



# NUCLEAR SECURITY SUMMIT 2014

## NATIONAL PROGRESS REPORT

### MALAYSIA

(MARCH 2014)

#### 1. SUPPORT FOR MULTILATERAL INSTRUMENTS

Malaysia is at the final stages of revising its Atomic Energy Licensing Act 1984 (Act 304), that would incorporate the provisions of the International Atomic Energy Agency (IAEA) Convention on Physical Protection of Nuclear Material (CPPNM), and its 2005 Amendment Protocol; the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT); and the Additional Protocol to the IAEA Comprehensive Safeguards Agreement.

This comprehensive nuclear law would enable Malaysia to become a party to the various Conventions and Protocols on nuclear security, including Malaysia's accession to the CPPNM, ratification of the ICSANT and the IAEA Additional Protocol, and adoption of various outstanding IAEA Codes of Conduct.

#### 2. STRENGTHENED NATIONAL NUCLEAR AND RADIOLOGICAL MATERIAL SECURITY SYSTEM

Malaysia continues to implement the Strategic Trade Act (STA) 2010 (Act 708), enacted on 1 July 2011. The Act aims to combat the proliferation of weapons of mass destruction (WMD) by controlling the export, transit, transshipment and brokering of strategic items. The enactment of the STA reflects Malaysia's commitment to implement UNSCR 1540.

Malaysia has implemented the Malaysia State System of Accounting and Control of Nuclear Material (SSAC) in efforts related to supervising and controlling Malaysian research reactors.

Malaysia is in close cooperation with the US on the physical protection upgrades for the nuclear irradiators, through the Global Threat Reduction Initiative (GTRI) cooperation. The partnership between Malaysia and the US is important, recognising the mutual benefits. There are four Radioactive Sources Category 1 Facilities in Malaysia which underwent the process of assessment in February 2012, namely SINAGAMA, Gamma Green House, Gamma Cell and Raymintex.

Malaysian experts have participated as invited experts to IAEA programmes, both at the national and regional level. During these programmes, Malaysian experts have shared best practices and knowledge related to nuclear security with other participants in the region.

Malaysia continues to implement the nuclear security measures stipulated in the IAEA Nuclear Security Plan 2010-2013.

Malaysia is involved in the IAEA national project entitled "NSF 11318 - Deployment of Radiation Detection Equipment for Nuclear Security Applications" to further strengthen the human capital development in nuclear security.



### 3. CONTRIBUTION IN THE IAEA NUCLEAR SECURITY RELATED ACTIVITIES

Malaysia is committed in implementing the IAEA Information Circular, INFCIRC/225, on the Physical Protection of Nuclear Material and Nuclear Facilities.

Malaysia has implemented the provisions of the IAEA Code of Conduct on the Safety and Security of Radioactive Sources, as well as the Supplementary Guidance on the Import and Export of Radioactive Sources. Awareness and competency programs have been carried out to increase the level of competency among authorized users of radioactive sources in Malaysia.

Malaysia continues to ensure that all related activities on nuclear security complies with the international standards and guidance defined by the IAEA. Malaysia has recently reviewed its Integrated Nuclear Security Support Plan (INSSP) which has been proven to be very instrumental in designing and guiding the establishment of a sustainable national nuclear security capability.

With the assistance from the IAEA, Malaysia has established the INSSP for the period of 2009-2013, as a comprehensive plan to further improve nuclear security in the country. Malaysia has revised its INSSP for the period of 2013-2015 to include the recommendations provided by the IAEA.

### 4. SUPPORT FOR INTERNATIONAL NUCLEAR SECURITY RELATED ACTIVITIES

Malaysia has endorsed the Statement of Principles to the Global Initiative to Combat Nuclear Terrorism (GICNT). Malaysia recently co-organised, with Australia, New Zealand and the United States of America, the Tiger Reef Cross-Disciplinary Training Workshop and Tabletop Exercise on Nuclear Forensics, from the 4 to 7 February 2014, in Kuala Lumpur under the framework of the GICNT.

