

BWC Superweek for East Asia & the Pacific: improving cooperation

The relationship between the Biological Weapons Convention and the other weapons of mass destruction regimes—nuclear and chemical—can be somewhat likened to the story of Cinderella. The nuclear and chemical ‘stepsisters’ have the benefit of large supporting organizations, namely the International Atomic Energy Agency (IAEA) and the Provisional Comprehensive Test Ban Treaty Organization (CTBTO) for nuclear concerns, and the Organization for the Prohibition of Chemical Weapons (OPCW) for chemical weapons. These three organizations are impressive institutions with hundreds of staff and healthy budgets. In contrast, the Biological Weapons Convention (BWC) is supported by a three-person BWC Implementation Support Unit (ISU). The BWC, as the disadvantaged sister, must therefore rely heavily on her fairy godmother, namely, the cooperation and assistance opportunities offered by regional and national actors.

Another challenge faced by our Cinderella is that BWC concerns are usually but one of many issues handled by a lone and overburdened disarmament officer in Foreign Ministries. Nuclear, chemical and conventional weapons disarmament and non-proliferation will often demand and obtain the lion’s share of the officer’s attention. To compound the challenges in the BWC field, there is a wide array of activities, cooperation and assistance on various aspects of biosecurity, biosafety and life sciences undertaken by numerous states and organizations. Coordination among these activities and actors is not necessarily optimized. Furthermore, the relevance of the said activities to the BWC is not often recognized. In the case of the East Asia and Pacific (EAP) region, BWC-related international activity can be broadly classified into four streams:

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Multilateral: activities with the United Nations (UN) and other multilateral bodies.

Inter-regional: cooperation between two regional groups, for example the European Union (EU) and the Association of Southeast Asian Nations (ASEAN).

Regional: activities within the ASEAN Framework, either the Association per se or through the ASEAN Regional Forum (ARF).

Bilateral: one-on-one country-to-country activities.

Another classification can be made regarding each of the actors: inter-governmental, governmental, or civil society.

At the multilateral level, activities are carried out by the UN Security Council Resolution 1540 Committee, the OPCW, and of course the BWC–ISU under the UN Office of Disarmament Affairs (UNODA). More broadly, the work of the World Health Organization (WHO) and the World Animal Health Organization (OIE) should also be considered.

The EU is the regional organization most engaged with ASEAN. The EU's projects for the region include the EU Joint Action for the BWC, which has an emphasis on Confidence Building Measures (CBMs), and the European Commission–Joint Research Council's Pilot Projects and Chemical, Biological, Radiological and Nuclear (CBRN) Center of Excellence for) undertaken in partnership with the UN Inter-Regional Criminal Research Institute. Bilateral cooperation in biosecurity and biosafety among countries in the EAP region is active, particularly with the United States and Australia.

While all the countries of Southeast Asia are members of the Non-Aligned Movement (NAM), one of the three caucuses in the BWC, cooperation mainly takes the form of coordination of positions and statements in Geneva and general discussion on disarmament in the Movement's summits and ministerial meetings.

Within the EAP region, awareness and appreciation of the BWC heightened in the run up to the convention's Seventh

Review Conference (7RC) taking place in December 2011. Among the prompts for this awareness was the series of BWC Regional Workshops jointly organized by Indonesia and Australia, along with the launch of the EU's Joint Action for the BWC in 2009. In addition, President Barack Obama's announcement of a new national biosecurity strategy (also in 2009) placed an emphasis on the BWC, as did the appointment of Ambassador Laura Kennedy as Special Representative for the convention. The US Biosecurity Engagement Program's (BEP) bilateral capacity-building partnerships in the region were also an important factor. In addition, China hosted a BWC Workshop in 2010. Other ongoing disarmament, counter-terrorism, export control, transnational crime and health-related activities were also key motivators.

The OPCW also played an important role, in that its programme of cooperation and assistance for the CWC in the 2000s underscored the need for a holistic approach to policy advancement on WMD/CBRN issues, including the BWC. Civil society activity was also critical in awareness-raising, particularly the organization of regional and national biosecurity and biosafety professional associations, led by the Asia-Pacific Biosafety Association (A-PBA).

The ARF is the key actor for regional security dialogue and cooperation in East Asia and the Pacific. The 28-member Forum, which is mandated to 'foster constructive dialogue and consultation on political and security issues of common interest and concern' encompasses the 10 members of the Association and Australia, Bangladesh, Canada, China, European Union, India, Japan, Democratic Peoples' Republic of Korea, Republic of Korea, Mongolia, New Zealand, Pakistan, Papua New Guinea, Russian Federation, Sri Lanka, Timor Leste, United States and Vietnam.

