For the past decade, the world has looked to the Asia Pacific as the new centre of dynamism in the global economy. This collection shows this optimistic view of the region needs to be tempered with sustained attention to more sobering trends associated with increasingly destructive rivalries in Asia and the Pacific.

Thirty years ago, the American and Soviet presidents signed the Intermediate-Range Nuclear Forces (INF) Treaty; the first bilateral nuclear disarmament agreement between the two superpowers since the start of the Cold War. The treaty would commit them to scrap an entire class of nuclear weapons from their arsenals. It was a moment when much of the world breathed a sigh of relief at the prospect of a possible end to the “delicate balance of terror” that had existed since the 1950s. Each superpower possessed more than enough nuclear warheads to destroy all life on the planet, and had for decades lived under a regime of mutually-assured destruction (MAD), acknowledging that its only defence against its opponent’s nuclear weapons was the ability to threaten complete destruction in retaliation if attacked. It had been a world seemingly a heartbeat away from ending due to either sudden escalation or error.

Continues on next page
The decades that followed the INF Treaty seemingly continued the positive trend. The 1990s began with the end of the Cold War and the collapse of the Soviet Union, and continued with the denuclearisation of South Africa, the negotiation of new treaties banning nuclear testing, chemical weapons, trade in fissile material, and the extension of the nuclear Non-Proliferation Treaty (NPT). More sobering counter-trends were the breakthrough to nuclear status of India and Pakistan and tensions over nuclear programs in Iraq and North Korea. The following decade saw attention shift towards terrorism, despite confrontations over Iran and North Korea’s nuclear enrichment and missile development programs. Nothing seemed more unlikely than a nuclear exchange during America’s “unipolar moment”. In 2009, a new American President, Barack Obama, committed to seeking a world free of nuclear weapons. Nuclear war steadily receded as a threat in the consciousness of most people as the twenty-first century moved into its second decade. Terrorism remained a preoccupation, while climate change caused mounting anxiety. Tensions again rose over Iran and North Korea’s nuclear programs, but arguably both countries were seen more as rogue states than genuine disturbances to the nuclear order. By mid-2017, the United Nations General Assembly had voted for a Nuclear Weapons Prohibition Treaty (NWPT).

Against this background, North Korea’s seemingly sudden and certainly determined sprint towards gaining nuclear-tipped, intercontinental ballistic missiles in 2016 and 2017 has come as a sudden shock. Like a flash of lightning on a dark night, Pyongyang’s provocations have concentrated attention on several developments that have been unfolding over the past decades which, taken together, place the world closer to a possible nuclear exchange than at any time since the end of the Cold War. In their essays, Leonid Petrov and Ron Huisken provide vital insights into North Korea’s motivations, demonstrating clearly why we should not have been surprised by its flurry of nuclear and missile tests in recent months.

While the Cold War was a global stand-off between two superpowers located on separate continents, the new nuclear dynamics are driven by six established and new nuclear powers and are predominantly concentrated in the Asian region. As essays by Michael Clarke and Brendan Taylor and H. D. P. Enwall in this collection note, this makes the current situation arguably much more unpredictable and dangerous. Geographic proximity, hypersonic speeds and new detection capabilities all have the effect of collapsing reaction times, substantially raising the risks of miscalculation and over-reaction. And while our attention is rightfully on two sub-regions—Northeast Asia and South Asia—we should not be blind to proliferation pressures in Central and West Asia.

Taken together, there are several trends that have been apparent over many years that should place the dangers of new nuclear rivalry in Asia at the very forefront of policy deliberation and public discussion. Most obviously, the numbers and quality of nuclear weapons are increasing as established and new nuclear weapons states modernise and upgrade existing nuclear stockpiles, build more nuclear warheads, and develop more sophisticated missiles and missile...
defence systems. A separate but related trend is that the number of nuclear weapons states is steadily growing, all the while increasing the incentives for other states in Asia to develop their own nuclear capabilities. As essays by Benjamin Zala, Rory Medcalf and Stephan Frühling in this collection show, rapid technological developments in non-nuclear weapons systems have also introduced new sources of rivalry and destabilisation into the mix, raising further incentives to increase the number, quality and variety of nuclear weapons at hand. As many of the essays point out, technological change has slipped the bonds of either arms control regimes or deterrent doctrines and is rapidly outpacing both. Consequently, nuclear, conventional and unconventional weapons technologies are both the results and the drivers of increasingly complex rivalries in Asia. As Clarke and Taylor and Enwall demonstrate, it is no longer possible to think in terms of bilateral stand-offs between nuclear-armed opponents. The complex rivalries and stark imbalances in capabilities across Asia give rise to interlocked nuclear “trilemmas”, where attempts of one or two nuclear rivals to stabilise a nuclear balance and protect themselves give rise to cascades of insecurity and destabilising countermeasures by others. This is a context in which extended nuclear protection guarantees between the United States and its Asian allies could rapidly lose their credibility, leading to sequences of nuclear proliferation in Northeast Asia. O. Fiona Yap examines the public opinion data of Northeast Asian states for signs of growing demand for independent nuclear deterrents. Surveying the landscape of Asia’s “second nuclear age”, Ramesh Thakur focuses on dangerously eroding boundaries between nuclear and conventional weapons, tactical and strategic nuclear weapons, and the nuclear, cyber and space domains. As the US, Russia, China and now newer nuclear states discard their political commitment to mutual deterrence, acquiring new means to target each other’s nuclear systems, the temptations to consider pre-emptive strikes are rising. Tanya Ogilvie-White argues in her essay that an equally worrying trend is the spread of what she calls “nuclear fatalism” – the belief that arms control is increasingly quixotic and that only deterrent responses are adequate in the current climate of rising rivalry. Richard Brabin-Smith shows that Australia is both deeply implicated in and profoundly affected by the new nuclear and missile dynamics unfolding to its north. Clearly these dynamics must become central to Australian defence and foreign policy planning. The essays by Gareth Evans, Ramesh Thakur and John Tilemann assemble a sobering range of challenges that confront arms control efforts in the current climate. Equally concerning are the observations of Amin Saikal and Matthew Sussex that American efforts in counter-proliferation and nuclear primacy have decisively eroded its credibility as a trusted participant in establishing systems of reassurance and stabilisation on the unfolding situation. This collection of essays draws on the collective expertise and experience of scholars in the Australian National University’s College of Asia & the Pacific. This institution and its predecessors have produced, over decades, some of the most respected analyses of nuclear strategy and arms control, and today the College boasts a breadth and depth of knowledge and insight that few institutions in the world can rival. This optimistic view of the region needs to be tempered with sustained attention to more sobering trends associated with increasingly destructive rivalries in Asia and the Pacific. Even if the North Korean crisis subsides, the dangerous intersecting trends it has illuminated will not recede. This region, and the world, cannot afford to turn its attention elsewhere, hoping that nuclear stability will somehow autonomously reassert itself. There needs to be sustained attention to addressing the perilous dynamics unfolding in the Asia Pacific. Crucial to addressing these dynamics must be understanding and building awareness – a process this collection is intended to promote.

This collection of essays draws on the collective expertise and experience of scholars in the Australian National University’s College of Asia & the Pacific. This institution and its predecessors have produced, over decades, some of the most respected analyses of nuclear strategy and arms control, and today the College boasts a breadth and depth of knowledge and insight that few institutions in the world can rival. We should not forget that nuclear weapons are the starkest existential threat the planet faces. There are no prospects of survival, recovery, mitigation or adaptation against an extended nuclear exchange. Even a limited exchange could have catastrophic effects on the environment and the institutions that underpin global production and commerce. We stand at a point at which nuclear weapons could transition from being a dampener of conflict among great powers to a driver of deepening distrust and arms racing among them. For the past decade, the world has looked to the Asia Pacific as the new centre of dynamism in the global economy. This collection shows this optimistic view of the region needs to be tempered with sustained attention to more sobering trends associated with increasingly destructive rivalries in Asia and the Pacific. Even if the North Korean crisis subsides, the dangerous intersecting trends it has illuminated will not recede. This region, and the world, cannot afford to turn its attention elsewhere, hoping that nuclear stability will somehow autonomously reassert itself. There needs to be sustained attention to addressing the perilous dynamics unfolding in the Asia Pacific. Crucial to addressing these dynamics must be understanding and building awareness – a process this collection is intended to promote.
Asia is the world’s only site, and Japan the only victim, of the use of nuclear weapons in war. The Indian subcontinent and the Korean peninsula are also two of the least unlikely theatres of a nuclear war, while a direct China-US confrontation from an escalation spiral starting in the South China seas is also possible.
Second nuclear age

In ‘the second nuclear age’, a phrase coined by Paul Bracken in his book, the site of the main great power rivalry has shifted from Europe to Asia. The second nuclear age is characterised by a multiplicity of nuclear powers with crossing ties of cooperation and conflict, the fragility of command and control systems, the critical importance of cyber-security, threat perceptions between three or more nuclear-armed states simultaneously, and asymmetric perceptions of the military and political utility of nuclear weapons. The Cold War nuclear dyads have morphed into interlinked nuclear chains with a resulting greater complexity of deterrence relations between the nine nuclear-armed states—the five NWS plus India, Israel, North Korea and Pakistan. The nuclear relationship between India and Pakistan, for example, is historically, conceptually, politically, strategically and operationally deeply intertwined with China as a nuclear power. With North Korea now possessing a weaponised intercontinental nuclear capability, for the first time in history the US must posture for and contend with three potential nuclear adversaries—China, Russia and North Korea. There are substantially fewer nuclear weapons today than at the height of the Cold War, with shared borders, major territorial disputes, history of many wars since 1945, compressed timeframes for using or losing nuclear weapons, and political volatility and instability. In the Russia-US strategic rivalry, submarine-based nuclear weapons deepen strategic stability by enhancing survivability and reducing successful first-strike possibilities. The race to attain continuous at-sea deterrence capability through nuclear-armed submarines is potentially quite destabilising in Asia because the regional powers lack well-developed operational concepts, robust and redundant command-and-control systems, and secure communications over submarines at sea.

