

SECOND SOUTHEAST ASIA STRATEGIC DIALOGUE (February 2011)

NUCLEAR CHALLENGES IN
SOUTHEAST ASIA:
PROMOTING COOPERATION
AND CONSENSUS

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ABBREVIATIONS

ADMM+	ASEAN Defence Ministers Meeting +
ASEAN	Association of Southeast Asian Nations
ARF	ASEAN Regional Forum
ARF-ISM	ARF Inter-Sessional Meeting
BATAN	National Nuclear Energy Agency (Indonesia)
BAPETEN	National Nuclear Regulatory Agency (Indonesia)
CSCAP	Council for Security Cooperation in the Asia Pacific
FMCT	Fissile Material Cut-off Treaty
IAEA	International Atomic Energy Agency
NAM	Non-Aligned Movement
NPT	Treaty on the Non-Proliferation of Nuclear Weapons
NWS	Nuclear-Weapon States
NNWS	Non-Nuclear-Weapon States
PSI	Proliferation Security Initiative
SEANWFZ	Southeast Asian Nuclear-Weapon-Free Zone
START	Strategic Arms Reduction Treaty
UAE	United Arab Emirates
UNSCR	United Nations Security Council Resolution
ZOPFAN	Zone of Peace, Freedom, and Neutrality

EXECUTIVE SUMMARY

This workshop was convened to examine Southeast Asian perceptions of nuclear security and nonproliferation challenges, and to explore opportunities for international and regional cooperation to address them.

Historically, these challenges have been few and the need for cooperation small in Southeast Asia. With only a handful of nuclear research reactors and small communities of experts, the region's nuclear capabilities have been very limited. And in the absence of major international threats, governments have faced no incentive to reconsider their traditionally strong commitments to nonproliferation.

However, both of these conditions are changing. In response to rising energy demand, several Southeast Asian governments are now planning to develop substantial nuclear energy sectors by the 2020s. And in recent years, Southeast Asia's insulation from great power rivalries has declined. This is most evident in the South China Sea. But it is also apparent in the debate over ASEAN's ability to remain at the core of Asian multilateral security institutions.

Since an initial workshop in 2009, Southeast Asian interest in nuclear energy has grown and awareness of strategic uncertainty has increased. At the same time, understanding of nuclear security and proliferation dangers has been enhanced, as seven Southeast Asian countries participated in the first Nuclear Security Summit, and a Philippine diplomat chaired the NPT Review Conference.

Nevertheless, most Southeast Asian participants in this workshop still believe that their region neither faces nor presents major nuclear security or proliferation risks. They feel that their governments' commitments to the NPT and SEANWFZ are sufficient guarantees against these dangers. Moreover, they emphasize that all countries in the region (except Burma) have cooperated closely with the IAEA. Political elites in the region view discussions about enrichment and reprocessing as premature.

Participants from outside the region are less sanguine. In their view, Southeast Asian governments have not done enough to prepare for worst-case outcomes. They believe that governments in the region should adopt all major nuclear security and nonproliferation conventions, fulfill their obligations under UNSCR 1540, and initiate discussions about enrichment and reprocessing. Many felt that ASEAN should endorse these steps and even coordinate regional implementation of international standards.

Southeast Asian participants are wary of creating new international obligations or using regional institutions to enforce international agreements. They prefer to rely on voluntary national implementation of internationally agreed standards. However, ASEAN is already coordinating nuclear safety efforts among its members, and their reluctance to embrace regional approaches to nuclear security and nonproliferation reflects a sense that these are less pressing concerns than nuclear safety.

Throughout the workshop, there was vigorous and often critical discussion about ASEAN's ability to facilitate cooperation in support of nuclear security and nonproliferation. But this led to several important conclusions.

One is that ASEAN can act when it reaches consensus. This is especially true at the functional or operational level, and evident in the area of nuclear safety. However, nuclear security and nonproliferation are not yet seen as pressing issues for the region, so there is no consensus among countries that regional action is required.

Second, even when a consensus exists among ASEAN members, the Association itself may not be the ideal forum through which to act. It simply lacks the expertise and resources that international institutions already possess.

Third, a lack of cooperation within the ASEAN framework should not be taken as evidence that ASEAN members are unwilling to cooperate at all. When a broad consensus exists that action is needed, but regional capabilities are limited, members are likely to cooperate with internationally recognized institutions that can offer expertise, resources, and legitimacy. Indeed, all ASEAN members (except Burma) are strongly inclined to cooperate closely with the IAEA.

Finally, even when ASEAN lacks technical and financial resources, the Association can still play a critical role in facilitating cooperation by endorsing internationally agreed standards, agreements, and commitments. However, there is little support in the region for ASEAN to coordinate regional implementation of international standards.

For the future, several issues merit further attention. One concerns the future of SEANWFZ. The NWS have raised expectations in the region that they will agree to an amended protocol in the near term. This would provide a basis for expanded cooperation on nuclear proliferation. However, awareness is growing in Southeast Asia that the treaty under which SEANWFZ was established may need to be updated in order to address contemporary WMD challenges.

Another is NWS support for disarmament, since there was a widespread feeling in Southeast Asia that recent progress on nonproliferation was made possible by NWS progress on disarmament.

The last is the gap between regional and international priorities on two critical issues: discussion of enrichment and reprocessing, and concrete steps to address the dangers of nuclear proliferation and nuclear security. In both cases, there is less enthusiasm in Southeast Asia than globally.

BACKGROUND

This report summarizes the presentations, discussion, and findings of the conference, which was convened by Dr. Michael Malley, a lecturer at the Naval Postgraduate School and Dr. Tanya Ogilvie-White, a senior lecturer at the University of Canterbury.

This conference, the second in a series, was intended to assess emerging trends in Southeast Asia that may increase the probability of nuclear proliferation in previously unanticipated ways. In particular, it was intended to gauge Southeast Asian perceptions and understandings of these trends, including the possibly widespread use of nuclear energy amid growing strategic uncertainty in the region.

Because these trends are emerging ones, and their potential interactions are complex, the conveners purposely selected participants with expertise in a wide range of scientific and policy fields related to nuclear energy, nonproliferation, and regional security. Participants were drawn from all major countries in Southeast Asia, as well as Australia, India, New Zealand, and the United States.

About half of the participants took part in a previous conference, held in 2009, so the discussions that took place during this conference represent the continuation of a dialogue that began over a year earlier.

In both conferences, participants assessed Southeast Asian nuclear programs and nonproliferation policies. However, the 2011 meeting considered a set of issues that the 2009 meeting had identified for further discussion: the impact of great power rivalry on Southeast Asia, and the relevance to the region of international efforts to address nuclear proliferation, security, and disarmament.

KEY FINDINGS

Session One: Nuclear Power Plans in Southeast Asia

- The nuclear energy plans of Vietnam, Indonesia, and Malaysia continue apace, while Thailand has taken a step back from its previous plans. The primary motivating factor for nuclear energy development is energy security, as states seek to increase and diversify their energy supplies.
- However, observers from outside the region believe some countries may be motivated by the pursuit of political prestige as much as economic considerations.
- Effective nuclear energy cooperation under the purview of ASEAN is likely to develop slowly. Governments already cooperate closely with the IAEA and see much less benefit to cooperating with each other.

Session Two: Nuclear Dangers

- Within the region, there is little concern that any country's nuclear power plans will provoke concern among its neighbors. However, observers from outside the region expect countries to watch each other's nuclear energy development very closely, and they warned that any decision to embark on indigenous enrichment or reprocessing would be considered significant.
- Whether nuclear energy aspirants should pursue UAE-style nuclear cooperation agreements is controversial in the region. Some feel the discussion is premature; others believe that restrictions on indigenous enrichment and reprocessing would only be acceptable in the context of reciprocal concessions by the NWS.
- Evidence that Myanmar is cheating on its nonproliferation obligations is compelling, but its program is small and at the prototype stage. This problem could be addressed by cutting IAEA technical cooperation and increasing pressure from neighbors (perhaps including a SEANWFZ fact-finding mission). However, there is little enthusiasm in the region for such steps.
- There is still some resistance in the region to UN Security Council Resolution 1540. However, states are becoming more willing to seek assistance to plug capacity gaps (for example, in policing borders and identifying dual-use items).
- There are concerns in the region that nuclear security is becoming a "fourth pillar" of the NPT. There is a deficit of trust on the issue of the right to peaceful uses of nuclear energy and corresponding obligations on nuclear weapons states to disarm.

Session Three: Great Power Rivalry and Regional Security

- Participants from within the region expressed little concern about the strategic implications for Southeast Asia of the rise of China and India. Observers from outside the region worried that Southeast Asians have a rose-tinted view of the ability of regional institutions to mitigate proliferation pressures, especially those created by China's military expansion and growing regional assertiveness.
- Vocal U.S. support for Southeast Asia in the South China Sea dispute may be creating expectations among some Southeast Asia countries that the United States would come to their aid if China adopted a more aggressive policy.
- The ASEAN Regional Forum is not necessarily regarded as the appropriate forum to promote Asia-Pacific security cooperation. Some in the region believe other regional organizations may be "more efficient" due to their smaller membership.
- It could be argued that Southeast Asian states are taking a "self-help" approach to their strategic security, through conventional hedging and the use of regional organizations. However, it is not yet clear that nuclear energy development is a part of this self-help strategy.

