

# NTS BULLETIN

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### CLIMATE CHANGE page 3

## ENERGY SECURITY page 3

## FOOD SECURITY page 4

## HEALTH SECURITY page 5

#### HUMANITARIAN ASSIS-TANCE AND DISASTER RELIEF page 5

# TRANSNATIONAL CRIME page 6

## WATER SECURITY page 7

#### Why nuclear security matters in Southeast Asia?



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Recent cases of missing radioactive materials in Southeast Asia this year alone vividly highlight the significance of enhancing nuclear security in the region. In Malaysia, a radioactive device was reportedly lost in August 2018 while being transported by two employees of an industrial company that owned the missing device. In the Philippines, an industrial equipment containing radioactive materials was stolen from the facility of a construction firm in July 2018. There were concerns that the unknown amount of radioactive materials contained in the missing devices could potentially emit harmful radiation if handled improperly or be used as a weapon, otherwise known as "dirty bomb".

While nuclear security is often understood to be about securing nuclear power plants and nuclear weapons, it is also very much about the security of radioactive materials. As defined by the International Atomic Energy Agency (IAEA), nuclear security is "the prevention and detection of, and response to, theft, sabotage, unauthorized ac-

cess, illegal transfer or other malicious acts involving nuclear material, other radioactive substances or their associated facilities".

#### Securing radioactive materials

Although there is no nuclear power plant in the region currently, there is a broad range of legitimate uses of radioactive materials especially in industrial facilities, hospitals, research reactors, and scientific laboratories. Without stringent oversight on the use and handling of radioactive materials, there are potential risks of these being accidentally leaked, stolen and used for malicious purposes, or released indiscriminately by non-state actors. From 2013 to 2017, there were four reported cases in Southeast Asia involving illicit trafficking and theft of radioactive materials. Hence, a key point to note is that the security of radiological materials is an important component of nuclear security.

Apart from the immediate impact of a radiological leak, attack or explosion,

there are four major non-traditional security consequences associated with a nuclear security incident: health, economic, societal and environmental. Therefore, establishing an effective and sustainable nuclear security infrastructure is crucial for the protection of the state, people, society and the environment.

## Establishment of regional networks

Across Southeast Asia, current gaps in nuclear security governance include lack of funding support to implement capacity-building projects and wide differences in nuclear knowledge and infrastructure among ASEAN Member States. Further efforts are therefore crucial to improve capacity in the least developed Southeast Asian countries. Moreover, several ASEAN Member States have yet to ratify and incorporate global nuclear security agreements into their national legal frameworks.

The burgeoning regional cooperation on civilian nuclear energy among ASEAN Member States can help plug these gaps in nuclear security governance. The ASEAN Network of Regulatory Bodies of Atomic Energy (ASEANTOM) has been conducting regular exchanges of best practices, capacity-building efforts, and assistance to member states to implement key international agreements.

Apart from regional bodies such as the ASEANTOM, nuclear security training and support centres of excellence (COEs) can potentially play a key role in establishing a regional nuclear security architecture. In Northeast Asia, COEs can develop the human resources and technical support services needed for a sustainable nuclear security regime. Southeast Asian states may emulate this good practice by establishing their national COEs. So far, only a few states such as

Indonesia, Malaysia and Vietnam have established their nuclear security training centres. A collaborative network of COEs in Southeast Asia can complement the work of ASEANTOM in terms of sharing good practices, resources, expertise and information.

With the ever-present transboundary risks of radiological emergencies and stolen radioactive materials, improving the rate at which security policies are fully implemented and understood by all stakeholders could dramatically narrow the gaps in nuclear security in the region.

### **Suggested Readings**

- Mely Caballero-Anthony and Julius Cesar Trajano, "Enhancing nuclear energy cooperation in ASEAN: Regional norms and challenges", Chapter 7 in Peter Van Ness, Mel Gurtov (eds.) Learning from Fukushima: Nuclear Power in East Asia. Canberra: Australia National University Press., 2017.
- Shea Cotton, Sam Meyer and Anne Pellegrino, CNS Global Incidents and Trafficking Database,
   Monterey, California: James Martin Center for Nonproliferation Studies, 2018.
- Nuclear Threat Initiative, NTI Nuclear Security Index: Building a Framework for Assurance, Accountability, and Action, Washington DC: NTI, 2018.
- David Santoro and Crystal Pryor, "The Road Ahead for Nuclear Governance in the Indo-Asia-Pacific", Issues and Insights Conference Report, Vol, 18, CR 6, Pacific Forum, January 2018.

#### **CLIMATE CHANGE**

#### **NEWS & COMMENTARIES**

Has climate change threat been underestimated?

AFP,

The Straits Times
5 October 2018

Wind turbines contribute to climate change: Study

AFP,

The Channel News Asia 5 October 2018

Key findings in UN report on limiting global warming to 1.5 deg C AFP.