The Philippines, in 2009, initiated a series of four annual ARF workshops on biological threats in partnership with the United States and later Australia. The themes of the workshops were: first, 'Biological Threat Reduction'; second, 'Biorisk Management'; third, 'Disease Surveillance'; and fourth, 'Detection, Preparedness and Response'. (For further information on the ARF Series, see here.)

For its part, the Philippines also sought to actively support

preparations for the BWC 7RC. Manila, the Philippines' capital, has traditionally placed a high priority in disarmament issues, as recently evidenced by its Presidency of the 2010 Review Conference of the Nuclear Non-Proliferation Treaty (NPT) and Chairmanship of the Meeting of States Parties to the Convention on Certain Conventional Weapons (CCW) in 2012. Save for the Convention on Cluster Munitions (CCM) to which it is a signatory, the country is a state-party to all disarmament treaties.

The Philippine Department of Foreign Affairs (DFA) is Manila's agency charged with the conduct of diplomatic relations. Unless otherwise specified by a particular law or policy, it is the default entity responsible for carrying out treaty obligations.

Up until the mid-2000s, the DFA, particularly its Office of UN and Other International Organizations (UNIO), had prime responsibility for the BWC. The Philippine Permanent Mission to the UN in Geneva is Manila's main external interface with the BWC community and its ISU. Delegations to the BWC's meetings are always manned by Mission officers, with occasional participation from Manila-based experts.

The Mission extensively discussed possible actions to undertake in support of the 7RC with the Geneva BWC Community, starting in 2009. It was noted that there were already numerous activities planned around the world, including seminars and workshops specifically developed for the conference. There were also ongoing activities such as the EU Joint Action, and bilateral cooperation programmes.

VERTIC's counsel on the matter was sought. The Philippines has a long-standing and valued relationship with VERTIC and its experts. In 2009, Mr Scott Spence co-organized a Philippine National Workshop on BWC Legal Implementation in Manila with the Mission and DFA-UNIO, in line with VERTIC's National Implementation programme.

The Philippines' various key stakeholder agencies participated in the activity, including the Departments of Justice, National Defense and Health, and jointly produced a draft BWC Bill. Mr Spence was no stranger to the Philippines and its WMD Community, having also been a member of an

OPCW-US Government Mission to Manila in 2006, which assisted in the preparation of the Philippines' draft CWC Bill. Ms Angela Woodward, from New Zealand, was intimately familiar with the dynamics of the Asia-Pacific region and had also done much work with the Philippines and ASEAN.

In Geneva, members of VERTIC's legal team together with those of the BWC-ISU and the Philippine Mission to the Geneva conferred and brainstormed at the sidelines of the BWC meetings in 2009-10 on the best regional approaches to take on the road to the 7RC. Among the common challenges identified were the limitations in financial resources and the availability of relevant experts, and at the same time, the existence of numerous related projects with evident overlap. It was noted that there already was, in the pipeline, regional consultative and outreach activities by the relevant states and organizations but which did not appear to be sufficiently coordinated. The EU-JA was set to conduct a CBM and National Implementation workshop, the US State Department had plans for a meeting on biosecurity in furtherance of its ongoing BEP, while Australia had intended to hold regional consultations for the RC. Along with valuable input from Ms Karin Hjalmarsson and Mr Sarka Kcrlava, the EU-JA officials based in Geneva, and the ASEAN, Australian and US delegations, we came up with the idea of holding a 'Superweek' around the summer of 2011 which would consolidate, in one location and over one time-period, the various activities planned for the region.

The Superweek approach entailed holding the planned workshops back-to-back, enabling participants to attend all the meetings. Resources would be pooled with efficiency in mind. Two participants from each of the ten ASEAN countries and other requesting ARF countries would be sponsored. This arrangement suited the EU, US and Australia well, as their planned workshops were mutually reinforcing, and would maximize the immersion of participating BWC experts, and provide extensive networking opportunities.

It was hoped that each country's mission would include one officer from the national agency dealing with the BWC and its encompassed issues, and one who would head, or be a member of, the country's 7RC delegation.