Session Four: Dealing with WMD Challenges

- There is a common perception in the region that WMD threats are much less urgent than other challenges, including economic development and internal security.
- This underpins the view that security policies should not focus on external defense or hard security issues, but on creating stability through prosperity and human security at both the national and regional levels.
- Regional security institutions, including the ASEAN Regional Forum, are not robust enough to provide frameworks for effective counter-WMD cooperation.
- PSI is more effective than regional institutions, but most countries in the region remain distrustful of institutions that are neither ASEAN-related nor UN-sanctioned.
- Some participants from the region suggested that functional cooperation on nuclear security might have advanced further than strategic agreement on these issues.

Session Five: Prospects for Cooperation – International Initiatives

- There is still some wariness in Southeast Asia over U.S.-led plurilateral nonproliferation initiatives, such as PSI. Most states in the region maintain the NAM position that there is no need to participate.

- Most states in Southeast Asia are strongly committed to the NPT, SEANWFZ and IAEA, and regard these institutions as the keys to nonproliferation in Southeast Asia.
- However, significant challenges exist. SEANWFZ is in danger of becoming obsolete unless it is updated to address 21st century issues. New forums and arrangements (such as the working group on high level waste management) are needed, and ASEAN needs to develop a concrete plan to implement the 2010 NPT Review Conference “Action Plan.”
- There is no “ASEAN position” regarding multilateral nuclear fuel cycle proposals, and none is likely to emerge. States in the region regard discussions about the fuel cycle as premature.
- ASEAN has not considered how it would deal with a case of withdrawal from the NPT. There are no provisions for calling an emergency meeting if this were to occur in Southeast Asia. Some states in the region believe the option for withdrawal from the NPT under Article X is not appropriate so there could be some movement on this in future.

Session Six: Prospects for Cooperation – Regional Initiatives

- ASEAN is not synonymous with “Southeast Asia.” A lack of cooperation within ASEAN institutions on nuclear issues does not mean countries in the region are unwilling to address them cooperatively. In fact, they often prefer to do so through the IAEA or the UN.
- It important to be realistic about ASEAN’s limits. When it comes to WMD issues, ASEAN members look to the Western members of ARF to deal with them because the former have neither the capacity nor the interest, whereas the latter have both.
- To date, SEANWFZ has been more symbolic than substantial. Implementation of the 2007 “Plan of Action” would transform it into a more practical agreement, but this is tied to NWS signing the Protocol to the Bangkok Treaty, which they have not yet done.
- Widespread interest in the development of nuclear energy creates new opportunities for regional cooperation, especially in human resource development, fuel supply, and radioactive waste management.
- Cooperation in these areas could strengthen the economic and security pillars in the ASEAN Community that the region plans to form by 2015.

PANEL PRESENTATIONS AND DISCUSSION

Session One: Nuclear Power Plans in Southeast Asia

Dr. Carolina Hernandez (University of the Philippines) chaired the opening panel, which included presentations by Dr. Chang Youngho (Rajaratnam School of International Studies, Singapore), Dr. Ferhat Aziz (National Nuclear Energy Agency, Indonesia), Dr. Noramly Bin Muslim (Atomic Energy Licensing Board, Malaysia), and Dr. Ta Minh Tuan (Diplomatic Academy of Vietnam).

The opening session examined the growing demand for energy in Southeast Asia, and the place of nuclear energy in governments' efforts to satisfy this demand. To help participants understand the context in which several Southeast Asian countries are considering nuclear energy, Chang Youngho offered an overview of their energy policies. Across the region, he said, governments seek to diversify their sources of energy in order to meet rising demand and enhance their own energy security. At this time, all countries rely heavily on fossil fuels and none relies on nuclear energy.

In his view, nuclear energy is the leading alternative to fossil fuels, but energy diversification policies may also include solar, wind, hydro, geothermal, and biomass. However, countries face significant barriers to exploiting the full range of options. Among these, Dr. Chang listed a lack of experience with key technologies; a lack of manpower for the operation of nuclear power plants; a lack of funding for large energy projects; underdeveloped policy frameworks for dealing with nuclear power; a lack of institutional, financial and technical structures to promote renewable energy options; reliance on national rather than regional power grids; and a lack of private sector participation.

The second panelist was Ferhat Aziz, who spoke about Indonesia's nuclear energy development. Due to rapidly rising demand for electricity, he said, Indonesia needs to triple its generation capacity by 2025. Renewable alternatives are not suitable, he said, because their supply is not stable enough. Moreover, the supplies of some renewable energy sources are located on islands that are distant from the consumers who need energy. As the world's largest archipelagic country, with over 17,000 islands, Indonesia faces unique challenges in meeting its people's demand for energy. To serve the major population centers, he said that nuclear power remained the best option over the long term.

Dr. Aziz noted that the government has conducted feasibility studies and identified potential nuclear reactor locations. However, this has been met with opposition from community leaders and social interest groups, namely in Muria (Central Java) where protests have delayed

further progress. In addition to further outreach to the community, the next steps the next step will involve working with the IAEA to perform an Integrated Nuclear Infrastructure review, and resolving some outstanding issues regarding the responsibilities of the facility owners. In addition, nuclear human resources development is ongoing through a national team, which includes the Ministry of Energy, Ministry of Research and Technology, BATAN (Atomic Energy Agency), BAPETEN (Nuclear Regulatory Agency), and universities.

Next, Noramly bin Muslim spoke about the preparations Malaysia is making to establish its own nuclear power industry. At the behest of Malaysia's current Prime Minister, he said, the country has a stated goal of operationalizing a nuclear energy infrastructure by July 2021. This goal comes hard on the heels of the country's announcement that by 2019 conventional energy supplies will no longer be sufficient to meet demand.

In early 2011, the Malaysian nuclear power corporation was formed, and Malaysia aims to have its first nuclear power plant ready within a decade. This new corporation has three objectives: to plan and coordinate the implementation of the nuclear power plant; to ensure that infrastructure meets IAEA requirements; and to select the owner and operator of the nuclear power plant. In order to meet these goals, the government must overcome several challenges. Among these, Dr. Noramly highlighted the difficulty of winning public acceptance, financing the project, conducting feasibility studies and formally selecting plant sites, as well as adhering to international norms and regulations associated with nuclear power.

In the session's final presentation, Ta Minh Tuan focused on the often-overlooked issue of nuclear security in Southeast Asia, which, he said, would grow in importance as countries develop nuclear power. He noted that governments in the region have tended to focus more heavily on nuclear safety issues, while neglecting nuclear security. Opponents of nuclear power, who raise concerns about the safety of nuclear reactors, have reinforced this tendency. In addition, he noted, there is a paucity of publications about nuclear security by Southeast Asian experts.

The problem is compounded by the perception that nuclear power is not an immediate problem. Therefore, he said, many people adopt an attitude of "let's wait and see what happens." At the official level, this attitude is reflected in the reluctance of governments in the region to sign or ratify international conventions dealing with nuclear security. In fact, the SEANWFZ omits any implementation of nuclear security cooperation or policies.

Dr. Tuan went on to address the threats to nuclear security posed by non-state actors and illicit networks in the region. Southeast Asia is a major transshipment point for dual-use items, he noted, and remains weak in its ability to effectively enforce freight inspections. He concluded

his presentation by stressing the need for change in the perceptions of nuclear security in Southeast Asia, increased focus on securing nuclear material, collective signing and ratification of conventions that deal with nuclear security, and revising of the SEANWFZ to include requirements for nuclear security.

Discussion

The discussion session began with a question on whether rivalry is driving the need or desire for nuclear energy. There was some agreement among Southeast Asian participants that this was not the case. One participant remarked, “Whoever builds the first nuclear power plant will share that energy with others.”

This led others to question why all countries in the region aren’t buying into regional cooperation from the beginning, if there is no rivalry among countries. There was general agreement that any rivalry on this issue is commercial rather than political, that the need for nuclear power in Southeast Asia was genuinely economic, and that is not motivated by prestige factors. As a speaker from the region commented, “Vietnam and Malaysia, for example, need a lot of power and quickly – by 2019, Malaysia’s demand will exceed its supply. We have to choose a nuclear power program. With our current conventional power program, we sell power to Thailand and Singapore, and vice versa. Malaysia imports power during the day, and exports to Thailand at night. We cooperate—the rivalry is commercial, not political.” Similarly, other participants remarked that when ASEAN states started to build nuclear research reactors, this was supposed to be the beginning of the expansion of nuclear technology. Through this development, states in the region have gained nuclear experience. The motivation has never been political, one Southeast Asian participant said, and noted, “When[ever] states began to look at nuclear power, it was because there was a need for it [i.e., energy].”

However, a participant from outside the region commented that, “It does seem like there is a race to be the first to build a nuclear reactor in the region,” adding that “while it may not be rivalry, it also doesn’t look like cooperation—it looks like nuclear technology is being considered on the basis of national pride and confidence, which may impact on and hinder cooperation.”

