

**Abstract Title:** Nuclear Suppliers Group Assurances for U.S. Imports

The Nuclear Suppliers Group (NSG) is a group of nuclear supplier countries which seeks to contribute to the non-proliferation of nuclear weapons through the implementation of Guidelines for nuclear exports and nuclear related exports. The NSG desires Atoms for Peace and not for non-peaceful activities. The NSG Guidelines are consistent with, and complement, the various international, legally binding instruments in the field of nuclear non-proliferation, again, fostering Atoms for Peace. Government-to-government assurances are required for especially designed or prepared nuclear transfers – technology and material - and are based on the fundamental principles: prohibition on nuclear explosives, Safeguards, Physical Security, and controls on Retransfers. Periodically, the U.S. Government receives requests from other governments for shipments of material, equipment, or technology. The U.S. State Department receives the incoming import case request from a foreign embassy and then the NRC sends out the request to the interested company. Once the NRC receives written confirmation, in accordance with the NSG Guidelines for the transfer of nuclear material, equipment, and technology, INFCIRC/254/Part 1 (the Trigger List), from the company, the State Department will then forward a diplomatic note to the requesting foreign government providing the required U.S. assurances according to the NSG Guidelines. This government-to-government process of granting assurances, ensures that nuclear trade for peaceful purposes does not contribute to the proliferation of nuclear weapons or other nuclear explosive devices, and that continued and monitored international trade and cooperation in the nuclear field is not unduly hindered in the process. This closely coordinated exchange of assurances among NSG countries allows for the peaceful use of atoms for the good of society.

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The NSG is presently a group of 48 countries that meet and work together to limit the spread of nuclear weapons and the research and development to produce nuclear explosive devices. The NSG has published Guidelines that are consistent with, and complement, several international, legally binding instruments in the field of nuclear non-proliferation. The aim of the NSG Guidelines is to ensure that the import and export (trade) of nuclear material, equipment and technology for exclusively peaceful purposes does not start or further contribute to the proliferation of nuclear weapons or other nuclear devices, and that the peaceful international trade and country cooperation, agreements, or trade in the nuclear field is not unduly hindered in the process. Today we will be discussing the first set of NSG Guidelines, which govern the export of items that are especially designed or prepared (EDP) for nuclear use. The guiding question for listing items in the Guidelines and the Trigger List is “do the items meet the “especially designed or prepared” criteria for the processing, use, or production of special fissionable material? The EDP term comes from Article III.2 of the Treaty on the Non-Proliferation of Nuclear Weapons (NPT). The Trigger List is a control list and technical annex to the NSG Part 1 Guidelines and covers EDP equipment, components, materials, subsystems, and facilities for processing, use and production of special fissionable material. “Trigger List” items “trigger” a requirement for International Atomic Energy Agency (IAEA) safeguards in the country of destination, or the importing country. We will not be discussing the export of dual-use nuclear-related items and technologies. This first set of Guidelines governs or covers the export of (i) nuclear material, (ii) nuclear reactors and equipment; (iii) non-nuclear material for reactors; (iv) plants and equipment for the reprocessing, enrichment, and conversion of nuclear material and for fuel fabrication and heavy water production; and (v) technology (including software) associated with each of the above items. For historical perspective, the NSG Part 1 Guidelines were originally published as an IAEA Information Circular INFCIRC/254 in 1978. The latest version is INFCIRC/254/Rev. 14/Part 1. The NSG Part 1 Guidelines direct that supplying countries (exporting) should authorize a transfer of material or EDP equipment only upon formal government to government assurances (GTGA) from recipients (importing country) per the instructions in paragraphs 2 to 4 of the Part 1 Guidelines. Also, the recipient of a subsequent retransfer is expected to provide the same formal GTGAs as those required by the supplier for the original transfer. The recipient or importing country also has to provide assurance that it will not re-transfer specific items, material, or equipment as listed in paragraph 9 of the Guidelines (heavy water production, enrichment, or reprocessing) that it has received to a third government without the exporting government’s prior consent. Another requirement is the implementation of effective physical protection measures because it can help prevent the theft, diversion, or illicit transfer of nuclear material. Of note, the NSG Guidelines Part 1 are applied both to NSG participants and non-NSG participants. Many NSG members do not possess a self-sufficient fuel cycle and are major importers of nuclear items. Accordingly, they are required to provide

the same assurances for nuclear transfers as non-NSG participants in agreement with the Guidelines.