The BWC Conference Week (as the Superweek was officially known) was further developed and refined after months of intense coordination among the co-organizers in Geneva, Brussels, Washington DC, Canberra and Manila. The Philippine Government would lead the week as overall Chair with the BWC-ISU as Vice-Chair. Ms Hjalmarsson of the EU Joint Action, Mr. Chris Park of the US State Department and Mr Peter Hooton of the Australian Department of Foreign Affairs and Trade served as Chairs of their respective workshops.

Participants to the Superweek came from a wide spectrum of stakeholder agencies, mainly from foreign affairs, defense, health, and law enforcement. Some were even representing designated national authorities for BWC and other CBRN concerns, demonstrating the advances made in their respective governments on WMD policy.

States participating in the event included Australia, Cambodia, China, Indonesia, Japan, Laos, Malaysia, Myanmar, Philippines, Republic of Korea, Singapore, Thailand, United States and Vietnam. Experts from Norway and the United Kingdom, the UNSCR 1540 Committee, World Health Organization also participated. The Philippine Government provided the meeting secretariat, composed of personnel from the Department of Foreign Affairs (DFA) and the Anti-Terrorism Council (ATC).

The week opened with a dinner reception hosted by the Executive Secretary and ATC Head Mr. Paquito N. Ochoa, Jr (the Executive Secretary is the 'primus inter pares' of government ministers and is analogous to the Cabinet Secretary in other countries). He directs the work of the Philippine Office of the President (OP), of which the ATC is a key coordinating agency. The President of the Philippines, H.E. Benigno Aquino, Jr., followed the proceedings of the Superweek with interest, in line with his pronouncement that the country 'is committed to initiatives by foreign governments and international organizations to fight the proliferation of biological weapons and make the world safer'. Ambassador Guy Ledoux, EU Representative to the Philippines, delivered the opening remarks at the start of the workshop.

Each of the three workshops run during Superweek examined

global, regional and national perspectives and concerns, in the context of the 7RC and overall BWC process.

The first workshop dealt with national implementation of BWC obligations through legislation and administrative and enforcement measures, as well as strengthening of the CBM process. The second workshop dealt with disease surveillance and bioterrorism prevention; and also dual-use science and technology. Workshop 3 focused on the 7RC and universality, a new intersessional process, the ISU, and assistance and cooperation. Participants exchanged views and experiences in an open and lively manner, and developed close professional and personal ties over the course of the week.

VERTIC's role in the Superweek focused on national implementation and the CBM process. A number of delegations also consulted bilaterally with VERTIC's representatives to the Superweek, Ms Woodward and Ms Escariz Leal, on possible cooperation particularly on legislative drafting. I had the honor of also sharing the Philippines' invaluable experiences with VERTIC on the drafting of our own BWC, CWC and Strategic Goods legislation and design of a national implementation process.

What the Superweek achieved

Among the important achievements of the Superweek is that it helped to foster a sense of synergy and improved coordination among the BWC community and related stakeholders in the East Asia and Pacific region. It also demonstrated that while cooperation among the states-parties on the global level is limited by the lowest common denominator of consensus, regional activity is dynamic.

The Superweek also provides a tested template for harmonizing numerous workshop activities involving a common theme and the same target stakeholder audience. In addition, it showed, in a concrete way, how regional and national assets, as well as independent organisations including VERTIC, can be effectively marshaled as 'force multipliers' of the BWC community and ISU. Such support is needed given the BWC regimes limited resources.

The momentum generated in the event helped to invigorate the national implementation and CBM efforts of participat-

ing states, and a sense of cohesiveness among the countries in the region, coming into the 7RC. And although the results of the 7RC did not quite live up to the expectations of many, the East Asia and Pacific region at least presented itself as an active caucus within the BWC community. After the Superweek, the East Asia and Pacific region established a practice of meeting as a group during the BWC's Meetings of Experts and States Parties.

Towards the end of the Manila Superweek, many participants proposed that there should be a follow-up Superweek, and even a 'Megaweek' on one or two cross-cutting WMD/CBRN themes.

A Superweek is also being considered for other regimes, including those focusing on nuclear and radiological weapons. And other multilateral communities are now considering use of the Superweek format, including universalization for the UN Convention on Certain Conventional Weapons.