One participant questioned why Southeast Asian states were interested in nuclear energy in particular, and whether this technology was appropriate for the region. Some participants stated that hydropower also has great potential, but unless the ASEAN power grid is connected and the energy shared, no energy options will reach their full potential. However, another consideration is energy security: “if we buy from our neighbors, the supply is not secure. This is

why we consider nuclear power plants.” To some, this reinforced the sense of rivalry among countries in the region.

On the subject of Dr. Tuan’s presentation, one participant commented, “The problem is that we don’t know how to work together on nuclear security. The [ASEAN Regional Forum Inter-Sessional Meeting (ARF-ISM)] body took two years to be established, and had to drop the word ‘security.’ Energy ministers are only concerned about energy production, not security of facilities and materials. But mostly, we [in the region] are afraid of bureaucratic paperwork, which is why we don’t sign as many treaties and conventions.

Session Two: Nuclear Dangers

Session Two was chaired by Dr. Tan See Seng (Rajaratnam School of International Studies, Singapore). Presentations were made by Dr. Maria Rost Rublee (University of Auckland, New Zealand), Mr. Robert Kelley (Stockholm International Peace Research Institute, Sweden), and Dr. Tanya Ogilvie-White (University of Canterbury, New Zealand).

In this panel, participants were asked to consider the full range of nuclear dangers that exist in the region, or are likely to arise in the future. In particular, panelists were asked to examine how assessments of these dangers is changing, and what types of developments could affect perceptions of these dangers in the future? More narrowly, the panel also considered whether Myanmar presents a nuclear proliferation threat.

Maria Rost Rublee began the session with an examination of the main factors that might shape Southeast Asian perceptions of nuclear danger. In her view, there are three main categories of contributing factors: the nascent security community in ASEAN; national nuclear energy policies; and Australia’s dominant position in the region.

The creation of a security community, she argued, could be an antidote to proliferation, as the regulation of behavior creates stability among community members. Relationship building increases trust and reduces threat perceptions, which will be important as the region embarks on nuclear energy development. She also noted that the conduct of national nuclear energy policies acts as a signal to other states about future intentions, which feed into the global nonproliferation regime. If Australia develops nuclear power, its actions could increase threat perceptions in Southeast Asia, especially for its closer neighbors. If states such as Indonesia react, there could be a snowball response. In terms of existing nuclear energy plans, states in the region need to be conscious that their route to nuclear energy development will be watched very closely by their neighbors and by the wider international community for any signs of military intentions. Any

decision to embark on indigenous enrichment or reprocessing would be considered significant, whether or not the decision is driven by energy considerations.

Robert Kelley offered a detailed examination of evidence about a possible nuclear weapons program in Burma. According to Kelley, who has written extensively on this subject, Burma is cheating on its nonproliferation obligations, but its program is small and at the prototype stage. In 2010, images emerged of Burmese nuclear fuel cycle components, along with information on the intent to build a reactor, enrich uranium and develop weapons. To respond to Burma, he argued, the IAEA needs to be strengthened; IAEA technical cooperation aid to Burma (which was valued at \$1.3 billion 2008-09) should be cut; and pressure from ASEAN should be increased.

Tanya Ogilvie-White outlined nuclear security challenges in Southeast Asia, which she argued are significant and growing. Southeast Asia is a region of economic dynamism with some of world's biggest trade routes and transit points. There is widespread use of nuclear technology and growing nuclear infrastructure in the region (nuclear energy programmes will increase the potential for illicit trade in sensitive nuclear related materials). The region has a geography of long, difficult maritime and land borders, which are difficult to patrol. In addition, there is a culture of lax border controls and tourist-friendly visa requirements (especially in Thailand) and network of dynamic multi-product illicit trafficking networks, which countries in the region are having difficulty shutting down. Terrorist groups are known to operate in the region, often using existing criminal networks to operate (those involved in these networks are entrepreneurial in their approach, and would be willing to acquire any materials for the right price). More states in the region recognise these vulnerabilities, which are significant for all WMD controls. But there is still some resistance to Resolution 1540. She noted that, despite this, there has been progress in bilateral nuclear security cooperation with the IAEA. Her main point was that nuclear security steps are being taken, even if ASEAN itself does not often refer to the language of Resolution 1540 (for political reasons).

Discussion

The second discussion session began with a series of questions about Southeast Asian countries' failure to sign nuclear security instruments and conventions: Why haven't they signed them? Is it due to political baggage and slow political processes? Do states not see signing these conventions as buying real security? Are they too costly to implement?

From the perspective of those from outside the region, it seemed that there is a lot of direct but quiet cooperation between Southeast Asian countries and the IAEA when those countries identify capacity gaps that urgently need to be filled. Filling these gaps rather than

signing international agreements appears to be their top priority. Signing conventions involves a lot of paperwork and is labor intensive. Differing priorities was also perceived to be one of the reasons that states had not discussed nuclear security instruments: nuclear security and nonproliferation are not very high on their national agendas.

However, one speaker note that this may be changing: “When 1540 was first passed, states were asked to identify their own gaps. Malaysia proudly declared: ‘we don’t need any assistance—we can offer assistance to others.’ This was actually nonsense, given Malaysia’s capacity problems. More recently, Malaysia provided a detailed report to the 1540 Committee that actually identified its own gaps for the first time, which shows a significant change in attitude. The assistance clause in 1540 is very clear, and donor states are willing to throw money at it. States in Southeast Asia are now much more willing than they initially were to identify gaps, for example, in policing borders, identifying dual-use items; and they are more willing to accept money to help plug these gaps. “

From the perspective of Southeast Asian participants, lack of progress on nuclear security can be attributed simply to a lack of expertise and lack of experience. “Now that nuclear security is more of a pressing matter, we have to go for it. Malaysia will be signing a few [conventions] in coming years,” one participant said.

Although some participants found the evidence on Burma’s nuclear program compelling, one participant took issue with the idea that the Burmese government is doing things secretly that could be done openly. “They would probably buy candy bars this way,” he said. He asked for further elaboration on Kelley’s comment that the U.S. State Department wouldn’t agree with his assessment. Kelley responded that he had presented information provided by the Burmese defectors to the U.S. state department, foreign correspondents club, and others, and had only received a lukewarm response.

Another participant explained that Indonesia’s attitude to the Burma revelations is also interesting: in Jakarta there is the perception that the “talk of a Burmese nuclear program can’t be true, because Burma has signed the NPT. The IAEA has wonderful tools, this can’t be happening.”

In response, it was argued that the IAEA is not the right organization to deal with Burma. “They are now in the process of another letter exchange, but the IAEA doesn’t have any power. The IAEA has already been denied entry by Burma.” Others agreed that based on the bad experience with the DPRK, the IAEA should be cutting IAEA technical cooperation assistance to Burma now, rather than waiting until it’s too late.

The discussion then moved toward the question of how the Burma issue *could* be addressed: “If the IAEA has no authority, and has been rebuffed 3 times by the Burmese government, what would be a non-U.S. / non-Myanmar mechanism or avenue where this issue could be raised, discussed and some sort of agreement reached?”

Suggestions from participants included a broad-scope WMD-issues unit within the UN, and existing provisions under SEANWFZ that allow fact-finding and clarification-seeking. So far, however, no SEANWFZ members have considered this option.

A member of the panel agreed that the evidence was compelling, that it seems as though the Burmese government has the intention, but not the capability to acquire nuclear weapons. However, in looking at the success of the Burmese nuclear program, it is useful to compare it to that of Iraq. In Iraq, almost all the progress happened within the last few years. The program was doing badly, and then was suddenly fixed.

In the discussion on nuclear security, a number of participants noted that the three pillars of the NPT could not be viewed in isolation from one another. They also expressed concerns that nuclear security is becoming a “fourth pillar,” to which non-nuclear states have never agreed. The point was made that there is a deficit of trust on the issue of the right to peaceful uses of nuclear energy and corresponding obligations on nuclear weapons states to disarm. Developing states get a raw deal, the speaker said, because they are being put under pressure to take on more nonproliferation and nuclear security obligations when states with nuclear weapons are not upholding their end of the bargain.

In response to this, another participant pointed out that the Obama administration is currently engaged in bridge-building efforts to prove that it is serious about disarmament, and there have been some positive results, such as New START. But the question is: why are these efforts not appreciated? What would it take to boost political will on the part of NNWS to adhere to stronger nuclear security and nonproliferation measures? That’s an open question at the moment.

Reactions to Rublee’s paper focused on the issues of enrichment and reprocessing, and whether states should be pursuing UAE-style nuclear cooperation agreements. One participant stated “in talking about nonproliferation, we can’t put all the responsibility on Vietnamese-style agreements regarding enrichment and reprocessing rights. FMCT has been languishing for a long time. We can’t just say that states that have signed the NPT are not engaged in nuclear hedging. If there’s no interest in nuclear weapons, and especially in a state where no domestic uranium deposits, wouldn’t it make sense to just say we are not interested in enrichment and reprocessing?” But a participant from Southeast Asia responded that, “we can’t just talk about

nonproliferation and forget about disarmament...We shouldn't overlook the other obligations – for example, negative security assurances, nuclear weapons free zones. Everyone has to abide by the promises that they have made.”

