed by the necessary political dialogue among concerned states to address underlying issues of insecurity and to build confidence and trust.

I should note that verification supported by diplomacy has been an important part of the success so far in Iran and Libya. And in that sense, I can only hope that the continuation of the six party talks on the North Korean nuclear program will yield results that will include inter alia full IAEA verification.

Clearly the world has changed. The key features of the international security landscape have been altered significantly over the past two decades. Whatever value the concept of nuclear deterrence may have served during the Cold War as a volatile currency on which the standoff between two superpowers was balanced, they have now become the ultimate elephant in the parlor. For the five countries recognized as the nuclear weapons states under the NPT, the nuclear arsenals are increasingly becoming either a focal point for resentment or cynicism among the nuclear have-nots, or worse, a model of emulation for states that wish to pursue clandestine weapons of mass destruction programs, hoping that this will bring them security and status.

It is the height of irony in today's security environment that the only actors who presumably would find the world's most powerful weapons useful and would deploy them without hesitation would be an extremist group. A nuclear deterrent is absolutely ineffective against such groups. They have no cities that can be bombed in response, nor are they focused on self-preservation, but even as we take urgent measures to protect against nuclear terrorists, we remain sluggish and unconvinced about the need to rapidly rid ourselves from nuclear weapons. Why? The answer in my view is that the international community has not been successful to date in creating a viable alternative to the doctrine of nuclear deterrence as the basis for international security. Nuclear weapons will not go away until a reliable collective security framework exists to fill the vacuum. The aftermath of the Cold War should have served as the logical lead-in to such an effort. The resulting changes to the international security landscape have been obvious. It is only that we have not acted to adapt to these changes.

If there is any silver lining to this dark cloud, it is that the window of opportunity is still open. The efforts to counteract Iraq's phantom weapons of mass destruction, to unveil a clandestine nuclear weapon program in Libya, to understand the extent and nature of Iran's undeclared nuclear program, to bring North Korea back to the NPT regime, and to dismantle any nuclear program they may have, and to prevent nuclear terrorists have all brought worldwide attention to bear on issues of nuclear nonproliferation and nuclear security. The energy is ours to harness. If we are ever to build a global security structure, based on human solidarity and shared human values, a collective security framework that will serve the interests of all countries equally and make reliance on nuclear weapons obsolete, the time in my view is now.

The question remains, how? Whose responsibility is it to create this security framework? Is it an initiative for policy makers? The U.N. Security Council? The scientific community? The answer of course is that it will take all of us. Progress must be made on all fronts—political, scientific and societal. We must all take the responsibility for action.

Sidney Drell comes to this problem as a physicist, and I come to it as a lawyer and a diplomat, but we have arrived exactly at the same basic conclusion, that reliance on nuclear weapons is a recipe for self-destruction. I find it encouraging that people from all sectors of society have been coming forward with proposals on how to address the challenges of nuclear proliferation and nuclear arms control. In my view, this could be the beginning of a much-needed discussion on security, and we should do all we can to stimulate the dialogue, move it forward and keep it in public focus.

I would like to spend my remaining few minutes outlining what I see as the type of action that must be taken.

Let me first then turn to the political and policy front. In this area, leadership must be focused on restoring and strengthening the credibility of multilateral approaches to resolving conflict and threats to international security--conflict and threats ranging from preserving the environment to ensuring the respect for human rights, working for sustainable development and controlling weapons of mass destruction, which in our globalized world can only be resolved through a collective and multilateral approach in which competing interests and powers can be contained and harmonized. The system of collective security hoped for in the United Nations Charter has never been made fully functional or effective. This must be our starting point. For some years now, efforts to achieve Security Council reform have been mostly focused on the question of whether additional countries should be given permanent seats. In my view, such a change would be helpful in making the Council more representative of today's global reality, and in removing the current correlation, in that the same five countries recognized as nuclear weapons states hold the five permanent seats on the Security Council.

But more importantly, for the Security Council to take the leadership role for which it was designed, its reform must be focused on more than issues of membership. The Council must be able and ready to engage swiftly and decisively in both preventive diplomacy and enforcement measures, with the tools and methods in place necessary to cope with existing and emerging threats to international peace and security. This should include mechanisms for preventive diplomacy, to settle emerging disputes within and among nations. The genocide in Rwanda, where 800,000 people died, and the appalling situation in Darfur, where 10,000 people are dying every month, are two prime examples of the lack of early and decisive intervention by the Security Council.

The Security Council should also have at the ready small sanctions, so to speak, that can target a government without adding misery to its helpless victims as we have seen in Iraq. The Council should have adequate forces to intervene in the foreseeable range of situations, from maintaining law and order, to monitoring borders, to combating aggression, and yes, in my view, the Security Council should be able to authorize

collective preemptive military action when the eminence and gravity of the threat merits such action.

Increasing the effectiveness and relevance of the Security Council is an essential step toward a functional system for collective security. Such a system is the only alternative to the reliance that some nations, including nuclear weapon states and their allies, now place on nuclear deterrence, in a good-guy versus bad-guy approach that inevitably leaves some nations seeking to achieve parity. A functional system for collective security is the only alternative to the current hodge-podge of approaches to addressing security, ranging from inaction or late action on the part of the international community, to unilateral and self-help solutions on the part of individual states or groups of states.