The strategic boundary between nuclear warheads and conventional precision munitions is being steadily eroded. Moreover, state-sponsored cross-border militancy and extremism involving nuclear-armed states is another contemporary reality, as is the fear of nuclear terrorism. The first nuclear age was also marked by the practice of strategic nuclear policy dialogues firstly among the North and South Korean leaders in 2018 and secondly between the US allies and the Soviet Union. No equivalent dialogues exist in the Asia Pacific either among allies or between adversaries. The boundaries between nuclear and conventional weapons, tactical and strategic warheads, and nuclear, cyber and space domains are eroding.

Asia Pacific

Asia—and only Asia—contains states with the full spectrum of nuclear weapons status in relation to the NPT, with the clear majority being non-NWS parties of the NPT. Three US allies depend for their national security on the extended nuclear deterrence provided by US nuclear weapons. Russia and the US also have a massive geographical footprint each in the Pacific. China is Asia’s only NPT-recognised NWS and the sole Asian permanent member of the UN Security Council, which functions as the global enforcement authority in the maintenance of nuclear peace and security. Pakistan is the only one of the nine nuclear-armed states where nuclear weapons were developed by the military, are essentially under military control and the decision to use them will be made by the military rather than civilian leadership. India is the only one to have territorial conflicts with two nuclear-armed states, China and Pakistan, over long and contested borders.

Yet the overall risks of nuclear war—by design, accident, rogue launch or system error—have grown with more countries with weaker command and control systems in more unstable regions possessing these deadly weapons, terrorists wanting them, and vulnerability to human error, system malfunction and cyber attack. The geostrategic environment of the subcontinent, for example, had no parallel in the Cold War, with shared borders, major territorial disputes, history of many wars since 1945, compressed timeframes for using or losing nuclear weapons, and political volatility and instability. In the Russia-US strategic rivalry, submarine-based nuclear weapons deepen strategic stability by enhancing survivability and reducing successful first-strike possibilities. The race to attain continuous at-sea deterrence capability through nuclear-armed submarines is potentially quite destabilising in Asia because the regional powers lack well-developed operational concepts, robust and redundant command-and-control systems, and secure communications over submarines at sea.

The strategic boundary between nuclear warheads and conventional precision munitions is being steadily eroded. Moreover, state-sponsored cross-border militancy and extremism involving nuclear-armed states is another contemporary reality, as is the fear of nuclear terrorism. The first nuclear age was also marked by the practice of strategic nuclear policy dialogues firstly among the

Asia is the only continent where nuclear stockpiles are growing. Even though their combined stockpiles total only three per cent of global nuclear arsenals, warhead numbers are growing in all four of the Asian nuclear-armed states of China, India, North Korea and Pakistan.

US and its allies, and secondly between the US allies and the Soviet Union. No equivalent dialogues exist in the Asia Pacific either among allies or between adversaries. The boundaries between nuclear and conventional weapons, tactical and strategic warheads, and nuclear, cyber and space domains are eroding.

North Korea is unique in the family of nations: a communist dynastic dictatorship that has committed acts of aggression and serial provocations against its more populous, prosperous and democratic southern kin state; acts of state criminality in kidnapping Japanese citizens in Japan and smuggling them into North Korea; and acts of state terrorism.

North Korea is the only country in the family of nations: a communist dynastic dictatorship that has committed acts of aggression and serial provocations against its more populous, prosperous and democratic southern kin state; acts of state criminality in kidnapping Japanese citizens in Japan and smuggling them into North Korea; and acts of state terrorism.

North Korea is unique in the family of nations: a communist dynastic dictatorship that has committed acts of aggression and serial provocations against its more populous, prosperous and democratic southern kin state; acts of state criminality in kidnapping Japanese citizens in Japan and smuggling them into North Korea; and acts of state terrorism.

North Korea is unique in the family of nations: a communist dynastic dictatorship that has committed acts of aggression and serial provocations against its more populous, prosperous and democratic southern kin state; acts of state criminality in kidnapping Japanese citizens in Japan and smuggling them into North Korea; and acts of state terrorism.
Annex 2 countries whose ratifications are needed to bring it into force. Four holdouts are Asian: China, India, North Korea and Pakistan. Since the treaty’s adoption in 1996, the handful of nuclear tests have all been in Asia: five by India in 1998, six by Pakistan in 1998, and six by North Korea between 2006–17. North Korea is the only country where nuclear weapon tests are still being conducted. Meanwhile, Pakistan has consistently blocked the commencement of negotiations on a fissile materials cut-off treaty (FMCT).

Elevated nuclear risks and threats

Not surprisingly, nuclear risks and threats that exist globally are also present in Asia, in some cases more acutely. Security complexes and the main drivers of nuclear weapons policy tend to be primarily regional—and indeed, in the Asia Pacific, sub-regional—rather than global, although obviously there are cross-linkages between the two. Moreover, the sub-regional nuclear insecurity complex across Asia does not always coincide with the geographical sub-region. For example, in the subcontinent, there is a triangular nuclear relationship between China, India and Pakistan. The other South Asian states are largely irrelevant to the core dynamics of the nuclear equation, although they would be severely impacted with any use of nuclear weapons and by nuclear accident. By contrast, in Northeast Asia, every country is part of the nuclear equations complies. In Southeast Asia and Oceania, no country has or is likely to seek nuclear weapons in the foreseeable future. Some Southeast Asian countries are interested in nuclear power, but Oceania is entirely free of nuclear power reactors, and both sub-regions are covered by nuclear-weapon-free zones.

Asia is the world’s only site, and Japan the only victim, of the use of nuclear weapons in war. The Indian subcontinent and the Korean peninsula are also two of the least unlikely theatres of a nuclear war, while a direct China–US confrontation from an escalation spiral starting in the South China Seas is also possible. In mid-2017 China and India faced each other in a tense military confrontation at the tri-junction with Bhutan in the Doklam plateau for well over a month. Premeditated nuclear strikes seem unlikely pathways to a nuclear exchange. But the toxic cocktail of growing nuclear stockpiles, expanding nuclear platforms, irredentist territorial claims, and out of control jihadist groups makes the Indian subcontinent a high-risk region of concern. Even a limited regional nuclear war, in which India and Pakistan used 50 Hiroshima-size (15 kiloton) bombs each, could cause a famine through nuclear winter effects that destroy crop production, disrupt global food distribution networks, and over a decade, kill up to two billion people.

The subcontinent is not free of the risk of a nuclear exchange triggered by acts of terror committed on Indian territory by individuals and groups linked to networks in Pakistan. No one can be confident that another Mumbai-style terrorist attack like the one in November 2008 on a major Indian city will not take place, with links back to jihadists based in Pakistan; that India will not retaliate militarily; and that this will not escalate to another war which then crosses the nuclear threshold. That is, the brittleness of deterrence stability is a function of fragile crisis stability mechanisms. Moreover, each party will feel more insecure with every increase in the other’s nuclear weapons stockpiles and capabilities.

In an interview with The Mainichi in July 2017, General Pervez Musharraf, who was President of Pakistan in 2002, confessed to having contemplated the use of nuclear weapons in the year-long military standoff with India following a terrorist attack on India’s Parliament in December 2001. He refrained from doing so for fear of Indian retaliation in kind. The claim may be true or false: on matters of national security, Musharraf is more than capable of asserting something that fits Pakistan’s narrative of a nuclearised bilateral conflict that the world should mediate. Regardless of the veracity of the claim, the very fact that Musharraf asserted it in an on-record interview has the consequence of further weakening the taboo on nuclear weapon use and softening the non-use norm. Northeast Asia is the world’s most dangerous cockpit for a possible nuclear war that could directly involve four nuclear-armed states—China, North Korea, Russia and the US—plus South Korea, Japan, and Taiwan as major US allies. The pathways to a war that neither side wants include a fatal miscalculation in the instrumental recourse to brinkmanship by both sides. US threats could spook Kim Jong-un into launching a pre-emptive attack, or Kim’s serial provocations could incite a South Korean or US military response that creates an unstoppable escalation spiral. The logic of US President Donald Trump’s ‘America First’ policy contains the rationale for preventing North Korea from acquiring the capacity to strike the US mainland, regardless of the scale and gravity of the harm inflicted on South Koreans, Japanese and others in the region ‘out there’ instead of Americans ‘over here’.

