

Russian Exports of Sensitive Equipment and Technology

**Testimony
of
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Thank you, Mr. Chairman for the opportunity to testify this afternoon on a subject of high importance to international security: Russian exports of equipment and technology that may contribute to the proliferation of weapons of mass destruction and missiles for delivering them.

Sadly, Mr. Chairman, this is an area where we are seeing history repeat itself and where, it seems, Moscow has failed to absorb the unmistakable lessons of the past.

In the 1960s, 1970s, and 1980s, the world witnessed eager, profit-oriented exporters carelessly sell sensitive commodities that recipient states later misused to support weapon-of mass-destruction programs.

During the '60s, the United States and Canada provided India the CIRUS research reactor, but they did so under weak controls. Later, India misused the facility to produce plutonium for its 1974 nuclear test.

In the 1970s, the desire for profits and influence led France to sell Iraq the Osiraq reactor (which Israel destroyed in 1981) and to promise Pakistan and South Korea facilities for extracting weapons-usable plutonium from spent nuclear power plant fuel. The 1970s also saw Germany offer Brazil, then under military rule, the equipment needed to produce fissile materials. Only the strongest diplomatic intervention by the United States persuaded France and Germany to curtail the most sensitive of these exports.

In the 1980s, weak interpretation and enforcement of export controls in a number of Western countries, particularly Germany and Switzerland, enabled Pakistan to acquire crucial facilities to support its nuclear weapons effort, permitted Libya to build the Rabta chemical weapons plant, and allowed Saddam Hussein to advance multiple weapon-of-mass-destruction and missile programs.

Slowly, but with increasing resolve, Western suppliers recognized the dangers of allowing profit to guide their export decisions, and they have moved to tighten export control rules and enforcement. Today, the newly appreciated danger that terrorist organizations are seeking to acquire weapons of mass destruction makes this mission all the more urgent.

Unfortunately, Moscow has not heard the message and, driven by the desire for profit, is engaged in a wide range of unwise exports. (See table, attached.) The Bush Administration has highlighted Russia's disturbing trade with Iran in the nuclear and missile areas, which I will not reiterate here. But the Russian government is also permitting – indeed encouraging – other, highly disturbing exports.

- It has opened the nuclear Pandora's box in Syria by selling a large research reactor to that country, which we consider to be a state-sponsor of terrorism and which is known to have an extensive chemical weapon and missile arsenal. Although, like the Osiraq reactor, this facility will be subject to monitoring by the International Atomic Energy Agency (IAEA), the reactor will help train Syria's first generation of nuclear scientists and, like Osiraq, has sufficient power for the clandestine production of plutonium.

- Moscow, similarly, has enhanced the prestige of the widely condemned military junta in Myanmar by signing a contract to provide that state with its first research reactor.
- Moscow is also helping to refurbish the Tajoura Nuclear Research Center, in Libya, a country with a significant chemical weapon arsenal and which is seeking to expand its missile capabilities. Although the Tajoura reactor is under IAEA inspection, Russia's assistance will mean more and better training for Libyan nuclear specialists, whose next project may be a clandestine nuclear weapons program.
- Most troubling, however, is that at a time when the international community is intensely concerned about the threat of nuclear war in South Asia, Russia is assisting India to develop nuclear-capable cruise and ballistic missiles and is seeking to "cash in" through major sales to India's civilian nuclear power program. These activities violate the long-standing major rules of the Missile Technology Control Regime (MTCR) and the Nuclear Suppliers Group.

I should underscore, Mr. Chairman, that these exports are neither inadvertent, nor the result of smuggling activities that by-pass official controls. Indeed, not only are these exports all blessed by officials in Moscow, but these same officials have deliberately manipulated Russian export control laws to permit these sales.

It is clear, for example, that Russian cruise missile technology exports, while technically complying with the MTCR, will provide India the ability to build systems with greater range and payload capabilities that would violate that regime, if exported directly. India has a widely-known history of exploiting missile technology in this way, a history to which Russia is cynically turning a blind eye.

Moreover, to permit the export of 58 metric tons of fuel for the Tarapur reactors, Russian export control officials grossly distorted an exception to the Nuclear Supplier Group Guidelines. The Guidelines permit exports to countries like India on safety grounds, only if such exports are "essential to prevent or correct a radiological hazard to public health and safety, which cannot reasonably be met by other means." Russian export officials asserted that the export of the Tarapur fuel met this standard – a view that all other members of the Nuclear Suppliers Group, save Belarus, have publicly and repeatedly rejected.

Although these exports do not involve smuggling, smuggling of Russian WMD and missile commodities remains a distinct and dangerous dimension of Russian weapons of mass destruction and missile exports. The most notorious case of smuggling involved the sale of some 800 missile components by Russian entities to Saddam Hussein, in 1995. UN inspectors discovered many gyroscopes and other components in Iraq, where Iraqi officials had dumped them into the Tigris River in an attempt to hide them from the UN teams. Although details of the smuggling operation were widely publicized, Russian authorities never prosecuted those involved.