With a viable system of collective security in place, policy makers and political leaders may find it easier to make progress on the nuclear arms control front, such as bringing into force the Comprehensive Nuclear Test Ban Treaty and negotiating an internationally verifiable Fissile Material Cut-Off Treaty. In my view, every effort should be made starting at the 2005 NPT conference and continuing in other venues to agree on benchmarks for nonproliferation and disarmament. These benchmarks should include urging all the states to bring the additional protocols to IAEA safeguard agreement into force; tightening and formalizing the controls over the export of nuclear materials and technology; working towards multilateral control over the sensitive part of the nuclear fuel cycle--enrichment, reprocessing and the management and disposal of a spent fuel; and ensuring that states cannot withdraw from the NPT without clear consequences, including prompt review and action by the Security Council.

The international community should also work rapidly to reduce the stockpile of high-enriched uranium and plutonium around the globe, and to strengthen the protection of the existing nuclear material and facilities. An essential benchmark will be that a concrete roadmap for verified, irreversible nuclear disarmament, complete with a timetable and involving not only the NPT nuclear weapons states but also India, Pakistan and Israel, is at last put in place.

Just over a month ago, the foreign ministers of Brazil, Egypt, Ireland, Mexico, New Zealand, South Africa, and Sweden spoke out jointly saying, quote, “Nuclear nonproliferation and disarmament are two sides of the same coin, and both must be energetically pursued.” Unquote. Thirty years after the enactment of the NPT with the Cold War ended, and over 30,000 nuclear warheads still available for use, it should be understandable that non-nuclear-weapon states are no longer willing to accept as credible the commitment of nuclear weapon states to the NPT disarmament obligations.

In my view, we have come to a fork in the road. I assert there must be a demonstration to move toward nuclear disarmament or we should resign ourselves to the fact that other countries will pursue a more dangerous parity through proliferation. The difficulty of

achieving our ultimate objective, the elimination of all nuclear weapons, should by no means be underestimated, but at the same time, it should not be used as a protection for failing to start the process of drastic reduction in existing nuclear arsenals--and simultaneously, to explore the development of collective response mechanisms that will be needed against any future clandestine nuclear proliferation efforts.

I would also like to emphasize the role of scientists in advancing nonproliferation and disarmament objectives, and the responsibility for action that lies with the scientific community. Science brought us the atom bomb, and if we are to rid ourselves of nuclear weapons, we will need an equally intensive effort on the part of the scientific researchers, to develop innovative tools for nuclear verification and mechanisms for reducing the proliferation potential of nuclear material and technology. In the area of nuclear verification, for example, advances in environmental sampling and analysis techniques are enabling the IAEA inspectors to determine with far greater precision the nature and origin of individual particles of uranium and thereby to help us detect undeclared activities. Satellite imagery technology and advanced information analysis techniques have also broadened the range of inspection capabilities. And in the long run, science may be able to develop additional innovative ways and means to neutralize the impact of nuclear and other weapons of mass destruction.

The proliferation of nuclear weapons, the greatest danger in the world of Sidney Drell and James Goodby, is the legacy we all share, and ultimately every concerned citizen also shares the responsibility for action. In countries ranging from the most powerful to some of the least developed, the voice of the citizens is increasingly a force in the political debate. It is vital that we engage individuals from all sectors of society in a public dialogue on international security, to remind them of the continuing danger of nuclear war, to explain to them possible alternatives and to offer avenues for involvement. We must continue to develop and refine proposals for action, to bring them to the attention of governments and opinion leaders, and to promote public discourse on nuclear nonproliferation and disarmament that will become too forceful to be ignored. And here I am pleased to recognize the important role played by CISAC as a force in the field of international security and cooperation. Your effort to develop proposals that aim to enhance security and to move it away from reliance on nuclear weapons and nuclear deterrence have never been more urgent or more relevant.

For centuries, perhaps for millennia, security strategies have been based on boundaries. City walls, border patrols, and the use of racial and religious groupings or other categories separate friend from foe. Those strategies no longer work. The global community has become interdependent with the constant movement of people, ideas, and goods. Many aspects of modern life—global warming, Internet communication, the global marketplace, and yes, the war on terrorism—point to the fact that the human race has walked through a door that cannot be re-entered. Yet, with all the strides we have

made to connect on many levels, we continue to think disconnectedly on others. We think globally in terms of trade but continue to think locally in terms of security. We cherish our connectivity on the Web, but turn away from solidarity in matters of extreme poverty. Jim Morris, the executive director of the World Food Program, recently pointed out, quote, "There are about 800 million hungry people in the world today, about half of them children." Unquote. Yet, the governments of the world spent $900 billion on armament last year. Could it be that our priorities are askew?

This is a mindset we must change. In this century, in this generation, we must develop a new approach to security capable of transcending borders, an inclusive approach that is centered on the value of every human life. The sooner we can make that transition, the sooner we will achieve our goal of a planet with peace and justice as its hallmark. Thank you very much. (Applause.)

CHRIS CHYBA: Thank you, Dr. ElBaradei, for your remarks, and thank you for agreeing to take questions from our audience. If you do have a question, please line up in one of the aisles behind one of our colleagues in the Cardinal Red Stanford shirts. Once I recognize you, I'd like to ask you please to give your name and affiliation, and then state your question. Right here.

TIM HSING*: My name is Tim Hsing. I'm at the Asian American Public Policy and Security. I had a question for you, sir. The U.S. has been continually eroding the power of international bodies like the United Nations and the body that you represent, and with the U.S. now trying to back out of the NPT and also the fact that the U.S. refuses to shine any spotlight on the nuclear armaments that Israel has, and how that's never up for discussion, and how we did not even know what happened between India and Pakistan before the nuclear explosions, so you're here representing a body that the most powerful country in the world refuses to acknowledge the existence of, so how do you plan to work with—sorry, the re-elected administration? (Murmurs.)