Indeed, given the introduction of new programmes to the EAP region such as the G-8 Global Partnership on Against the Spread of Weapons and Materials of Mass Destruction, and the EU's CBRN Center of Excellence for Southeast Asia and new JA for the BWC, another coordinating and synergizing Superweek would be in order in the coming year—as a 'grand ball' for our BWC Cinderella. VERTIC, as proved by its invaluable role in the Manila Superweek, can be proud of being a model and best practice of 'Track Two Diplomacy' and as an NGO partner of multilateral processes which is truly attuned to the needs of states. •

JESUS S. DOMINGO

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Blog posts, Oct-Dec 2012

'Syria revisited - international law and the use of biological weapons'
Scott Spence, 5 October 2012

'Man convicted of illegal possession of pufferfish toxin sentenced'
Yasemin Balci, 11 October 2012

'Introducing the candidates'
Andreas Persbo, 18 October 2012

'Nunn-Lugar: A Retrospective?'
Katherine Tajer, 25 October 2012

'Cyber-security, foreign goods and the role of verification'
Katherine Tajer and Larry MacFaul, 2 November 2012

'BWC implementing legislation – let's look at the statistics'
Angela Woodward, 8 November 2012

'Centralizing radioactive waste storage'
Rocio Escauriaza Leal, 15 November 2012

'Disarmament Education and the CTBTO'
Andreas Persbo, 23 November 2012

'Civil society contributions to the operation of the Chemical Weapons Convention'
Scott Spence, 29 November 2012

'Regional trends in the adoption of implementing legislation for the CWC'
Lasha Tvaliashvili with Yasemin Balci, 6 December 2012

'Existential risks and the technological singularity'
David Keir, 14 December 2012

'Notes from the Wilton Park non-proliferation conference'
David Cliff, 20 December 2012

Verification Quotes

I had been a strong advocate for CTR before. But visiting those facilities, seeing the work that so many of you do, seeing these old weapons once aimed at us now being turned into scrap truly brought home how important this work was. This is one of our most important national security programs. And it's a perfect example of the kind of partnerships that we need, working together to meet challenges that no nation can address on its own—US President Barack Obama, speaking on 4 December 2012 about the US-Russian Cooperative Threat Reduction programme that began in 1992 and which is due to expire in June 2013.



US verification goals in Obama's second term

Katherine Tajer, London

Now that a bitter election has been fought and won, US President Obama can refocus on foreign policy. Within a broad spectrum of foreign policy issues, non-proliferation measures may be the real winner of this election, as Barack Obama can finally address his first-term promises without fear of losing second-term votes. Those seeking radical shifts in the President's agenda, however, could potentially be disappointed.

For sure, Iran will continue to be the focal point of Obama's non-proliferation policies. The most recent International Atomic Energy Agency report makes clear that the Iranian government intends to expand its enrichment programme, despite many governments' concerns. Moreover, Iran shows no sign of granting the Agency the access it needs to gain assurance that all material that should be declared has been declared. This leaves the world guessing as to the nature of Iran's nuclear capabilities and intentions. The President has almost no straightforward options to change his course of internationally imposed sanctions and diplomacy, but also seems to have little faith in its continuation. Russia will also receive a great deal of Obama's attention. In this respect, it is common to highlight two main projects: a new treaty on further nuclear arms reductions, but also a triage effort for cooperative threat reduction. However, a wide range of interrelated Russo-American security issues are mitigating progress on these treaties. NATO is at the centre of this tension—Russia wants a legally-binding guarantee that NATO expansion plans will not affect their current deterrence systems, but to date, Washington has only offered verbal assurance.

Russia's current mistrust of America will have a knock-on effect in guaranteeing additional bilateral legislation. The battle for New START may be fresh in Obama's memory, but his effort to ensure a follow-up treaty is essential to cement his legacy in non-proliferation. In a new book, Michael

O'Hanlon and Steven Pifer of the Brookings Institute suggest a new treaty should aim for a total of 2,000 to 2,500—including both strategic and non-strategic (or 'tactical') nuclear weapons. Tactical weapons' limits are a key US goal for a new treaty, and would require a new verification regime. Despite enforcing historical lows for US-Russian weapons, the verification regime would be expected to include more assurances and provisions than before and build upon the requirements of New START. If successful, this process may inform the eventual involvement of other countries' nuclear forces.

On test-ban issues, the 2009 'Prague Speech' highlighted Obama's passion for the Comprehensive Test Ban Treaty (CTBT), but more imminent issues took precedence during the first term. Earlier this year, the National Academies of Science published a report stating that the US is now technically prepared to 'maintain a safe and effective nuclear weapons stockpile without testing and to monitor clandestine nuclear testing abroad'.