Indeed to this date, there have been few prosecutions in Russia for smuggling activities, and those that have occurred have resulted in minimal penalties for offenders. Given the dangers of leakage of WMD materials from Russia, it is extremely unfortunate that efforts to prevent such leakage, on which the United States is spending hundreds of millions of dollars, are not being reinforced by the deterrent effect of aggressive Russian prosecution.

Given these patterns, it seems clear that the fundamental problem is a lack of political will in Moscow to enforce a disciplined export control system, an export control system that gives a higher priority to nonproliferation than to profit.

How can we change this situation? The Bush Administration, like the Clinton Administration, has tried a number of approaches, but with only limited success. It has raised U.S. concerns at "the highest political level," most recently at the May 2002 Moscow Summit. It has imposed sanctions against specific Russian entities involved in improper exports. It has publicized Russia's departures from international norms. It has spent millions training Russian export control officials. Despite these efforts, the problems persist.

I would like to suggest several new avenues to reinforce these nonproliferation efforts.

First, it may be time to indicate more forcefully that other members of the Missile Technology Control Regime and the Nuclear Suppliers Group are dissatisfied with Russia's behavior. My first thought was to seek to expel Russia from these groups for a period of time. Russia is not a member of the Australia

Group, which harmonizes chemical- and biological-weapon related export controls, but that organization is able to work quite effectively without Moscow's participation.

Administration officials have pointed out to me, however, that expulsion would entail many diplomatic headaches, not the least of which is the fact that neither the MTCR nor the NSG has established rules for removing or suspending members.

At a minimum, such a process is needed for the future, so that the groups can discipline their wayward members. A U.S. call for such procedures, a step which all observers would know was initiated with Russia in mind, would be one more signal to Moscow of the seriousness of U.S. concerns.

In the meantime, the United States should reinforce the public shaming of Russia through the equivalent of a nonproliferation "scarlet letter." In its official pronouncements describing the members of these organizations Washington should include a note or asterisk stating that the "United States" or "some members" of the groups "have raised concerns that Russia is not in full compliance with the guidelines of the [the Missile Technology Control Regime] [Nuclear Suppliers Group]."

A second approach would be to take a leaf from domestic U.S. law enforcement. Here it is common practice for federal officials, through the seizure of wrongdoers' assets or the imposition of fines, to seek to deprive malefactors of the financial gains they have obtained from their illicit activities. In addressing Russian export controls, the United States could adopt a parallel strategy by reducing dollar-for-dollar the benefits it provides Russia, so as to offset the profits Russia makes from improper exports.

It might be possible, for example, when the United States periodically "rolls over" Russia's sovereign debt to reduce the total amount of debt postponed by an amount equal to Russia's profits from dangerous exports. This, in effect, would force Russia to disgorge its illicit gains to pay off the amount of debt so accelerated.

The Clinton Administration was reluctant to link macro economic stabilization activities to nonproliferation, but this approach would have a modest impact on the overall Russian economy while sending a very strong signal regarding U.S. concerns.

Finally, we have to ask ourselves, "How do we lead Russian officials to place nonproliferation over profit?" In the end, the issue is one of education. For more senior officials, education, it seems, must be conducted in public, exposing them collectively to international calumny for their inappropriate policies. But more junior officials, those training to become officials, and journalists can be taught through more traditional means – for example, through mid-career training and degree-granting programs that stress nonproliferation values and through exchanges with Western countries that have embraced and implemented such values.

This concludes my remarks, Mr. Chairman. I would be pleased to answer any questions you may have.

* In taking this step with respect to the MTCR, it will be important for the United States to leave no doubt that it is, itself, in full compliance with the group's guidelines. It is possible that some cooperative activities with other states in the area of ballistic missile defenses could raise questions in this regard.