DR. ELBARADEI: Well, I'm not sure I'll accept your basic proposition that the U.S. does not acknowledge the body which we represent. I mean, in fact, we have had very close cooperation with every U.S. administration since the establishment of the Agency in 1957. We have been working closely with the Bush Administration on efforts to curb the threat of weapons, of nuclear weapons, on issues of nuclear activities, on issues of nuclear safety, and many other issues. I think we share the same objectives, clearly, that we need to stem the threat of nuclear weapons and we need, you know, to make our world safer. We can disagree sometimes in any, like in any pluralistic society, on how to go about it, but make no mistake. We share the same objectives. Your question on the fact that the Israeli program is out of our, you know, oversight, and for that matter, the India and Pakistan. I mean, that the NPT has 187 members, 189 member states--in fact, the most [subscribers next to] the U.N. Charter--demonstrates how much

the international community attaches importance to the question of weapons, nuclear weapons. However, there are three countries still outside the regime. Ultimately it has to be a universal pact. Ultimately, as I said, we need to implement all parts of the nonproliferation treaty, not only to curb the spread of nuclear weapons, but to move to nuclear disarmament. This was the fine balance established in the NPT. The five nuclear weapon states commit themselves to move toward nuclear disarmament, to negotiate in good faith to move toward nuclear disarmament, which an international code of justice said that that means achieving concrete and precise results, which is nuclear disarmament, and on the other side, a commitment by everybody else not to develop nuclear weapons. That package needs to be implemented. We're not there yet. We don't have a perfect order, but we are quite on the way to go there, and I think, as I mentioned today, it is very important that the nuclear weapons states, including of course the United States, provide leadership by showing drastic reduction in their nuclear weapon arsenal, by making sure that we are, all of us, committed to the principle enshrined in the NPT and that is a world free from nuclear weapons.

CHRIS CHYBA: Let's go over to the next aisle.

NICK FRAM: Hi, I'm Nick Fram. I'm a student here at Stanford. My question is whether the U.S. and the international community is doing all it can to secure nuclear material in the former Soviet states, and if not, what specific steps need to be taken for that to happen?

DR. ELBARADEI: Well, I think there's a lot of work going on to secure nuclear material, not only in the former Soviet Union but all over the place. I mean, we have nuclear material, highly enriched uranium, we have plutonium, radioactive sources all over the place, and we are in fact doing all we can, you know, both at the IAEA and in cooperation with all member states, to secure the nuclear material. However, we are in a race against time. We have seen indications that terrorists are interested to acquire nuclear material, or nuclear, or even a nuclear weapon, or radioactive sources, and that is a danger we cannot afford to ignore. So it's really a question of doing all we can to secure all the nuclear material, reduce the amount of existing highly enriched uranium or plutonium, and we still can do more, I could say. I mean, it's a question also of resources. As you know, we, you know, the IAEA had an initiative which aimed to put as much money to secure material in the former Soviet Union, I think I fully support all that's being done there. We work closely with many countries to ensure that all nuclear material, radioactive sources, are properly protected, but we are not there yet.

CHRIS CHYBA: Is there a question all the way over on that side, please?

JEN DRENKIN: My name's Jen Drenkin. Israel has nuclear weapons. It's my understanding that Israel helped South Africa with each new nuclear weapon program when South Africa was under apartheid, now dismantled of course. Why hasn't Israel

signed the Nonproliferation Treaty, and why does there appear not to be international condemnation of that stance by Israel, and more recognition that Israel has nuclear weapons, and furthermore, you mentioned how nuclear weapons tend to be developed because of regional instabilities. Do you think if Israel was a member of the NPT, the issues we're having with Iran and their nuclear weapons program would be lessened, or helped? Thank you.

DR. ELBARADEI: Well, the nonproliferation regime is based on a voluntary basis. I mean, that's where, that's the basis of the regime. It's not, there is no obligation to be part of that regime. I think all those 189 countries who have become party to the regime have concluded that it is in their interests to renounce the nuclear weapon option rather than to maintain it because by doing that, they're sending a message to their neighbors that we are not a threat to your security. As I said, Israel, India and Pakistan for their own security reasons have concluded that they are better off, until now at least, to maintain the nuclear weapon option, similar to the other five nuclear weapon states—the United States, Russia, France, China and France [*sic*]. Again, we are working with them to create a security environment by which they start by reducing their nuclear weapon arsenal and then move toward nuclear disarmament. Whether Israel was cooperating with South Africa, we obviously do not have the information. I mean, you, we have read some about of these—we do not have. However, South Africa as you know has dismantled its previous nuclear weapon program and is now part of the nonproliferation regime.

The fact that Israel is still outside the regime obviously is a, is a situation that needs to be changed in the long run. We have been working with Israel, we have been working with all the Arab states in the Middle East to see what are the conditions for the creation of a nuclear weapon-free zone. On the one hand Israel is saying that this could only be attained in the context of peace, that security is a condition, or parallel, has to be pursued in parallel with the peace process, and as long as there is no comprehensive peace in the Middle East, they cannot lower their security threshold and give up their nuclear option.

On the other hand, the Arabs are saying Israel has to become party to the Non-Proliferation Treaty could be regarded as a confidence-building measure that can enhance or accelerate the peace process. What I have been trying to do is to tell all the parties that these two issues—security and peace process—should be pursued in parallel, that security obviously will enhance the peace process and you cannot have peace that is not under-girded by a set of security measures including obviously elimination of all weapons of mass destruction.