The Union of Concerned Scientists (UCS) asserts that ratification would be a step toward resolving current Sino-American tensions, due to the high level of Chinese participation in the project. China has stated that it will pursue ratification if they are informed of America's specific reservations regarding the treaty. Additionally, the verification regime for a ratified CTBT is approaching operational readiness. The international monitoring system is nearing completion, and has recently been subjected to several tests. Moreover, the on-site inspection manual is being reviewed and refined.

Obama strongly supports global zero, and it will be his second term that will determine his contribution to it. However, considering the current landscape of American politics and temperature of US-Russian relations, it remains clear that the president will face many challenges when attempting to deliver on his Prague promises. •

Three convicted for illicit trafficking in Moldova

Jasmin Kaisla, London

In June this year, three men were convicted in Moldova for storing and transporting radioactive material. The three were arrested in August 2010 in Chisinau, where they had been caught with 1.8kg of natural or depleted uranium, which they planned to sell for nine million euros. The organizer and one of the perpetrators of the crime were sentenced to just over one year in prison each, while the other perpetrator was sentenced to 18 months imprisonment.

The three men were convicted in the Court of Appeals in Chisinau under Articles 42 and 292 of the Moldovan Criminal Code. Article 292 criminalizes the production, procurement, processing, storage, transport, use or neutralization of explosives or radioactive material, and punishes these acts with a fine and a maximum of five years' imprisonment. The court established that the three men had stored and transported radioactive material with the intention of selling it, without having obtained the necessary government authorization. Article 42 of the Moldovan Criminal Code criminalizes various forms of participation in a crime, such as organizing, instigating and acting as an accomplice.

This case highlights the need to have national legal measures in place to prevent illicit trafficking in nuclear and other radioactive material. Without the necessary criminal provisions, prosecution of the possession or transport of these materials may not have been possible. Indeed, the possession or transport of nuclear and radioactive material would not be, in itself, illegal.

But by establishing a robust licensing system in law, a country can specify that it is an illegal act to possess or transport nuclear and other radioactive material without proper registration and permits, or in non-compliance with the requirements. Establishment of proportionate penalties for these prohibitions will not only allow for punishment of the offenders, but can also have a deterrent effect.

According to an open source compilation put together in May 2012 by the Terrorism Research Initiative, a think tank

based in Vienna, between 1990 and 2011 there were seven cases of illicit trafficking of nuclear and radioactive material through Moldovan territory or involving smugglers of Moldovan nationality. And in September this year, seven people were arrested in the breakaway region of Transnistria in relation to the illegal possession and trafficking of conventional weapons and as well as uranium.

In recent years Moldova has stepped up its efforts in the fight against the illicit trafficking of nuclear and other radioactive material.

In 2007, Moldova established the National Agency for Regulation of Nuclear and Radiological Activities (NARNRA). Since then, NARNRA has worked on a number of laws and regulations addressing the problem, as well as procedures for state control and supervision of radioactive sources, including registration, licensing, on-site inspection and a national source inventory in line with international standards. •

The legacy of Aum Shinrikyo

Russell Moul and Ryoji Sakai, London

In the city of Matsumoto in 1994, and in the Tokyo subway system in 1995, the doomsday cult Aum Shinrikyo (Supreme Truth) used the lethal nerve agent sarin gas against civilians in attacks that left 19 people dead and thousands injured. On 8 June this year, the final suspect in the Tokyo attack, Katsuya Takahashi, was arrested. Following this, on 21 November, the Japanese Supreme Court upheld the decision to sentence senior Aum Shinrikyo member Seiichi Endo to death. This marks the end of 17 years of police searches and, so far, 188 trials relating to Aum Shinrikyo activities.

Since 1995, according to Japanese press, more than 190 members of the cult have been arrested (not all on charges related to the sarin attacks). A large number, including the cult guru Shoko Asahara (born Chizuo Matsumoto) considered responsible for masterminding the group's activities, were tried under court proceedings and charged with crimes including murder, attempted murder, and kidnapping.

At the time of the attacks, Japan's existing legislation did

not contain provisions prohibiting the production, development, acquisition, stockpiling or transfer of chemical weapons. Furthermore, the mandate for Japanese police to investigate criminal activity related to religious groups, like Aum Shinrikyo, was limited.

Consequently, action needed to be taken to allow prosecutors and police greater powers for investigating Aum Shinrikyo's activities and to prevent future incidents. A clear benefit of criminalising the full range of activities relating to chemical weapons is to enable authorities to prevent these crimes and punish the offenders if they do take place.

