

NUCLEAR SAFETY: MALAYSIA'S ENGAGEMENT IN PREVENTING NUCLEAR TERRORISM THREAT

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ABSTRACT

In this present era, nuclear safety is a matter highly debated at the international level. This is because there are concerns on the threat of terror groups using nuclear as a weapon of mass destruction. This issue was also raised during the nuclear security summit held in Washington, USA in April 2016. Therefore, a study has been conducted to clarify Malaysia preparedness in facing a nuclear terrorism threat. This research has a few objectives where the first objective is to oversee the legal aspects of nuclear safety in Malaysia. Secondly, this study will also explore the form of nuclear terrorism that can be carried out by terrorists. The final objective is to clarify to what extent is the engagement on nuclear security by Malaysia and cooperation at the international level to face this threat. The finding of this article shows that Malaysia has its own mechanism to counter the nuclear terrorism threat. Legal and regulatory mechanism is one important aspect to curb the terrorism threat with the enforcement of several nuclear related laws e.g. Atomic Energy Licensing Act 1984 and Strategic Trade Act 2010. International cooperation and peer sharing of information in the aspect of nuclear security are also mechanisms which can effectively counter any attempted act of nuclear terrorism. It is hoped that this article will shed some light and awareness about the threat of nuclear terrorism and the preparations made by Malaysia in dealing with this matter.

Keywords: Nuclear Safety, Terrorism, Nuclear Law, International Cooperation, Nuclear Terrorism.

INTRODUCTION

The threat of nuclear terrorism has a big impact on world security. This has also become the highlight of the Fourth Nuclear Security Summit (NSS) 2016 held in United State of America on 2nd of April 2016. Deputy Prime Minister

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of Malaysia, Dato' Seri Dr Ahmad Zahid bin Hamidi was quoted in the Utusan Online as saying, "We urge all countries in the world to give attention seriously towards the wrongful use of nuclear weapons" (Musthafa, 2016).

All countries, regardless of whether they are members of the International Atomic Energy Agency (IAEA) or not, need to share information about the abuse of nuclear weapons, radiological materials and biochemical weapons. According to Malaysian nuclear expert, Dato' Noramly bin Muslim, Malaysia is concerned about are nuclear materials being illegally imported, or passing through our ports and airports as transit commodities. Malaysia has taken the necessary steps to prevent such possibilities by implementing robust export controls (Normaly Muslim, 2012).

Earlier during the plenary session at the Fourth Nuclear Security Summit (NSS) 2016, Dato' Seri Dr Ahmad Zahid bin Hamidi said there was a need to redouble efforts towards the ultimate goal of attaining general and complete disarmament of weapons of mass destruction, in particular nuclear weapons. He was quoted in the Utusan Online as saying although the NSS had intensified efforts to bring the issue of nuclear security to the forefront, the nuclear disarmament process should also be accelerated as nuclear weapons continue to pose as one of the greatest dangers to mankind (Musthafa, 2016). Dato' Seri Dr Ahmad Zahid bin Hamidi also stated that "We must also strengthen the capacity to maintain effective control and undertake pre-emptive actions to ensure nuclear security" (Musthafa, 2016).

OBJECTIVE AND METHODOLOGY OF RESEARCH

This research has a few objectives. The first objective is to obtain an overview of the legal aspects of nuclear safety in Malaysia. Secondly, the study will also explore the form of nuclear terrorism that can be carried out by terrorists. The final objective is to clarify to what extent is the engagement on nuclear security by Malaysia and cooperation at the international level to face this threat. It is hoped that this article will shed some light and awareness about the threat of nuclear terrorism and the preparations, Malaysia has made in dealing with this matter.

This article is a socio-legal research and the methodology is primarily qualitative. In a socio-legal research, data collection relies on primary and secondary data (Yaqin, 2007). Primary data refers to legislation, parliamentary records, and related court cases from Malaysia. Secondary sources are based on publications such

as articles, journals, books, student theses, and official documents. In addition, observations of the issue on the ground related to nuclear security is also included in the analysis.

To achieve the socio-legal research objectives, a number of approaches will be used as research tools such as historical (Mahmud, 2009; Postan, 1972; Lange, 2013), philosophy and jurisprudence method (Yaqin, 2007), comparative method, and analytical and critical method (Chatterjee, 2000). Some other methods are also used by researchers such as descriptive method, exploratory method (Gutteridge, 1946) and rationalization method.