Luckily, all the parties including Israel agree that the ultimate aim is a nuclear weapon-free zone in the Middle East, but that aim is not there yet. I think as soon as we go back hopefully to a peace process in the Middle East, as soon as we make some progress on

the peace process, I would hope that a security dialogue will start between the parties and be able to have a security system in the Middle East not based on nuclear deterrence, not based on chemical weapons, but based on cooperation, based on trust. I have a few months ago made a visit to Israel. I had quite a good meeting with Prime Minister Sharon. I told him what I feel--that we are in the Middle East facing two options. One is that Israel will continue to remain outside the regime, and then we should not be surprised that we, in the next 20, 30 years, we will have two or three countries in the region acquiring nuclear weapons, or worse, God forbid, an extremist group getting their hands on a nuclear weapon. And there, whatever the silence you will have, as I just said, will not be of any use because these people cannot be deterred, or, try to think together of a different system of security that does not rely on nuclear weapons, that is inclusive in its coverage and that's based on trust and cooperation.

CHRIS CHYBA: Let's come back to this side.

BEN GOLDSMITH: Hi, my name's Ben Goldsmith. Given from what you just said, it sort of sounds like you're in favor of complete nuclear disarmament in most of the world's countries. But given that you have certain countries like Iran and North Korea and Israel who see nuclear weapons as not just a deterrent against other nuclear weapons but against conventional attack, do you really think it's a plausible goal to sort of have this total global disarmament and how would you go about, I mean do you have any thoughts on how you would convince these nations to give up their nuclear weapons and, you know, as seeing if they're not just against, deterrent against other nuclear weapons.

DR. ELBARADEI: Well, that goal is not set by me. That goal was set in the Non-Proliferation Treaty in 1970, where all countries committed themselves to move toward total elimination of nuclear weapons. I mean, that continues to be our ultimate objective as a civilized community of nations. It is not an easy, it is not an easy task, as I just mentioned again in my talk. You have to develop an alternative system to the concept of nuclear deterrence, which we haven't really done much to develop, but you also have to have a system of collective security, whereby countries do not feel the incentive to develop nuclear weapons. I always ask the question, why do you see many proliferation efforts in the Middle East or on northeast Asia and not in Scandinavia, for example? I mean, and the answer is obvious. It's security. If you feel that you have a sense of security, if you feel that your identity is not threatened, if you feel that your neighbors are not, are not a threat to you, then you do not, you do not try to develop weapons of mass destruction. So you need to work on these causes of instability and insecurity, starting with, as I mentioned, some of these chronic disputes, starting with this growing schism between the rich and the poor, when we know that two-thirds of the world live on less than one dollar a day. I mean, we should not be surprised to see such an extremism. Whether it be under the cloak of religion, language, color, what have you—I mean, you need to address causes of instability and security. You need to understand security in a

broader context, and not just a question of weapons. It's a question of equality, it's a question of justice, it's a question of giving every individual the right to live in peace and freedom and dignity, and to have hope for the future. There's a lot of work to be done in all fronts, and your question is also good that we need ultimately, even if we move toward nuclear disarmament, to protect ourselves against possible cheats. There will always be those who might want to cheat the system, and again, we need to think of some collective system to protect ourselves against possible cheats who are trying, could try in a clandestine way to develop nuclear weapons. Can we think of a small nuclear arsenal under the collective control of the Security Council, for example, to deal with this kind of situation? There's a lot of possible scenarios that one can think of, but the important thing is that if we believe that going the way we are heading, more and more countries acquiring nuclear weapons, we are now talking about eight or nine at least nuclear weapon states. If we are thinking that going the way that President [Eisenhower] predicted, that we will have 20, 30 nuclear weapon states, is a recipe for self-destruction, is a threat to our global survival. If we all believe that, then we have a lot of work to do, to move in the other direction, and create a culture where nuclear weapons or other weapons of mass destruction have no place. Ultimately we need to look at nuclear weapons the way we look at genocide, the way we look at slavery. It's taboo, that we should even think about it, but we need to do a lot of work to create that environment. Started from education, starting in, addressing some of the injustices we see, working on security, providing leadership, lots of work needs to be done. But we should continue to endure and we should continue to know that this is the only way, and this is the only road we should travel. (Applause.)

CHRIS CHYBA: Someone back here.

SRI DOM: Good evening. My name is Sri Dom. I'm a student here. You are primarily concerned with upholding the NPT. Some have argued that the NPT itself is flawed, because it allows some countries to possess nuclear weapons, and those who don't have it yet, not to acquire them. What is your opinion on that, sir?

DR. EL BARADEI: I am not saying that NPT is a perfect regime, by any chance. I have been saying and referring to some of the limitations of the NPT, but the NPT is the best game in town we have right now, and rather than try to destroy the NPT or to get the NPT to disintegrate and turn into total chaos, we need to build on it. I know the Indian position on the NPT, that it allows countries to have nuclear weapons, the haves and the have-nots, but I'm also saying that the NPT allows that different treatment as a matter of transition. This is not supposed to be a permanent status. The NPT is meant to say you will have nuclear weapons for a period of time, but you ought to move to a nuclear disarmament, and I think understanding the NPT in that way is, should be, should help countries that are outside the regime once this disarmament process starts, to join. I've been always saying that India, Pakistan and Israel were never [inaudible] start an arms

control process should be part of that regime. So the NPT is not perfect, but the NPT is the best mechanism we have today.

ED WILL: Hello, my name is Ed Will. I'm a Stanford physics graduate student. So you speak of the need for scientists and engineers to develop ways to enhance our security, and I was wondering whether you believe intercontinental missile, ballistic missile defense, would enhance our security in the long run by taking away the incentive for nuclear weapons, or if it would actually encourage the proliferation of nuclear weapons?