Japan's process of enacting legislation for implementing the Chemical Weapons Convention (CWC) had been in preparation since 1993 and was actually pending before parliament at the time of the attack. However, the sarin incidents brought about prompt adoption of the legislation—which otherwise may not have been implemented until entry-into-force of the CWC in 1997, or at some later date.

At present, 89 out of 188 states parties to the CWC have yet to adopt the necessary legislation to implement the CWC. This means that, like Japan in 1995, they will not be able to investigate and prosecute offenders for chemical weapons crimes, but rather only for other offences already included the country's legal framework which do not cover the specific nature of the crimes.

The Tokyo attack highlighted to other countries' security agencies that chemical, biological, radiological and nuclear (CBRN) terrorism by non-state actors was, and is, a real threat. In response, governments and the international community have strengthened efforts to combat CBRN terrorism.

For instance, the US began to fund programmes to train law enforcement personnel and the emergency services to cope with chemical and biological attacks on civilian targets, while more recently the UK carried out a number of simulated chemical attacks on the London Underground (in 2003 and in 2007).

Although Aum Shinrikyo's attacks were focused on Japan, it was, as Ian Reader, Professor of Religious Studies at Lancaster University, recently stated in his article 'Globally Aum', 'not purely a Japanese affair... It was also a watershed event globally, one whose shadow has influenced planning, policies, and understanding of terrorism, religion, and violence in the modern day.' •

Middle East WMD-free zone conference postponed

David Cliff, London

Late in November 2012, the US State Department announced that a multilateral conference to discuss the establishment of a WMD-free zone in the Middle East would not be held in December 2012, as had been planned. No new date for the meeting was set.

The failure to turn this conference into reality, at least in 2012 as had been called for in the final document of the Non Proliferation Treaty Review Conference two years ago, is being seen as a major setback to hopes of establishing such a zone in the Middle East in the foreseeable future. And, for some, as a blow to the robustness of the nuclear non-proliferation regime itself.

In its statement, delivered by State Department spokesperson Victoria Nuland, the US noted that the conference—which was being facilitated by the Finnish diplomat Jaako Laajava and a team from the Finnish foreign ministry—could not be convened this year 'because of present conditions in the Middle East and the fact that states in the region have not reached agreement on acceptable conditions for a conference.'

Ms Nuland added that 'a deep conceptual gap persists in the region on approaches toward regional security and arms control arrangements,' and stressed that the solutions to these differences can only come from states in the region; that outside actors 'cannot impose a process on the region any more than they can dictate an outcome.'

For more than a year, Mr Laajava and his team have been engaged in intensive diplomatic efforts with states in the

Middle East and other interested parties—principally the US, UK and Russia. As 2012 draws to a close, their efforts look ultimately to have been in vain, unless the conference can be quickly rescheduled and held sometime in 2013.

Responding to the US statement, Sandra Butcher of the international secretariat of the Pugwash Conferences on Science and World Affairs noted that the postponement of the conference sends out an ‘ominous message’ to the Middle East ‘that the possession of WMD is legitimate and perhaps even useful in the defense of certain states’ and that the ‘future viability of the NPT and possible progress towards peace in the [Middle East] has been seriously jeopardized.’

Had the conference been held, verification would have been almost certain to feature prominently in discussions as the monitoring challenges associated with a zone are substantial. Nuclear weapon-free zones exist elsewhere in the world but the proposed Middle Eastern zone would be the first to address all classes of WMD: nuclear, chemical and biological.

Verification would therefore likely involve combining various elements of existing regimes—the IAEA safeguards system and the inspection regime for the Chemical Weapons Convention, for instance, either in part or whole, with entirely new processes. Verification mechanisms for biological weapons may need to be considered, as may mechanisms for the verification of nuclear warhead dismantlement.