A verifiable and irreversible denuclearisation of North Korea would also be the most effective bulwark against the growth of pro-nuclear weapon sentiments in non-nuclear East Asia. Japan, South Korea and Taiwan are examples of states with advanced latency: mastery of the sensitive nuclear fuel cycle technologies and availability of and access to sensitive nuclear materials. Rising nationalism in the region, territorial disputes in the East and South China Seas, continued North Korean nuclear defiance and concerns about Trump’s tweeted perceptions of free riding allies and relaxed attitude to nuclear weaponisation by them, have been catalysts for pro-nuclear arguments in Japan and South Korea. Growing Chinese belligerence and diminished faith in the US security guarantee could also attract interest in Taiwan in the pursuit of an independent deterrent. However, there are also substantial political, economic, and reputational constraints in all three, reinforced by additional legal, bureaucratic, scientific, and public opinion potential vetoes in Japan. Internationally, the NPT constrains the weapon option, the US nuclear extended deterrence bolster Japan’s security confidence, and weaponisation could rupture relations with Washington. Tokoyo is also acutely conscious of the extreme regional sensitivities to any nuclearisation. Domestically, the three non-nuclear principles, the very strong nuclear allergy in public opinion, and the atomic energy basic law that limits nuclear activity to peaceful purposes are additional powerful constraints on the weapons option.
Adjunct Associate Professor Ron Huisken

China and nuclear proliferation: the case of North Korea

China has done as much as it deemed necessary to look as though it disapproved and wanted it to stop. But it is hard to argue that China ever regarded stopping the North Korea program as critical or even important to Chinese interests.

Adjunct Associate Professor Ron Huisken joined the Strategic & Defence Studies Centre at ANU in 2001, where he focused, in particular, on US and Chinese security policies, multilateral security processes in East Asia and arms control. Dr Huisken spent nearly 20 years in government with the departments of Foreign Affairs & Trade, Defence, and Prime Minister & Cabinet. Prior to government, he worked with the Stockholm International Peace Research Institute, the University of Malaya, and the United Nations secretariat in New York. He holds degrees in economics from the University of Western Australia and the Royal Stockholm University, and a PhD in international relations from ANU.

North Korea is China's only formal ally, the result of a relationship forged in the 1950-53 Korean War. North Korea's first postwar leader, Kim Il-sung, repeatedly pressed the Soviet leader, Joseph Stalin for permission and support to take over South Korea by force and make the entire Korean peninsula part of the Socialist bloc. Stalin eventually agreed but on the condition that China's new leader, Mao Tse-dung, also support this initiative. Mao joined in, watched how close the North came to complete success before its forces were routed by the United States-led United Nations coalition and then found himself having to decide whether to resist the UN coalition or accept having US forces stationed just over the Yalu River. North Korea's buffer state value to China is still recited as a core reason for China's tolerance of its excesses.

Some 400,000 Chinese troops remained deployed in North Korea until 1958. Long before that, however, Kim Il-sung had begun to take North Korea on its singular national journey. Kim set out to purge opponents, including the leaders of factions close to the Soviet Union and China, and to build a personality cult that exceeded any known precedent, together with the societal controls needed to compel compliance. This process included the narrative that the US and its puppet regime in Seoul had been the aggressors in 1950 and were seeking a second opportunity, establishing a fierce and relentless belligerence toward these states as the default setting for North Korea's foreign and security policy. A perpetual state of extreme and urgent threat to the existence of North Korea clearly underpins widespread privation, draconian instruments of domestic control and compulsory fanatical devotion to the leadership.

In addition, the curious fact that North Korea, located quite literally in China’s armpit, seems both invulnerable and utterly paranoid about its security might also suggest that, for deep-seated historical reasons, it has a very limited appetite for security support from China.

Continues on next page
China and the Soviet Union essentially washed their hands of North Korea after the 1950–53 war. Nikita Krushchev made one determined effort, in 1956, to unseat Kim Il-sung. China also participated but more cautiously because Mao did not wish to depose Kim, only to see him change his ways. Thereafter, Chinese-Soviet Union relations deteriorated steadily until the decisive split in 1959–60 and the ensuing three decades of declared enmity, including a struggle for leadership of the socialist movement. Moscow and Beijing vied for North Korea’s support, but only so long as it appeared to be reliably contained, essentially by the US. This was especially so from the 1980s onwards, as China could be depended on to suppress any interest in Japan and South Korea in acquiring an independent nuclear weapon capability, and from then they showed little further interest in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)—the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial.

In the 1960s, China began to forge with Pakistan an independent nuclear weapon capability, and from then they showed little further interest in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)–the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)– the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial.

China and the Soviet Union essentially washed their hands of North Korea after the 1950–53 war. Nikita Krushchev made one determined effort, in 1956, to unseat Kim Il-sung. China also participated but more cautiously because Mao did not wish to depose Kim, only to see him change his ways. Thereafter, Chinese-Soviet Union relations deteriorated steadily until the decisive split in 1959–60 and the ensuing three decades of declared enmity, including a struggle for leadership of the socialist movement. Moscow and Beijing vied for North Korea’s support, but only so long as it appeared to be reliably contained, essentially by the US. This was especially so from the 1980s onwards, as the US could be depended on to suppress any interest in Japan and South Korea in acquiring an independent nuclear weapon capability, and from then they showed little further interest in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)– the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)– the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)– the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)– the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.

China has long had a cautious and calculated attitude toward the proliferation of nuclear weapons, coming across as a guarded actor on this issue rather than a champion of either promiscuity or denial. China was the last of the UN Security Council’s five permanent members (the P5) to demonstrate its mastery of this technology, conducting its first test explosion in October 1964. China, along with France, declined to join the 1968 Nuclear Non-Proliferation treaty (NPT)– the centerpiece of the international non-proliferation regime– because in changing the persona of the entity that they had played such a decisive role in creating.
In recent weeks, a number of prominent observers have argued that the battle has been lost, that North Korea has irreversibly broken into the club of nuclear weapon states...
Pyongyang is clearly in a hurry to develop its inter-continental ballistic missile capability, to enable it to deliver a nuclear strike on the continental US. North Korea’s leader, Kim Jong-un, has authorised more missile tests in 2017 alone than his father, Kim Jong-II, did during his entire reign from 1994-2011.

Speculation is rife that North Korea’s burgeoning nuclear and ballistic missile programs will spark a dangerous new Northeast Asian arms race. In May of this year, senior officials in United States President Donald Trump’s administration reportedly confided in Australian Foreign Minister Julie Bishop their fears that such an arms race was “inevitable” should the international community fail to rein in Pyongyang’s nuclear and missile advances. During an interview on CNN in October 2017, former US Secretary of State Hillary Clinton agreed, asserting that “we will now have an arms race—a nuclear arms race in East Asia”. Senior political figures like Minister Bishop and Secretary Clinton have encountered no shortage of strategic analysts willing to substantiate their claims. The prominent American commentator Michael Auslin, for instance, argued recently that “North Korea is ensuring a nuclear arms race”. Similarly, the late Desmond Ball pointed presciently to a predominantly naval Northeast Asian arms race—through one with clear nuclear dimensions—in a paper published just over half a decade ago.

The arms race concept is widely employed. While its precise meaning remains contested, most experts agree that, used correctly, it applies to a relatively rare phenomenon in international relations.
First and foremost, a defining characteristic of any arms race is the notion of “reciprocal interaction”. In other words, two or more states need to disagree over the “proper” balance of military power between them and they need to be self-consciously increasing their arsenals—quantitatively or qualitatively, or both—specifically in response to that disagreement.

Second, for arms-racing in any genuine sense of the term to occur, this action-reaction dynamic ought to be occurring rapidly. The classic historical example of the arms race phenomenon is that involving Britain and Germany in the period prior to the First World War. Then, the British responded to Germany's naval build-up by developing a powerful new class of warship called the dreadnought, which the Germans subsequently copied. In the decade preceding the First World War, the number of dreadnoughts built by Britain was influenced significantly by the numbers built by Germany, and vice versa.

