

**Co-Chairs' Summary Report of the ASEAN
Regional Forum Raising Awareness and Promoting
Cooperation on CBRN Risk Mitigation Workshop
Manila, Philippines, 6-8 March, 2018**

Introduction

1. Co-chaired by the Philippines, Canada, and the United States, the 2018 ASEAN Regional Forum (ARF) Workshop, “Raising Awareness and Promoting Cooperation on CBRN Risk Mitigation – A challenge for security and social agendas,” was held in Manila, Philippines 6 – 8 March 2018. This workshop facilitated the way forward to strengthen Chemical, Biological, Radiological, and Nuclear (CBRN) risk mitigation and response, and explored options for sharing information and technological resources.
2. Participants from 22 countries as well as the United Nations (UN), European Union (EU), and the Association of South East Asian Nations (ASEAN) Secretariat attended the workshop. A list of participants is provided in **Annex A**. The agenda consisted of a variety of presentations from organizations within and outside the ASEAN region and is provided as **Annex B**. The workshop focused on information exchange of best practices and lessons learned from responses to CBRN incidents. A Senior Leadership Seminar included heads of delegation from each member state to share their insights regarding the collaboration of ASEAN countries when confronted with a CBRN challenge. The panel discussions, led by subject matter experts, provided participants with the opportunity to exchange CBRN response concepts and also develop a way ahead for future forums. Shared presentations are provided as annexes as noted throughout this report.

Opening Remarks

3. **Philippine Secretary of National Defense Delfin Lorenzana** delivered opening remarks sharing his vision and expectations for the 2018 ASEAN Regional Forum Workshop. Secretary Lorenzana discussed his concerns associated with the emerging threats and the ease in which weapons are manufactured and transported. This dynamic environment increases the likelihood that weapons of mass destruction will be used. It is essential for all ASEAN nations to strengthen interagency cooperation to mitigate CBRN threats within the region. He expressed the importance of the workshop as a vital forum for sharing best practices and identifying areas for collaboration.
4. **Canadian Ambassador John Holmes** thanked the ASEAN nations for their continued collaboration addressing threats in the region. The invitation for the Canadian Prime Minister to attend the ASEAN summit demonstrates the strength of the relationship between Canada and the SE Asian region that has been growing since 1977. Ambassador Holmes highlighted the important role that SE Asia plays in global security, including both the prevention and proliferation of weapons of mass destruction. He identified that a clear threat exists for CBRN materials and delivery systems to fall into the wrong hands. Ambassador Holmes ended his remarks by stating that for these reasons, Canada is engaged more than ever in SE Asia, including continued interest in ASEAN and ASEAN Defense Minister Summits.
5. **Michael Klecheski, United States Deputy Chief of Mission to the Philippines**, welcomed participants and thanked the Philippines and Canada for their support as co-hosts of the workshop. Mr. Klecheski described the goal of this forum as three-fold, including providing a venue to highlight best practices and the opportunity to build strategic approaches to a common problem, and examining national and regional protection and response plans. He explained that the recent terrorist attacks in Marawi, Philippines illustrated the threat posed

by violent extremists in the region. Despite the challenges associated with interagency cooperation, he stated that all must work together as a region to mitigate threats.

CBRN Threat Assessment for the Region

- 6. Mr. Ali Rached, INTERPOL Policy Advisor** spoke about the work that INTERPOL conducts around the globe including the prevention and response to transnational crime, counter terrorism, and cyber-crime. INTERPOL has developed a first responders' CBRN awareness card and a series of public messages for law enforcement to use during and following an incident. INTERPOL is moving steadily to design and coordinate cross-border interagency operations. These include preventing the illicit trafficking of CBRN materials and IED components and the prevention and disruption of terrorist activities. He addressed the importance of information-sharing and intelligence analysis, capacity building and training, and operational and investigative support. He encouraged member countries to facilitate information-sharing to enhance their capability of preventing and responding to CBRN and IED attacks. He stated the need to coordinate cross-border interagency operations. His presentation is included in this report as **Annex C**.