However, as another participant pointed out, “the ‘123 agreement’ (Vietnam-U.S. nuclear cooperation agreement) has not yet been signed, it is still in negotiation. The draft has been completed, but only a few people have seen it. So how could foreign observers know what the text is about? Most of the text is standard, there are no kinds of loopholes or opportunities to do enrichment and reprocessing.”

Session Three: Great Power Rivalry and Regional Security

Dr. Michael Malley (Center for Contemporary Conflict, USA) chaired the third session, with presentations by Dr. Raja Mohan (The Indian Express, New Delhi), Dr. Noel Morada (University of Queensland, Australia), and Dr. Robert Ayson (Victoria University of Wellington, New Zealand).

The context for the third session was the continued growth of great power rivalry in Southeast Asia. Panelists were asked to consider how this rivalry is shaping the security policies of states in the region and whether it affects their perceptions of nuclear dangers

Raja Mohan began the third session by discussing the broader political context that shapes responses to nuclear issues within the region. In particular, he argued that the rise of China and the emergence of India are shifting the balance of power from West to East. This strategic shift affects all facets of the discussion in Asia about nuclear issues, including the role of extended deterrence; the debate on arms control and disarmament; the rise of Chinese sea-based nuclear capabilities; and the potential for spoilers within ASEAN.

With the second nuclear age centered on Asia, he asked, how will countries in Southeast Asia respond to this shift? Can Southeast Asia continue to isolate itself from great power rivalry? He suggested that there is a lack of awareness in Southeast Asia of the strategic implications of this power shift, and a rose-tinted view of the ability of regional institutions to mitigate proliferation pressures (especially pressures created by China's military expansion and growing regional assertiveness). In his view, Southeast Asia is in for a rude awakening, unless the level of strategic awareness increases.

Noel Morada, the second speaker, focused on multilateral approaches to security in Southeast Asia. He outlined some of the tensions created by China's growing assertiveness, including the spat between the United States and China over the South China Sea at the ADMM+ in Hanoi in October 2010. He wondered whether Clinton's remarks had created

expectations among some Southeast Asia countries that the U.S. would come to their aid if China adopted a more aggressive policy. He raised questions over whether future U.S. administrations would remain as engaged in the region, and what the implication of a U.S. pull back would be for regional security dynamics.

Morada also argued that the ARF might not be the appropriate forum to promote Asia-Pacific security cooperation, because its membership is too large and its scope too broad. The East Asia summit may be “more efficient” due to its smaller membership, but he noted that U.S. involvement appears to be making China uncomfortable. In terms of nuclear threat perceptions, Morada argued that the most serious threat comes from the possibility of China and India’s nuclear rivalry being played out in the context of the South China Sea dispute.

Robert Ayson examined several hypotheses about the impact of great power rivalry on the security of Southeast Asia. He contended that there is an intrinsic connection between great powers and nuclear proliferation. In the nuclear era, he said, great powers rely on themselves for their own security, and nuclear deterrence plays a central role.

Great power cooperation and competition are having an impact on the security landscape in Southeast Asia specifically and Asia more broadly. Unknowns such as the sustainability of the U.S. nuclear deterrence, the trajectory of India as a great power, and the potential for the exercise of great power rivalry in Southeast Asia all impact the security landscape. Finally, both foreign and security policy in states in Southeast Asia are likely to focus more intensely on the great power race, namely the U.S. and China. Mr. Ayson posited that Southeast Asia was engaged in the pursuit of “self-help,” through conventional hedging and the use of regional organizations, and questioned whether nuclear energy development a part of this strategy.

Discussion

The first comment of the discussion concerned the degree to which great powers influence the international system, and the extent to which norms, treaties and international organizations govern relations. One participant, who took exception to the uncompromising and narrow realpolitik of Mohan’s paper in particular, declared that: “The NPT is not just great powers dictating the way that they want things to be; it was a product of substantial negotiations. International institutions and norms take on a life of their own—agents create the structure, but then the structure begins to shape the agents and their actions. As such, the NPT takes on a life of its own, and a meaning of its own. It can’t simply be changed on the whim of the great powers.”

Another participant remarked that treaties often do reflect the interests of the great powers. Even though the smaller states were involved in NPT negotiations, they only achieved

minor victories. Article IV was “a crumb.” He noted that the NPT is not the same as it was in 1970. “It has responded to changes and has evolved. There are loopholes, and these need to be dealt with practically – through initiatives like the PSI.”

It was also noted that the original premise of the NPT has become more difficult to enforce as nuclear technology has spread. “We need to devise a more practical system, instead of just sticking to the original treaty.”

In response, it was argued that the Iranian case is not problematic just because there are loopholes in the NPT – there are a whole host of reasons the Iranian nuclear issue has become so intractable. The same participant argued that every article of the NPT is very important and the Treaty as a whole should be seen as an evolving, regime-building process. There is a Review Conference every five years where members are supposed to review the NPT. This mechanism is very important because it provides a forum where members can bring issues for discussion and strengthen the Treaty.

In light of this, another participant suggested that states in Southeast Asia should sit down and talk about what they are going to do about reprocessing and enrichment, for example, “rather sit and wait for the answer to come from above.”

On the idea that Japan might end its threshold status and develop nuclear weapons, one participant argued strongly that this has been written about extensively, and the conclusion in the literature is that Japan is not going to go nuclear anytime soon because of a number of factors, including that it has a parliamentary system rather than a presidency, and that the nuclear industry is largely private.

The participant who suggested that Japan might take the nuclear option responded: “We should always be open to the black swan emerging. There has been a generational change in Japan, and the new generation does not have the experience of WWII. Right wing parties may exploit threats, traditional nationalism and the rivalry between Japan and China. The possibility of Japan taking the nuclear weapons option might be a remote one, but we should not rule it out completely.”

The definition of a “great power” sparked further debate. One participant noted that if the term is defined as a state that has the ability to defend itself, there might not be any at all. A panel member replied that he was aware of the limitations of great power theories, and they just naturally appealed to him. He stated that great concerns over power dynamics are now evident in Southeast Asia, and “if it matters to them, it matters.”

Another participant asserted that ASEAN has tried to protect itself from great power rivalry. “We want the great powers to work with us. China has accepted SEANWFZ and free trade agreements; it has the home advantage. This doesn’t mean that we want China to dominate the region, which is why we welcome some U.S. regional involvement. We still want Japan to be more active; it is our biggest financial backer. But the problem is that the Japanese prime minister and foreign minister changes every few years, so there is a lack of consistency.”

One participant from the region mused that while ASEAN is in the driver’s seat in Southeast Asia, it may not have a current driver’s license. Southeast Asian states can easily bypass ASEAN when it comes to protecting self-interest. China would not give in to ASEAN on this point, he said. Several participants emphasized the importance of non-nuclear trends, and the positive effects that can be seen in this respect.

One participant opposed the assertion that moves towards the elimination of nuclear weapons, including New START, may have a dangerous, destabilizing effect; that this may lead to others taking up the nuclear option (a reference to the debate on whether Japan will go nuclear as the U.S. nuclear arsenal diminishes). “A number of states have sought to take the ‘nuclear’ out of ‘deterrence,’ and may accept a conventional umbrella as opposed to a nuclear umbrella. Moving towards zero doesn’t necessarily have to have a negative security impact.”

Others asserted that nuclear weapons-free zones have an important normative effect as symbolic statements that put pressure on nuclear weapons states. A participant from outside the region expressed the view that ASEAN is in a healthy state regarding the non-nuclear norm; it is striking, she said, that despite the great power pressures, the norm has survived.

As the discussion moved towards the issue of deterrence, participants wondered how central nuclear weapons are to the concept, and whether it would be possible to achieve effective deterrence without the nuclear dimension. Can we leave the nuclear out of deterrence? “The rise of China raises questions about this. U.S. power is perceived to be declining, and everyone will make their own calculations about what this means for them. The question is one of the relative power balance between the U.S. and China: not the question of extended deterrence.

Session Four: Dealing with WMD Challenges

Dr. Robert Ayson (Victoria University of Wellington, New Zealand) chaired the fourth panel, which included presentations by Dr. Marianne Hanson (University of Queensland, Australia), Dr. Carolina Hernandez (University of the Philippines), Dr. Tan See Seng (Rajaratnam School of International Studies, Singapore), Ms. Angela Woodward (Verification Research, Training and Information Centre, VERTIC), and Mr. Ward Wilson (Center for Nonproliferation Studies).

The theme of session four was the expansion of the nonproliferation regime through numerous multilateral, plurilateral, and bilateral initiatives. Panelists were asked to consider which of these initiatives are most effective and why, and to discuss how the evolving nonproliferation regime is perceived in Southeast Asia.