LAW ON NUCLEAR SECURITY IN MALAYSIA

Nuclear related catastrophes such as the leakage of the nuclear plant and nuclear waste storage facility in Fukushima, Japan in 2011 has been a concern due to the impact on the environment and the safety of the people who live in the surrounding areas. Accidents caused by natural disasters such as tsunamis have affected the operation of nuclear power plants, forcing the shutdown of the plant operations so as to control the pollution caused. Cleanup activities around the area contaminated with radioactive nuclear materials have been carried out, and the residual waste resulting from the cleanup activities must be managed properly to ensure the health and safety of the public and workers, as well as the environment is protected. This is explained by the IAEA statement (2012) on the implications of the Fukushima incident that "Radioactive waste generated by the Fukushima accident requires not only short term measures that were taken at the NPP site after the accident but also long term measures for life cycle management of all waste, on and off site".

Similar concerns have also been raised by Malaysians. Although our country has yet to develop nuclear energy, the issue of radioactive waste at the Lynas, Gebeng Industrial Estate in the state of Pahang, has already sparked consternation among the local community. This concern is due to the availability of radioactive waste residue resulting from the production of the rare earth piled up in a temporary storage area in the factory. This is compounded by the expression of 'Not in My Backyard (NIMBY)' which has been spreading among the population and highlights the problems related to radioactive management in Malaysia (IAEA, 2012). Due to this issue, there is a need to study the law on nuclear security in Malaysia to understand whether Malaysia is prepared with relevant legal means to curb nuclear misappropriation and deal with the threat of nuclear terrorism.

The legislation related to the use of radioactive materials in the country dates back to 1968 when Parliament passed the Radioactive Substances Act 1968, which seeks to control the radioactive material or ionizing radiation in medicine (LPTA, 1994). Under this act, regulations have been established, namely the Radiation Protection Regulations 1974 and Regulation of Radiation Protection (Medical Diagnostic X-Ray) 1983, which are basically for the medical field (FNCA, 2015).

Radioactive Substances Act 1968 Act was repealed when the Atomic Energy Licensing Act 1984 (Act 304) was enacted on 1 February 1985 and came into force on the same date. Section 3 (1) of Act 304 authorizes the establishment of the Atomic Energy Licensing Board (AELB)² and it was placed under the Prime Minister at that time. However on 27 October 1990 the Board was placed under the Ministry of Science, Technology and Innovation.

To curb any malpractice related to the security aspect of nuclear activities and nuclear waste activities in Malaysia, a specific standard regulation has been introduced under the ambit of Act 304. Act 304 and its subsidiary regulations and guidelines (issued from time to time) became the main legal radioactive and nuclear related sources of reference in Malaysia. To facilitate the implementation of Act 304, there is a need to regulate subsidiaries in which the Minister may make regulations to control, supervise and license the production, application and use of atomic energy and regulate the production, importation, exportation, transportation, refining, possession, ownership, use, sale or disposition or other dealing in any radioactive material, nuclear material, prescribed substance, irradiating apparatus or any other article which may in the opinion of the minister be used for the production, use or application of atomic energy (LPTA, 2006).

Act 304 also allows government intervention in the aftermath of a nuclear incident. Should the Government intend to indemnify the installation operator according to section 61, the court adjudicating any claim for compensation arising from the nuclear incident shall allow the Government to intervene in the proceedings at any time before the final decision is made (LPTA, 2006). In addition, all claims and compensation relating to nuclear incidents by victims and those involved must be made fairly and impartially with the orders and decisions of the court if the Government acted to indemnify the nuclear damage (LPTA, 2006). Financial guarantees and insurance are also created or maintained by nuclear operators including private insurance, private contractual indemnity, insurance or other financial security (LPTA, 2006).

² LPTA's main objective is to regulate and supervise the activities of atomic energy in the country to ensure that all activities are conducted safely and not endanger the workers, the public, property and the environment. Information obtained from the manual LEM / AM / 11, What is the Atomic Energy Licensing Board issued in August 1994, p 2.

The regulatory uses of radioactive materials, nuclear and nuclear waste are implemented through licensing. Part III of the Act relating to control and licensing is the part that explains the procedures and rules for all types of licence applications in respect of nuclear and radioactive. Section 12 (1) insists that any nuclear-related activity requires a valid licence issued by the AELB (LPTA, 2006). It aims to control these activities systematically through AELB and the Ministry of Health as each licence application will be recorded in the database by AELB Licensing Division and the Ministry of Health (LPTA, 2006). Holders of a valid license from the manufacturing industry will be monitored by the AELB Enforcement Division and for medicinal purposes by the Ministry of Health (LPTA, 2006).