Discussion of the 2015 ARF CBRN Risk Mitigation Workshop and Way Forward

- 7. Dr. Robert Frank, European Commission Regional Cooperation Officer for South-East Asia - Instrument Contributing to Stability and Peace (EC, DG DEVCO)**, presented a summary of events conducted during the 2015 ARF CBRN Risk Mitigation Workshop that shaped this year's discussion. In 2015, participants from 17 countries and the European Union attended. Subject Matter Experts from the Philippines' National Disaster Risk Reduction and Management Council (NDRRMC), ASEAN-GGP-Blue Dot, Department of Foreign Affairs Canada Philippines' Department of Health (DOH), Australian Department of Foreign Affairs and Trade, Organisation for the Prohibition of Chemical Weapons (OPCW), World Health Organization – Western Pacific Regional Office, and the International Atomic Energy Agency (IAEA) provided informational briefings and facilitated panel discussions on a variety of topics. Following the completion of the 2015 Workshop, the European Union in concert with other countries continued to work on and monitor the progress of numerous activities. These included reporting the outcomes to the 14th ARF Inter-Sessional Meeting on Counter-Terrorism and Transnational Crime (CTTC) and continuing support for the EU CBRN Risk Mitigation Center of Excellence (CoE) Initiative in SE Asia. Additionally, the EU leveraged information from its member states to update the EU CBRN Action Plan. The EU will utilize the outcomes of the 2018 Workshop to further efforts in CBRN Risk Mitigation and National Action Planning. His presentation is included in this report as **Annex D**.

CBRN Risk Mitigation: A Successful Model for Promoting National Strategic Priorities at the National, Regional, and International Level

- 8. Mr. Harro Wittermans, Regional Coordinator for South-East Asia for the United Nations Inter-regional Crime and Justice Research Institute (UNICRI)** provided a presentation on CBRN risk mitigation. He presented an overview of the UN environmental conventions related to CBRN to which many of the SE Asian countries have committed. He pointed out that while the obligation to counter CBRN exists via these conventions, there needs to be more effort amongst the countries. He highlighted and provided an overview of the EU CBRN Risk Mitigation CoE initiative. This continues to serve as a framework for coordination and cooperation at the national, regional, and international level to enhance CBRN policies and capabilities. Mr. Wittermans discussed the model CBRN National Action Plan (NAP) noting that its structure should include the following elements:

- National institutional structure
- Participation in relevant international instruments
- Assessment of CBRN national threats and risks
- Analysis of current capacities to mitigate CBRN risks
- Proposed objectives to reinforce national counter CBRN capacity
- Table of practical actions to strengthen counter CBRN capacity

Mr. Wittermans' "take home message" to the audience included the importance of a designation of a National Contact Point for each of the conventions, promoting the finalization and approval of a CBRN National Action Plan (NAP), and involving each country's ASEAN focal point in the CBRN National Team to work towards structural ARF/ASEAN discussions on countering CBRN. Mr. Wittermans' presentation is included in this report as **Annex E**.

Regional and Global CBRN Risk Mitigation Partnership Initiatives Panel (Moderated by Lieutenant Colonel Markus Weber, Canadian Special Operations Forces Command)

9. Dr. Ferdinal Fernando, ASEAN Secretariat, welcomed the conference attendees and outlined the efforts already underway in the ASEAN region. He identified goals to enhance capabilities in the areas of intelligence sharing and operational methods and efforts and activities to promote enhanced response and coordination. He said that all parties need to promote a safer and healthier region, and he presented information in the ASEAN Political-Security Community (APSC) Blueprint 2025. A particular focus is to increase bio-detection capabilities, laboratory capacity, and support for Emergency Operations Center (EOC) networks and communication. He shared that many of these actions started over 10 years ago and recognized the need to have cooperation and coordination between law enforcement and public health organizations. Areas of concern include early detection, bio-terrorism, and disease outbreaks and monitoring. ASEAN has been very busy with the identification of Health Clusters and activities that promote enhanced response and coordination. Dr. Fernando concluded his presentation by promoting ongoing partnerships with international organizations, human and animal health sectors, and the ASEAN community. His presentation is included in this report as **Annex F**.