DR. EL BARADEI: (Pause.) (Chuckles.) Difficult for me, because I really in honesty don't, do not really understand all the intricacies of the proposal. However, you know, I have seen that some people have looked at that proposal to be an invitation for others to enhance their nuclear weapons arsenals, and by having the shield, you would want to have more weapons to be able at least to have the likelihood for some of your weapons to penetrate the shield. I think what we need, and whether the shield, the nuclear shield will provide you a security as we have seen, you know, saying the only way to, using missiles to launch, you know, to attack, you know, is not the only way to be able to have nuclear weapons. You can easily bring a nuclear weapon, so it's a harbor for them. So even if you move on a nuclear shield, you know, it is not the only way to avoid a possible nuclear attack. However, what my concern frankly is whatever system we work on has to be a system that's inclusive in nature, meaning that provides security for all, and not provide security for some at the expense of others. I think perfect security for some is a perfect insecurity for others. We need to have a system of security that for every nation, every nation believe that they are secure and they can do away with their effort to acquire nuclear weapons or if they have nuclear weapons, to move away from having this. Ultimately, as I said, and this is my [inaudible] like Utopia. The only way we'll have permanent peace or permanent security is where we have a system of security that is centered on the human, the individual, that, on the acknowledgement that what we have and what we share together is much more than what divides us, that our security should not be based on borders, should not be based on race, but should be on the equal protection of every human life on the planet.

CHRIS CHYBA: All the way across.

ANYA VODOPYANOV:Hi, my name is Anya Vodopyanov. I'm a recent Stanford graduate. I would like to push you a little bit more on the question that has been asked by another member of the audience about the nonproliferation, the threat to nonproliferation posed by the vast quantities of fissile material in Russia, and specifically I would like to ask you about the initiative that has been recently underway I think from June or so to make Russia into a, essentially into a nuclear, spent nuclear fuel storage site, "an international waste dump" I think it's been called by some, so I was wondering with, in

that regard, with regard to the threat that Russian existing materials as opposed to the threat that they're supposed to pose to a nonproliferation, how do you justify creating an international sort of much larger storage in that country?

DR. EL BARADEI: Well, I think these are two different issues. I mean, the one is nuclear material that is there in Russia and the need for maybe better physical protection of these materials. I mean, the government is clearly doing it's best, the Russian government, to protect the nuclear material, the radioactive sources that exist in Russia. The other issue you talked about is whether we have an international repository for all the spent fuel, all the waste we have, and the answer, yes we do. I mean, we have now 50 countries that have nuclear material, radioactive sources, spent fuel in interim storage. They don't have the geology, they don't have the resources, they don't have the capacity to have a permanent disposable facility, and I think what we are saying that we need probably two or three or four international storages around the globe in countries that have the technology, that have the proper geological formation, that have the resources whereby we can secure in a permanent way the, the, the huge amount of waste and spent fuel that exists now around the globe.

Then of course there is the question of security, but as you know, spent fuel storage is something which is, it goes very, very deep underground and obviously it would be in one site. We can think of all different ways for protecting that. I mean, you will have to do the same in Russia as you will do probably in Yucca Mountain, if Yucca Mountain will become operational. Whatever you have spent fuels with plutonium in it, whatever you have, you have enriched uranium, you do need high level of security. But if you try to concentrate amount of this material, first reduce the amount of the material available. I think concentrated in a few places, the better security option and chances you have.

DUNCAN STEWART: Hello, my Name is Duncan Stewart. I'm a physicist educated here at Stanford, working next door at Hewlett-Packard. You proposed a framework for global security starting with the Security Council and based on values of human decency. I can't agree more. However, I see a fundamental disconnect between the motivation of the Security Council which in the last decade has been essentially economic only, and the actions required which are as you point out based on human decency. For example, the Security Council brokers power between its most powerful members, not between the poorest members of the U.N., and yet the poorest members are the ones most likely to seek parity, either as a state or as a source of individual extremists. The lack of attention to poor members results in the genocide in Rwanda and Darpoor. How can we, does this gap exist? How can we bridge that gap between economic motivation and actually the human decency values which will fairly treat the poorest members of our society?

DR. EL BARADEI: Well, I think this, as I said, this is a mindset that needs to be changed. I mean, if we feel comfortable that we are spending, as I said, $900 billion on

arms and armaments and spending $57 million, $57 billion on official development assistance per year. I mean, there's clearly something wrong with our priorities. I hope, as I said, that with the new phenomenon we have seen, all these waves of extremists, all this new tension, all this new war, that we will have to come to realize that our concept of security as narrowly defined is not the right way to do it, that if we want security we need to start by establishing parity. We need to start work on establishing justice, equity, and if we have that I think we have all the resources in the world we can to do the preemptive action. The problem in the international community all the time. We only start to react, we never take preventive actions, you know. It's always when a horrible thing happened that we will then try to take the necessary measures, whether it's a Chernobyl accident, whether it's the Nine-Eleven, it's only after the fact, and what I'm really saying here now that if we do not want a repeat of some of the major crises we have gone through and could be even worse because of as I said the threat of technology, etc, we need to rethink our concept of security and we need to start thinking in terms of human decency and we need to start thinking in terms of assistance based on equality and justice and not a blinker system based on narrow national interests.

DAN BIRKENSTOCK: My name is Dan Birkenstock. I'm an aero astro student here at Stanford, and I was wondering. You see on the news an awful lot IAEA inspectors being rebuffed or turned away when they're trying to get into various sites in some of the countries that you mentioned before, and I was wondering how does that play out on the ground? You always kind of read it in the newspaper and you say I wish they would just go for it and barge on in, you know, and not be turned away, and I realize it's a voluntary treaty, but what is the actual give and take on the ground like when you turn up at a site and they say no and you say yes? (Laughter.) Sorry, and also there's a lot of us here are students that are going to be looking for jobs someday. I was wondering how does one go about being hired as one of the inspectors that you see on the ground? (Laughter.) (Applause.)