On 3 June 2013, Malaysia became a registered user of the International Catalogue of Sealed Radioactive Sources and Devices (ICSRs). This has allowed Malaysia to identify sources, the devices housing the sources and details of manufacturers and suppliers worldwide.

Malaysia is currently negotiating with Myanmar on cooperation in this arena. This cooperation will include the exchange of best practices and experiences in nuclear security.

### 5. CONTRIBUTION TO THE MINIMIZATION OF SENSITIVE NUCLEAR MATERIALS

Almost 3000 Disused Sealed Radioactive Sources (DSRS) is being stored in the temporary storage facility of the Malaysia Nuclear Agency. To safeguard the safety and security of these DSRS, Malaysia, with the assistance of the IAEA, is in the process of developing a disposal facility, using the borehole technology, to manage these disused sources, in safe and secure manner.

Malaysia is exploring the viability of thorium as an energy source material for nuclear power generation, under the National Science, Technology and Innovation Policy. The policy calls for a Flagship Programme to support the development of new emerging technologies. One of the main focuses under this programme, is to explore the possible utilisation of thorium from local resources for the Malaysian Nuclear Power Programme.

### 6. ESTABLISHMENT OF CENTERS OF EXCELLENCE AND SUPPORT

Malaysia has been recognized as a Nuclear Security Support Centre (NSSC) by the IAEA since December 2012. Through the NSSC, Malaysia has been able to increase its domestic expertise on nuclear security and continues to enhance its law enforcement capabilities and capacities through training exercises. This would allow rapid detection and response by relevant law enforcement agencies in the event of a nuclear or other radioactive materials incident.

Malaysia, in its capacity as the regional NSSC, with the cooperation of the IAEA, disseminates best practices and shares experiences with countries in the region. This serves as part of a continuous effort to strengthen its national capability and at the same time, to form a network for information exchange and experience sharing.



As a NSSC, Malaysia has also been invited to IAEA programs, both at national and regional levels, in sharing best practices.

By virtue of being a NSSC, Malaysia is continuously strengthening its law enforcement capability by establishing an integrated National Nuclear Security Training Module for Frontline Officers. This training module addresses the roles and functions that all respective agencies play when dealing with any response to a nuclear or other radioactive materials crisis. These training modules are in line with the IAEA guidance and recommendations.

Malaysia sees the NSSC as a tool to retain knowledge and expertise gained from various international cooperation and assistance in nuclear security.

## 7. ENHANCED EFFORTS TO COMBATING ILLICIT TRAFFICKING IN NUCLEAR AND RADIOLOGICAL MATERIALS

Since 29 March 2001, Malaysia has gained access to the Illicit Trafficking Database in Nuclear Material and Other Radioactive Sources. This database is managed by the IAEA, the World Customs Organization (WCO) and the International Police Organization (INTERPOL). By referring to the international database, Malaysia has been able to enhance its efforts in ensuring its national nuclear security.

Malaysia continues to improve its radiation detection systems, ensuring that these systems are in line with the IAEA standard Integrated Nuclear Security Network (INSN). This enables the Royal Malaysia Customs to remotely verify radiation detection at the country's point of entry and exit.

Malaysia has in place the mechanisms for radiation detection screening during major public events. This radiation detection screening mechanism was used during the Global Entrepreneur Partnership Summit, held in Kuala Lumpur in October 2013. Malaysia is committed to further deploy its radiation detection mechanisms in major public events in the future.

## 8. STRENGTHENED COOPERATION BETWEEN GOVERNMENT AND THE NUCLEAR INDUSTRY

The Malaysian National Operation Planning Committee, in August 2013, has mandated the Atomic Energy Licensing Board of Malaysia to lead the technical support agencies in implementing nuclear security measures in Malaysia.

Malaysia through the Malaysia Nuclear Agency is committed to lead the development of human capital in the areas of nuclear safety and security, as part of its awareness program with the nuclear industry.

Malaysia places great importance in promoting the nuclear security culture in industries. Towards this, Malaysia has both, organised and participated, in various human capital development programs related to nuclear security, both at the national and international levels.