## TREATIES AGAINST NUCLEAR TERRORISM THE GLOBAL LEGAL FRAMEWORK CAN MAKE A DIFFERENCE

## **BY LARRY D. JOHNSON**

wo international treaties — one being drafted and the other already on the books - specifically address nuclear terrorism. Both could require that specific measures be taken worldwide to protect and secure nuclear facilities from terrorist attack and sabotage. But neither one does. Efforts to include such requirements - before the terrorist attacks of 11 September 2001 have not borne fruit. Now, in the wake of lessons learned, is the time to revive and support them.

Lessons Learned. The first lesson from the September terrorist attacks is that self-preservation can no longer be relied upon as a deterrent. We can no longer assume that no one "in his right mind" would allow himself to be exposed to dangerous ionizing radiation in order to commit a terrorist act. Suicide missions took care of that, undercutting a presumption which had played a major role behind assessments of what is required to defend against terrorists and sabotage.

The second lesson, in turn, is that so-called "dirty" bombs are more plausible. If the terrorist is not concerned with being irradiated, he will not be deterred from trying to obtain radioactive material in order to build a "dirty" bomb, the popular term for a conventional explosive device designed to disperse radioactivity.

The effects of such a "dirty" bomb would not of course match the devastation of exploding a nuclear weapon, but the point is not strategic or military; it is psychological and political. In the town of Goiana in Brazil, the discovery of a radioactive "source" which had been used for medical purposes but carelessly discarded, caused disruption, panic, a few deaths and hundreds contaminated. Spreading radioactivity at a sports event, a concert or in a water supply would be intended to spread terror, fear, hopelessness and despair.

The same would apply to using conventional explosives in an attempt, near an urban center, to breach a nuclear reactor in order to release radioactivity or otherwise affect the reactor's functioning or to blow up a spent fuel pond where "used" but highly radioactive fuel rods are cooling.

The third lesson is that safety and security is only as good as its weakest link. What happens far away can impact anywhere in the world. While we strive to make sure our own nuclear facilities are safe from theft and sabotage and provide for homeland security, the terrorist might well be able to obtain material through theft or illegal purchase in countries seemingly far away for delivery to our doorstep.

The fourth lesson is that laws must be strengthened to make sure protection is in place against acts of terrorism. Concerning terrorism treaties, it may all be very well and good to provide for criminalizing the acts and punishing the terrorists, but that's after the thief has let the horse out of the barn, so to speak. In view of the nature of this beast — dangerous radioactive material — the point should be to make sure the thief doesn't get anywhere near the barn in the first place. Every attempt should be made to prevent the act from happening in the first place. Nuclear terrorism treaties should require that countries take *specific measures* of prevention to guard against acts of nuclear terrorism and sabotage.

What Kind of "Dangerous" Radioactive Material? In the past, treaties and international regulation have focused on certain radioactive material which is considered "dangerous" because it can be used to make nuclear weapons. It is "fission-

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The same material is used for peaceful purposes in nuclear power plants to produce a controlled chain reaction. It is technically called "nuclear material" and is the subject of various non-proliferation treaties and agreements. This material may be described in a nontechnical way as "weapons-usable" radioactive material. The interesting thing is that such material, depending on the circumstances and the particular stage in the production process, may or may not be particularly dangerous radiologically.

Other radioactive material cannot be used to produce a nuclear explosion or weapon, but is nevertheless considered "dangerous" because the ionizing radiation it emits may do serious damage to your health. This kind of material is used, for example, in medicine and industry and is meant to be subject to strict national regulation.

From the point of view of a terrorist, both types of radioactive material have their attractions. Obviously, a terrorist might well try to get his hands on a nuclear weapon or on weapons-usable material to try to construct a crude bomb. But a terrorist might also try to obtain the other type of radioactive material in an attempt to spread radiation for the purpose of causing mass panic and terror, as well as death and injury.

Treaty Aspects to the Problem. The international community has up to now not looked at the two "dangerous" types of radioactive material in any comprehensive manner. That accounts for the fact that there are now two treaties — one already on the books and the other under negotiation — on aspects of nuclear terrorism, with some overlap between them; not exactly ideal. Both could include measures of prevention but both are woefully weak in that regard.

■ Protection and Security of Weapons-usable Material. The first treaty, known as the Convention on the Physical Protection of Nuclear Material was adopted in 1980 under the auspices of the IAEA. It concerns only weapons-usable material and includes measures to protect and secure such material only in the course of international transport. It also criminalizes various acts, such as theft, illegal acquisition, possession and use.