The Straits Times 8 October 2018 Why the Government ignores climate change

Orla Muldoon, The Irish Times 12 October 2018

Low-emission cows: Farming responds to climate warning

Jonathan Watts, The Guardian 12 October 2018

Trump's economic adviser and Marco Rubio question extent of human contribution to climate change

Chris Mooney and Elise Viebeck,

The Washington Post 14 October 2018

#### **SELECTED PUBLICATIONS**

Climate change operational framework 2017–2030: Enhanced actions for low greenhouse gas emissions and climateresilient development

Asian Development Bank, Mandaluyong City: Asian Development Bank

2017

Global warming of 1.5 °C: Summary for Policymakers

Myles Allen, et al, Intergovernmental Panel on Climate Change 2018

#### **EVENTS & ANNOUNCEMENTS**

Sustainable Investment Regional Forum on Forum Europe Sustainable Develop

12 March 2019 Paris, France Regional Forum on Sustainable Development for the UNECE Region

21–22 March 2019 Geneva, Switzerland



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#### **ENERGY SECURITY**

#### **NEWS AND COMMENTARIES**

Ensuring energy security also vital: Tan Wu Meng

Jose Hong, The Straits Times 21 September 2018

'Trade wars' are not good for energy security, Russia's energy minister warns

Holly Ellyatt, CNBC 3 October 2018

IAEA holds table top exercise to strengthen detection and response capabilities in maritime nuclear security events

Catherine Friedly, IAEA News 3 October 2018 Australian government backs coal in defiance of IPCC climate warning

Paul Karp, The Guardian 8 October 2018

Is China powering the future of nuclear?

Scarlett Evans, Power Technology 10 October 2018

Going all out to save energy

Narrendra Aggarwal, The Business Times 11 October 2018



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#### **EVENTS AND ANNOUNCEMENTS**

## Singapore International Energy Week

29 October- 2 November 2018 Singapore RSIS Seminar on Science and Technology Needs in Nuclear Security Detection 20 November 2018

Singapore

#### **SELECTED PUBLICATIONS**

# Securing energy supply and maritime interests: Seeking convergence

Frank Umbach, RSIS Working Paper No. 316, S. Rajaratnam School of International Studies

2018

## Climate change and nuclear power 2018

International Atomic Energy Agency, Vienna: International Atomic Energy Agency 2018

#### **FOOD SECURITY**



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#### **SELECTED PUBLICATIONS**

An ethnographic exploration of food and the city
Marc C.A. Wegerif,
Anthropology Today, Vol. 34,
No. 5
2018

Does urban agriculture improve food security? Examining the nexus of food access and distribution of urban produced foods in the united states: A systematic review

Alana Siegner, Jennifer Sowerwine and Charisma Acey,
Sustainability, Vol. 10, No. 9

#### **NEWS & COMMENTARIES**

#### Food insecurity – Overcoming fragmented food systems and trade wars Paul Teng, RSIS Commentary

27 September 2018

World Food Programme (WFP) and Cote D'ivoire create Centre of Excellence Against Hunger APO Group, Africa News 5 October 2018

Agricultural intelligence: What AI can do for smallholder farmers Elliott Brennan, Food Tank 5 October 2018 Experts: Indigenous seeds key in ensuring food security Rachel Kibui, Daily Nation 7 October 2018

Japan to provide US\$2.7M food assistance to Liberia Daily Observer 9 October 2018

Latest farming technologies focus of Riyadh event
Rashid Hassan,
Arab News
9 October 2018

Brazil detects form of swine fever in remote region Ana Mano, WSAU News 9 October 2018

#### **EVENTS & ANNOUNCEMENTS**

2018

45th Session of the Committee on World Food Security (CFS 45) 15-19 October 2018 Rome, Italy 3rd International Conference on Agricultural Engineering and Food Security
12–13 November 2018
Berlin, Germany



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#### **HEALTH SECURITY**



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#### **NEWS & COMMENTARIES**

Partnerships and politics in public health: A focus on non-communicable diseases

Sylvia Garry and Rachel Thompson, Chatham House 5 October 2018

Sulawesi quake: Rescuers issue public health warning as more bodies found

AFP,

The Straits Times 6 October 2018

Australia launches inquiry into mental health's impact on productivity

Reuters, Channel NewsAsia 7 October 2018 Climate change is bad for your mental health Kate Wheeling, Pacific Standard

8 October 2018

Implement policy changes to complement mental health campaigns

Chow Zi Siong, The Straits Times 9 October 2018

Helping health care workers avoid burnout

Deirdre E. Mylod and Thomas H. Lee, Harvard Business Review

12 October 2018

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Improved tools and strategies for the prevention and control of arboviral diseases: A research-to-policy forum

Piero Olliaro et al., PLOS Neglected Tropical Diseases, Vol. 12, No. 2 2018 Are health systems interventions gender blind? Examining health system reconstruction in conflict affected states

Valerie Percival et al., Globalization and Health, Vol. 14, No. 96 2018

#### **EVENTS & ANNOUNCEMENTS**

Singapore Health and Biomedical Congress

25–27 October 2018 Singapore 8th Annual Global Healthcare Conference

15–16 July 2019 Singapore



Courtesy of Flickr account of ADB and used under a creative commons license.