Marianne Hanson began this session by discussing the impact of global initiatives on developments in Southeast Asia. Throughout 2010, she observed, international nuclear security cooperation appeared to make significant gains. The Nuclear Security Summit process garnered strong Southeast Asian participation, she noted. In addition, regional resistance to participation in PSI appears to be softening, in ways that parallel Southeast Asian views of their 1540 obligations. It may also signal a growing willingness to consider participation in other ad hoc, plurilateral initiatives like PSI. Finally, she noted that negotiations over the SEANWFZ protocol appear to be proceeding in a way that will lead the United States and other nuclear weapons states to become signatories.

However, she also identified areas in which there is a need for further efforts to close loopholes in the NPT. In particular, she argued that it was crucial for Southeast Asian countries to adopt UAE-style limits on nuclear enrichment and reprocessing. The U.S.-India nuclear deal set a poor precedent in this regard. In addition, she observed that even though the issue of nuclear security is gaining traction, much more needs to be done.

Carolina Hernandez reviewed ASEAN's experience with nuclear nonproliferation initiatives in the past. For most of the time since the group was formed in the late 1960s, she said that nonproliferation has not occupied as high a priority in the security agenda of most Southeast Asian states or even in the security agenda of the Association of Southeast Asian Nations (ASEAN) as domestic threats and non-conventional security challenges. However, the region was concerned about the dangers of nuclear proliferation, and sought to address them mainly by isolating the region from great power rivalry. This was evident in its declaration of the region as a "zone of peace, freedom, and neutrality" in the early 1970s, and its adoption of the Bangkok Treaty in the late 1990s to make the region a nuclear weapons-free zone.

She argued that the test of whether SEANWFZ can be further developed and strengthened lies in its implementation under the ASEAN Charter and the blueprint for the ASEAN political-security community. She acknowledged that ASEAN's track record in security cooperation reflects an emphasis on voluntary cooperation without sanctions for non-compliance. However, she also noted that efforts to develop SEANWFZ are "not entirely in the hands of ASEAN member states." They require the active support of the nuclear weapons states, beginning with their accession to the Bangkok Treaty protocol.

Tan See Seng followed with a discussion of how Southeast Asian states are responding to WMD concerns, and whether multilateral and plurilateral initiatives can help to address WMD challenges in a cohesive manner. He identified three main approaches that Southeast Asian governments have taken. One is declaratory, and manifest principally in their adherence to SEANWFZ and the NPT, which he noted are “are important, but clearly limited by design.”

The second is functional, and in this category he placed PSI, the Asian Senior-Level Talks on Nonproliferation (A-STOP), and the Container Security Initiative (CSI). These are more useful for practical purposes, but U.S. dominance of CSI and PSI has led to a cool response from countries in the region. Finally, there are overarching regional institutions, such as the ASEAN Regional Forum and the East Asian Summit. However, these institutions are broad in scope and are vulnerable to ideological and political clashes that hamper progress on narrow issues such as proliferation.

The combination of these approaches is a “messy, inchoate mix,” and unlikely to change. It is also one on which few Southeast Asians “are prepared to count on their own regional institutions as providers much less guarantors of regional security.”

The session’s final presentation broadened the discussion of WMD to include chemical and biological weapons (CBW) challenges. Angela Woodward described the range of challenges to include threats from dual-use materials, equipment, and delivery systems; the comparative ease of development and acquisition of CBW when compared to nuclear weapons; a rapidly evolving biological and chemical weapons convention; and a relatively small epistemic community when compared to the radiological and nuclear weapons field. In Southeast Asia the community of experts is even smaller. Another challenge is that many of the states that do not participate in CBW treaties do not participate in the discourse either.

While the region still needs to overcome significant challenges on the CBW front, there have been some successes. For instance, individualizing state needs through in-country activities, involving regional partners and relevant NGOs in the discussion, demonstrating respect for uniquely national approaches, and effectively communicating have helped ASEAN countries deal with CBW problems. She acknowledged that fewer resources are available to deal with CBW threats compared to nuclear ones, but argued that biological and chemical initiatives in Southeast Asia need to be implemented on regional, sub-regional and national levels in order to be effective.

To address Southeast Asian concerns about the lack of progress on disarmament by nuclear weapons states, Ward Wilson was invited to examine recent developments in U.S. policy. He stated that despite the priority placed on this issue by the Obama administration, and

re-invigorated debate from think tanks and experts, there has been no groundswell of domestic public support for disarmament in the U.S. Because of this, there is little political value in being in favor of disarmament, which limits governmental action on this issue. These domestic constraints help explain why despite the genuine commitment of the Obama administration to its disarmament agenda, progress is slow and hampered by legislative opposition.

Discussion

The discussion opened with support for the assertion that it is very difficult to harmonize security cooperation in Southeast Asia. Although there may be general agreement that a security issue presents a shared challenge, changing the terms of reference within ASEAN is not easy. ASEAN has not yet grasped the importance of thinking through solutions to long-term problems. For example, dealing with spent fuel is seen by some as an issue that will need to be dealt with in the future rather than at present because states are only in the early stages of nuclear development. Of more concern are the immediate issues, such as the economy.

One participant from the region commented that WMD is a relatively new issue for ASEAN. The impetus for discussing this issue never comes from foreign ministries in the region, he said, but from the United States and European Union. Countries from outside the region have even proposed setting up a center of excellence to on export controls, but countries in the region are reluctant to accept the offer because of the costs involved. In general, the Southeast Asian view is that WMD should be handled by the United Nations, not ASEAN.

A participant from outside the region observed that in Southeast Asia there are a lot of layers of activity aimed at promoting regional security cooperation, but it is not clear how much they actually add: “a lot of effort goes in, not much comes out.”

He suggested that ASEAN members should focus on what can actually be achieved in concrete terms. One of the greatest regional weaknesses, he said, has been the lack of enforcement on the control of nuclear materials. This may create an opportunity for states in the region to change the way they cooperate, but only if they recognize it as a shared threat that requires a coordinated response.

When the Khan network was uncovered, he noted, it was found that a key component was made in Malaysia. “If we’re serious about addressing WMD challenges, we should be doing more things that can actually contribute to WMD security rather than creating more big structures.” (This was a reference to the need for more functional, agency-level practical cooperation as opposed to the empty political rhetoric that often dominates elite level discussions in ASEAN).

This comment was followed by the observation that despite the vast contrast between the overarching institutions, and the differing interests of Southeast Asian states, cooperation is still possible. It may even be more effective to have cooperation between a smaller number of states rather than the whole region or all of ARF. If smaller projects may suit regional needs better, are these broader, overarching agreements really necessary?

Another Southeast Asian participant agreed with Dr. Tan's view that the regional preference has been for ad hoc regionalism, and that the result of this preference has been that "we are left with a slew of arrangements that don't cohere together easily." The participant also agreed that in terms of the specific nuclear security challenge, there is growing cooperation at the functional level. But she argued that overarching political frameworks remain important, because they set the stage for effective functional cooperation: political frameworks provide historical context and legitimize practical actions that follow. Each level works together; it's not a question of one or the other.

The point was made that ASEAN will naturally become more proactive on nonproliferation as nuclear energy expands into the region; it will become a priority at a time, and in a way that ASEAN sees fit. The same participant added: "don't sort our problems out for us. ASEAN does not want to be dominated."

Session Five: Prospects for Cooperation – International Initiatives

Tanya Ogilvie-White (University of Canterbury, New Zealand) chaired the fifth panel, with presentations by Johan Saravanamuttu (Institute of Southeast Asian Studies, Singapore), Ta Minh Tuan (Diplomatic Academy of Vietnam), and Febrian Ruddyard (Ministry of Foreign Affairs, Indonesia).

Session five examined Southeast Asian views of international approaches to nuclear nonproliferation and security. Participants were asked to look ahead to the 2012 Nuclear Security Summit and 2015 NPT Review Conference as key events on the international nuclear calendar.

The session began with an examination of Malaysia's evolving approach to nonproliferation. The first panelist, Johan Saravanmuttu, noted that Malaysia has played a key role in shaping ASEAN policy on this issue. In general, he said Malaysian policy on nuclear nonproliferation could be divided into two eras. The first ran from the early 1970s until the late 1990s, and was marked by a concerted effort to promote the creation of a "zone of peace, freedom, and neutrality" (ZOPFAN) in Southeast Asia.

Malaysia initiated this proposal, and hosted the meeting in 1971 during which ASEAN adopted it. ZOPFAN only implicitly rejected the introduction of nuclear weapons into the region,

so in the 1980s Malaysia supported an Indonesian initiative to draft a treaty that would establish a nuclear weapons-free zone in the region. Malaysia was among the first to sign the treaty in 1995. Over the next decade, Malaysia and ASEAN continued to oppose nuclear proliferation, but neither made significant efforts to implement SEANWFZ.

A second era, according to Saravanamuttu, appears to have begun recently. Following the SCOMI/SCOPE incident in 2004, in which a Malaysian firm was revealed to be connected to the A.Q. Khan network, Malaysia has slowly moved to embrace international nonproliferation norms and protocols in a concrete way. It remains wary of some international initiatives such as PSI, and maintains the Non-Aligned Movement (NAM) position that there is no need to participate in PSI. However, in the past year Malaysia has participated in the Nuclear Security Summit, and passed a Strategic Trade Act designed to prevent illicit proliferation networks from exploiting Malaysia.