10. Mr. Louis-Martin Aumais, WMD Threat Reduction Program, and Global Affairs Canada emphasized Canada's support for peace and prosperity in the ASEAN region. Canada has a long-term record of over 15 years of cooperation with its SE Asian partners and will continue with these efforts. Canada is interested in a full spectrum of WMD and CBRN support processes that include efforts in bio-detection, animal health monitoring, anti-crime, and human trafficking. Mr. Aumais stated that we should focus on increasing the cost of these criminal activities for these actors while decreasing the cost of prevention protection. Mr. Aumais stated that the Global Partnership against the Spread of Weapons and Materials of Mass Destruction should be a focus for all ASEAN members. He concluded by calling on participants to energize actions and grow real solutions for real risks and common threats. His presentation is included in this report as **Annex G**.

11. Dr. Rebecca Hoile, World Health Organization (WHO), opened her remarks by sharing that the global threat of a biological attack is real and evolving. She stressed the need to look at resources, capabilities and intent. She explained the formula, Risk = $f(\text{Threat} \times \text{Vulnerability} \times \text{Impact})$. Dr. Hoile highlighted recent outbreaks and discussed the challenges faced by a biological outbreak, noting that most occur naturally. The identification of deliberate events is challenging, because symptom presentation takes time and may look like other illnesses. She recommended that investigative plans be developed and discussed for each outbreak. These plans are intended to identify the biological agent, the mode of spread, the affected victims, and the ultimate link of the outbreak to its source. Dr. Hoile concluded her presentation with an explanation of a health security interface

model whose focus is on coordination and collaboration. Her presentation is included in this report as **Annex H**.

- 12. Mr. Shawn DeCaluwe, Organization for the Prohibition of Chemical Weapons (OPCW)**, discussed the overall mission of the OPCW. Activities include verification of treaties to ban Weapons of Mass Destruction through disarmament and non-proliferation. He introduced and explained the Assistance and Protection elements of OPCW (Article X) and its basic and advanced courses for CBRN response worldwide. He later offered these courses to member countries. OPCW also offers table-top and field exercises and “train the trainer” courses. His presentation is included in this report as **Annex I**.

CBRN National Response Plans Panel (Moderated by Sgt David Rolston, Royal Canadian Mounted Police)

A panel discussion on CBRN national response plans with representatives from Australia, the Republic of Korea, and Singapore was held. The panel focused on CBRN action plans of each country.

- 13. Mr. Graeme Shennan, Deputy Director for CBRN, and WO2 Andrew Newsome, Australian DOD**, presented on Australia’s National CBRN Response. They noted Australia’s comprehensive CBRN framework which focuses on three common themes: collaboration, cooperation, and information-sharing. They highlighted how Australia’s counterterrorism (CT) strategy prioritizes and places importance on the disruption of terrorist activity rather than gathering evidence for prosecution. They also noted preparedness as the primary objective for the CT mission in Australia, with prevention, response, and recovery as subsequent steps. They explained that State and Territory governments are responsible for developing, implementing, and maintaining disaster and emergency management plans, including plans for CBRN incidents. A declaration of a National Terrorist Situation will enable supplementation of state and territorial law enforcement with Commonwealth agency assets. Defense elements may be deployed to incidents when requested. The Australian presentation is included in this report as **Annex J**.
- 14. Colonel Hyung Moon, Korean Armed Forces**, provided an overview of WMD consequence management (CM) and explained the relevant laws related to CM within the Republic of Korea (ROK). He discussed the importance of continually developing ROK CM capabilities in order to combat potential threats from North Korean WMD. He mentioned that ROK CM procedures were recently revised in 2017 and transitioned from a military-led to a civilian government-led system with the integration of civilian and military resources. He concluded his presentation by stating the need to share a common understanding of strategies for coping with WMD CM, as well as the need to establish an initiative promoting ASEAN regional coordination and cooperation.
- 15. Major Jiyoung Kim, Korean Armed Forces**, further elaborated on the capabilities and current status of ROK CBRN operations by discussing their CBRN readiness procedures and strategies. She shared that the ROK continues to strengthen their CBRN response assets in order to combat North Korean WMD threats. Major Kim’s presentation is included in this report as **Annex K**.