Pyongyang is clearly in a hurry to develop its inter-continental ballistic missile (ICBM) capability, to enable it to deliver a nuclear strike on the continental US. North Korea’s leader, Kim Jong-un, has authorised more missile tests in 2017 alone than his father, Kim Jong-Il, did during his entire reign from 1994-2011. Likewise, three of North Korea’s six nuclear tests have taken place under Kim Jong-un’s watch. Consistent with the arms race concept, North Korea’s foreign minister Ri Yong Ho has indicated that Pyongyang’s pursuit of nuclear weapons is intended to realise a “balance of power with the US”. Moreover, there has been an evident action-reaction dynamic to the increasingly vitriolic statements traded between Kim and Trump. Beyond the rhetoric, however, there is very little evidence to suggest that Pyongyang’s nuclear and missile advances are indeed reactive. Rather, they appear to reflect nothing other than the culmination of a decades-long determination to establish North Korea as a fully-fledged nuclear power.

There is certainly some evidence to suggest, however, that South Korea has been responding to Pyongyang’s nuclear and missile advances in ways consistent with the arms race concept. Much to China’s chagrin, for instance, Seoul in July 2017 confirmed that it would proceed with the installation of the US Terminal High Altitude Area Defense (THAAD) missile defence system immediately following a North Korean ICBM test. Similarly, in September 2017 in the wake of North Korea’s sixth nuclear test, the Trump administration acceded to a request from Seoul to remove the 500-kilogram weight limit in place on conventional warheads provided by the US to South Korea. Removing these restrictions affords Seoul much greater capacity to strike against the North in the event of conflict.

Yet South Korean responses to Pyongyang’s advancing nuclear and missile programs have not been as rapid as the arms race concept would anticipate. THAAD deployment, for instance, was politically fraught and proceeded fitfully. The decision to deploy was initially announced by the US and South Korea in July 2016. Yet this decision was called into question by the May 2017 election of President Moon Jae-in. Whilst on the campaign trail, Moon had pledged to review THAAD deployment. Likewise, while South Korean conservatives have called for the redeployment of US tactical nuclear weapons removed in 1991 to the Peninsula, South Korea’s Defense Minister Song Young-moo dismissed this as a potential reaction to Pyongyang’s nuclear and missile advances following a meeting with his US counterpart, Defense Secretary Jim Mattis, in October 2017.

North Korea’s foreign minister Ri Yong Ho has indicated that Pyongyang’s pursuit of nuclear weapons is intended to realise a “balance of power with the US”. 
Tokyo's reactions to North Korea's nuclear and missile advances have been highly incremental and protracted. Contrary to the expectations of the arms race concept, it is thus hard to sustain the contention that Japan's reactions to Pyongyang's provocations constitute a major qualitative or quantitative shift, as opposed to reflecting a more considered military modernisation process. Mounting speculation that Japan “going nuclear” will be a central element in Northeast Asia's emerging nuclear arms race runs into similar difficulties. Beyond the political and public arguments that would have to be made within Japan, substantial and complex operational planning would be needed for such a development to occur. As the technologically-savvy strategic commentator Richard Bitzinger has recently observed, numerous operational steps and capability issues would need to be resolved, and there is little evidence today that Japan has even begun to put such a process in place.

Commentators predicting the emergence of a Northeast Asian nuclear arms race might argue that South Korean and Japanese policies to date have only been possible because of the confidence that Seoul and Tokyo have in the nuclear umbrella provided by their senior ally, the US. Yet as the confidence of Seoul and Tokyo in US extended nuclear deterrence erodes in the face of North Korea's nuclear and missile advances, these commentators would argue, so too are the pace of Japanese and South Korean reactions to those advances likely to increase.

What such prognoses fail to account for, however, is the tradition of self-restraint which has long been a feature of Asian strategic culture. Writing in the late 1980s and challenging the conventional wisdom that arms control measures were next to non-existent in this region, for instance, the respected strategic commentator Gerald Segal concluded that informal and inherently more flexible arms control measures “based as much on unstated self-restraint” constituted one of “the hallmarks of Asian arms control”.

Three decades on, it would be worth exploring further whether Tokyo and Seoul's thus far quite measured responses in the face of Pyongyang's nuclear and missile advances are, in fact, a product of this deep-seated culture of self-restraint. Is China's still relatively modest nuclear arsenal a reflection of this culture too? Will North Korea continue to expand its nuclear and missile forces indefinitely, or will a measure of self-restraint appear from Pyongyang at some point also? Should such a culture of self-restraint today exist, the Singaporean practitioner Bilahari Kausikan calls for its abandonment. In a provocative, yet sophisticated contribution to the Northeast Asian nuclear arms race debate, he asserts that regional stability would be best served by Japan and South Korea pursuing nuclear weapons. Following a Waltzian logic, Kausikan argues that such a development would allow for “a six-way balance of mutually assured destruction (MAD) among the US, China, Russia, Japan, South Korea and North Korea” to form. Just as the fear of MAD served to effectively deter the Americans and the Soviets from entering the nuclear abyss during the Cold War, Kausikan contends, so will it ultimately prove stabilising in Northeast Asia today.

However, Kausikan's proposal underestimates the difficulty of applying the Cold War construct of MAD to contemporary Northeast Asia. The greater number of players involved here renders this region infinitely more complex and unpredictable than the much simpler bipolar world which existed during the superpower stalemate. Moreover, Northeast Asia's strategic geography is different. As another Singaporean scholar Bernard Loo has recently observed, during the Cold War “the early warning systems that both superpowers maintained provided them with a reaction time of approximately 30 minutes”. In Northeast Asia, however, “the region is simply too compact, such that warning times of a pre-emptive first strike will be virtually non-existent”.

Growing speculation notwithstanding, the spectre of a Northeast Asian nuclear arms race thus still appears some way off. To be sure, Pyongyang's nuclear and missile capabilities are advancing faster than most analysts anticipated. Yet there is little evidence of reciprocal intention—the very essence of arms-racing—as a driver of North Korean behaviour.

There is some evidence to suggest the existence of action-reaction dynamics in the responses of Seoul and Tokyo to those North Korean advances. Again, however, those reactions have not occurred with the degree of rapidity anticipated and required by the arms race concept.
The actor that has perhaps most fully exploited the ambiguities of the current Asian strategic environment has been North Korea. Kim Jong-un’s calculus is relatively clear: he believes that his regime’s survival is assured if it can demonstrate not only a nuclear weapons capability but also the intercontinental ballistic missile to deliver them.

On 10 October 2017, Bilahari Kausikan, former Permanent Secretary of Singapore’s Ministry of Foreign Affairs, argued in the Washington Post that North Korea’s demonstrated nuclear weapons and intercontinental ballistic missiles (ICBM) capabilities would inevitably compel Japan and South Korea to ‘go nuclear’. This would establish a “six way balance of mutually assured destruction” in Northeast Asia between the United States, Russia, North Korea, China, Japan and South Korea that would “freeze the status quo” and ameliorate the current cycle of nuclear brinkmanship.

In theory such an order characterised by “six rational” and “functioning polities”, as Kausikan described these states, enmeshed in relationships of mutual nuclear deterrence, appears preferable to the uncertainties of the present environment. However, it rests on an assumption that strategic stability will flow from the advent of greater rather than fewer numbers of nuclear-armed states and the historical experience of the US-Soviet Union relationship during the Cold War.

Declining stability in a multipolar Asia

The essence of strategic stability, as Thomas Schelling and Morton Halperin noted at the height of the Cold War, is to limit incentives for states to launch a first strike by ensuring secure second-strike capabilities. The prospects for achieving such stable nuclear deterrent relationships among Asia’s multiple nuclear weapons states in the short term appear slim.
This is due to a dynamic of interconnectivity across key strategic relationships, shifting relativities of power amongst its major powers, technological change, and nuclear and conventional asymmetries. These factors undermine the potential for strategic stability by creating incentives for crisis escalation, first-strikes and the utilisation of ‘grey zone’ strategies that exploit deterrence ambiguities. While it has been commonplace to understand Asia’s nuclear relationships to be defined by several strategic triangles, e.g. US-Russia-China, US-North Korea-China, India-Pakistan-China, it is increasingly apparent that such triangular nuclear relationships also inextricably impinge upon the security and strategic interests of major non-nuclear weapons states. Thus, the Asian nuclear order is defined not by classic, dyadic security dilemmas but rather, as Linton Brooks and Mira Rapp-Hooper argue, by security “trilemmas” whereby “actions taken by one state to defend against another state have the effect of making a third state feel insecure”. This dynamic is perhaps most obvious with respect to the US-China relationship. As China continues to modernise and expand its nuclear arsenal to primarily counter perceived nuclear and conventional advantages of the US, this will inevitably spill over into the South Asian nuclear equation as India will seek to counter Chinese modernisation with its own. This, in turn, will likely compel Pakistan to keep pace. Given the centrality of Beijing’s long-standing all-weather relationship with Pakistan—including cooperation in strategic weapons systems and technologies—in balancing against Indian predominance on the subcontinent, this could stimulate renewed Chinese aid to Islamabad and heighten tension between Beijing and New Delhi.

The evolution of missile defence technology plays a potentially destabilising role across the major nuclear relationships in Asia...