The NSG Part 1 Guidelines also contain the often used “Non-Proliferation Principle” adopted in the mid-1990s, whereby a transfer, notwithstanding other NSG Guidelines provisions, is only authorized when the exporting country has been satisfied that the nuclear transfer of equipment, material, or technology would not add to or contribute to nuclear weapons proliferation. This principle seeks to cover the important, but rare cases, where adherence to the NPT or to some other nuclear related Treaty may not be a strong enough guarantee that a State will consistently share the objectives of the Treaty or that it will remain in compliance with its country obligations. As stated earlier, the Annex A to the NSG Part 1 Guidelines, the “Trigger List”, lays out the specific types of material, equipment, or technology to which the conditions of supply described in the NSG Part 1 Guidelines apply. The Trigger List is an illustrative list and so it contains definitions and General Notes to support the interpretation of the Trigger List by supplier (exporting) governments. The guiding question for listing items on the Trigger List is do the items meet the EDP criteria for the processing, use, or production of special fissionable material? Although the NSG Guidelines are not legally binding, NSG members commit to apply those Guidelines via their own national legislation. Decisions on export applications are taken at the national government level in accordance with their own national export licensing requirements.

A fundamental part of the nuclear non-proliferation, world-wide, infrastructure is the important requirement for Government to Government Assurances, or GTGAs. These GTGAs must be given before the export of certain types of sensitive nuclear material, equipment, or technology is allowed. The reasoning or principle behind this important requirement is that notifications of sensitive exports, for nuclear end-use, are conveyed directly between Governments so that the legitimacy of the planned export and its intended end-use can be verified. All items on the NSG Trigger List are subject to a GTGA. There are several important parts to this GTGA process. Besides the exchange of documents there is also the verification process that the recipient company or entity has to provide to ensure the prompt and effective processing of GTGA requests. The company can assist in this GTGA process by understanding what information they will be asked to provide, what is required, why it is needed, and to understand to make the process as streamlined as possible by providing information as quickly as possible. Additionally, the exporting company should ensure that the receiving, or importing company is aware that the export intended items are subject to certain NSG requirements. The exporting company needs to ensure that the contact details of the authorizing person in the importing company are included in license application. The importing company needs to understand that they will need to provide information to their respective government, and that the authorizing person selected must have sufficient seniority and authority to provide the requested information on behalf of their business. Another good practice is the exporting company should very carefully review the export application to provide an adequate and accurate goods description and up to date consignee or end user details. Lastly, the exporting company should work closely with their national export licensing authority to ensure any export license applications submitted are appropriate, accurate, and complete to meet necessary requirements.

Sometimes, for a particular GTGA case, there may be several end users; in this situation, there needs to be close government-industry interaction as the importing government can not issue an assurance to the exporting government until all end users listed on the import have provided their appropriate and relevant information.

Let's look at the U.S. Import Assurance process in a little more detail, as currently carried out by the U.S. government. The foreign government will deliver its request to its embassy in Washington, D.C. by diplomatic note. The foreign embassy will deliver the request to the Department of State's (DOS) Office of Nuclear Energy, Safety and Security, Bureau of International Security and Non-proliferation (ISN/NESS). Occasionally, assurance requests can also be received by U.S. embassies in foreign countries. If a U.S. embassy receives such a request, then they would forward the request to ISN/NESS for processing. Once a request is received, ISN/NESS forwards the request to the Nuclear Regulatory Commission (NRC), which will reach out directly to the end user company to obtain confirmation that they will comply with the requested assurance. In the meantime, ISN/NESS will draft a diplomatic note providing U.S. government assurances to the requesting country and will also circulate request internally to DOS for clearances. Once confirmation is received from the end user U.S. company and the diplomatic note is cleared and signed by approving DOS authority, ISN/NESS will return the foreign request in the manner it was received. For example, in most cases, if the request was sent by the foreign government's embassy, then the signed diplomatic note will be returned directly to that embassy. Once there is country to country agreement, then the company to company agreement (business contract) can start, and nuclear trade can begin under NSG Guidelines with non-proliferation approved assurances which will be mutually reinforcing – peaceful nuclear transfers under appropriate member country guidance.