Case Study Panel (Moderated by Mr. Brent Woodworth, Los Angeles Emergency Preparedness Foundation)

A panel discussion on CBRN responses which included presentations from Iraq – Chemical Attack, Japan-Fukushima and Sarin Gas Attack, and Philippines-Henipavirus Outbreak was held. The panel focused on CBRN response actions and lessons learned from the aforementioned incidents.

Iraq – Chemical Attack

16. Major General Zaid Khalaf Nigga Al-Ani from the Iraq Ministry of Defense, and Captain Qahtan Adnan Yaqoob from the Ministry of Interior, provided a briefing on ISIS chemical attacks, including the impact of the attacks on their nation, and the management employed thereafter. Post-incident evaluation determined that ISIS employed mustard sulfate. As a result of these chemical attacks, a CBRN team and chemical decontamination stations were established to mitigate CBRN effects. The Council of National Security Agents recommended the formation of the National Response Team. Duties include controlling hazardous materials and responding to CBRN incidents, evaluating response plans, and coordinating with Iraqi's National CBRN Team to seek experts with chemical or biological backgrounds. An overview of the impacted areas was provided. Their presentations are included in this report as **Annex L**.

Japan-Fukushima and Sarin Gas Attack

17. Lieutenant Colonel Tomoya Oyamada provided lessons learned from the Matsumoto Sarin Attack, Tokyo Subway Sarin Attack, and the Fukushima Nuclear Disaster. The Tokyo subway sarin attack killed 13 people and injured more than 6300 people. The sarin used was at a purity level of 30%, but because of the dispersal process, the impact was significant. The attacks revealed significant communications deficiencies between police, fire, and the Japan Ground Self-Defense Force (JGSDF). As a result of the attack, the Nuclear Biological Chemical (NBC) Terrorism Site Management Cooperation Model was created and information sharing was organized. JGSDF personnel were provided with detectors which were able to detect gaseous chemical agents. Hospitals were equipped with decontamination equipment. He addressed the lessons learned as a result of the Fukushima Nuclear Disaster. These included a new emergency radio system allowing radio communication among JGSDF, police, and fire fighters, new decontamination systems equipped with waste water processing functions, and continued cooperation with U.S forces in countering CBRN incidents. The presentation is included in this report as **Annex M**.

Philippines-Henipavirus Outbreak

18. Ms. Rowena Capistrano, Department of Health and Dr. Nemia Sucaldito, Chief of Applied Epidemiology and Health Management Division, discussed the 2014 Henipavirus outbreak in the Philippines and how it affected many organizations and agencies. The Henipavirus caused severe illness among humans, horses, and other animals such as dogs and cats that were exposed. Fatality rates among humans were high. It was thought that the initial cause of the illness was Fatal Encephalitis Syndrome which can be contracted when handling deceased human remains. Samples were sent to the Australian Animal Health Labs but all samples came back negative for bacteriological, Hendra, and the Nipah virus. The samples were then sent to the Japan National Institute of Infectious Diseases where two samples came back positive for the Nipah Virus. As field investigations were conducted, it was found that the Henipavirus belonged to a genus of recently emerging viruses within the Paramyxoviridae family and included two zoonotic pathogens: the Hendra virus and Nipah virus. As a result of this outbreak, a joint field mission was created with a team of veterinarians, epidemiologists, and clinicians. Although the source of the horse infections was not determined, the most likely source is fruit bats. Their presentations are included in this report as **Annex N**.