Technological change as a destabiliser

The destabilising effect of such dynamic security trilemmas is also increasingly exacerbated by technological developments in the conventional domain that may replicate, offset, or mitigate the strategic effect of nuclear weapons. Four technological capabilities loom large in this context: missile defence, anti-satellite, conventional counter-force and cyber. The evolution of missile defence technology plays a potentially destabilising role across the major nuclear relationships in Asia as it may imperil secure second-strike capabilities and provide incentives for consideration of first-strike or launch under attack postures. Anti-satellite weapons, such as those tested by China in 2007 and the US in 2008, meanwhile can negatively impact on command and control over nuclear arsenals and delivery systems by jamming or destroying early warning satellites. Conventional counter-force capabilities such as the US development of prompt global strike (PGS) holds the potential to enhance US conventional superiority, erode the faith of competitors or adversaries in the survivability of their nuclear arsenals and create incentives for arms racing. Finally, cyber capabilities, as Stephen Cimbala argues, “might complicate the management of a nuclear crisis” as “information attacks on command and control and communications systems might lead to a mistaken nuclear launch based on false warnings, to erroneous interpretations of data or panic on account of feared information blackout”.

"This is due to a dynamic of interconnectivity across key strategic relationships, shifting relativities of power amongst its major powers, technological change, and nuclear and conventional asymmetries. These factors undermine the potential for strategic stability by creating incentives for crisis escalation, first-strikes and the utilisation of 'grey zone' strategies that exploit deterrence ambiguities. While it has been commonplace to understand Asia's nuclear relationships to be defined by several strategic triangles, e.g. US-Russia-China, US-North Korea-China, India-Pakistan-China, it is increasingly apparent that such triangular nuclear relationships also inextricably impinge upon the security and strategic interests of major non-nuclear weapons states. Thus, the Asian nuclear order is defined not by classic, dyadic security dilemmas but rather, as Linton Brooks and Mira Rapp-Hooper argue, by security "trilemmas" whereby "actions taken by one state to defend against another state have the effect of making a third state feel insecure". This dynamic is perhaps most obvious with respect to the US-China relationship. As China continues to modernise and expand its nuclear arsenal to primarily counter perceived nuclear and conventional advantages of the US, this will inevitably spill over into the South Asian nuclear equation as India will seek to counter Chinese modernisation with its own. This, in turn, will likely compel Pakistan to keep pace. Given the centrality of Beijing's long-standing all-weather relationship with Pakistan—including cooperation in strategic weapons systems and technologies—in balancing against Indian predominance on the subcontinent, this could stimulate renewed Chinese aid to Islamabad and heighten tension between Beijing and New Delhi."
The central problem here is the operation of the security trilemma. Both Moscow and Beijing have made it clear through force posture development and declaratory policy that they do not have faith in Washington's consistent assertions that the evolution of its force posture is in fact driven primarily by a desire to combat those regional challengers.

Nuclear asymmetries

Compounding these trends are the evident asymmetries between Asia's nuclear weapons states. At the basic level of arsenal size, the region's current nuclear powers, the US, Russia, China, India, Pakistan and North Korea, are radically unequal. According to the Bulletin of the Atomic Scientists annual nuclear forces 'stocktake' in 2016, the US currently has a total inventory of around 4,670 warheads of which 1,930 are deployed, while Russia has a total inventory of around 4,500 of which 1,800 are deployed. In contrast, China, India and Pakistan currently possess around 260, 120, and 130 non-deployed nuclear warheads respectively, while there remains speculation on the extent of North Korea's embryonic arsenal.

Asymmetry is also evident in the respective force postures of Asia's nuclear weapons states, i.e. their decisions about current force capabilities, where forces are and how they’re postured, relevant infrastructure development and declaratory policy. Decisions in this realm have the potential to either dissuade adversaries from quantitative or qualitative competition or conversely to stimulate them to compete.

Ultimately, the evolution of American nuclear force posture since the end of the Cold War has been central in stimulating the latter rather than the former. Successive administrations since the early 1990s have pointed to a variety of pressures such as technological diffusion, continued horizontal proliferation amongst widely regarded rogue states such as Iraq, Iran and North Korea, and the advent of mass casualty terrorism, as driving changes in US nuclear force posture such as greater emphasis on modernisation of the nuclear triad of bombers, ballistic missile submarines (SSBNs), missiles and counter-force targeting.

Kier Rieber and Daryl Press have argued, however, that this posture amounted to a rejection of the mutual vulnerability that underpinned strategic stability during the Cold War in favour of a posture of nuclear primacy designed to dissuade potential adversaries such as Russia and China by developing means to blunt their second-strike capabilities and “prevent weaker countries from being able to challenge the US in critical regions". This posture has also been supported by US conventional counter-force capabilities; most notably development and deployment of ballistic missile defence (BMD), Terminal High-Altitude Area Defense (THAAD) systems and PGS.

From the US government’s perspective, however, such force posture developments have been primarily stimulated by a determination not to accept mutual vulnerability with regional challengers such as North Korea. In turn, as former US Deputy Assistant Secretary of Defense for Nuclear and Missile Defense Policy, Brad Roberts, recently argued the US adopted a “laissez-faire attitude toward adaptations in the strategic deterrents of Russia and China that they deem necessary to maintain the credibility of their deterrents, in their eyes, as the US adapts its posture to negate the deterrents of regional challengers".

The central problem here however is the operation of the security trilemma. Both Moscow and Beijing have made it clear through force posture development and declaratory policy that they do not have faith in Washington’s consistent assertions that the evolution of its force posture is in fact driven primarily by a desire to combat those regional challengers. Beijing perceives US force posture developments as especially troubling due to its enduring reliance on a posture focused on maintaining, in Jeffrey Lewis' phrase, the “minimum means of reprisal”, i.e. ensuring a secure, second-strike capability. This is reflected not only in the modest size of China’s nuclear arsenal and ICBM force but also in its declared “no first use” policy that stipulates China’s commitment to only use its nuclear force in response to a nuclear strike on it.

From China’s perspective, the evolution of US force posture and conventional counter-force capabilities suggests an attempt to attain what Chinese observers term “absolute security” and escape mutual vulnerability within the China-US nuclear relationship.

Beijing has arguably begun to transition away from reliance on its minimum deterrent posture by increasing and modernising its ICBM force to ensure survivability and modified its no-first-use doctrine to one of limited ambiguity. China’s response thus illustrates both the corrosive impact on strategic stability of Asia’s security trillemmas and how the increasing overlap in nuclear and conventional capabilities provides incentives for the manipulation of the ambiguities of deterrence. China’s shifting nuclear force posture and doctrine, while enough to potentially deter an American conventional counter-force strike, may also encourage worst-case American assumptions about China’s threshold for nuclear use in a crisis.

Life in the grey zone?

Taken together, as Taylor Fravel and Fiona Cunningham have argued, “China’s strategic community appears willing to depend on limited ambiguity to deter a U.S. conventional attack on its nuclear facilities. To avoid ending up in a costly nuclear arms race reminiscent of the Cold War, China is betting that the U.S. desire to avoid nuclear escalation is more important than U.S. interests in the region".

This dynamic, i.e. “betting the U.S. desire to avoid nuclear escalation is more important than U.S. interests in the region”, has been manipulated by Beijing in the context of the ongoing tensions in the South China Sea. Here, China has utilised a variety of grey zone tactics, such as the creation of artificial islands and the use of civilian fishing boats as part of a maritime militia that remain below the level of aggression that may usually prompt military retaliation to make gains at the expense of a strategic competitor.

The actor that has perhaps most fully exploited the ambiguities of the current Asian strategic environment however has been North Korea. Kim Jong-un’s calculus is relatively clear: he believes that his regime’s survival is assured if it can demonstrate not only a nuclear weapons capability but also the ICBM capability to deliver them. Kim is making a similar but higher stake bet to that of Beijing: that the US will ultimately baulk before following through a potential direct counter-value threat against the regime’s survival.

Strategic stability in the current Asian strategic environment, then, appears an increasingly difficult objective to attain. Not only is the environment characterised by an emergent geopolitical multipolarity but also by complex and adversarial relationships amongst the nuclear weapons states. Nuclear deterrence relationships in this context have become less stable and prone to manipulation. This should serve as a reminder that nuclear deterrence is ultimately concerned with the manipulation of risk and, as such, should temper arguments that when it comes to nuclear weapons more may be better.
In light of Kim Jong-un’s most recent threat to test a hydrogen bomb above ground, such preparations to meet the threat may even be considered responsible by the domestic and international communities.

