

The Effects of the Revised CPPNM on Legislative Framework

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1. Introduction

A Diplomatic Conference was held last July at Vienna of Austria and adopted an important Convention in physical protection field. The Convention is the revised Convention on Physical Protection of Nuclear Material. A State Party to the revised CPPNM has obligation to meet the Convention. Since the Amendment to CPPNM is expected to enter into force in near future, there is an urgent need to prepare for implementing the international obligation. Thus, it is important to assess the effect of the revised Convention on national legislative and regulatory framework to govern physical protection of domestic nuclear material and facilities. The objective of this paper is to perform comparative assessment between new provisions of the revised Convention and national law in order to prepare for the implementation of the international norm.

2. Amendment to CPPNM

The Convention on the Physical Protection of Nuclear Material (CPPNM) was drafted in the 1970s and entered into force in 1987[1]. The CPPNM requires each State Party to take appropriate steps to ensure that nuclear material in international transport is well protected. However, the CPPNM does not cover the protection of domestic nuclear material and facilities. Since 1990, various threats related to nuclear material and facilities have been increasingly reported throughout world. It has become clear that the existing CPPNM is deficient in coping with such threats that the world faces currently. With the U.S.'s circulation of the revised CPPNM in 1998 as a beginning, IAEA took steps for amending the existing CPPNM. The Amendment to CPPNM was finally adopted on 8 July 2005[2]. The title of the existing CPPNM is replaced by the following name: Convention on the Physical Protection of Nuclear Material and Nuclear Facilities (CPPNMF). The CPPNMF can be roughly divided into 3 main sections: physical measures (Article 2A, 3, 4); measures of cooperation (Article 5); the criminalization of offenses and their prosecution (Article 7~13)[3].

3. LPPREP

After terrorist attack of 11 Sep. 2001, Korea has also paid sharply increasing attention to physical protection of nuclear material and facilities. To cope with international strengthening trend of physical protection

regime as well as to protect nuclear material and facilities within its jurisdiction from threats, Korea has started to establish national law to govern the physical protection. Through efforts of several years, the national law, Law for Physical Protection of Nuclear Material and Facilities and Radiological Emergency Preparedness(LPPREP), was enacted and entered into force on Feb. 16, 2004. The draft amendment to CPPNM and international standard of physical protection (INFCIRC/225/ver.4) were used as resources for making the LPPREP. The LPPREP consists of two parts, physical protection part and radiological emergency preparedness part[4]. This paper deals with only physical protection part because radiological emergency preparedness is beyond topic of this paper.

4. Comparison of CPPNMF and LPPREP

4.1 Extension of the Scope of Physical Protection (Article 1A)

Compared with the time when the existing CPPNM was prepared, there have been many changes in threat environment: the rise of illicit trafficking, the increase of sabotage and acts of terrorism. To encounter appropriately such threats, the CPPNMF broadens the scope of the physical protection obligation to cover, in addition to nuclear material while in international transport, nuclear material in domestic use, storage and transport and national nuclear facilities. In this point, the scope which LPPREP can cover is well defined in Article 16. Based on Article 16 of LPPREP, it can conclude that LPPREP meets the requirement for the scope of the CPPNMF

4.2 Military Exclusion (Article 2)

Article 2 of CPPNMF has 5 paragraphs regarding the scope of the Convention, the responsibility of each State Party, sovereignty, military exclusion and exclusion of nuclear material and facilities used for military purpose. After hot discussion and bilateral or multilateral debate, China's proposal was accepted and added as new subparagraph (c) of paragraph 4 of Article 2 at the Diplomatic Conference[5]. The provision (c) has the symbolic meaning that military force of a State against nuclear material and nuclear facilities used for peaceful purposes shall be excluded from the governing of CPPNMF but the CPPNMF does not permit the violent

action to such nuclear material and facilities as lawful authorization. Except for paragraph 4 of Article 2 of CPPNMF, the other things can be covered by LPPREP. However, provision on acts of military force isn't stated in LPPREP.

4.3. Physical Protection Obligations (Article 2A)

Article 2A requires each State Party to establish, implement and maintain an appropriate physical protection regime applicable to nuclear material and facilities under its jurisdiction. The regime would aim to meet the four objectives. In implementing the obligations, each State Party shall apply 12 Fundamental Principles of Physical Protection of Nuclear Material and Facilities. The Fundamental Principles was applied in enacting LPPREP. Obligations of Article 2A is equivalent with those of Article 3 and 4 of LPPREP. And Article 2A is the cornerstone of LPPREP. In other hands, paragraph 4 of Article 2A regulates that the nuclear material not subject to physical protection regime should be protected in accordance with prudent management practice. Even though some nuclear enterprisers in Korea have been using nuclear material of level less than Category III, LPPREP has not included the provision to govern such nuclear material. The legal framework for the nuclear material not subject to physical protection regime should be prepared as soon as possible to implement an appropriate and effective measure for physical protection.

4.4 Protection against Sabotage (Article 1A and 2A)

Provision related to sabotage or sabotage threat isn't included in the text of the existing CPPNM because there is little concern about the sabotage in the late 1970's. With the time, threat environment has also been changed. In these days, the increase of acts of sabotage and terrorism has become a matter of grave concern. To encounter dangers posed by such threats, the CPPNMF requires each State party to achieve and maintain effective physical protection regime against the sabotage of nuclear material and facilities. Such sabotage is also treated significantly in many articles of LPPREP. To my opinion, it seems to be no problem in meeting the requirement of CPPNMF for sabotage.

4.5 Cooperation among States Parties on Physical Protection Matters (Article 5)

Nuclear accident affects the neighboring countries as well as the country which the accident breaks out. To respond effectively to danger posed by unauthorized removal and sabotage, cooperation among countries concerned is necessary. The CPPNMF requires each Stage Party to provide cooperation and assistance in the case of unauthorized removal of nuclear material and to inform as soon as possible the State (States) concerned

in case of sabotage of nuclear material and facilities. Even though the provision concerning this issue isn't included in LPPREP, Korea has already joined another convention on cooperation in radiological emergency. Thus, the issue on cooperation of physical protection matters under emergency will be well addressed under present legal framework.

4.6 Criminal Offenses (Article 7)

Offenses relating nuclear material and facilities are described in the Article 7 of CPPNMF. There was specially heated controversy on environment- and sabotage-related offenses for reaching consensus. This is due to the questions of whether the substantial damage to the environment is regarded as the sabotage offense, whether the death or injury to a person or substantial damage to property is caused by exposure to radiation or release of radioactive substances and whether there is a worldwide-accepted definition of environment for prosecution process. After hot discussion and consultation, substantial damage to the environment was added as an element of the offenses and the sabotage also was regarded as a punishable offense under CPPNMF. Provisions regarding the environment- and sabotage-related offenses are stated in definition part of Article 2 and in penal provision of Article 47 of LPPREP. Thus, environment- and sabotage-related offenses can also be prosecuted under LPPREP.

5. Conclusion

To prospect any matter in implementing the obligations of the CPPNMF, comparative assessment of the CPPNMF and LPPREP is performed. As a result, it turned out that obligations of CPPNMF are overall covered by LPPREP. However, LPPREP is deficient in preparing provisions treating nuclear material not subject to physical protection regime. Over time, the CPPNMF will contribute to protecting the national public health and safety from threats relating nuclear material and facilities by strengthening national and international physical protection regime.

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