Febrian Ruddyard followed with a discussion on the 2010 NPT Review Conference, in which he participated. Indonesia's role in the conference was especially important, since it coordinated the NAM position. The conference, he said, has rightly been hailed as "momentous." In contrast to the 2005 review conference, this one took place in a more "positive international environment," that was made possible by the nuclear weapons states' renewed commitment to nuclear disarmament. The conference itself was marked by an "open, all-inclusive and transparent process of negotiations and consultations," which covered a wide range of issues and led to a consensus final document.

The conference produced several developments that he considered especially important. The first is the commitment of NWS to accelerate concrete steps toward disarmament, and the request that they report back to the Preparatory Committee meeting in 2014. On nonproliferation, he noted that the review conference "underscored the importance of resolving all cases of non-compliance with safeguards obligations in full conformity with the IAEA statute and member states' respective legal obligation," and encouraged all states parties to the NPT to conclude and bring into force the Additional Protocol as soon as possible. [Though he did not mention it, this is especially relevant in Southeast Asia, where only Indonesia and Singapore have ratified and implemented it.] In addition, the conference endorsed the establishment of a nuclear weapons-free zone in the Middle East.

Looking forward to the 2015 review conference, he noted that the NAM countries intend to "vigorously build on" the 2010 conference's outcome document. He said NAM's top priorities include the total elimination of nuclear weapons by 2025; universality of the NPT as soon as possible; commencement of negotiations on a nuclear weapons convention; and commencement

of negotiation “on a legally binding instrument to provide non-nuclear-weapons states with global, unconditional security assurances against the use or threat of use of nuclear weapons.”

The last panelist, Ta Minh Tuan, discussed ASEAN’s role in promoting cooperation in the region on all aspects of nuclear energy, safety, security, and nonproliferation. In particular, he argued that SEANWFZ must be updated to ensure that it does not become obsolete. The international agenda has moved beyond the cold war concerns that motivated ASEAN to establish SEANWFZ, but so far ASEAN has not taken steps to update the terms of the treaty to deal with contemporary proliferation challenges.

He also stressed the importance of supporting new forums and arrangements, such as the working group on high-level waste management, which is convening in Vienna this year (and which Noramly Bin Muslim is chairing). He suggested that by promoting other mechanisms—such as the ASEAN+3 nuclear forums, APEC civil nuclear energy forums, and ARF—ASEAN could build on the modest success of SEANWFZ. But he acknowledged that without great power commitments, it is unlikely that SEANWFZ will be able to reach its full potential. Lastly, he argued that ASEAN must develop a specific action plan based on the NPT Review Conference action plan.

Discussion

The first question from participants concerned the nuclear fuel cycle. Was there any sense at the Review Conference that states considering nuclear energy programs are insistent on their right to full indigenous enrichment and reprocessing capabilities? Was there any sense that they could be willing to support multilateral fuel cycle arrangements? One of the panelists responded that attitudes to multilateral nuclear fuel cycle approaches are complicated, even within NAM. Currently, there is no collective NAM position to submit to Vienna for discussion. There is a current IAEA study on this but NAM has not come to a common position; it is buying time to allow national studies first. There is certainly no “ASEAN position” either, the speaker added, since Southeast Asian governments regard debate over the issue as premature.

One participant asked whether Mohammed ElBaradei’s proposal to remove the option for withdrawal from the NPT makes sense to ASEAN? One of the panelists responded that Article X withdrawal proposals were indeed a sticking point at the 2010 Review Conference. From the perspective of Southeast Asia, the region needs to address the issue of how it would deal with a case of withdrawal from the NPT, as there are currently no provisions for calling an emergency meeting if this were to occur within the region. However, some states in the region do feel that the option for withdrawal from the NPT is not appropriate so there could be some movement on this in future.

There was a series of questions about what steps ASEAN could have taken prior to the Review Conference. “Was there a coherent ASEAN position, even if it was only to support the NAM position? Should there be a role for ASEAN with respect to the action plan?”

In reply, a participant said that a statement from the chair of the SEANWFZ commission had been drafted, as a way of publicizing SEANWFZ to the international community. He was unsure what could be done at the ASEAN level besides trying to convince the nuclear weapons states to sign the protocol to the Bangkok Treaty, but mentioned the upcoming 3rd ARF Inter-Sessional Meeting (ARF-ISM) on nonproliferation. This meeting, he said, would finalize a work plan, which includes items on counter-terrorism, WMD, UNSCR 1540, and preventing a destabilizing arms race in the ASEAN region.

The next comments related to the disarmament side of the Review Conference, and how that relates to other instruments. “If you’re going to be serious about disarmament, it’s going to have to be multilateral rather than bilateral. But getting China to buy in will be a major challenge.”

On the issue of great power involvement, participant from outside Southeast Asia suggested that China has presented itself as the “best” nuclear weapons state, in terms of its statements on disarmament. At the 2010 Review Conference, she noted, China’s statements gave it “a glowing reputation” among NAM members, while the other nuclear weapons states bore the brunt of criticism for their lack of progress on disarmament. Another participant commented that this was a case of clever diplomacy on China’s part, but added that this does not detract from the fact that China is the only one of the five nuclear weapons states that is currently expanding its nuclear capabilities.

Another panel member asserted the need to get nuclear energy and nuclear security-building on the agenda within ASEAN; otherwise, he said, these issues will not receive enough attention. However, the implementation of the 64 action points of the 2010 Review Conference largely depends on national efforts. China announced that it is willing to accept SEANWFZ and sign the protocol, but no action has been taken towards this. In its position papers, it sounds as though it is ready, but it will likely be the last of the NWS to sign.

The panel was asked what they thought about the recent reports in the media that question China’s commitment to its no-first use policy, as it was a topic of interest in the West. They responded that in Vietnam, Malaysia, and Indonesia there had not been much debate or discussion at all. For Vietnam and Malaysia, there are more important foreign policy concerns.

This disjuncture between Western and Southeast Asian attention to China's nuclear weapons policy led to a discussion about the priority of domestic concerns in most Southeast Asian countries, and the limitations these place on foreign policy actions and resources. A participant from the region asked, where do the resources come from for regional or international initiatives when your domestic constituents have more pressing concerns about economic development?

A speaker from outside the region pointed out that some ASEAN states have received external assistance to address security issues that are not necessarily high domestic priorities, e.g., in small arms and light weapons trafficking. There are parallels, the speaker suggested, with the field of WMD, in which external assistance can promote security and development, thereby reducing the apparent tension between the two.

Session Six: Prospects for Cooperation: Regional Initiatives

Professor Marianne Hanson (University of Queensland, Australia) chaired the final panel, with presentations by Ferhat Aziz (National Nuclear Energy Agency, Indonesia), Noramly Bin Muslim (Atomic Energy Licensing Board, Malaysia), David Capie (Victoria University of Wellington, New Zealand), Pavin Chachavalpongpun (Institute of Southeast Asian Studies, Singapore), and Termsak Chalermpanupap (ASEAN Secretariat).

The final session explored the numerous regional initiatives that are underway to tackle nuclear security and safety challenges in Southeast Asia. Panelists were asked to consider how these initiatives are progressing, how the 2012 review of SEANWFZ Plan of Action is likely to shape up, and how regional nonproliferation initiatives can complement international ones.

Ferhat Aziz began the final session with a presentation on Indonesia's nuclear energy plans, and the role that regional cooperation could play. Indonesia has worked with the IAEA on improving the safety and security of its nuclear facilities, and has built up a nuclear science base through BATAN. Multilateral cooperation on nuclear energy, including waste management and fuel supply, could have strong regional benefits. Opening the channels of communication, increased transparency and building mutual cooperation could be a stepping-stone for Southeast Asian regional integration. By working together on nuclear energy issues – safety, security and nonproliferation – could also be a step towards meeting ASEAN commitments to establish a security community by 2015, he concluded.

Noramly Bin Muslim spoke about the increasing concern regarding spent fuel and radioactive waste management in the region. He argued that ASEAN states may not have the capability to manage the back end of the nuclear fuel cycle within their borders, and lack the

economic or technological capabilities to support these activities. He suggested that although many states in Southeast Asia are anxious to get nuclear energy programs up and running, a number of specific issues need to be addressed first. These include increasing the development of information and knowledge management networks, adherence to international treaties and conventions, development of human resources, fuel supply arrangements, consultation on location of sites, the future decommissioning of nuclear facilities and spent fuel and radioactive waste management.

David Capie addressed the issue of regional cooperation in Southeast Asia more broadly. He raised the point that there are a huge number of agreements and commitments in the region that suffer from compliance and implementation problems; this is not exclusive to those related to nuclear issues, and is often the result of a lack of national capacity. He also pointed out that ASEAN is not synonymous with “Southeast Asia”: cooperation does not necessarily have to go through ASEAN. Similarly, Track II dialogue can play an important role in stimulating discussion, and creating opportunities for the development of nuclear security and safety frameworks.