North Korea has aggressively accelerated its nuclear missile program and testing capabilities under Kim Jong-un, who assumed his position as leader in 2012. As CNN’s Joshua Berlinger reported on 20 October 2017, in the first 10 months of the year, the country launched 15 tests of short- and intermediate-range missiles, and one long-range intercontinental ballistic missile. In 2016, North Korea conducted some 15 missile-tests according to a CBS News report on 6 September 2017. Clearly, there are no signs of de-escalation in North Korea’s program, despite global condemnation and United Nations sanctions imposed after these tests. Instead, the country seems determined to pursue Kim Jong-un’s “byungjin” policy, i.e. the dual pursuit of economic development and nuclear weapons, pointed out in Charles Armstrong’s 2017 article, North Korea in 2016: Much more of the same, in the Asian Survey. Indeed, the number of launches and tests under Kim Jong-un’s reign so far has already exceeded the combined total under the previous two leaders, Kim Jong-il and Kim Il-sung. Meanwhile, these firings, launches, and tests mean that North Korea’s immediate neighbours of South Korea, Japan and Taiwan remain in the grips of its nuclear threat. South Korea’s capital, Seoul, is literally within the sights of the low-tech artillery stationed at the demilitarised zone. Japan is further off, but the Supreme Leader has seen fit to launch missiles over the country—not once but twice in 2017, on 29 August and 15 September—as warnings to this critical United States ally. Taiwan’s proximity and its relations with the US also puts it at elevated risk geographically, although North Korea has not directed its bellicosity towards the nation.

O. Fiona Yap is an Associate Professor at the Crawford School of Public Policy at ANU. Her main research interests are in policy and the political economy of East and Southeast Asia, focusing on how strategic interactions between government and citizens lead to outcomes such as democratisation, civil-military relations, peace, economic development and policy success. Her research work is available through journals including the British Journal of Political Science, Comparative Political Studies, Journal of East Asian Studies, Journal of Theoretical Politics, Social Science Quarterly, Korea Observer, Japanese Journal of Political Science, Asian Survey, Government and Opposition and Policy Sciences as well as chapter contributions in edited volumes. She is co-editor of the European Journal of Development Research, and Asia & the Pacific Policy Studies, a board member of the Korea Institute, and editorial board member for Asian Survey, Korea Observer, and the 21st Century Political Science Review.
What are the responses of these neighbours to North Korea's escalation and provocation? Do the domestic publics in Japan, South Korea and Taiwan consider North Korea's nuclear missile program and threats to be an imminent danger or, at the least, a significant problem for their countries? Are these attitudes about North Korea changing over time, with the progression of North Korea's program? Understanding these public attitudes and responses provides critical understanding of the support for military proliferation or even nuclear development and deployment in these respective countries and may be a harbinger to similar developments in the broader region, including Australia and Southeast Asia. The following tracks how public responses and opinions in the three nations may undergird or undermine proliferation in these three territories.

Understanding public attitudes in the countries

Japan

For Japan, Article 9 of the Constitution that renounces war and “the threat or use of force as means of settling international disputes” means the country will need to amend its constitution to provide for military capabilities to launch a first strike, even if that first strike is a deterrent strike against North Korea's missile stations. Notwithstanding Article 9, Japan has in place a two layer anti-missile system that works to destroy missiles in mid-flight as well as in the final descent, and the country is looking to deploy the more sophisticated Terminal High-Altitude Area Defense (THAAD) system that is also capable of destroying short- and intermediate-range rockets in final descent. An interesting question to ask: given Japan’s anti-missile system, why did it not shoot the missile flyovers from North Korea in August and September 2017, but instead, sounded the air raids to warn its people to take cover?

Some have speculated that it is to see the capability and reach of the North Korean missiles. Others have argued it is because the anti-missile system may not work, and it would be politically costly for the government with the domestic public, especially for any further military or missile development.

Public opinion surveys corroborate this. The Asian Barometer, which conducts successive waves of surveys for countries in East and Southeast Asia, shows that war was not considered the paramount problem by respondents in 2007 and 2011, when waves 2 and 3 were conducted in Japan. Instead, the economy and government service delivery were considered more important—virtually tied at 16.8 per cent and 18 per cent respectively—for respondents who named the most important problems facing the country in 2007. In 2011, the economy became the overriding concern, at 40 per cent. War, more precisely, the prospects of international war, was reported as one of the most important problems facing Japan by only 7.5 per cent of respondents in 2007. That fell to two per cent in 2011.

Of course, these polling results are pre-Kim Jong-un. Is there reason to suspect the Japanese electorate may not be as sanguine about the prospects of international conflict since 2012? Some suggest so, given the results in the two recent elections: Prime Minister Shinzo Abe and his Liberal Democratic Party (LDP) were handed two successive electoral landslides, one in December 2014, and the most recent on 22 October 2017. In the two elections, Abe drummed the conservative line for the economy as well as the hard line against North Korea. Both elections saw the LDP and its coalition partner, the Komeito Party, with more than two-thirds of the 465-seat legislature.

In 2014, the LDP and its partner controlled 325 seats in the House of Representatives. With the 2017 elections, the Prime Minister and the LDP won 284 seats while its coalition partner retained 29 seats. The 2017 election results are even more notable because public approval of the Prime Minister had dropped below 40 per cent right before the elections, a 10-point fall from the previous quarter. Despite this, the LDP with its coalition partner won some 313 seats in the 465-seat legislature, as reported in the Nikkei Asian Review on 22 October 2017. 

For Japan, Article 9 of the Constitution that renounces war and “the threat or use of force as means of settling international disputes” means the country will need to amend its constitution to provide for military capabilities to launch a first strike, even if that first strike is a deterrent strike against North Korea's missile stations. Notwithstanding Article 9, Japan has in place a two layer anti-missile system that works to destroy missiles in mid-flight as well as in the final descent, and the country is looking to deploy the more sophisticated Terminal High-Altitude Area Defense (THAAD) system that is also capable of destroying short- and intermediate-range rockets in final descent. An interesting question to ask: given Japan’s anti-missile system, why did it not shoot the missile flyovers from North Korea in August and September 2017, but instead, sounded the air raids to warn its people to take cover?
Still, the survey results may provide a baseline for understanding public support for the constitutional amendment that would have to precede any military proliferation. Article 96 on amendments stipulate that amendments must have the concurrent support of two-thirds of both houses of Japan’s parliament, the Diet. Further, amendments must be ratified by a majority of the electoral turnout in a referendum. The LDP and its coalition partner control two-thirds in the House of Representatives. They also have 150 seats or about 62 per cent of the 242-seat House of Councillors. The LDP will need to win another 12 seats in the next upper house elections in 2019 to exceed the two-thirds requirement, which may not be a huge hurdle. However, there may be a bigger challenge in getting the public ratification: in 2015, Abe’s security bills that expanded Japan’s role in self-defence met with huge protests, even after prolonged debate, before finally taking effect in 2016. The road ahead may not be all smooth.

South Korea

Much like Japan, the public in South Korea do not seem overly concerned with North Korea. Indeed, public opinion surveys compiled by the Asian Barometer show that South Korean respondents considered China as having most influence in Asia in 2011 and 2015 and that China’s influence is greater than that of the US. North Korea barely registered a blip in the survey in 2011. It is interesting to note that even though China is viewed as wielding the most influence in Asia, South Koreans do not necessarily view it as having a more positive influence in Asia than other nations. How do South Koreans view China’s influence and how does that compare against the US? The 2015 survey reports 75 per cent of the respondents see China as having a positive influence on South Korea. This is not a lot lower than the 86 per cent who see the US as having a positive influence on the country. These results may have something to do with the predominant concerns with the economy; notwithstanding, they do underline that, if push comes to shove, South Koreans are more inclined to side with the US. Certainly in 2017 and probably thereafter, a China that is seemingly unable or unwilling to assert its influence over North Korea may well lead South Koreans to support military terms spearheaded by the US.

What do South Koreans perceive to be the most important problem in their country? Responses to waves 3 and 4 of the Asian Barometer show that the economy is of foremost concern, followed by government services, crime, corruption and political instability. Conflict between the North and South does not even register as a blip in these surveys. That may partly explain the large-scale protests and opposition against the deployment of the THAAD anti-missile system in the country. While Japan is looking to install the THAAD anti-missile system, South Korea already has the THAAD system in place, deployed by the former President Park Geun-hye’s administration in July 2017 following a three year debate.

The large demonstrations that took place may suggest opposition to military enhancement, but that is not the case in South Korea. Indeed, in the budget discussions for 2017, the ruling and opposition parties achieved a rare agreement on the need to increase defence spending to counteract Pyongyang’s escalating threats. The public and the opposition parties, then, are not averse to improving military or defence capabilities per se. Rather, the protests against THAAD in South Korea should be seen in light of two issues: concerns among residents located at the deployment area over radiation contamination and seepage; and concerns over the Park administration’s opaqueness and failure to follow procedural rules over the government’s choices, including to clarify THAAD’s technical defence capability. The million-person strong demonstrations against the former President Park that led to her impeachment and subsequent removal from office, then, may pave the way to improve support for military enhancement with a new administration and greater political accountability.
Taiwan
Taiwan has fully supported UN sanctions against North Korea for its missile launches and tests, even though Taiwan is not a UN member due to China's insistence it is a province of China rather than a separate country. China's insistence may explain in part why North Korea has not targeted Taiwan, despite its belligerence to other allies of the US, including Australia: it may be deemed a recognition of Taiwan.