Otherwise, how countries protect and secure their own nuclear material is left for them to decide — a matter of domestic sovereignty. The IAEA Director General, however, issued guidelines in 1999 on what is specifically needed in order to protect nuclear material from unauthorized removal and nuclear facilities from sabotage; they are even termed "requirements" but in fact and law are only recommendations.

A review process was started in 1999 to ascertain if and how the treaty could be strengthened. Both the IAEA Director General and various governments have long held that the treaty is too limited and needs amendment; legal and technical experts have been convened toward that end.

Certain additions have been agreed upon, such as broad objectives and fundamental principles. But how they will be applied is up to each country. Absent so far is agreement on provisions requiring compliance with the preventive measures already recommended by the IAEA. Nor is there agreement yet on a review mechanism by which countries could be held accountable for what they were doing to protect and secure their nuclear material and facilities.

In the light of the lessons learned from the September terrorist attacks, urgent steps are needed to strengthen the treaty, to include a requirement for specific, concrete preventive measures that all countries must take to protect their nuclear material and facilities against acts of terrorism.

If measures already set out in IAEA recommendations require adjustment, then they should be adjusted. If submission of reports on implementing the treaty are too intrusive, countries must at least insist that the treaty include as an obligation what is now voluntary — namely, periodic visits by independent IAEA experts to assess and give advice on measures taken to protect and secure material and facilities. It is simply not serious to rely on each country policing itself when it comes to making sure that material which can be used to make a weapon of mass destruction is safe and secure.

■ The Draft Treaty for the Suppression of Acts of Nuclear Terrorism. The second treaty is being drafted in New York, as part of the UN's global campaign against terrorism. The Legal Committee of the General Assembly has before it a draft treaty, initially proposed by Russia, on the suppression of acts of nuclear terrorism.



Contrary to the IAEA convention, this draft treaty is focused on both kinds of radioactive material — both the "weaponsusable" material and other material which can be dangerous to life and limb. Even though any text finally approved would still have to be ratified by a certain number of countries before it would come into effect, the text would still have the advantage of being universal - having been approved by approximately 190 countries - and being part of the global campaign against terrorism. It includes the usual criminalization provisions but a weak preventive measure, calling on countries to simply take into account IAEA recommendations on the protection of radioactive material.

The General Assembly should take a decision that preventive measures have to be included in the treaty if it is to be comprehensive in its attack on nuclear terrorism. The drafters should go beyond their focus on the suppression of criminal acts and the extradition/prosecution of perpetrators, and focus as well on inserting binding measures designed to prevent a terrorist from getting near the radioactive material in the first place.

The next meeting at which the Assembly is due to take up the issue is in September 2002. The Assembly should task the IAEA Director General to submit measures of prevention which could be included as requirements in the treaty. What is important is that a policy decision is made by governments that such a provision should be included in the treaty and that the experts are instructed to come up with a technically viable text for UN governments to examine.

Arguments for Maintaining the Status Quo. Those against the positions advocated here will argue that we should not risk undoing the results already achieved in both treaties. They will argue that an overly legal, treaty approach is too detailed, will take too much time and disregards the technical complexities involved. Others might worry that if the treaty were too specific about preventive measures, it would reveal to would-be terrorists sensitive information on how security is maintained, which they could then devise ways to circumvent. Another argument is that some countries are quietly, behind the scenes, already providing sufficient protection and security advice to a number of countries on a bilateral basis.

Sensitive security matters must indeed be kept from potential terrorists. But the 1999 IAEA recommendations are already public; making them binding has nothing to do with revealing secrets. Moreover, IAEA advisory missions have not resulted in exposing sensitive matters. Bilateral measures may play a very important (if somewhat unknown) role in preventive measures but why not add another tool at the multilateral level if we seek universal and global efforts to combat terrorism? Finally, the public at large, and the policymakers and lawmakers which answer to that public, might well view the matter differently. particularly if an act of nuclear terrorism were ever successfully carried out.

What is Needed: Policymakers Focusing on the Issue. All possible and lawful measures should be taken to protect innocent civilians against malicious acts of terrorism. All tools should be examined for use in that effort, including international treaties.

These are public policy matters requiring the attention of policy-makers who have to be made aware of the problem, be given options, weigh and balance the various elements, make informed decisions and give instructions to the technical and legal experts. This is a matter of providing for the security and well-being of everyone and should be seen as part of the global compaign against terrorism.

The sooner policy-makers focus on using all tools, including treaty-making, to combat nuclear terrorism, the sooner stronger barriers will be in place to prevent nuclear and radioactive materials from falling into the wrong hands.

Photo: Following expert meetings at the IAEA, stronger measures to combat nuclear terrorism are being put into place. (Credit: D. Calma/IAEA)

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