

Development of the NSG and the Philosophy of Nuclear Export Controls

*Nuclear Suppliers Group
October 15, 2009
New York, New York*

Introduction

It is a pleasure to be here today. As you know, I have been asked to discuss two topics: the development of the Nuclear Suppliers Group (NSG) and the need for a nuclear export control regime.

Nuclear Export Control Regime

I would like to begin my talk by going back to the beginning of the export control regime. It can be said that the nuclear export control regime began when the Treaty on the Nonproliferation of Nuclear Weapons went into force in 1970. The concept of limiting nuclear trade was introduced by Article III.2 of the treaty, which specified that nuclear suppliers should only trade with states inside the IAEA safeguards system. When this requirement was introduced, there was no further direction for nuclear suppliers beyond the corollary that they provide no “source or special fissionable material, or...equipment or material especially designed or prepared for the processing, use or production of special fissionable material, to any non-nuclear-weapon State...unless the source or special fissionable material shall be subject to the safeguards.”

Claude Zangger formed the Zangger Committee to provide some clarification. The Committee developed a list of controlled items and disseminated this information to IAEA Member States through INFCIRC/209. This information circular was dubbed the “Trigger list,” as each item listed “triggered” the need for safeguards. Until 1975, the activities of nuclear supplier states were based solely on the requirements of Article III.2 of the NPT, as the Zangger Committee simply provided guidance on how to interpret this article.

This changed, in 1974, with India’s peaceful nuclear explosion. Although India had not signed the NPT and had not violated any treaty obligations, a number of states were concerned by this development. These states assembled in London, shortly after India’s test, to discuss what actions they should take to strengthen nuclear export controls. France notably joined these discussions. As both a nuclear supplier and nuclear weapons state, it was important for France to have a voice; however, until this point, France was unable to participate in such discussions, as it was not a party to the NPT. France’s participation in the London meetings highlighted an important gap and provided another important reason to establish a nuclear export control organization that was not affiliated to the NPT.

The NSG – Formation and characteristics

This group of states, originally known as the London Club and later the NSG, developed a more comprehensive list of export controls to complement Article III.2 of the NPT. The NSG modeled its guidelines after the Zangger Committee’s “Trigger list,” but expanded

the scope to include limits on plants and equipment for the reprocessing, enrichment, and conversion of nuclear material, and for fuel fabrication and heavy water production. In addition, the NSG introduced other conditions for supply that went beyond Article III.2. The NSG's mandate goes beyond the NPT by controlling technology and know-how, and controlling dual-use equipment and components for the production of special nuclear material and nuclear explosives. The NSG also introduced stringent conditions of supply such as government assurances for peaceful-uses, full scope safeguards, physical protection, and re-transfer consent. The group continues to evolve by building upon the successful practices of other regimes.

Like other multilateral export control regimes, the NSG is an informal arrangement that embodies the policy commitments of Participating Governments to adopt, implement, espouse, and enforce an export control standard for nuclear transfers for civil purposes. The NSG is neither trade promoting nor trade restricting. The group takes decisions on a basis of consensus, which means that forty-six governments must agree to amend both its understandings (Guidelines) and its control lists (Annexes). There are pros and cons of an informal arrangement, but I believe the virtue of flexibility is important for the NSG to address the threat of controlled technology or equipment being diverted for use in unsafeguarded or non-peaceful activities.

When combating the threat of clandestine WMD development, the NSG also benefits from the technical expertise of its members and an effective means of communication. In regards to sharing information and consulting with Participating Governments, the NSG has created a multi-layered approach that combines modern telecommunications with time-tested diplomatic channels. One of the most arduous but important initiatives was the establishment of the NSG Information Sharing System, commonly referred to as NISS. NISS is the combined efforts of all the NSG members to ensure that information is shared in a consistent, secure and timely manner. NISS offers secure e-mail, the ability to archive and retrieve denial notices, and is the central database for various NSG presentations on technologies and programs of concern. The NSG also communicates with its members through a Point-of-Contact, the Government of Japan's Permanent Mission to the IAEA in Vienna. The regime would not be as successful as it is without the POC and the dedication of the Government of Japan.

NSG Guidelines

Since its inception, the NSG's Participating Governments have created and modified two lists of nuclear and nuclear-related dual-use items. As mentioned earlier, these lists are known as the "Trigger List" and "Dual-Use List," respectively. Together they represent all facilities, equipment, items and technology that are required for the processing and use of nuclear material, including the testing and fabrication of nuclear explosives. The lists themselves were the basis of Annex 3 of the United Nations Security Council Resolution on Iraq and Annex 2, Items for Import/Export Reporting, of the IAEA's Additional Protocol. Although the existence of both lists has greatly enhanced the ability of the nuclear export regime to curb proliferation, it has not prevented states and organizations from seeking to acquire nuclear materials, equipment, and technologies. As a result, the NSG revised its Guidelines multiple times since they were first adopted in 1978.

What is perhaps the most notable change is the addition of a second set of Guidelines. In response to the realization that Iraq had sought and succeeded in obtaining dual-use items, the NSG created a “Dual-Use list” in 1992. This list was meant to supplement the “Trigger list,” not replace it. The new list expanded the guidelines further to add restraints on the transfer of dual-use technology and equipment for the development and production of tools and materials. It is important to note that the Zangger Committee’s “Trigger list” only pertains to equipment and materials, and that this is where the NSG and the Zangger Committee differ.