Pavin Chachavalpongpun followed with a discussion of SEANWFZ. What has the plan of action achieved so far? Could SEANWFZ be more vital in a nuclear energy age, and what future role could it play? Are there any alternatives? Pavin suggested that thus far, SEANWFZ has been more symbolic than substantial. However, it has the potential to act as a coordination mechanism on nuclear security and safety issues within the region for science, health and technology agencies. In particular, SEANWFZ could be a starting point for ASEAN dialogue on nuclear issues, including disarmament, global initiatives such as PSI, enrichment and reprocessing, and compliance.

The final presentation was delivered by Termsak Chalermphanupap, who described recent changes in ASEAN’s approach to nuclear nonproliferation. In particular, he focused on fresh efforts reconcile a tension between conflicting articles in the Bangkok Treaty, other efforts to persuade the five permanent members of the U.S. Security Council (P-5) to sign the protocol to the Bangkok Treaty, and the broadening of ASEAN’s nonproliferation commitment to include all types of WMD.

He noted that the Bangkok Treaty, which established the SEANWFZ, has suffered from tension between two provisions. Article 3 requires that each state not permit nuclear weapons within their territory, while Article 7 allows each state to determine on its own whether to permit foreign ships and aircraft—which may be carrying nuclear weapons—to enter its territory. The challenge of reconciling these provisions is greatest for U.S. security partners in the region,

namely the Philippines, Singapore, and Thailand. Recent discussions indicate that progress may be made on this issue during Indonesia's chairmanship of ASEAN.

Accession of the five NPT-recognized NWS to the Bangkok Treaty protocol is a longstanding ASEAN goal. China and ASEAN issued a joint statement in 2004 that confirmed China's willingness to sign the protocol, but the SEANWFZ Commission decided not to invite China to sign, he said, "for doing so would alienate the other four NWS," which continue to object to part of the treaty and the protocol.

He listed three sets of issues that need to be resolved in order to win support from the other four NWS (P-4). One concerns transit rights and port/airfield visits by foreign military vessels and aircraft; this requires reconciling the tensions between Articles 3 and 7. Another and "more difficult issues" is the zone of application. The P-4 object to the inclusion of exclusive economic zones and continental shelves in the territory covered by SEANWFZ. He noted that ASEAN members are "very unlikely [to] curtail the zone application of SEANWFZ, chiefly because they need maximum protection against dumping of radioactive material or other dangerous wastes."

Two other sets of issues that need to be resolved, Termsak said. One is the P-4 objection to text in the treaty protocol that demands the NWS provide a "blanket negative security assurance" against the use of nuclear weapons against third parties in the territory covered by SEANWFZ. The other is P-4 concern that SEANWFZ amounts to an "unlawful exercise of sovereignty" over the high seas.

There are reasons to believe progress on these issues is likely to occur in the near future, he said. One reason is that the P-4 seems to have softened their objections to nuclear weapons-free zones. In this regard, he said ASEAN had taken note of Secretary of State Hillary Clinton's statement during the 2010 NPT Review Conference. In addition, ASEAN has taken steps to speed the process. In 2011, ASEAN foreign ministers "welcomed the U.S. interest to move forward on SEANWFZ and requested Indonesia, as the ASEAN Chair, to work towards resuming direct consultations with the five NWS this year."

Outside of discussions about SEANWFZ, he acknowledged that "WMD has seldom been discussed directly in any ASEAN meeting." Neither the foreign ministers nor defense ministers have sought to address this subject. This led him to conclude that "WMD is still a relatively new issue to ASEAN.

Discussion

The discussion began with a question about reconciling Article 3 (under which states agree not to permit the stationing or transport of nuclear weapons) and Article 7 (under which they are permitted to decide for themselves whether to allow foreign ships and aircraft to visit or pass through their territory) in SEANWFZ. Attendees posed several questions, including how will this actually be resolved? Is it possible to consider that the Chinese would be willing to live with SEANWFZ, while it might affect the U.S. more significantly? A panelist speculated that in the conflict between Article 3 and Article 7, sovereignty would prevail.

A participant remarked on the need to be realistic about what SEANWFZ can aspire to be, noting that it is part of the mechanism *for* disarmament, rather than a disarmament instrument itself. In addition, one needs to be realistic about ASEAN's limits: when it comes to WMD issues, ASEAN members look to the Western members of ARF to deal with them because the former have neither the capacity or the interest to take concrete action, whereas the latter have both.

Another participant stated that a lot of work was done within CSCAP on the Bangkok Treaty, to identify its weaknesses, whether it needed to be revised, and the potential for cooperation between nuclear weapons free zones globally. However, in trying to find out from foreign ministries how the treaty of Rarotonga is implemented and if there is a lot of cooperation, it was found that the treaty was more symbolic than practical, which perhaps sheds an interesting light on nuclear weapons free zone more generally. The origins of treaties can reflect priorities at the time of creation, but this does not necessarily reflect current realities.

The point was made that it is ironic that China has agreed to sign the SEANWFZ protocol, because it knows that unless the other four nuclear weapons states sign, there will be nothing for China to sign at all. A participant from Southeast Asia stated that it is not realistic to expect the nuclear weapons states to sign the protocol in the next few years. He described SEANWFZ as a "political commitment" by ASEAN, and the lack of progress toward implementation affects the Association's credibility. Therefore, he argued, ASEAN cannot wait to take steps toward implementation.

One panelist sought clarification on the process by which the nuclear weapons states would sign the protocol, and whether China's offer to sign had been formally rejected by ASEAN. A Southeast Asian participant replied that ASEAN needs to wait for the other nuclear weapons states to be ready to sign, because ASEAN understands that the protocol must be revised before being signed and wants all NWS to sign an identical protocol. ASEAN informed China of its decision to reject its offer to sign via a joint communiqué in 2004.

It was commented that there seemed to be a greater impetus for functional and technical cooperation and informal Track II dialogue in Southeast Asia rather than more formal elite level political cooperation. One of the panelists agreed. He added that there had been a CSCAP proposal to formally set up a study group on nuclear energy, which would be a sub group of the WMD Study Group (like the Export Controls Experts Group).

In response to criticism from a participant regarding the lack of implementation of the Bangkok Treaty and its 2007 “Plan of Action” within ASEAN, one of a panelist responded that: “we don’t do what we’ve said we won’t do” (i.e. implementation is tied to NWS signing the Protocol, which they have not yet done). However, verification is difficult, because states in the region do not have the tools and capabilities to, for example, verify and monitor whether Chinese or U.S. submarines are passing through their waters.

The discussion concluded with some final remarks from the panel. Noramly remarked that ASEAN is basically an economic forum. In order to improve the quality of life, you must have industry. We started off with conventional energy, he said, and this led to discussions about sharing power through an ASEAN power grid. A lot of things have been done on renewable energy too. More recently, nuclear energy has had increased interest in the power grid.

Termsak highlighted the achievements of SEANWFZ within the region: no nuclear weapons, no nuclear attacks, no dumping of radioactive waste, cooperation with the IAEA, and increased signing of international nuclear agreements. “It is important that as a group, Southeast Asia takes a stand—that we want our region to be free of nuclear weapons and WMD, and that we want support from the world for this.”

Concluding Session: Key Findings and Questions for the Future

In the concluding session, Michael Malley and Tanya Ogilvie-White summarized the views that participants had expressed on three main issues, and identified questions that merit discussion in future workshops.

Emerging Nuclear Challenges

One of the key questions discussed during the workshop was, What kind of challenges are likely to arise as the use of nuclear power becomes more widespread, and as strategic uncertainty increases?

Nuclear safety was the most widely and readily acknowledged challenge, and participants agreed that within official circles in Southeast Asia this challenge is the most widely recognized and accepted one. For the most part, countries prefer to deal with nuclear safety on a national

basis, but in close cooperation with the IAEA. However, a regional approach is emerging within ASEAN under the auspices of the energy ministers.

Nuclear security is considered a relatively new and unfamiliar subject in Southeast Asia, since it falls outside the three pillars of the NPT. As a result, there is little consensus yet among Southeast Asians, whether in this workshop or more generally, about the nature of this challenge or how it should be addressed. There is great uncertainty over how governments should prioritize security threats. However, awareness of these threats is rising, and governments have begun to embrace international initiatives to tackle them, including support for the 1540 committee's work and the Nuclear Security Summit process.

Nuclear proliferation, in the eyes of most Southeast Asians, is not likely to be a major challenge in their region. In particular, none of the participants from Southeast Asia believe that the establishment of civilian nuclear energy programs will increase the chance that governments in the region will seek to acquire nuclear weapons. Likewise, none thought that changes in the regional balance of power would lead governments to seek nuclear weapons. Overwhelmingly, they believed that Southeast Asian governments' commitment to the NPT and SEANWFZ were solid and likely to endure in spite of changes in domestic capabilities or international rivalries. On this point, participants from outside the region were less sanguine.

Cooperation to Meet New Challenges

The second major question addressed during the workshop was, what kinds of cooperation will be needed to meet these challenges? Since individual governments acting alone can meet none of the dangers identified above, cooperation of some sort is necessary.