In addition, the licensee is required to make a statement on the radioactive material, nuclear material, prescribed substance or irradiating apparatus in his possession or under his control to AELB to explain the quantity and type of material (LPTA, 2006). Authorities, either LPTA or the Ministry of Health, have the power in their discretion to cancel or revoke during the period as it deems fit any licence if it is found the licensee has committed an offence under this act, or violation of any condition of the licence, or a licensee has stopped using or operating nuclear installations or suspension or cancellation is made in the public interest (LPTA, 2006). In some cases, the Minister has the power to suspend a licence granted by the Atomic Energy Licensing Board (Board), and in the case of Lynas, the Temporary Operating Licence (TOL) to Lynas (M) Sdn Bhd, to provide opportunities for research was suspended by the Minister in accordance with the power provided under Section 11 of Act 304 (LPTA, 2006).

MALAYSIA'S ROLE IN PROMOTING NUCLEAR SECURITY

It is clear that Malaysia plays an important role in helping the international community in the understanding of nuclear security and impact of nuclear terrorism. Malaysia has been appointed as a non-permanent member in the Security Council of the United Nations (UNSC) from January 2015 to the end of 2016 (Sharanjit, 2014). The UNSC³ seat is considered crucial for Malaysia as it gives its members a strong voice in addressing issues related to world peace and security, especially in discussing issues related to nuclear and nuclear security, an issue in which the safety of the world is often a concern in the UNSC. This means Malaysia can play a better role in giving views on the management of nuclear terrorism.

³ UNSC functions include maintaining international peace and security, to investigate disputes that may cause international friction and to determine the threat or violent action that could jeopardize peace and decide what action should be taken.

Malaysia has provided insights and an active voice in nuclear issues at the global level. National states stand firmly and consistently without any fear or favour of any party in support of a world without nuclear weapons and the development of nuclear energy for peaceful purposes. Malaysia played an active role at the international level in the IAEA Ministerial Conference on Nuclear Safety in Vienna in June 2011, organized after the nuclear accident at the Fukushima Daiichi nuclear plant in Japan in March 2011. In addition, the establishment of the Malaysian National Nuclear Security Support Centre (NSSC) has been given recognition by the IAEA as a nuclear security training centre in the region (IAEA, 2015).

Malaysia is a member of a regional cooperation agreement known as the Regional Cooperative Agreement for Research, Development and Training Related to Nuclear Science and Technology for Asia and the Pacific (RCA). The regional cooperation agreement in the nuclear field is a form of formal cooperation agreements with regional countries initiated in 1972. The establishment of this joint venture agreement provides regional cooperation to member countries from the Asian continent. Intensive cooperation programmes have been carried out aimed at sharing experience and expertise in the development, technical and training areas in the field of nuclear science and technology. RCA member countries other than Malaysia include Australia, Bangladesh, Cambodia, China, India, Indonesia, Japan, South Korea, Mongolia, Myanmar, New Zealand, Nepal, Pakistan, Palau, the Philippines, Singapore, Sri Lanka, Thailand and Vietnam (RCA Regional Office, 2014).

On the issue of nuclear weapons, Malaysia has firmly stated that deletion comprehensively of all forms of nuclear weapons is the only solution against the use or threat of nuclear weapons. Malaysia is among the first countries in the region that signed the Convention on Non-Proliferation of Nuclear Weapons (NPT) (United Nations Office of Disarmament Affairs, 1970), that prohibits any nuclear weapons development or receive any form of external assistance on nuclear weapons; Convention and the Comprehensive Nuclear Test Ban Treaty (CTBT).

The introduction of the Strategic Trade Act 2010 also clearly indicates the state of firmness to ensure Malaysia does not become a transit point or hub for the trade of materials that can be used to make weapons of mass destruction, including those that can be used to make nuclear weapons (MITI, 2016). At The Summit 2010, Malaysia had proposed the establishment of a nuclear safety convention under the United Nations to assist the IAEA in ensuring global security compliance and a transparent nuclear programme under the Convention of Non-Proliferation Nuclear Weapons.

