

Analysis on Legitimacy of Non-explosive Military Applications of Nuclear Material

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1. Introduction

The Article I of the *Treaty on the Nonproliferation of Nuclear Weapons* (NPT), which is a backbone of the nuclear nonproliferation regime, give the right and obligation to the IAEA to ensure that safeguards are applied on all nuclear material in the territory, jurisdiction or control of the State “for the exclusive purpose of verifying that such material is not diverted to nuclear weapons or other nuclear explosive devices.” Meanwhile, the Agency’s Article II of the Statute lays down that the Agency shall ensure that the assistance provided by it or at its request or under its supervision or control “is not used in such a way as to further any military purpose.”

The government of the Argentina pointed such difference of the Agency’s safeguarding purpose in the NPT and the Statute by introducing a report, “*Consideration of the Degree of Compatibility between Certain Provisions of Document INFCIRC/153 and the Agency’s Statute* (GOV/2098)” to the Board of Governors in September 1982, during the Falkland Islands War. There was a presence of British nuclear-powered submarines in the Southern Atlantic.

As the government of the Argentina requested the Director General to instruct the Secretariat to make a study to determine the degree of compatibility between the provisions of the safeguards agreements in force and the Statute as regards the statutory legitimacy of non-explosive military applications of nuclear material subject to the Agency’s safeguards system, the Secretariat submitted “*Compatibility of Safeguards Agreements and the Agency’s Statute: Explanatory Memorandum submitted by the Argentine Republic* (GOV/INF/433)” to the Board of Governors in February 1983.

Although there is few case on diverting nuclear materials to non-explosive military purposes, the Secretariat’s 1983 report can be a ground to handle such issues.

2. IAEA’s Study on the Non-Explosive Military Purpose of Nuclear Material

To answer for the Argentine government’s request, the Secretariat reviewed several documents including the Statute, especially Articles II, III.A.5, III.B.I, XI and XII, the Treaty on the Non-Proliferation of Nuclear Weapons (NPT), especially Article III (1), INFCIRC/66/Rev.2 and the safeguards agreements concluded on the basis of that document, and INFCIRC/153 (Corrected), which forms the basis for the negotiation

of safeguards agreements in connection with Article III of the NPT. A discussion of the compatibility of the terms of safeguards agreements with the Statute must therefore include a determination whether the peaceful use of all items while they are under safeguards is assured under all types of agreements.

According to the Secretariat, the Statute requires the peaceful use of items while they are under safeguards, and the Agency’s functions under the Statute extend only to peaceful uses of nuclear energy. Safeguards under INFCIRC/153-type agreement cover all nuclear material in all peaceful nuclear activities of the State. They do not extend to military activities, regardless of whether these would be proscribed under NPT.

An INFCIRC/153-type agreement would permit the withdrawal of nuclear material from safeguards for use in a military activity not proscribed by NPT only in accordance with the procedure and the conditions laid down in paragraph 14 of INFCIRC/153. In conclusion, any such withdrawal which involves the termination of safeguards is not contrary to the Statute.

3. The Practical Problems

The Secretariat’s conclusion may be differently applied on the Nuclear Weapon State (NWS) and the Non Nuclear Weapon State (NNWS) in reality. Diversion of nuclear materials to non-explosive military purpose by NNWS raises more substantive issues.

In accordance of the paragraph 14 of INFCIRC/153, the Agency and the State shall make an arrangement so that, only while the nuclear material is in such an activity, the safeguards provided for in the Agreement will not be applied. The arrangement for non-application of safeguards shall be approved by Board of Governors. There are no such arrangement, which has tabled on Board of Governors, until today and it may indicate an unattainability of withdrawing nuclear material from safeguards for non-explosive military purposes.

Bilateral Agreements on the use of transferred nuclear material raises another restriction. For example, Article 13 of the *Agreement for Cooperation between the Government of the Republic of Korea and the Government of the United States of America Concerning Peaceful uses of Nuclear Energy* states that “Nuclear material, moderator material, equipment and components transferred pursuant to this Agreement and any nuclear material, moderator material, or byproduct material used in or produced through the use of any nuclear material, moderator material, equipment or components so transferred shall not be used for a

nuclear weapon or any nuclear explosive device, for research on or development of any explosive device, or for any military purpose.”

Similarly, Agreements for Cooperation concluded by the Republic of Korea and other NWSs, which are able to supply concentrated nuclear fuel, include Article on no explosive or military application. Agreements for Cooperation with France, the UK, China, Russia clear that transferred materials shall not be used for any military purposes. An agreement for Cooperation with Germany states that transferred materials shall not be used in such a way as to result in a nuclear explosive device.

Table I: Articles on no explosive or military application from Agreements for Cooperation

State	Article
UK	The Cooperation agreed upon this Agreement shall be exclusively for peaceful purposes. Nuclear material, equipment, material and facilities especially designed or prepared for the production or use of nuclear material, and technological information transferred in the context of cooperation under this Agreement or derived from such cooperation, shall be used only for peaceful non-explosive purpose
China	1. The cooperation pursuant to this Agreement shall be carried out only for peaceful purposes. 2. Nuclear material, material, equipment, technology and facilities received pursuant to this Agreement and special fissionable material recovered or produced as a by-product shall not be used for the development or the manufacture of any nuclear explosive devices or for any military purpose
Germany	No material, nuclear material, equipment or information transferred under this agreement, nor any subsequent generation of special fissionable material, nor any other material produced, processes or utilized in conjunction with or through the use of any items transferred, shall be used in such a way as to result in a nuclear explosive device.

4. Conclusion

The non-explosive military use of nuclear materials are not legally prohibited to the NNSW by the NPT and the IAEA Statute. However, if the Republic of Korea tries to develop its non-explosive military nuclear capacity, such as nuclear-powered submarine, obtaining materials allowed for such research and development is impossible in reality. Nuclear materials imported by major partner countries are prohibited to be used for the other purposes than peaceful non-explosive purpose by pursuant bilateral cooperation agreement. The paragraph 14 of INFCIRC/153 prescribe withdrawal process for nuclear materials under this safeguards agreement. However, unprecedentedness of implementing such paragraph refers legislative difficulty of withdrawing nuclear materials from safeguards for non-explosive military purposes. Researches on the small-scale reactors may not be prohibited for to some degree of process, however the researchers should bear in mind that it must be faced a legal problem when it tries to demonstrative its outcome with actual nuclear materials.

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