What does the Taiwan public perceive as the most important problem in the nation? Responses to waves 2, 3, and 4 of the Asian Barometer show that the economy is of foremost concern, with worries regarding democracy tied with concerns over corruption. In wave 2, concerns about food outranked the other problems; certainly, there have been recurring scandals over food safety in Taiwan. Why it should shoot to prominence in 2006 for wave 2 over 62 per cent of the respondents cited food as a major problem–but vanish after 2006 despite food scandals in 2011 and 2014 is unclear.

Perhaps also interesting is that China does not register as a problem to Taiwan respondents. It is no surprise that Taiwan maintains an ambivalent disquiet about China: in the 2014 wave 4 Asian Barometer surveys, almost 55 per cent of Taiwan respondents reported that China's influence on Taiwan is negative. In comparison, only 26.6 per cent–about half the number for China–report the US as having a negative influence on Taiwan.

Taiwan announced in March 2017 its plans to raise its military spending to 3 per cent of its gross domestic product (GDP). According to reporters Adela Lin and Ting-Shi of Bloomberg News, that is an expected increase of 50 per cent of the nation's defence spending, which has not seen such budgets since 2008. This announcement follows China's plan to raise defence spending by 7 per cent. It is unlikely that Taiwan's spending will be commensurate with China's; the same Bloomberg report notes that China's military spending is second only to the US. Still, for Taiwan, the boost underpins plans to develop the nation's domestic defence industry; this will not only help the nation's defence but also bodes well for raising its GDP.

Better, larger, stronger?
How are North Korea's neighbours Japan, South Korea and Taiwan responding to the escalation of its nuclear missile program? Each of the countries have ratcheted up their military and defence capabilities. Importantly, these are mostly driven or underpinned by the support of their respective citizenry. Public support bodes well for continued increases and enhancements to the military might of these countries in the direct path of North Korea's bellicosity. In light of Kim Jong-un's most recent threat to test a hydrogen bomb above ground, such preparations to meet the threat may even be considered responsible by the domestic and international communities.

Thanks to Anuruddhi Rathnayake Mudiyanselage for research assistance.
Dr Benjamin Zala

Nuclear balances and the challenge of advanced conventional weapons in Asia

Australia has long played an important technological role in relation to advanced conventional weapons via the hosting of the joint US-Australian facility at Pine Gap outside of Alice Springs, a ground station used to collect satellite data. This data includes, amongst other things, early-warning of ballistic missile launches and tracking data integral to the US ballistic missile defence network in Asia.

One of the most striking trends in the contemporary nuclear politics of the Asia-Pacific region is that one of the key drivers of security dynamics and nuclear decision-making is not the size and quality of nuclear arsenals, but developments in conventional weapons. In particular, what might be considered strategic or advanced conventional weapons (ACW) have grown in importance in recent years and look set to continue to shape the nuclear dynamics of this part of the world for the foreseeable future.

ACW refers to a suite of weapons including ballistic missile defence (BMD); precision strike technologies usually referred to as conventional prompt global strike (CPGS) systems, anti-satellite and anti-submarine warfare weapons, as well as offensive cyber capabilities that could be used to compromise nuclear arsenals. Each of these weapons systems are important and have direct implications for deterrence, stability and arms racing. But more important is their combined effect.

While initially dominated by the United States, this area of military development now involves China, India, Russia and others, resulting in the Asia-Pacific region being at the centre of what may turn out to be the most serious challenge to nuclear stability in decades.

Continues on next page
For the first time, a nuclear armed state publicly stated that its nuclear doctrine was directly shaped by what it referred to as “the growth of unrivalled U.S. conventional military capabilities”, including “major improvements in missile defences”.

Rise of advanced conventional weapons

In part, the increasing reliance on ACW to augment strategic nuclear forces in the defence postures of the major powers has been the product of the so-called Revolution in Military Affairs with its emphasis on high-end precision targeting and communications technology. In this sense, the increasing role of ACW has been driven by a degree of technological determinism, with capabilities often being developed before missions have been articulated. It is also linked to the continued reductions in the nuclear arsenals in the US and Russia. In particular, ACW was linked specifically with nuclear disarmament and the attempt to reduce the role of nuclear weapons in the US defence posture by the then President Barack Obama administration’s 2010 US Nuclear Posture Review. For the first time, a nuclear armed state publicly stated that its nuclear doctrine was directly shaped by what it referred to as “the growth of unrivalled U.S. conventional military capabilities”, including “major improvements in missile defences”.

BMD technology uses radar, satellites and interceptor missiles to track, locate and shoot down incoming ballistic missiles. Developments in BMD have been the most important and the first form of ACW to be actively and widely deployed, as explored in Stephan Frühling’s essay in this report. While the US was the first-mover in this regard, Russia, China, India, Israel, Japan, the North Atlantic Treaty Organization (NATO) and others are all engaged in research and development. CPGS refers to a new category of offensive weapons which are long-range, precision-guided missiles that can travel at top speeds and deliver a conventional rather than a nuclear warhead. Much of the attention now is focused on hypersonic missiles. Hypersonic missiles can travel at greater than Mach 5 speeds of over 6,000 kilometres per hour and are most often cruise missiles, or gliders boosted by ballistic missiles. Anti-satellite and anti-submarine weapons as discussed in Rory Medcalf’s essay in this report refer to a variety of monitoring and surveillance systems as well as offensive capabilities that can be used to locate and compromise or destroy submarines and satellites. These include kinetic offensive capabilities such as armed underwater drones to target submarines, ground-based missiles or micro-satellites to hit target satellites and non-kinetic options such as directed energy weapons to target satellites.

The final component of the ACW challenge to nuclear forces is the potential for offensive cyber operations to compromise the command, control and communications systems that nuclear forces rely on. Concerns over such vulnerabilities have been evident in the official statements of a number of nuclear-armed states for years. For example, in 2013 the then commander of US Strategic Command (STRATCOM), General Robert Kehler, admitted to the Senate Armed Services Committee that “we are very concerned with the potential of a cyber-related attack on our nuclear command and control and on the weapons systems themselves”. The possibility for cyber-attacks to compromise nuclear arsenals include an adversary’s ability to ‘spoof’ early-warning systems, jam communications channels and even compromise missile targeting.

Abandonment of mutual vulnerability

The major effect of the rise of ACW in the defence postures of nuclear-armed states is to undermine the centrality of mutual vulnerability in deterrence relationships. The development of nuclear weapons, and in particular secure second-strike capabilities, during the Cold War had such a profound effect on how military force is used in international affairs that it became known as the post-1945 nuclear revolution. In short, what is referred to as ‘deterrence by denial’ i.e. deterring an adversary from attacking you by denying them the chance of victory, was replaced by ‘deterrence by punishment’ (deterring an attack through the promise of assured retaliation). The relationship between deterrence by punishment and stability was captured by ‘deterrence by punishment’. The final component of the ACW challenge to nuclear forces is the potential for offensive cyber operations to compromise the command, control and communications systems that nuclear forces rely on. Concerns over such vulnerabilities have been evident in the official statements of a number of nuclear-armed states for years. For example, in 2013 the then commander of US Strategic Command (STRATCOM), General Robert Kehler, admitted to the Senate Armed Services Committee that “we are very concerned with the potential of a cyber-related attack on our nuclear command and control and on the weapons systems themselves”. The possibility for cyber-attacks to compromise nuclear arsenals include an adversary’s ability to ‘spoof’ early-warning systems, jam communications channels and even compromise missile targeting.

For decades, two factors have impeded the serious development of ACW. First was a political commitment to MAD as the anchor of stability in a nuclear-armed world. This led, for example, to the effective banning of BMD in the US-Soviet Union relationship with the 1972 Anti-Ballistic Missile (ABM) Treaty. The second factor was technological. For years, military scientists talked of the possibility of CPGS and BMD with little to show for it in successful, testable prototypes. Similarly, offensive weapons systems aimed at compromising satellites and locating and compromising submarines and mobile missiles have been in development in military laboratories for decades. Since the turn of the century however, ACW have come of age technologically and gone from being the subject of obscure research initiatives and scientific conference papers to major weapons-development programs by the likes of Boeing, Raytheon, and Lockheed Martin. At the same time, the political commitment to MAD and its central emphasis on mutual vulnerability has been effectively abandoned in the US with a flow-on effect in Russia, China, India, Japan and elsewhere. ACW technologies have become normalised to the point where both political and technological barriers to their deployment are no longer meaningful. The result is that we are now on the cusp of a new era in which pre-emptive counterforce strikes (attacks aimed at destroying or degrading an adversary’s nuclear arsenal and its related command, control and communications structure) have become, at least theoretically possible, without crossing the nuclear threshold. While governments, think tanks, and scholars have begun to give ACW technologies greater attention, often missed in this analysis is the importance not of their individual but instead their possible effects on the reliability (and therefore vulnerability) of nuclear arsenals when used in combination.
As ACW technologies continue to mature and become more reliable in the years ahead, the risk of retaliatory strikes associated with engaging in a pre-emptive counterforce strike will decrease accordingly. In the event of a crisis between two nuclear-armed adversaries where one (state A) has ACW at their disposal, it is possible to envisage a conventional pre-emptive strike along the lines of the following scenario:

1. State A uses anti-satellite weaponry to strike along the lines of the following scenario:
   - Offensive cyber capabilities are employed
   - State B’s missile silos, bomber fleets, submarine bases and command, control and communications facilities are hit with CPGS missiles.
   - Underwater drones are used to locate and either attack state B’s nuclear-armed submarines or compromise their ability to launch their ballistic missiles (e.g. jam their communications capabilities that receive firing orders or confuse their targeting systems which may have already been compromised by the anti-satellite attack);
   - Offensive cyber capabilities are employed to compromise state B’s ground-based stations used for picking up and transmitting information from back-up satellites as well as any command, control and communications facilities not destroyed in the initial CPGS strike;
   - Finally, state A’s BMD system is used as the final defence if state B is still able to launch a limited retaliatory strike (e.g. from a missile silo that was not destroyed or a submarine that was able to launch a missile salvo before being compromised).