#### **HUMANITARIAN ASSISTANCE AND DISASTER RELIEF**

#### **NEWS AND COMMENTARIES**

Young girls primary victims of humanitarian strife AFP, Channel NewsAsia 24 September 2018 Marawi's humanitarian challenges: Limits of localising aid Martin Searle, RSIS Commentary 27 September 2018



Courtesy of Flickr account of US Army and used under a creative commons license.

Toilets and tents: A week after Indonesia's tsunami, survivors still need basic aid Ian Morse.

Irin News 4 October 2018

Blockchain for humanitarian aid: Problem or panacea?

Christopher Chen. RSIS Commentary 11 October 2018

New trends in humanitarian assistance - The private turn in humanitarian aid

Jose Ma. Luis P. Montesclaros and Christopher Chen. RSIS Commentary 5 October 2018

The sudden, shocking growth of Hurricane Michael Robinson Mever. The Atlantic 10 October 2018

'Hammers and a hoe': Indonesia keeps diqging as official tsunami search ends Kate Lamb. The Guardian 11 October 2018

Climate change is a major multiplier of disaster losses

Mami Mizutori & Patricia Espinosa, Thomson Reuters Foundation News 11 October 2018

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Simultaneous disasters in Southeast Asia: Is risk outpacing resilience?

Christopher Chen. Foo Yen Ne and Margareth Sembirina. NTS Insight, Singapore: RSIS Centre for Non-Traditional Security Studies 2018

Humanitarian accountability report: How change happens in the humanitarian sector CHS Alliance. Geneva: CHS Alliance 2018

#### **EVENTS & ANNOUNCEMENTS**

NOHA25 Celebrations 14-15 November 2018 Brussels, Belgium

Evaluating complex humanitarian interventions—utilizing evidence-based approach-22-23 November 2018 Oxford, UK

#### TRANSNATIONAL CRIME



Courtesy of Flickr account of USASOC News Service and used under a creative commons license.

Activists 'shocked' after Hong Kong police chiefs block alert to banks on human trafficking-linked transactions

Niall Fraser, South China Morning Post 11 October 2018

Najib Razak unrepentant over 1MDB scandal Financial Times, Nikkei Asian Review 11 October 2018

#### **NEWS & COMMENTARIES**

Facebook, responding to lawsuit, says sex trafficking banned on site Reuters.

Channel News Asia 4 October 2018

Stop, check and call: How Nepal's women 'human interceptors' catch traffickers

Thomson Reuters Foundation. Dhaka Tribune

5 October 2018

The California policeman helping the Philippines tackle child abuse Annie Kellv. The Guardian 8 October 2018

As feds focused on detaining kids, border drug prosecutions plummeted Brad Heath,

USA Today 10 October 2018

#### **SELECTED PUBLICATIONS**

Model guidelines on government measures to prevent trafficking for labour exploitation in

supply chains
OSCE Office of the Special Representative and Cocoordinator for Combatting Trafficking in Human Beings,

Vienna: Organization for Security and Cooperation in Europe

2018

Valentine's Day: Tainted jewelry supply chains Human Rights Watch, London: Human Rights Watch 2018

#### **EVENTS & ANNOUNCEMENTS**

Human Trafficking 101: Victim-centered approach for human trafficking investigations

3-6 December 2018 Tennessee, USA 21st International Conference on Human Trafficking and Migration 27-28 February 2019
Buenos Aires, Argentina

#### WATER SECURITY



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#### **NEWS AND COMMENTARIES**

Asia Water Forum 2018 explores innovative approach to water security Asian Development Bank, Devdiscourse 2 October 2018

Living with water: Embracing cultural adaptions to floods
Mary Anne Ocampo and Tao
Zhang,
Eco-Business
4 October 2018

China's drought losses predicted to soar as planet warms Thomson Reuters Foundation, Eco-Business 4 October 2018 MWSS assures water security Ben Cal, Philippine News Agency 9 October 2018

Who controls the tap? Addressing water security in Asia Paul B. Stares, Council on Foreign Relations 10 October 2018

As groundwater levels plunge, Lahore begins turning off the taps Waqar Mustafa, Thomson Reuters Foundation 10 October 2018

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Yangon Declaration: The Pathway Forward Asia Pacific Water Forum 2017 Beyond scarcity: Water security in the Middle East and North Africa MENA Development Report, Washington, DC: World Bank 2018

#### **EVENTS & ANNOUNCEMENTS**

Our Ocean Conference 2018 29-30 October 2018 Bali, Indonesia Water Security and Climate Change Conference 2018
3–7 December 2018
Nairobi, Kenya



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