Discussions on verification, however, at least have the potential to proceed on parallel, technical tracks, whereas the hold-up of the December conference has faltered on political grounds. Participation in the conference is one major stumbling block, but regional states still also need to reach a number of understandings between them—including on which aspects of the zone should be discussed at the conference and what rules of procedure should be followed. •

Publications & Events

Cyber security conference held in Geneva

From 8-9 November 2012, VERTIC collaborated with UNIDIR and Chatham House in hosting a conference on cyber security at the UN in Geneva. The meeting addressed ‘Confidence Building Measures in Assuring Cyber Stability’. It gathered over 100 participants from governments, inter-governmental bodies, NGOs and the private sector. The agenda examined technical and political challenges to cyber stability and heard countries’ perspectives on what a stable cyber environment might look like. VERTIC’s Larry MacFaul gave a presentation on the first day of the conference discussing the potential role for verification in the cyber security field. Mr MacFaul examined where verification techniques might apply to cyber security challenges. VERTIC would like to thank UNIDIR, Chatham House and the conference sponsors for hosting a successful meeting that had a positive and proactive atmosphere. •



Palais des Nations, Geneva

BWC publication released

In October, Rocío Escauriaza Leal, VERTIC’s Legal Officer, co-authored a publication on the BWC with Rafael Perez Mellado, Scientific Adviser at the Ministry of Foreign Affairs and Cooperation, Spain. The publication, ‘La Convención para la prohibición de las Armas Biológicas: una herramienta para la seguridad internacional’ (The Biological Weapons Convention: a tool for international security), provides a general overview of the convention and its role in Spanish society. •



Collaboration helping to improve nuclear detection devices

Lasha Tvaliashvili, London

Developing reliable and affordable systems for detecting illicit radioactive and nuclear material is an important part of nuclear security in an increasingly globalized world. The principal devices used for detecting illicit nuclear materials in vehicles and containers at national points of entry are known as radiation portal monitors (RPMs). These are usually large, fixed structures located at traffic pinch-points in seaports, railheads and other chokepoints. Transportable detection systems are also used in some cases.

RPMs are automatic, but susceptible to false alarms triggered by naturally occurring radioactive materials. Usually they combine solid scintillators for gamma detection and helium-3 tubes for neutron detection. This combination makes the detectors good first-line defence systems. They are large enough to complete a primary, general scan of vehicles or containers reasonably quickly while maintaining sufficient sensitivity to detect possible illicit cargo.

An alert from these sorts of detectors can prompt border agents to carry out a more detailed examination using hand-held Radioisotope Identification Devices (RIIDs), which can locate the 'hot spot' in a cargo, and which also contain identifier capabilities for specific isotopes. However, both RPMs and RIIDs may fail to detect heavily shielded nuclear materials.

Another type of system, known as an Advanced Spectroscopic Portal (ASPs), is supposed to combine the front-line detection and alarm function of a traditional portal detector with the identifier capabilities of RIIDs in a single monitoring action. Problematically, ASPs (like conventional portal monitors) use helium-3 for neutron detection, which is expensive and in short supply globally, undermining the viability of these new detectors as well as current RPMs.

According to a report by the US Domestic Nuclear Detec-

tion Office (DNDO) in July 2012, the main challenges for next generation nuclear detection systems are: cost-effectiveness, wide area search capabilities, scanning of aviation and small vessels, and detection of heavily shielded nuclear materials.

Since 2009, DNDO has been collaborating with the European Commission's Joint Research Centre in Italy, and with other international partners, under the so-called ITRAP+10 Program (Illicit Trafficking Radiation Assessment Program+10), which entered its final phase this year. This work assesses a range of detection systems 'including portal monitors, personal detectors, radioisotope identifiers, gamma and neutron high-efficiency detection equipment, portable scanners and mobile monitors'.

Given the pressing need to improve the functionality of many of the detection systems currently in use, the ITRAP+10 programme is a welcome and encouraging initiative as it enables the partners involved to share technological experience and to develop efficient and reliable devices for preventing smuggling of nuclear materials. •

VERTIC News

National Implementation Measures Programme

Over the past three months, the NIM programme completed its first three legislation surveys on the security of nuclear and other radioactive material. With the expansion of our programme to include legislative assistance across chemical, biological, radioactive and nuclear weapons and materials, we have now started to analyze states' legislation to implement the amended Convention on the Physical Protection of Nuclear Material (CPPNM), the International Convention for the Suppression of Acts of Nuclear Terrorism (ICSANT), the Code of Conduct on the Safety and Security of Radioactive Sources (Code of Conduct) and other related instruments. We also completed two legislation surveys on national implementation of the Biological Weapon Convention.

Scott Spence promoted our expanded programme in a presentation on the security of nuclear and other radioactive material at the Nuclear Inter Jura Congress of the International Nuclear Law Association Conference held in Manchester from 9-10 October.