The protracted discussions about ASEAN that took place throughout the workshop revealed two clear patterns. In the realms of nuclear safety and security, governments prefer to address challenges through national implementation and enforcement of internationally agreed standards. However, they recognize that their own national capacities are limited, and they are prepared to accept aid that is offered to them by international organizations and by developed countries.

Despite recent efforts to enhance cooperation on nuclear energy within ASEAN, the Association's role in these areas is limited. It simply does not have the capacity to assist countries in meeting international standards, let alone set regional ones. But this should not lead outside observers to conclude that ASEAN *members* (in contrast to ASEAN as an *organization*) are reluctant to cooperate. In fact, nearly all ASEAN members (with the notable exception of

Burma) are strongly inclined to cooperate individually with international organizations and countries able to offer assistance directly.

In the area of nuclear proliferation, Southeast Asian governments also recognize the need for cooperation, but prefer a different mode of cooperation. At the global level, they tend to rely heavily on diplomatic endorsement of the nonproliferation regime, particularly its NPT core, and they resist mandatory commitments. Most countries in the region also resist plurilateral initiatives, like PSI, that are not established by international agreements. At the regional level, they approach nonproliferation through SEANWFZ. So far, they have not taken steps to go beyond SEANWFZ. Participants from the region readily acknowledged that the treaty that established the zone needs to be updated, but did not expect changes to occur soon.

ASEAN'S Role

Despite widespread skepticism of ASEAN's ability to act decisively, the discussions during the workshop showed that ASEAN is able to play distinctly constructive roles in issues that concern the main nuclear challenges the region is likely to face.

First, it can endorse international standards, agreements, and commitments, and thereby enhance their legitimacy among ASEAN members. In doing so, ASEAN makes it easier for individual members to take actions to enforce or comply with international agreements.

Second, ASEAN may be able to coordinate regional implementation of international standards. Coordination is less costly than actual implementation and may be feasible and acceptable, especially in the area of nuclear safety.

Third, the Association can pursue one of its traditional roles, confidence building, with respect to emerging nuclear challenges. In particular, it may wish to provide mutual reassurance of benign intent regarding the establishment of new nuclear capabilities.

Finally, the Bangkok Treaty provides a legal basis for ASEAN to pursue roles that it has so far deferred. In particular, it could choose to develop the capacity for verification and monitoring of compliance with the treaty, which contains provisions not just on the well-known SEANWFZ but also on the peaceful use of nuclear energy.

Questions for the Future

Several issues arose that clearly merit further consideration over the next several years. Perhaps the most important concerns the future of SEANWFZ. One question is whether the NWS and ASEAN can agree on changes to the treaty protocol that accommodate each party's

concerns. Most participants felt that this would produce a significant change in the region's security and strengthen the prospects for nonproliferation.

Another question on this issue is whether ASEAN members themselves will seek to update the Bangkok Treaty, either through amendments (unlikely) or new interpretations or annexes (more likely). Participants from the region spoke forthrightly and frankly about the lack of fit between the treaty and contemporary nuclear and other WMD challenges. Will this awareness lead to actual changes?

A second issue is the impact of great power rivalry on security dynamics in Southeast Asia, and especially on the durability of their commitment to nonproliferation. Participants from Southeast Asia overwhelmingly reject the possibility that their governments would soften let alone reverse their opposition to nuclear proliferation. But participants from outside the region, drawing on comparisons with other regions of the world, were not prepared to rule out such a fundamental change. Is such a change really unthinkable? What might strengthen or weaken ASEAN members' stand against proliferation?

Third, Southeast Asian speakers attributed a great deal of recent progress on the NPT and SEANWFZ to progress by the NWS on disarmament. But this raises two questions: If progress toward disarmament slows—and especially if some NWS enhance their nuclear arsenals—how will Southeast Asian commitments to nonproliferation be affected? More broadly, how would the region's security dynamics change?

Fourth, the need for limits on enrichment and reprocessing has been widely discussed internationally, but so far has received little attention in Southeast Asia. Indeed, participants from outside the region felt that it has not been taken seriously in the region. Why not? And what could cause views in the region to change?

Finally, many Southeast Asian participants viewed international initiatives to address nuclear security and proliferation challenges in their region as "premature." Implicit in this judgment is the possibility that such initiatives may become more relevant. What sort of changes could increase their relevance?

WORKSHOP SCHEDULE

NUCLEAR CHALLENGES IN SOUTHEAST ASIA: PROMOTING COOPERATION AND CONSENSUS

Heritage Hotel, Christchurch
15-17 February 2011

Project organized jointly by
Center for Contemporary Conflict, Naval Postgraduate School and
School of Social & Political Sciences, University of Canterbury
with support from
Defense Threat Reduction Agency (DTRA), USA

Tuesday, 15 February 2011

All Day Guest Arrivals

1900 – 2030 Reception/Dinner at Cellar Restaurant, Heritage Hotel

Wednesday, 16 February 2011

0845 – 0900 Registration

0900 – 0915 **Welcome and Overview**

Michael Malley, Naval Postgraduate School

Tanya Ogilvie-White, University of Canterbury and International Institute for
Strategic Studies (IISS)

David Hamon, Defense Threat Reduction Agency

0915 – 1045 **Session One: Nuclear Power Plans**

Context: The nuclear power plans of Southeast Asian states are constantly
evolving. What are the current goals, direction, and pace of development?
Looking ahead, how are these likely to change and what factors are likely to
influence those changes?

Chair: Carolina Hernandez, University of the Philippines

Energy diversification in Southeast Asia – Chang Youngho, Nanyang Technological University

Nuclear energy plans – Ferhat Aziz, National Nuclear Energy Agency, Indonesia; Noramly bin Muslim, Atomic Energy Licensing Board, Malaysia; Ta Minh Tuan, Diplomatic Academy of Vietnam

1045 – 1100 Break

1100 – 1230 **Session Two: Nuclear Dangers**

Context: Assessments of nuclear dangers vary widely among scholars and practitioners, as do state responses to these dangers. How are these assessments changing and what types of developments could influence threat perceptions in future? Does Myanmar present a threat?

Chair: Tan See Seng, Rajaratnam School of International Studies

Proliferation risks – Maria Rublee, University of Auckland; Robert Kelley, Stockholm International Peace Research Institute

Nuclear security challenges – Tanya Ogilvie-White, University of Canterbury

1230 – 1330 Lunch

1330 – 1500 **Session Three: Great Power Rivalry and Regional Security**

Context: Great power rivalry continues to grow in Southeast Asia. To what extent and in what ways is this shaping the security policies of states in the region? Does it have any impact on perceptions of nuclear dangers?

Chair: Michael Malley, Naval Postgraduate School

Speakers: Raja Mohan, *The Indian Express*; Noel Morada, University of Queensland; David Capie, Victoria University of Wellington

1500 – 1515 Break

1530 – 1700 **Session Four: Dealing with WMD Challenges**

Context: The nonproliferation regimes have been expanding via numerous multilateral, plurilateral and bilateral initiatives. Which of these are the most effective and why? How are they perceived in Southeast Asia?

Chair: Robert Ayson, Victoria University of Wellington

Multilateral nonproliferation initiatives – Marianne Hanson, University of Queensland; Carolina Hernandez, University of the Philippines; Tan See Seng, Rajaratnam School of International Studies

Chem-bio security initiatives –Angela Woodward, Verification Research, Training and Information Center (VERTIC)

Disarmament – Ward Wilson, James Martin Center for Nonproliferation Studies

1830 – 2030 Dinner at The Curator’s House

Thursday, 17 February 2011

0915 – 1045 **Session Five: Prospects for Cooperation – International Initiatives**

Context: The 2012 Nuclear Security Summit and 2015 NPT Review Conference are key events on the nuclear calendar. What goals do Southeast Asian countries hope and expect these meetings to achieve? What are the prospects for fuel cycle proposals (front-end vs. back-end) and for strengthened safeguards? What are the chief roadblocks to cooperation?

Chair: Tanya Ogilvie-White, University of Canterbury & IISS

Opportunities for international cooperation - Johan Saravanamuttu, Institute of Southeast Asian Studies; Ta Minh Tuan, Diplomatic Academy of Vietnam
NPT Review Conference look-ahead: Febrian Ruddyard, Ministry of Foreign Affairs, Indonesia

1045 – 1100 Break

1100 – 1230 **Session Six: Prospects for Cooperation – Regional Initiatives**

Context: Numerous regional initiatives are underway in Southeast Asia to tackle nuclear security and safety challenges. How are these progressing? How is the 2012 review of SEANWFZ Plan of Action likely to shape up? How will regional initiatives complement international ones?

Chair: Marianne Hanson, University of Queensland

Regional nonproliferation proposals – Ferhat Aziz, National Nuclear Energy Agency, Indonesia; Noramly bin Muslim, Atomic Energy Licensing Board, Malaysia; Termsak Chalermphanupap, ASEAN Secretariat; Pavin Chachavalpongpun, Institute of Southeast Asian Studies

1230 – 1330 Lunch

1400 – 1430 **Wrap-up**

Michael Malley, Naval Postgraduate School

Tanya Ogilvie-White, University of Canterbury & IISS

1500-2100 Informal discussions followed by dinner

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