This is in accordance with The United Nations Security Council (UNSC) adoption of a resolution on non-proliferation of weapons of mass destruction (WMD), namely the United Nations Security Council Resolution 1540 (UNSCR 1540) on 28 April 2004. UNSCR 1540 states that all Member States shall take and enforce effective measures to establish domestic controls to prevent the proliferation of nuclear, chemical, or biological weapons and their means of delivery, including by establishing appropriate controls over related materials (United Nations Office for Disarmament Affairs, 2016).

Malaysia has also proposed an increase in the membership of the Conference on Disarmament, which until now totals 65 countries. This proposal seeks to enlarge the membership to allow more members to play their roles and collectively address the issue of disarmament and non-proliferation. Malaysia is also committed to the process of global disarmament by starting a resolution entitled "Follow up to the advisory opinion of the ICJ on the Legality of the Threat or Use of Nuclear Weapons" that was presented during the General Assembly of the United Nations in 2010 and since then has been presented and updated each year at the conference (International Court of Justice, 1996).

Malaysia has cooperated closely with ASEAN member countries in matters related to the nuclear threat. This is evidenced by Malaysia's involvement in the coordination of the implementation of the joint committee on scientific and technological cooperation activities. This regional cooperation is to support the development of nuclear innovation, providing technical advice and support to member states for the implementation and development of nuclear reactors, especially with the introduction of the Trans ASEAN Power Grid (Jaafar, Wong & Kamaruddin, 2003). In the ASEAN science and technology committee, Malaysia contributes energy and ideas in research and technical projects and coordinate programmes to promote the benefits of nuclear energy development among ASEAN members (Symon, 2008).

At the regional level, Malaysia has demonstrated strong commitment in ensuring Southeast Asia remains a nuclear-free zone. ASEAN members signed the Southeast Asia Zone - Free of Nuclear Weapons (SEANWFZ) Treaty on 27 March 1997 which obliges members not to develop, produce or acquire, possess or have control over nuclear weapons (Nuclear Threat Initiative, 1995). With this agreement, it guarantees no effort among member countries to initiate any action that leads to the construction of nuclear weapons. At the meeting of the Commission Southeast Asia Nuclear Weapon-Free Zone, held in Bali in 2010, Malaysia supported the idea of organizing a conference on a nuclear weapons-free zone (Laursen, 2013).

At the same time, through this SEANWFZ treaty, a campaign was also begun to prevent the development of nuclear weapons through effective international control. This has been achieved by Malaysia through upholding every resolution of the General Meeting of the United Nations from 1997 onwards, which were later adopted by the UN Security Council meeting each year. ASEAN members have also supported these resolutions which demonstrates the solidarity of this region with respect to efforts to make Southeast Asia free of nuclear weapons (Quilop, 2008).

Malaysia also expressed empathy with UN member countries on Pyongyang's weapons programme, saying that North Korea's nuclear weapons programme raises challenges towards regional peace. ASEAN members also unanimously condemned Pyongyang's nuclear weapons test in 2008 because it was a serious matter that would derail efforts to ensure that the region remains free of nuclear weapons (Ravichandran, 2015). With regard to the Iranian nuclear issue, Malaysia had voiced its view, which is in line with the global position, that Tehran's nuclear programme must be used for peaceful purposes only.

Malaysia has always upheld the Nonproliferation Treaty i.e. "Atoms for Peace" which was designed to promote the peaceful use of nuclear fission for producing electricity. Initially Atoms for Peace unconditionally supported other nations in their development of nuclear power. Then, worried about the connections between nuclear power and nuclear weapons, promoters of "peaceful nuclear technology" realized that countries who were receiving these technologies needed to agree not to use them for nuclear weapons (IAEA, 2014).

Discussions made regarding the role of Malaysia in the international arena on nuclear security indicates our country can go far in the development of nuclear energy. However, there is still a need to foster regional cooperation in enhancing network and expertise in the nuclear field. It is important to ensure that developmental progress in terms of expertise, human capital, and legal framework can proceed effectively and gain the trust of the people.

Recently, Malaysia has also set up a nuclear security detection laboratory that focuses on maintenance and configuration of radiation detection equipment under the Malaysian National Nuclear Security Support Centre with the cooperation of IAEA, which was approved last February 2016 (Nuclear Security Summit, 2016). This is also to upgrade the mechanism preventing the sharing of information regarding nuclear developments around the world with terrorists.