Breakout Sessions

Workshop participants were divided into three groups to discuss and propose a way forward for three topics: Information Sharing, Improved Regional Response, and Technological Resource

Access and Support. Each breakout session is discussed further below.

Information Sharing Breakout Session

19. Colonel Marlon M. Bayhon, Armed Forces of the Philippines with co-chair Dr. Rebecca Hoile, World Health Organization, facilitated a discussion on enhanced information sharing within the ASEAN region. The breakout group focused on developing or delineating ways to improve information-sharing. In order to enhance information-sharing and as a way ahead, the breakout co-chairs introduced the following five key points:

- Designating a POC for ASEAN Region Information Sharing, potentially within an EOC/IOC
- Conducting an information sharing TTX among the law enforcement, defense, and security stakeholders
- Conducting an information sharing TTX among health and medical services stakeholders
- Conducting a feasibility assessment of the ASEAN Regional information sharing across the public health and law enforcement sectors
- Conducting a suitability assessment of the ASEAN Coordinating Centre for Humanitarian Assistance on Disaster Management (AHA) as a Regional Center for Joint Information Sharing

Dr. Hoile suggested that the first agency of contact at the strategic level during a biological incident is the Regional WHO office, if law enforcement necessities and protocols permit. One regional office is located in the Philippines and a second in India. In addition, there are many different ASEAN platforms to facilitate this contact and information. The platforms to facilitate information sharing among the Defense sectors are the Senior Official Level set of meetings, the ASEAN Military Assistance Center, and Ministerial level meetings. She also stated the distinct role of the ASEAN Secretary General, including a critical resource allocation role. A key question is how information-sharing among the medical and defense sectors occurs. Currently, there are limited or no information-sharing mechanisms in place. COL Bayhon stated there is a protocol for information-sharing in ASEAN member platforms. For medical response, an ASEAN center in Bangkok provides updates on medical issues. He further stated this information needs to be shared to assist parties in preventing and mitigating CBRN incidents. It was stated that the INTERPOL office in Bangkok might exchange information with the WHO Regional Offices, as well as the INTERPOL ASEANAPOL office in Malaysia with the various WHO sub-offices (ASEAN FETN, ASEAN HMM, ASEAN Lab Network, etc.)

The breakout group provided the following recommendations for the way ahead:

- A TTX among Law Enforcement, Security and Defense stakeholders and key players
- A TTX for the Public Health Services sector (ASEAN Network)
- A Feasibility assessment of Regional Information sharing across Public Health sector and Law Enforcement/security sectors
- A Suitability Assessment of the AHA/EOC as the regional center for Joint Information sharing
- Designating a POC for Info Sharing activities at EOC/IOCs within the ASEAN region

The Information-Sharing Out brief presentation can be found in this report as **Annex O**.

Improved Regional Response

20. FCSUPT Jose S. Embang, Philippines Bureau of Fire Protection National

Headquarters, Manila, facilitated a discussion workshop attended by 37 people, representing 13 different countries. He framed his discussion with the goal of improving and strengthening the capacities and capabilities of partner countries to prepare for, respond to, and recover from CBRN incidents. The discussion group identified several significant challenges in responding to a CBRN incident. Chief Embang used four different questions to facilitate the discussions. This resulted in a lively exchange of experiences and issues that needed attention. These included the identification of core capabilities and associated gaps in abilities. The group focused on the path forward and developed recommendations which will be shared with the senior leadership and country representatives.

The breakout group provided the following recommendations:

- Creation of a database of each country's capabilities
- Establishment a virtual CBRN response center to be coordinated by either the ARF or the ADMM mechanism

The Improving Regional Response Out brief presentation can be found in this report as **Annex P**.

