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## **Role of the non-proliferation regime in preventing non-state nuclear proliferation**

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Let me start with a brief introduction. I direct a long-term program of research, writing, networking and training on global security and global disarmament. Disarmament is not a particularly popular word right now, but when we were thinking about changing our program's name, the one thing we were certain about was that this word still needed to be there. These are issues we still need to discuss. They may seem to be politically impossible right now, but what is the old line? If you do not know which way you are going, any road will get you there.

I am going to try to deal with several different issues today. One caution - I have worked on nuclear weapons. I have worked on non-state actors in other contexts. I have not dealt with the non-proliferation regime and non-state actors before, which is the topic of my talk today. So it is a bit of a stretch, but I enjoyed working on this. It raised more questions than answers for me, and you will see some of that as I go along.

My talk has four main sections. First, I will give an introduction and sense of context about some of the tough issues and questions about paths to proliferation for non-state actors (as opposed to state actors). Then I will do something that those of you who have heard me speak before recognize as being somewhat traditional, giving good news and bad news. I usually try to keep them fairly evenly weighted. Today that was not possible; there is much more bad news than good news. Third, I will comment on particular aspects of the non-proliferation regime, focusing on some issues raised by the Non-Proliferation Treaty, International Atomic Energy Safeguards, and supplier measures. Last, I will suggest preliminary recommendations.

Arjun and Michele originally asked me to talk about the role of the Non-Proliferation Treaty with respect to non-state actors. I successfully argued that we ought to talk more broadly about the non-proliferation agenda as a whole. That said, there are many different ways to consider this issue: focusing on specific source countries, specific proliferation issues or aspects of the regime, or specific recipients. I am not really going to do the last piece, but I am going to try to do bits of the others.

Unfortunately, there is not even agreement on what the non-proliferation regime itself is. Just as I tend to use a fairly inclusive definition of national security, I use an inclusive definition of the non-proliferation regime. In addition to the NPT and the safeguards, that means dealing with the Comprehensive Test Ban Treaty, and in addition to the suppliers group, addressing issues such as nuclear weapons free zones, though they will not get much attention from me today. As Merav [Datan] said, these are interlocking, overlapping efforts. Sometimes that makes it difficult to figure out where to look for information, but it also provides us with additional points of leverage.

Here are some questions we need to consider. What weapons and material are actually out there? Who has what? What is the future potential for harm as opposed to what already exists? To what extent is this actually a physical threat and to what extent is it psychological? To what extent can the state system actually control this phenomenon? What are the strengths and weaknesses of the non-proliferation regime in dealing with non-state actors?

Non-state actors are an afterthought from the perspective of the non-proliferation regime. Safeguards, the NPT, and the test ban treaty are designed as state to state relationships. In fact, if you look at the NPT, it is not clear to me that you can find a mention of non-state actors in it. I have not found one, but I reserve the possibility that I am wrong.

Who are the key actors? Is "non-state actor" in this context really a code for terrorists and insurgents? There are lots of non-state actors. Some of them actually play quite constructive roles, but I do not think that is what we are really talking about here.

What is the relevant history? And what is really included when we talk about weapons of mass destruction? We have the new hot topic of the so-called "dirty bombs" or what the technicians call "radiological dispersal devices." Are those weapons of mass destruction? Possibly. Arguably, with an effective dirty bomb, you could do more harm than you could with a low-level chemical or in fact possibly biological attack. The military is now turning, of course, to a new acronym - CBRN, chemical-biological-radiological-nuclear. From their perspective, I think it fits. Of course, they have never been willing to include airplanes, so I have to admit that I have never completely understood their dividing lines.

What is the balance between prevention and reaction? Prevention is generally much easier. It tends to be a lot cheaper in many different ways. But it can be harder to bring about, because without a sense of an immediate threat, getting people off the dime can be quite difficult.

What have some of the important developments been in trying to keep nuclear weapons out of the hands of non-state actors? I raise the psychological question in addition to the physical question in part in reaction to some recent coverage of radiological weapons. Radiological weapons might be great terror weapons in that they might cause more psychological damage than physical damage, particularly if they are at the low end of the effectiveness scale.

We have apparently been fairly successful thus far in keeping weapons of mass destruction out of the hands of non-state actors. That sentence contains multiple hedges. I use "apparently" and "fairly," because I do not believe we know exactly how successful we have been in keeping

weapons of mass destruction out of the hands of non-state actors. Our guess is that thus far we have done okay. Why does that matter? It mattered before 9-11. This is not something new. It mattered because of concern that non-state actors might have gained access to weapons of mass destruction. How do we measure our effectiveness? Do we measure it against predictions? Do we measure it against zero?

Perhaps need to be making distinctions in our minds between two groups of terrorists. Arguably, one group of terrorists is primarily interested in having a political effect, and these terrorists actually see themselves as having political legitimacy that they want to retain. Another group consists of groups of terrorists who are non-state actors who simply want to do harm. I believe we may have devoted too much attention to groups who actually had political grievances, wanted attention and did not want to threaten their cause and too little attention to those who are willing to produce or even wanted to produce great harm. When beginning to prepare this talk, my gut instinct was that a robust non-proliferation regime should by its nature also impede access by non-state actors. My analysis suggests that this is true, but it is also important to leave a bit of room for unintended consequences. I will give you one example. The Non-Proliferation Treaty focuses on encouraging civilian nuclear power as part of the *quid pro quo* for countries forgoing nuclear weapons. This focus on broadening access to nuclear power could inadvertently make it easier for non-state actors to get access to nuclear material at a minimum and possibly get further up the chain than that. This is the kind of unintended consequence that I am thinking about.

