

Suggestion on Information Sharing for AP implementation

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1. Introduction

Under the Additional Protocol, States should provide the IAEA with expanded declarations of activities related to the nuclear fuel cycle and other nuclear activities, and with expanded access to the relevant information and sites to allow the IAEA to verify the completeness of these declarations [1].

The AP to the Safeguards Agreement (the Additional Protocol) was signed on June 21st, 1999 and entered into force on February 19th, 2004. ROK submitted initial declarations in August 2004. Since then, ROK has been submitting annual updated reports of initial declaration on every May 15th. To achieve successful implementation, it is necessary to collect the information for each individual article in Article 2 of the AP and verify the declared information provided by facility operators. Therefore, the cooperation among the ministries and offices concerned is a prerequisite for successful implementation of AP. Unfortunately, the formal procedure for inter-organizational information sharing and cooperation is not established.

This paper will briefly outline the AP declarations and suggest the information sharing among the ministries, offices and organizations for effective and efficient implementation of AP.

2. AP declarations

2.1 Provision of Information

A State should provide IAEA with an expanded information on research and development activities related to their nuclear fuel cycle; and on the manufacture and export of sensitive nuclear-related technologies. The IAEA has expanded rights of access to all parts of State's nuclear fuel cycle - from uranium mines all the way down to nuclear waste sites - as well as to any other location where nuclear material is or may be present (Table 1).

2.2 The procedure of AP declarations

The State authority is responsible for implementation of AP. ROK has been submitting declarations since 2004 and developed its information management system to prepare and verify declarations. The procedure for provision of declarations is shown in Fig. 1. Before submitted to the IAEA, the information provided by

facility operators should be analyzed and verified if it is correct, complete and internally consistent.

Table1. Provision of Information [2][3].

Provision of Information (Article 2)	
2.a.(i)	Nuclear Fuel Cycle Related Research and Development Activities not involving nuclear material: Authorized or controlled by the State
2.a.(ii)	Operational Activities of Safeguards Relevance at Facilities and Locations Outside Facilities
2.a.(iii)	Buildings on Sites
2.a.(iv)	Scale of Operations for Activities listed in Annex I
2.a.(v)	Uranium Mines, Uranium and Thorium Concentration Plants
2.a.(vi)	Quantities/Export/Import of Source Material Holdings
2.a.(vii)	Exempted Nuclear Material
2.a.(viii)	Processing Intermediated or High-level Waste
2.a.(ix)	Exports/Imports of Specified Equipment and Non-Nuclear Materials
2.a.(x)	Plans for Nuclear Fuel Cycle R&D
2.b.(i)	Non-governmental fuel cycle research & development not involving nuclear material
2.b.(ii)	Activities identified by the Agency
2.c	Amplification and clarifications upon request by the Agency

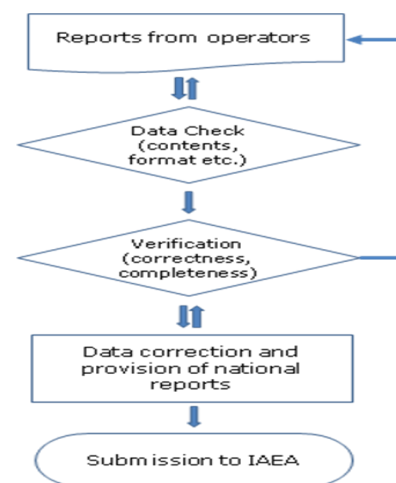


Fig.1. The procedure of AP declarations

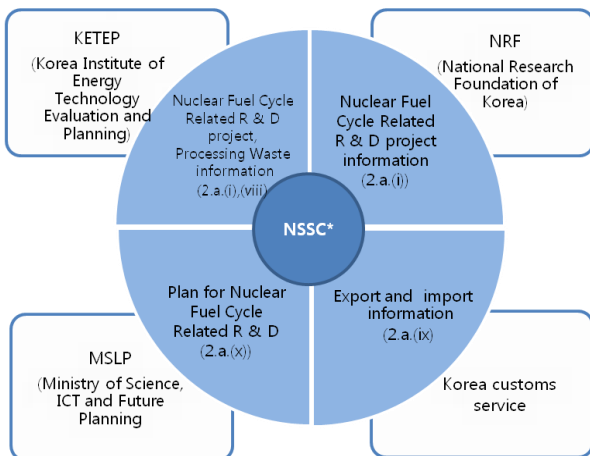
3. Inter-organizational information sharing

In order to guarantee successful implementation of the AP, the State authority should invest the necessary resources in collecting and evaluating all the available information as follows:

- Scientific and technical publications
- Government announcement
- News and internet information
- Operator's reports
- Trade and patent data
- Export and import data
- Image materials (e.g., facility map, photographs of sites, satellite image etc.)

However, there are many practical difficulties in collecting the information because it takes a lot of time, manpower and budget. Operators' reports are collected by every March 31st and AP declarations should be submitted to the Agency by every May 15th. Hence, there is not enough time to verify the correctness and completeness of the operators' reports and prepare declarations. Therefore, the best way to collect and evaluate all the information is through cooperation and information sharing among the competent authorities that have the relevant information and knowledge.

The Nuclear Safety and Security Commission (NSSC), the safeguards regulatory authority of ROK, should build an informational sharing framework and cooperate with these organizations to identify their roles and define the contents and level of required information. The information sharing framework among ministries, offices and organizations and relevant information that should be shared are shown in Fig 2.



*NSSC (Nuclear Safety and Security Commission)

Fig.2. Inter-organizational Information Sharing Framework

The main difficulty in information sharing is how to manage and deal with sensitive information. Some organizations might be unwilling to share their

information due to security concerns. Therefore, there is a need for a close partnership among competent authorities. They should work together to solve the issue and facilitate the sharing of information through ensuring that exchanges of information are accompanied by proper security requirements. This partnership will enable the trusted and appropriate sharing of related information.

4. Conclusions

The State authority has responsibility for AP implementation and it should verify correctness and completeness of the information declared by facility operators before submitting the declarations.

The close cooperation and information sharing among the ministries, offices and organizations are indispensable to effective and efficient implementation of AP.

REFERENCES

- [1] IAEA website (<http://www.iaea.org>).
- [2] "Protocol Additional to the Agreement between the Government of Korea and the International Atomic Energy Agency for the Application of Safeguards in Connection with The Treaty on the Non-Proliferation of Nuclear Weapons" entered into force on 19 February 2004.
- [3] "Guidelines and Format for Preparation and Submission of Declarations Pursuant to Articles 2 and 3 of the Model Protocol Additional to Safeguards Agreements", Services Series11.