Yasemin Balci delivered a presentation focusing on establishing a legal framework for the BWC at the 4th Annual International Symposium 'Biosecurity and Biosafety: future trends and solutions' in Milan, Italy, on 10-12 October. Ms Balci also participated in an international conference on chemical safety and security from 8-9 November in Tarnow, Poland.

This quarter, NIM staff attended two important treaty conferences. The Seventeenth Conference of States Parties to the Chemical Weapons Convention was held from 26-30 November in The Hague, the Netherlands. Scott Spence presented on the status of Syria's chemical weapons stockpiles under international law during the CWC Coalition Roundtable on a WMD-Free Zone in the Middle East. Yasemin Balci delivered VERTIC's statement during the Meeting of States Parties to the Biological Weapons Convention, which took place from 10-14 December in Geneva, Switzerland.

NIM Programme staff also finalized a 'Guide to National Implementation of UN Security Council Resolution 1540' and fact sheets on the Code of Conduct and ICSANT, as well as updated factsheets on the NPT and CPPNM (and its amendment), all in Arabic, English, French, Russian and Spanish. All of these materials are available on the VERTIC website. •

Verification and Monitoring Programme

Between October and December, the Verification and Monitoring Programme has been engaged on project work under grants focusing on the universalization of the IAEA Additional Protocol and also on nuclear verification in Iran. VERTIC's project grant on investigating the use of robotics in verification is also now underway.

In October, Andreas Persbo travelled to Stockholm on two occasions: first to participate in a SIPRI-hosted seminar on

treaty compliance; and then to a meeting on nuclear issues run by the International Law Association. During the same month, Mr Persbo also attended a roundtable meeting with the director-general of the IAEA, Yukiya Amano, at Chatham House in London.

October also saw Larry MacFaul participate in a meeting hosted by CityForum in London focused on 'Strengthening global cyber security – delivering on the priorities'. The meeting enjoyed strong participation from UK and US national security agencies, government and the private sector. David Keir travelled to Italy to present to an ESARDA special meeting on 'New Technologies for Arms Control Verification'.

In November, VERTIC co-hosted a conference on cybersecurity with UNIDIR and Chatham House. Larry MacFaul represented VERTIC at the meeting where he delivered a presentation examining verification concepts and cyber space, and chaired a number of sessions.

In addition, David Cliff travelled to Como, Italy, to participate in a roundtable meeting on the establishment of a proposed weapons of mass destruction-free zone in the Middle East. David Keir travelled to Washington to discuss 'baseline verification' as part of an NTI experts group, and Andreas Persbo lectured at the CTBTO's Capacity Development Initiative in Vienna.

December saw David Cliff attend a meeting of London-based nuclear young professionals at Parliament, and along with Andreas Persbo, Mr Cliff also attended a week-long conference on nuclear non-proliferation at Wilton Park in West Sussex.

On 13 December, Larry MacFaul gave a lecture on verification fundamentals at the Vienna Centre for Non-Proliferation and Disarmament. Verification and Monitoring Programme staff also hosted a review meeting at our offices in London for VERTIC's project focusing on transparency and confidence building for Iran's nuclear programme. •

Grants and administration

In this quarter, VERTIC secured a grant from the United Nations Interregional Crime and Justice Research Institute (UNICRI) as a project implementing partner for the 'Prerequisite to Strengthening CBRN national legal frameworks' project. The grant awarded is €800,000. VERTIC was also awarded a grant from the US State Department Verification Fund, for a 'Robotics for Verification' project. The amount awarded was \$100,000. VERTIC is most grateful to its funders for their support for our work.

In December, VERTIC had its annual audit for the financial year ended 31 October 2012. Haysmacintyre, VERTIC's auditors, were on site to carry out the audit. VERTIC's internship programme continues to thrive and attract strong applicants: Russell Moul is currently supporting the Verification and Monitoring Programme and Lasha Tvaliashvili is working with the National Implementation Measure Programme. Katherine Tajer has successfully completed her internship with VERTIC this month. She will take up a new role as a VERTIC consultant in January 2013. •

building trust through verification

VERTIC is an independent, not-for-profit nongovernmental organization. Our mission is to support the development, implementation and effectiveness of international agreements and related regional and national initiatives. We focus on agreements and initiatives in the areas of arms control, disarmament and the environment, with particular attention to issues of monitoring, review and verification. We conduct research, analysis and provide expert advice and information to governments and other stakeholders. We also provide support through capacity building, training, legislative assistance and cooperation.

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