DR. EL BARADEI: Well, I think if you keep saying yes to a country saying no, we will hire you as an inspector. (Laughter.) And that's basically what we do. I mean, we have to persevere. We obviously, we work on the basis of political agreement. It is not, it is voluntary as long as you are on board but once you become party to the nonproliferation treaty, for example, you are bund by certain legal obligations. You cannot turn our inspectors away, and if you turn our inspector away, then we go to the Security Council and I mean the while system works that our guardians, if you like, are the Security Council. We don't have an army of our own, we cannot force, barge our way through, but if there is a case of noncompliance and if a country refuses to give us access, it is a case of noncompliance, then we have to report to Security Council. Unfortunately, sometimes the Security Council does not act the way it ought to act, as I mentioned in the case of North Korea, for example, but we I think in most cases, with the exception frankly of North Korea, we have been managing to get our way through. I think you

need to work with a country, you need to show them that you're not going to be intimidated, that you know your rights, and you have to continue to insist, to exercise fully your right. That's the only way to be able to perform your job, but you also have to explain to them that it is in their interests, you know, to cooperate with you, because if they don't, then they create doubt and suspicions, and we report these doubts and suspicion, and then the consequences for them is much worse than just denying access to the Agency.

If you look at our website it will tell you what requirement you have to become an inspector. (Laughter.)

MATTHEW CRANIG: My name is Mathew Cranig. I'm a Public Policy and Nuclear Threat Fellow at the Institute of Global Conflict and Cooperation and a Ph.D. candidate at U.C. Berkeley, and my question has to do with reforming the Non-Proliferation Treaty. There's been a lot of discussion about this lately. Two proposals in particular are often cited. One would be to create a distinction between nuclear fuel user states and nuclear fuel supplier states, and the second has to do with reforming the escape clause, to make it more difficult for countries to withdraw from the treaty, and I would like to get your thoughts on these proposals in terms of the feasibility of actually amending the treaty, and second, in terms of the effectiveness of these proposals if they were to be implemented?

DR. EL BARADEI: Well, I think I'm biased on some of these proposals because these are my own proposals. (Laughter.) But I do believe that the last, the events of the last few years have shown the limitation of the Non-Proliferation Treaty. Precisely, a couple of, two of the areas we need to do in different ways is what you just mentioned. One is the fuel cycle, you know, access to highly enriched uranium or plutonium. We have come to realize now as again I mentioned, if every country acquiring the capability which is still legitimate under the Non-Proliferation Treaty, for having a plutonium factory or a factory to enrich uranium, you are really talking about a latent nuclear weapon state, because the technology is such now that if you are having the fissile material, you are really a few months away from acquiring a nuclear weapon should you decide to do that. That's obviously not the way we should be able to protect ourselves. The margin of security is too close for comfort, you know, and what I have been proposing that if countries want to have fuel for their electricity generation, we need to have organized ourselves in a different way by which we can possibly have few regional or multinational centers to produce the fuel, to produce the highly enriched uranium, to produce the plutonium. In that way, you'll have a number of countries overseeing each other and making sure that no one country has absolute control over the fissile material.

The other question is that you cannot just afford with a treaty like the NPT, this is just like any other treaty, I can come in, I can come out, you know, and as we have seen in the

case of North Korea. When a country is saying, well, I am moving out of the NPT, what they are really saying, I am walking out of the NPT because I want to exercise my option to develop nuclear weapons, and if that's not a threat to international peace and security, what else could be? What I am offering, saying that we need to curtail that right of moving out of the NPT. We need to create a regime where, and for some of the loyalists at least here, when Prohibition, again, having nuclear weapons become a preempt [inaudible] international law. In other words, whether they are a party to a treaty or not party to a treaty, it is banned, it's taboo. Exactly the way you think about slavery. It doesn't matter whether you are [inaudible] free to own slaves, if you practice slavery, this is something of a taboo and the international community will organize itself to deal with you. I think when you deal with weapons that threaten our very survival, you just cannot afford to treat it as a treaty obligation and as business as usual, so what I am saying that we need to curtail the right of withdrawal from the NPT, but to be able to do that, then the nuclear weapons states, that still, as I said, sit on thousands of nuclear weapons, need to show a commitment that they are moving to nuclear disarmament and need to show concrete acts that they are reducing their arsenal. Otherwise you will not have the moral authority to tell others that you should not have these because they are not good for you, while I will continue not only to have my own arsenal but to continue to refine my own arsenal. Irrespective of any ideology, common sense will tell you that this is not sustainable in the long run. (Applause.)

JUSTIN HASTINGS: My name is Justin Hastings. I'm from the Public Policy and Nuclear Threats Program as well. This question is from Montai Dotta at U.C. Davis. He asks that given that George Bush has been reelected, what advice do you have for him regarding Iran and North Korea?

DR. EL BARADEI: On North Korea—

JUSTIN HASTINGS: On the situations in Iran and North Korea?