RUSSIAN WMD AND MISSILE EXPORTS OF GREATEST CONCERN
TO THE UNITED STATES

NUCLEAR	Importing Country	Item	U.S. Concerns	Status
	Iran	Bushehr Nuclear Power Plant (NPP), Unit 1	Permitted under NPT; subject to IAEA inspections; will provide Iran training in nuclear facility construction and operation; may provide cover for sensitive nuclear exports and training.	Under construction; start-up planned, 2003-2004; talks underway re: second NPP at site
		Sensitive nuclear items, technology	<p>Few details in open literature; related to production of fissile materials for nuclear weapons. NPT requires Iran to place new nuclear facilities under IAEA inspection once nuclear materials are introduced. No violation identified to date. Russian sale of lasers possibly useful for uranium enrichment cancelled after U.S. raised concerns.</p> <p>“Russian entities continued to interact with Iranian research centers on various activities. These projects will help Iran augment its nuclear technology infrastructure, which in turn would be useful in supporting nuclear weapons research and development.” (CIA, reporting on activities in first half of 2001.)</p>	On-going
	India	Koodankulam NPP, Units 1 & 2 (1000 MW(e) VVER-1000)	Generally viewed as violating Nuclear Suppliers Group (NSG) Guidelines 1992 rule banning nuclear exports to countries that refuse to place <i>all</i> nuclear facilities under IAEA inspection (“full-scope safeguards”). NPPs will themselves be placed under IAEA inspection, but other Indian facilities remain uninspected. Russia claims its contract (signed in 1988) predates NSG rule and is exempt. Transfer likely includes technology not included in original 1988 deal.	Construction begun Jan. 2002
		Koodankulam NPP, Units 3 and beyond	Violates NSG full-scope safeguards rule because not included in original 1988 deal.	Contract signed Nov. 2001 for Units 3 & 4
		Fuel for Tarapur NPP (58 metric tons low enriched uranium.)	Though fuel will be under IAEA inspection, export violates NSG full-scope safeguards rule. Other NSG members reject Russian view that material is exempt under NSG rule permitting exports of safety-related equipment to avert an imminent threat to public health and safety.	Fuel exports began in 2001.
		Lease of two nuclear powered Akula II attack submarines for five years	Unprecedented (except for earlier Soviet-to-India n-sub lease of 1988-91). Not banned by NPT or NSG; may include cruise missile launch technology regulated (but not banned) under MTCR. Significant and unique escalation in level of weaponry transferred to a developing country. Will support Indian development of indigenous nuclear-armed ballistic missile submarine.	Negotiations continuing
		Assistance for the ATV n-powered ballistic missile submarine	Few details in open literature. Together with assistance for Sagarika, subject to regulation under MTCR. Unprecedented transfer of technology to a developing country.	Status uncertain

	Importing Country	Item	U.S. Concerns	Status
NUCLEAR, continued	Syria	25 MW(t) Dayr Al Jajar research reactor	Reactor to be under IAEA inspection. Light-water pool-type reactor could require weapons-usable highly enriched uranium fuel. Size of reactor could permit secret production of plutonium. Reactor introduces nuclear technology to a country viewed by United States as a state sponsor of terrorism and as possessing CW and possibly BW, as well as short-range missiles.	
		Nuclear power cooperation	Agreement signed January 2000. Could provide extensive training and cover for sensitive exports, as in Iran.	No apparent developments
	Myanmar	10 MW(t) research reactor	Reactor will be under IAEA inspection, but with training activities introduces nuclear technology to a country opposed to democratic values. Need to determine whether reactor will use weapons-usable “highly enriched” uranium as fuel.	Contract for export signed; deliveries in 2003
	Libya	Refurbish Tajoura Nuclear Research Center	Although facility is under IAEA monitoring, cooperation enhances training of nuclear specialists in a country considered to be a sponsor of terrorism and possessing chemical and, possibly, biological weapons and seeking longer range missiles.	On-vgoing
MISSILE				
	Iran	Assistance for Shahab III MRBM	Few details regarding specifics of Russian transfers in the open literature. CIA characterizes assistance as “crucial.”	Missile tested on several occasions
	India	Assistance for Sagarika submarine-launched ballistic missile	Open literature indicates this project is continuing. Assistance in developing the missile and providing technology for its manufacture would be a major violation of the MTCR. Russia and India have denied collaborating on the project, but U.S. officials remain concerned.	
		BrahMos PJ-10 cruise missile production technology	PJ-10’s 300 km range, 250 kg payload is below MTCR “Category I” level (300 km/500 kg), but India may be able to increase system’s capabilities.	Undergoing flight tests; full production planned for 2003
		3M-54E/ E1 “Klub” cruise missile	Klub’s 300 km range, 300 kg payload is below MTCR “Category I” level (300 km/500 kg), but India may be able to increase system’s capabilities.	Purchased; in service
		12KRB cryogenic rocket engine; joint	Used as third stage of Indian Geostationary Satellite Launch Vehicle (GLSV); if production technology transferred, could provide India with ICBM capability.	New Russian engine sales recently announced.
	Syria	Unspecified	“Foreign equipment and assistance for its liquid-propellant missile program—primarily from North Korean entities, but also from firms in Russia—have been and will continue to be essential for Syria’s effort.” (CIA, reporting on activities in first half of 2001.)	
CHEMICAL/ BIOLOGICAL				
	Iran	Unspecified	“During the first half of 2000, Russian entities remained a significant source of dual-use biotechnology, chemicals, production technology, and equipment for Iran.” (CIA, reporting on activities in first half of 2001.)	
	Syria	Unspecified		

IAEA: Int’l Atomic Energy Agency- NPT: Non-Proliferation Treaty - MTCR = Missile Technology Control Regime