Technological Resource Access and Support

21. Dr. Irma Makalinao, the University of Philippines Manila, facilitated a discussion regarding the accessibility of technological resources in the event of a CBRN incident. She suggested creating a mechanism to better understand the requirements for stockpiling vaccines, antidotes, and antimicrobials. She also recommended that ASEAN countries create a database of chemical threats and available CBRN equipment. Mr. Robin Chia Wei Chiang from Singapore added that based on Singapore's experiences, CBRN equipment and detectors that perform well in certain countries may not perform well in other countries due to differences in the environment, resource support/maintenance requirements, and funding limitations.

The breakout group provided the following recommendations:

- Creating a mechanism to better understand the requirements for stockpiling vaccines, antidotes, antimicrobials, and to inventory chemical agents and CBRN equipment
- Establishing a regional agreement among ASEAN countries regarding the transfer and sharing of CBRN information and equipment
- Conducting a detailed risk assessment of various agents and an inventory of the antidotes each nation possesses to see if it is possible to have local/regional stockpiles of equipment and antidotes that can be accessed by multiple countries

The Technology and CBRN Response Out brief presentation can be found in this report as **Annex Q**.

Senior Leader Seminar

22. Heads of delegation from 17 countries and the EU convened to validate the need for CBRN Risk Mitigation, share insights on opportunities to build synergy among the ARF, ASEAN Defense Minister Meeting (ADMM)-Plus and other ASEAN-centered mechanisms, understand the next steps and way ahead for reporting ARF CBRN workshop outcomes at the Singapore-chaired 25th ARF Ministerial Meeting in August 2018, and discuss best practices to facilitate whole-of-government approaches to national CBRN mitigation and risk-reduction. Senior Leaders agreed that cooperation and collaboration are essential to ensuring security in the ASEAN Region. CBRN threats are complex and are further

complicated by emerging technologies and the ability of state and non-state actors to acquire CBRN materials and delivery systems. The group agreed that ASEAN members must not allow administrative bureaucracy or inconsistent funding to impede the goal of a safer ASEAN in the event of a CBRN threat. Various resources such as the Global Partnership against the Spread of Weapons and Materials of Mass Destruction are available for ASEAN nations seeking to take action against the current threats. Heads of delegation strongly agreed that CBRN mitigation is vital to ensuring security in their respective countries as well as the ASEAN region together. Proper mitigation of CBRN incidents requires regional planning, information-sharing, communications, and unified operations among ASEAN partners. In order to implement proper mitigation and response actions, ASEAN members must agree upon a response plan format that is understood across the region. Moving forward, the delegation emphasized that discussion must continue among participants prior to the 2018 conferences in Singapore. Ideally, a CBRN response framework template should be agreed upon in the near future to facilitate the development of the plan. All Heads of Delegation affirmed that every ASEAN nation requires a national CBRN response plan. It is vital for ASEAN members to leverage ongoing CBRN response planning efforts from other organizations such as UNICRI and INTERPOL. The delegates suggested that member countries explore the potential for developing a Center of Excellence to expand the knowledge and capabilities for CBRN prevention and response planning across the ASEAN region. The Senior Leader Seminar and Out brief presentations are included in this report as **Annex R**.

Closing Remarks

Closing remarks were delivered by **Undersecretary Ricardo B. Jalad (Republic of the Philippines), Mr. Mike Minor (United States of America), and LTC Markus Weber (Canada)**. All three were gracious in their remarks and indicated significant strides were made during the forum in mitigating CBRN risk. They highlighted the participants' commitment and willingness to bring awareness not only to individual nations but to partner nations as well. It was emphasized that the ASEAN region is closer to solidifying a plan on how to support each member state in time of need during a CBRN incident. The biggest issue is no longer to ask why a CBRN incident takes place, but rather when and where it will occur. This led to a general consensus to refine a strategy that focuses on multi-lateral approaches for CBRN mitigation within the ASEAN region.

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Annex D: EU Presentation

Annex E: UNICRI CBRN Model Presentation

Annex F: ASEAN Secretariat Presentation

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