DR. EL BARADEI: I had very good meeting, I can tell you, with President Bush last April, and we discussed many of the issues you are talking, and I think again, the objective is clear, that we do not want either Iran or North Korea to have nuclear weapons, or any other country, for that matter. How to go about it is obviously a matter of as I said, it's a matter of how you use all your, the weapons in your diplomatic arsenal, how you use pressure, how you use incentive, how you use disincentives, and I think both, in both Korea and in case of Iran, you need to provide a security assurances to these countries, to feel that they are not threatened, to feel that they will not be attacked irrespective of the type of regime they have. You need to provide them, again, integration, a package of measure to integrate them into the international community. In the case of Iran, lifting the sanction both in the case of North Korea, and you need to provide disincentives by saying if you continue to develop nuclear weapons in the case of

North Korea or if we discover that Iran is developing a nuclear weapon program which we haven't seen the concrete proof of, but if you do, then the international community will be ready to take a set of measures to make sure that you will not continue to be in possession of these weapons. Any of these issues, you know, have to deal with security, have to deal with integration, inclusiveness, and you have to use incentives and disincentives. There's no magic solution for any of these, any crisis, you know. You just have to understand, you know, put yourself in the shoes of the other party, see what is reasonable they are asking and you can provide, what is not reasonable and you can enter, but the key on all of this is to engage in a dialogue, you know. As you know, I have been for a few months and years now talking about the need for a dialogue, a direct dialogue between the Iranian government and the U.S. government. I've said that to President Bush, I've said that to every member of the Bush Administration, and I continue to say that publicly, as you are doing in the case of North Korea, you ought to have a dialogue. I've been saying that in the case of the Middle East, you know, you cannot settle any issue unless the Israelis will sit with the Arabs, unless American will sit with Iranians, Japan will set with North Korea. Without a dialogue there is no way to move forward, so you have to dialogue, you have to understand each other, you have to provide incentives, you have to provide assurance of security, and you have to hope for the best.

CLINT TAYLOR: My name is Clint Taylor. I'm a graduate student in Political Science here at Stanford. On October 1st you office sent a memo to an Iraqi science official about the cache of HMX nuclear trigger explosives at Al Ka Ka. His response to the United Nations was leaked to CBS News who had planned to hold onto it until, and release the tape on October 31st. It broke before then but since then columnist William Safire and reporter Cliff May have accused the IAEA of trying to influence the American political process. I'd like to know how you respond to those charges, but I'd also like to know what, since this is obviously sort of brought to bear on the credibility and the legitimacy of the IAEA, what is being done to track down the source of the leak, and what sort of reprimand do you think is appropriate for the person who leaked it?

DR. EL BARADEI: Thank you very much. Well I can tell you it's unfortunate that our performance of a duty we have under, you know, our charter, under the Security Council guidance to us has been used as part of the political hype during a media election season. It's also unfortunate, frankly, that people did not try to look at the facts, you know. As I have been saying, people need to understand that there is a world out there other than the American election, and people (laughter and applause) people have obligations to fulfill, have responsibilities to assume. We every six months have an obligation to report to the Security Council on what we do in Iraq, you know, since 1991, our October report was the six-monthly report. When we repeat it our appeal to the Iraqi government, and to every other government, tat we need information on whatever material under our custody that exist in Iraq. Unfortunately we have been out of Iraq for a couple of years so we have to rely on information coming to us from the interim Iraqi

government or any, or the coalition force or the multinational force. On the tenth of October, I received a letter from the Iraqi government saying that there are 350 tons of high explosives went missing. This is a lot of explosives, and these are the kind of explosives that could be used for detonation of nuclear weapon and that's why they have been under our custody. I realize of course that the timing is very unfortunate because I know exactly, you know, the kind of reaction you will get from some of the media, not all the media, but some of the media, but more importantly, I saw that before the issue becomes public—and this was not really an issue that need to be kept confidential. But this is an issue which we usually interact with, with the Security Council and our interaction with the Security Council is always in public domain. But immediately when I received this information from the Iraqi government, I decided at least to give the U.S. government as in charge of the multinational force, an opportunity to look for these explosives, so I wrote on the 15th of October the U.S. Government saying before I report to the Security Council, I'd like to give you an opportunity to see whether you can tell me what happened to these explosives and whether you can in fact redeem this explosive in cooperation with Iraqi government. Unfortunately, the story leaked on the 25th of October. There is no reason to believe that it leaked from our side. I mean, it was the story known in Iraq, the story was known in the U.S. circuit, since that went the 15th of October since we reported, I have seen no indication whatsoever that it leaked on our part, but once the story became public knowledge, of course I had to report Security Council immediately because Security Council is our masters and they have to know about the series of events. Then I was told that bin Laden and I were trying to influence the American election. I think my answer to that that some of the media need to mature and understand, as I said, that there is other things happening in the world and the world does not come to a halt when you have an American election. (Applause.)

LEONARD CHERRY: One of your earlier comments was that you were—my name is Leonard Cherry, and I'm a retired physicist. One of your earlier comments was that you were getting cooperation with regard to the NPT from the Bush Administration, and in answer to another question, you indicated that it would be unreasonable for some country that has nuclear arms to say to the others, it's okay for us to have it but not for you. Now, unless things have changed recently, it's been my understanding that the Bush Administration has been pushing for the development of low yield, bunker buster nuclear weapons. Isn't there an inconsistency there somewhere?

DR. EL BARADEI: Well, I think I've said that. I think I said we are having good cooperation on with the Bush Administration on trying to curb proliferation of nuclear weapons, you know, countries are trying to acquire nuclear weapons is like in the case of Libya, like in the case of North Korea, we have been working very closely with them with regard to nuclear theories. And we have I think a bit of different views when it comes to nuclear disarmament, as [inaudible] said and if you read one of my talks at Carnegie Endowment, I think in June, I've said I came very hard on the issue of the U.S.

effort to try to develop new nuclear weapon, usable nuclear weapons, in fact, bunker buster or mini nukes, and I said that does not, in my view, you cannot reconcile that with their obligation under the Nonproliferation Treaty by where they committed themselves to move toward nuclear disarmament. We are, I think we are cooperating well on effort to stem the spread of nuclear weapons but I think we have different views on how we go about nuclear disarmament which is, as I said, in a pluralistic society, we should be able to disagree on certain issues.

CHRIS CHYBA: We will conclude at 5:30 which means we have time for just a few more questions. Over here.