When originally adopted, in the 1970s, the NSG Guidelines gave NPT Parties a well-meaning benefit of signature. The Guidelines were drafted for adherents to use them essentially as a checklist to ensure that recipients have their “paper-work” in place. In 1993, the NSG adopted its only subjective element of the Guidelines, the non-proliferation principle. This principle stated that regardless of what a recipient had signed, a supplier should not supply the items if a risk of diversion existed or is a supplier did not trust the recipient’s *bona fides*. While recent discussions in the IAEA have raised the question of adding more subjectiveness to the Guidelines, the “non-proliferation principle” remains the only subjective element in the Guidelines. To help implement this element effectively, suppliers require greater information sharing and greater cooperation of industry, to ensure that nuclear commerce is not adversely and unnecessarily affected.

More recent changes include amendments that address the nuclear terrorist threat. These detailed changes address the careful screening of information that is new and familiar. In the past, the Guidelines focused on the control of nuclear material, equipment, and technology; however, recent revisions also recognize the importance of safeguarding the design information of facilities to make it more difficult for terrorist groups to stage attacks. These recommendations reflect the need to keep such information closely guarded. Recent physical protection advances were also incorporated to ensure that facilities could be better protected. In light of the September 11 attacks, it is important to recognize that nuclear terrorism is a very real threat and that actions are crucial to ensuring that terrorists groups do not succeed in their aims.

Despite the changes the lists have undergone, there is one important aspect that remains unchanged. That is that these lists reflect a mission that is based firmly upon nuclear non-proliferation concerns; not the radiological threat that has become a more prevalent terrorist threat since September 11, 2001. One question that is often raised is why the NSG Guidelines do not address radiological materials. Bridging the gap from nuclear concerns to radiological, although not technically imposing for the NSG, would require a fundamental change to the group’s understandings, since the NSG draws its mandate from Article III.2 of the NPT. Integrating radiological materials is seen as a step beyond the group’s current understandings. So while it is not impossible for the NSG to formally take-up the issue of controlling radiological materials and the means to produce and use them, there would need to be a change from the current views of the members to add a third part to the Guidelines.

Let’s now turn to today’s challenges.

New Economy – New Paradigm

Working to ensure that nuclear materials and technology are used for peaceful purposes is central to the nuclear export control regime. But, meeting this challenge has become more difficult in recent years, due to the ever-changing economic paradigm. Globalization and technology have transformed how the industry conducts business. More specifically, the nuclear industry has become increasingly global, due to the considerable consolidation of the industry through various international mergers and acquisitions.

Economic progress has also impacted the trade of dual-use commodities. The advent of “just-in-time” manufacturing protocols and very efficient marketing and distribution practices, on the part of industry, has put tremendous pressure on national licensing systems to shorten the review time for export applications. The number and location of end-users also continues to increase, including greater access by the developing world to controlled technology. In addition, commercially viable nuclear technologies are becoming more complex as safety and nonproliferation concerns are engineered into new plants designs.

But, economics are not the only hurdle. The number of new revelations regarding the breadth, depth, and history behind the Iranian and North Korean nuclear programs outside the auspices of the IAEA has served as a surprise and a wake-up call. There is no doubt that not all States have the same commitment to their full-scope safeguards obligations.

The NSG has noted this and other revelations about recent proliferation programs and some Participating Governments have considered revising the NSG Guidelines in light of this new threat. The first question that the NSG must address is whether the current Guidelines and interpretations have impacted the ability of proliferants to achieve their nuclear ambitions: either by slowing it down or making it more difficult to acquire nuclear goods or technology. Second, the NSG must consider how to strengthen its Guidelines and what changes should be made to the control lists. Finally, the group must consider next steps, most notably in the terms of some very revolutionary ideas being put forth to ensure that enrichment and reprocessing technologies are not misused for non-civilian purposes.

The Need for Export Controls

Export control regimes were established to ensure that critical equipment and technologies were not diverted to unsanctioned activities. In the nuclear realm, it is still true that no country or organization can develop a nuclear explosive or improvised nuclear device indigenously. This highlights the fact that procurement will be required by non-state actors at some time; therefore, the regimes need to be in a position to identify and interdict as quickly and effectively as possible. The tools are in hand and we continue to augment them, but we need to coordinate as regime members and improve our ability to project our concerns to non-members that are key trading partners or distributors of controlled and threshold equipment, materials, and technologies.

Through the cooperation of nuclear supplier states, organizations such as the NSG are able to create barriers that make it far more difficult for states and organizations to acquire nuclear materials, technologies, and equipment. As the membership of export control organizations continues to grow, it becomes increasingly difficult to acquire the

inputs for nuclear weapons on the black market. And, without these items, they are simply unable to achieve their aims. But, global norms are only successful if states work together while individually meeting the goals they've committed to. Universal adherence is crucial to the success of such initiatives.

The need for a strong export control regime is even greater today. In recent years, we have seen that the lure of the atom has not decreased with time. And, to complicate matters, the expected surge in nuclear energy use worldwide will make it even more important to work to ensure that transfers of the nuclear materials and technology are for peaceful purposes. That is why the NSG must remain vigilant and continue to improve the sets of Guidelines to ensure greater global security while allowing access to the peaceful benefits of the atom.

Thank you.