NUCLEAR TERRORISM THREAT

The tragedy at Three Mile Island in the United States and Chernobyl in Russia in the late 1970s has increased public awareness of the dangers of nuclear power and the consequences that would occur as a result of incidents involving nuclear activities (Hultman & Koomey, 2013), coupled with Western concerns after the attack on the Twin Towers in New York and the Pentagon on 11 September 2001 allowed for a similar attack targeting a nuclear reactor and the storage of nuclear waste by terrorists (Chandler, 2011).

Even though there is no evidence that terrorist groups already have the capability to use nuclear materials in attacks, the recent bombings in Jakarta, Paris and Brussels revealed that there is a risk of nuclear terrorism to any country and terrorists who aim to cause mass deaths and panic would not hesitate to employ whatever means they can. The former IAEA chief, Mohamed Al Baradei also acknowledged that the risk of nuclear materials and nuclear waste falling into the hands of terrorists is very high. He said, "Exports controls have failed, allowing a black market for nuclear materials to develop, a market that is also available to terrorist groups" (Kim & Kang, 2012).

During the Fourth Nuclear Security Summit (NSS) held in United States of America on 2nd of April 2016, Dato' Seri Dr Ahmad Zahid bin Hamidi pointed out three aspects of concern should nuclear terrorism occurs. The first aspect of concern is the question of the destruction and damage if nuclear weapons fell into the hands of terrorists and are used in their targeted countries and locations. The second aspect, said the Deputy Prime Minister of Malaysia as quoted in Utusan Online, is the question of the level of destruction that would occur should terrorists hijack and use nuclear assets, particularly nuclear power plants (Musthafa, 2016). Finally, the third aspect of concern is the impact if terrorists seized nuclear materials.

According to the Center for International Security and Cooperation, Institute for International Studies, Stanford University, nuclear terrorism can take many forms, from an attack on a nuclear power plant to the theft and detonation of a nuclear weapon. However, it is important to remember that each nuclear terrorism scenario has a differing degree of likelihood, as well as very different consequences (Freeman Spogli, 2015).

An attack on a spent fuel storage pool of a commercial reactor would not even require a nuclear weapon. If the water drains out of the pool and the spent fuel rods become exposed to the atmosphere, an uncontrollable fire will put much more radioactivity airborne than what happened in Chernobyl (Sullock, 2014).

Even though there is no publicly available evidence that the Islamic State is pursuing a similar focused nuclear weapons effort, but the group's apocalyptic rhetoric, envisioning a final war between itself and the "crusader" forces, suggests a need for very powerful weapons, and recent incidents such as the in-depth monitoring of a senior official of a Belgian facility with substantial stocks of HEU are worrying indicators of possible nuclear intent. If the Islamic State does turn to seeking nuclear weapons, it has more money, controls more territory and people, and enjoys a greater ability to recruit experts globally than al Qaeda at its strongest ever had (Bunn, Malin & Tobey, 2016). Singapore's Prime Minister has also noted that the Islamic State militant group has already demonstrated an intent to engage in nuclear terrorism. He cited an issue of the group's propaganda magazine from last year that outlined a possible nuclear terrorism scenario in which IS launches an attack with a nuclear device purchased from the black market (Bernama, 2016).

According to Gallucci (2012), there is clear indication that terrorist organizations, such as al - Qaeda, are interested in acquiring and using nuclear weapons. They seek to inflict maximum damage with an economy of means; nothing can accomplish this end more effectively and with more certainty than a nuclear weapon. We have no reason to believe that a traditional defence against this threat will be effective. We cannot expect to prevent access to our territory, and we cannot expect to deter a terrorist who values our death more than his life. The danger is not only to the United States or Western Europe, as terror attacks in Moscow, Mumbai and Bali demonstrated. Any nation that faces a threat from terrorism should be concerned.

MALAYSIA'S COMMITMENT TO NUCLEAR SAFETY IN PREVENTING NUCLEAR TERRORISM

Malaysia joined the international nuclear regulatory body of the IAEA on 15 January 1969 with membership number 101. Since 1976, Malaysia has also been appointed several times in the Board of Governors of the IAEA and the latest is for the term 2008-2010. This clearly shows the seriousness of Malaysia in complying with international law relating to the management of nuclear security. The government's role in giving authority to the regulatory body implies that a framework of effective legislation for safety, including an independent regulatory body, must be established and maintained. The government is responsible for adoption of the national legal system of a law, regulations, and other standards and the measures necessary to comply with all state responsibilities and international obligations which are effectively in place to ensure the establishment of an independent regulatory body (IAEA, 2006).