The paths to proliferation look pretty similar for non-state actors and for states. You can make a weapon in part or in whole, presuming you can get access to fissile material. You can buy these weapons; or conceivably someone could give them to you. There is the possibility of engaging in collusion with states, either through countries inside the regime colluding with non-state actors or countries outside the regime colluding with non-state actors. Theft is an option and these days apparently with respect to radioactive material, you can simply go out and find it sometimes. This is not necessarily a good sign.

The standard framework that I tend to use on proliferation issues looks at technical questions, political, economic, psychological, military and legal factors and asks how these factors might promote proliferation. How might these factors retard proliferation? Which direction do they operate in? Of course, different factors can operate in different directions at different times. This depends in part on who is pulling the levers. This framework also maps non-state actors reasonably well. I do not want to suggest that we can simply take what we know about states and apply it to non-state actors, because that is not true. But we also do not have to go about reinventing all of this.

Let me give you one example on the technical side. The technical challenges for non-state actors and for state actors are virtually the same. To be successful, they have got to end up at the same point. Non-state actors have different kinds of impediments with respect to infrastructure than some states have. But if you think of a non-state actor as being in a similar position to a state that does not have a lot of infrastructure to begin with, there parallel may be useful. On the side of trying to prevent proliferation, particularly with respect to fissionable material, you are still dependent on getting an input from someone, somewhere, somehow. And those paths look much the same again. What are your options? You buy it, you steal it, what else do you do? There is

also a significant problem with handling the radioactive material, particularly when you are talking about people who do not have infrastructure. Back in the Dark Ages when I was studying these issues, 25 years ago, this was assumed to be one of the primary factors that could inhibit terrorists from successfully going in this direction. This is simply an example of how these factors related to non-state actors might map out.

On to good news and bad news. The good news, as I said earlier, is that the non-proliferation regime seems to have been largely successful thus far at keeping weapons of mass destruction out of terrorists' hands. My guess is that this is probably a combination of luck and skill, and possibly more of the former than the latter. Some tasks have been portrayed in the media as being much simpler than they actually are. The established nuclear powers, in particular the United States and Russia, tend to have fairly significant permissive action-link systems that are designed to prevent unauthorized use. As you move down the scale from long-range strategic weapons to shorter-range tactical weapons, those controls get looser and looser, as our colleagues at the Fourth Freedom Forum have done a very good job of pointing out. Yet the bottom line is that for nuclear proliferation as a whole, there has been much less proliferation than we expected 20 or 30 years ago. This is not enough, but that is not bad news. I think this also maps onto the non-state actor question.

And then there is the bad news. If you view the world in terms of probabilities, then the question of non-state actors getting access to nuclear weapons or other weapons of mass destruction is simply a question of time. That is very scary. There is too much material that has not been accounted for and probably cannot be accounted for. There are 500-some cases of trafficking in the IAEA database, half of them involving some sort of radioactive material. People all over the world are trying to figure out the extent of the problem, but we do not know and we may not ever know. And the clock is working against us.

How does the non-proliferation regime help us? It helps us in many different directions. One is that some of the non-state actor issues can in fact be reduced or moved back into state-to-state questions. Where do these people operate? Who is allowing them to operate on their territory? This is what the Bush Administration has done with the terrorism question. It has moved away from dealing with terrorist groups as non-state actors and is trying to make states responsible for the groups that are operating on their territory. This is not easy, but is at least possible.

One question is whether we should be providing permissive action links to India and Pakistan, to make it easier to prevent unauthorized individuals or groups from gaining access to their nuclear weapons. There is a whole set of issues related to whether that would violate the NPT. This seems like a state-to-state question, but it could also affect the likelihood of non-state actors getting their hands on these weapons. I think it turns out that the answer is to keep the components separate, so you do not need to worry about someone getting access to a complete weapon in the same way. Then we do not need to deal with the question of whether to go down the slippery slope of providing permissive action links.

IAEA safeguards map directly onto the question of non-state actors. What do IAEA safeguards cover? They include physical protection of facilities and material, and provisions to ensure the security of that material. If this is happening on a state-to-state basis, then nuclear material is not

going to be available for the non-state actors. If things are not going well on the state-to-state basis, then the materials are going to be available to non-state actors. There is a direct relationship.

Based on this analysis, it seems that having a robust non-proliferation regime would decrease non-state access to nuclear weapons and other weapons of mass destruction. I would encourage people to avoid making an artificial distinction between nuclear weapons and chemical and biological weapons in this area. I think we are facing many of the same problems with all three types of weapons, and the countries of concern overlap significantly. The groups that are interested in one of these types of weapons are often interested in the others. The core issues include source control, not giving the bad guys access to facilities and material. They also include funding issues and having the appropriate and adequate resources in order to carry out these functions. International control of fissile material moves you a long way in that direction as well. It is not easy, but it would decrease the risk even more. We need to think hard about the non-compliance problem. Who judges? Who determines punishment? Who determines remedies?

The bottom line is that working on the non-state actor problem requires the same kinds of actions that are already needed in order to strengthen the regime as a whole. One of the few positive results of September 11 is that by using non-state actors as the focal point, it may be possible to produce some policy outcomes that would not be possible if states alone were the issue. There may be ways to get some increased leverage there.

Thank you.