SERGEI D'AVILA: My name is Sergei D'Avila. I'm a Knight Fellow. I'd like to hear your comments on the Brazilian situation regarding this nuclear issue.

DR. EL BARADEI: Well, I think, again, there is not really much of disagreement between the Agency and Brazil is building an enrichment facility. Our dialogue with, or discussion with Brazil since they're on our need to make sure that we have a credible system of verification of such a sensitive facility. A couple of weeks ago I think we have come to an initial understanding on an approach by which we will be able to do our job properly and Brazil will be able to protect their commercial sensitivity. I think that's a concern of Brazil that they have technology that they need to protect from the inspector's eyes, which is permissible under our inspection system as long as we are able to do our job in a credible manner, so we have I think now come to an understanding, but we are being, that new understanding is being analyzed in Vienna and I hope if things work in a way I think I was told initially it could work, then we are moving in the right direction with Brazil.

JORGE DIS: My name is Jorge Dis. I'm a student at Stanford. I have a question regarding your recommendations for reforming the NPT. First of all, you said you wanted a distinction between nuclear fuel producers and nuclear fuel users. How would this be implemented without increasing the disparity between the nuclear have's and the nuclear have-not's? And also with regards to your proposal for increasing the having consequences for withdrawing from the NPT, how do you reconcile this with there being no consequences for not being involved in the NPT at all?

DR. EL BARADEI: All right. On the first issue, I think having a system that protects everybody by limiting their capability to produce enriched uranium or plutonium to a few centers in the world, and these centers will be manned on a multilateral basis, so it's not a question of have's and have-not's. I mean, you will have some of the countries who do not have nuclear weapons possibly participating in the management of an enrichment center or a reprocessing center, so it is not a question again of accentuating the have's and the have-not's; it's a question of protecting everybody against the threat of fissile material know-how that could end up in having 40, 50 countries that can produce

nuclear weapons in a few months, as I said. So I'm not sure I would perceive it as accentuating the have's and have-not's; I can, I look at it as a system by which everybody will get their legitimate needs of nuclear fuel and it is not just while at the same time ensuring that the technology, the know-how's are not being too accessible as to threaten the global security. On the question of withdrawal from the NPT, there I agree with you, that we cannot really do very much until the treaty becomes universal, until everybody becomes part of that treaty, until the nuclear weapon states also commit themselves to nuclear disarmament. Then we create a system which is universal, which you would create a system which as I said which everybody subscribes to, once we lock everybody in, then we should make sure that everybody stays in because that is the only way that we can ensure our survival, is not do I have countries continue to develop nuclear weapons.

JOSH CHEN: My name is Josh Chen and I'm an undergraduate. Looking toward 2005 what do you think are the key issues in the Nonproliferation Treaty review conference in May, and what do you hope to see achieved?

DR. EL BARADEI: Well, I can't achieve much because it's the member states who have to agree, but I can at least give them ideas as I've been trying to do in the last couple of years. What I would hope to achieve at the NPT Review Conference at least is to have a moratorium on countries that are trying to develop reprocessing capability or highly, or uranium capability. I think we have enough capacity in the world to provide all those who need nuclear fuel for their electricity supply. What I would hope is to get a moratorium for say a few years until we try to develop a better system of protecting ourself by as I mentioned maybe a multilateral control over few regional fuel cycle facilities. I would like also to get from the Nonproliferation Treaty an endorsement that every country that is part of the NPT should subscribe to the additional protocol that is we need to give us the legal authority so when we go to a facility we should not be rebuffed when we go and ask information, we should not be rebuffed, we should go armed by the proper legal authority which enables us at the end of the day to provide credible information that countries are not beating the system, are not cheating our inspectors.

CHRIS CHYBA: We will take just one or two further questions before we conclude, and I say that wit apologies to all who won't get to ask their questions. Right here.

MARGIE VASA: Hi, may name is Margie Vasa. I'm a student here at Stanford. My question was is the expectation with the implementation of the nonproliferation regime that the world will come to a point of complete cessation of hostilities and peace, and if that is not the case, how viable is it to expect a country to unilaterally give up a means of defense or deterrence, and I guess leading off from that, are we expecting peace

to come before complete disarmament or disarmament to come before peace can be achieved?

DR. EL BARADEI: Well, I think you have to have conditions of peace before you expect countries to give up their deterrence, but you also have to expect that we'll continue to have situation of disagreement, and what I am saying, even in the case of disagreement, even in case of conflict, we need to think of a different way other than relying on nuclear deterrence, you know. We need to find—that's really the challenge I leave with you. We have been talking about nuclear disarmament a lot, but we haven't done much to my knowledge of what is the alternative to the concept of nuclear deterrence? We now know that either if we continue to rely on nuclear deterrence, then we should not be surprised that after technology's spread we'll have just about everybody having some nuclear capabilities, and is that the kind of security that we can have obviously if you have that situation we have 30 or 40 or 50 countries having nuclear weapons or the possibility for a nuclear holocaust, at least through miscalculation if not intentionally, increases exponentially. What we are saying is we need to think yes we need to have a system to protect ourselves, we need to have a system of security clearly, but could we have something else, rather than a system which can threaten our very survival, but to have a situation as of permanent peace, well, that's utopia I don't think we will have. I think we need to make sure that we understand that we'll always have conflict, but try to find a different way of settling this conflict, and a different way of providing security.

CHRIS CHYBA: With that final challenge, I'm afraid we're going to have to conclude. I'd like to thank all of you for coming this evening, and please thank Dr. El Baradei. (Applause.)

*Please note that names of questioners have been transcribed as they sounded on tape; spellings may not be accurate.