The Malaysian government has engaged the nuclear security regime to a broad extent. However, the country has not yet initiated the development of a civil nuclear energy programme, although it is still considered as part of the future Malaysian energy mix. The Malaysian government has also not signed a number of key nuclear security related instruments. These include the Convention on the Physical Protection of Nuclear Material (CPPNM), the 2005 Amendment to the CPPNM and the Code of Conduct on the Safety and Security of Radiological Sources (CCSSRS). It does not formally endorse the Global Initiative to Combat Nuclear Terrorism (GICNT), which although not formally part of the nuclear security agenda defined above, is associated with it. However, it has signed the International Convention on the Suppression of Acts of Nuclear Terrorism, although the government has not ratified it yet (Kidd, 2012).

Recently, our Deputy Prime Minister Dato' Seri Dr Ahmad Zahid bin Hamidi stated as quoted in Utusan Online that Malaysia, as a state party of the Nuclear Nonproliferation Treaty (NPT) and a member state of the IAEA, has undertaken various measures and was fully committed in supporting the efforts to achieve global nuclear security (Musthafa, 2016). He said among the steps taken was finalizing the domestic legislation for ratification, within 2016, of the Convention on the Physical Protection of Nuclear Material and its amendment, the International Convention Against the Suppression of Acts of Nuclear Terrorism and the IAEA additional protocol.

Malaysia's progressive commitment to nuclear safety, security, and safeguard is evidenced, among others, in the recent incorporation of the IAEA Convention on Physical Protection of Nuclear Material (CPPNM), the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT), and the Additional Protocol to the IAEA Comprehensive Safeguards Agreements in Malaysia's Atomic Energy Licensing Act (Act 304) and its involvement in the Global Initiative to Combat Nuclear Terrorism.

Furthermore, the former chairman of Malaysia's Atomic Energy Licensing Board (AELB), Dato' Noramly Muslim, also suggested that work towards signing the CPPNM was in progress but caveated that nuclear is new. He mentioned that, "We don't have lawyers, administrators, people who have the nitty-gritty of agreements. The Malaysian legal community must first create the necessary capacity to comprehend and implement international and nuclear law and develop a greater understanding of its obligations under such agreements" (Kidd, 2012).

CONCLUSION

The risk of nuclear terrorism remains very real. Measures to secure nuclear weapons and the materials needed to make them are the most effective tools for reducing this risk. Terrorist threats are constantly changing as the dramatic rise of the Islamic State in 2013 makes this clear. Improving security for nuclear weapons and weapons-usable nuclear materials is a never-ending task.

Security must constantly evolve as the threat changes, technologies shift, and new vulnerabilities are revealed. In the past two years since the last nuclear security summit, security for nuclear materials has improved modestly but the capabilities of some terrorist groups, particularly the Islamic State, have grown dramatically, suggesting that in the net, the risk of nuclear terrorism may be higher than it was before.

Legal and regulatory requirements applied in nuclear activity in Malaysia are in line with the principle of upholding safety for the people. This is because the research revealed that the management of nuclear in Malaysia must be seen as giving the right to justice and protection from harm resulted in the misuse of nuclear especially from the terrorists. It is important for the continuance of life to the betterment and wellbeing of our children and our generation in the future (Taebi, 2010).

Malaysia has engaged in convincing its public of its capacity and capability in dealing with nuclear power. To respond to nuclear emergencies, Malaysia has established dedicated mechanisms and resources through the effectiveness of inter-agency coordination, communication, and response times. With regard to human resources, Malaysia needs to improve our human development programme for the development of our nuclear power plant. We need these expertise in nuclear security and regulatory aspect to safeguard Malaysia from any harm or threat by terrorism acts on our nuclear power plant in the future (Jaafar, 2014).

This is in line with the suggestion by our Deputy Prime Minister during the Nuclear Security Summit that there was also a need to strengthen the capacity to maintain effective control and undertake pre-emptive actions to ensure nuclear security. He mentioned as quoted in *New Straits Times Online* (2016) that, we need to further enhance cooperation in capacity building, timely sharing of information and intelligence, and adopt best practices, in our common endeavor to secure nuclear materials and ensure that they do not fall into the wrong hands, that of non-state actors and terrorist organizations.

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