Of course, this is only one possible scenario of how a pre-emptive counterforce strike employing ACW might play out (and is also limited only to forms of ACW that are currently either deployed or in development). However, it does demonstrate how the combinational logic of current ACW systems is already raising fundamental questions about the survivability of nuclear arsenals. Without breaking the ‘nuclear taboo’ by being the first state since 1945 to use nuclear weapons, states investing in ACW today can give themselves the option to consider pre-emptive strikes that knock-out an adversaries’ nuclear capabilities, thereby completely altering the military dynamics of a conflict. It should also be noted that in such a scenario, steps 1-4 would be taken almost instantaneously adding extra pressure on state B (and its allies) in deciding how to respond.

Asia’s new age of instability: where all ACW roads lead and intersect

While the US has led both the technological development of ACW and the associated political push to abandon mutual vulnerability as the cornerstone of nuclear stability, others are now following suit. In particular, the Asia-Pacific region is quickly becoming the focal point of this trend.

Washington, Beijing, Moscow and New Delhi all have active BMD, CPGS, anti-satellite and cyber programs. Unsurprisingly, all are also involved in major nuclear modernisation projects, at least in part driven by the need to respond to these ACW developments (added to this is Pakistan’s modernisation efforts as well as North Korea’s sprint towards a credible nuclear deterrent). Research and development efforts are also taking place collaboratively in certain domains. For example, on CPGS, India and Russia have been collaborating on the joint Brahmos project for several years. The Brahmos I is a supersonic cruise missile with a range of just under 300 kilometres (although the previous restriction to this range has recently been lifted by India’s entry into the Missile Technology Control Regime). Its successor, the Brahmos II is reportedly a hypersonic version of the same missile. On BMD, while China has continued to develop its own indigenous system, in 2014 Beijing ordered six Russian S-400 Triumph air defence units which, while being primarily used for anti-aircraft purposes, can also hit short-range ballistic missiles.

The abandonment of mutual vulnerability has also been embraced, with varying degrees of enthusiasm (but very little conscious recognition) by US allies who are the recipients of extended nuclear deterrence guarantees. Japan has been one of the greatest proponents of BMD in recent years and currently fields a tiered system including Aegis-equipped destroyers and the land-based Patriot Advanced Capability-3 system. South Korea has recently been at the centre of controversy involving ACW with the deployment of US Terminal High-Altitude Area Defense (THAAD) batteries in response to North Korea’s advances in its missile program. Australia has long played an important technological role in relation to ACW via the hosting of the joint US-Australian facility at Pine Gap outside of Alice Springs, a ground station used to collect satellite data. This data includes, amongst other things, early-warning of ballistic missile launches and tracking data integral to the US BMD network in Asia. Australia’s support for the increasing link between ACW and nuclear weapons, as it relates to the US extended deterrence guarantee, was reflected in the 2016 Defence White Paper (DWP) that stated specifically that both US nuclear and conventional forces were required to deter nuclear threats against Australia. Australia is unlikely to develop its own ground-based BMD system for homeland defence for both logistical and financial reasons.

While the US has led both the technological development of ACW and the associated political push to abandon mutual vulnerability as the cornerstone of nuclear stability, others are now following suit. In particular, the Asia-Pacific region is quickly becoming the focal point of this trend.

However, Canberra’s current plan to upgrade the Aegis defence system aboard the Hobart-class air warfare destroyers and the planned future frigates to include limited BMD capabilities ensures a degree of involvement in the ACW story as it develops in the future.

All of this adds up to a picture of a region in which the fundamentals of nuclear doctrine and force structures are set to be significantly challenged by the increasing spread of ACW technology. As these systems work to make the nuclear forces of those with fewer ACW capabilities more vulnerable, the challenge of maintaining nuclear stability in Asia (and beyond) is set to become more complicated than it’s been in decades. As ACW technologies are still in their infancy, first-movers and those who achieve technological breakthroughs will enjoy significant offensive advantages. The nuclear-armed intended targets of such advantages will face increasing pressures to act first to ‘use or lose’ their nuclear capabilities. They will also be pressured into continuously upgrading (and often expanding) their nuclear arsenals to try and counter ACW threats. As such, the growth of ACW means that we may well be witnessing the onset of a new and potentially dangerous nuclear age in the region.
Nobody can pressure Kim Jong-un into changing his course but his own people. And while the North Korean elites and ordinary people live in fear of war and invasion they will stay loyal to their leader.

After the successful test of a hydrogen bomb, which North Korea conducted on 3 September 2017, many sceptics around the world have admitted the denuclearisation of North Korea may be impossible. Given the secretive nature of the regime and its stubborn resistance to international inspections, the process of denuclearisation will never be deemed complete verifiable and irreversible (CVID). Some observers have proposed coming to terms with living with a nuclear North Korea, while others insist on a military strike against the rogue state. In the context of the continuing Korean War, both proposals seem coherent but promise no secure or mutually agreeable solution to the problem.

Are North Korean nuclear and missile programs non-negotiable? Is North Korea hell-bent on a suicidal mission of attacking the United States and its allies? Is a pre-emptive strike against the rogue nation and the decapitation of the regime the only way out of the protracted crisis? To answer these questions, we need to look at the context and underlying reasons that prompted this small and impoverished nation to follow the nuclear path so stubbornly.

The Korean problem—which is broader than the North Korean nuclear problem—emerged in 1945 with the ideological, political and military division of Korea and heralded the beginning of the Cold War. The Korean War that started in 1950 as a war for unification quickly turned into a surrogate Third World War. Neither the United Nations intervention nor the Chinese counter-attack could help Koreans to reunify their divided country. The conflict was halted in a truce by the 1953 Armistice Agreement but has never been replaced by a permanent peace regime. Nearly three decades after the end of the Cold War, the two Koreas remain divided, belligerent and irreconcilable.

Continues on next page
For the totalitarian regime in North Korea, the continuing war provides legitimacy and consolidates the masses around the leader, currently Kim Jong-un, who does not need to justify his power or be accountable for the North's economic woes. For the export-oriented economy and steadily democratising society of South Korea, the continuing war against communism provides broad international sympathy, which is translated into their staunch security alliance and economic cooperation with the US. The two Koreas still refuse to recognise each other and claim sole legitimacy on the peninsula.

Regional neighbours find this situation annoying but acceptable because the reunification of Korea could be potentially dangerous for some and advantageous for others. The Cold War mentality persists in Northeast Asia and requires its leaders to exercise special caution in any decisions related to the Korean peninsula, which is known for its strategic importance and abundance in natural resources. Seventy years after the division, Korea still serves as a buffer zone which separates the economic interests of China and Russia-dominated Northeast Asia from the US-dominated Pacific and Oceania. North Koreans see themselves on the forefront of the continuing global conflict, where everyone is now armed with nuclear weapons and long-range ballistic missiles (LRBMs). Their traditional allies, China and Russia, have undergone significant transformation and may not be willing to protect them from the new forms of hybrid warfare that include economic, cyber and information subversion.

The survival of the North Korean leadership and its political regime has become the goal for North Korean existence. In this context, the development of a reliable nuclear deterrent, regardless of the cost or reputational damage, is seen by North Koreans as a legitimate and righteous way to achieve national survival.

The recent boost of nuclear and missile programs is attributed to “Byungjin”, the parallel development of the economy and national defence capabilities line that was formulated in March 2013 at the plenary session of the Korean Workers Party’s Central Committee. Kim Jong-un’s new policy intended to convey the idea that nuclear arms are essential for national survival, defence and prosperity because only they can allow the reduction of the conventional weapons expenditures and spare valuable resources for economic development.

“Byungjin” is designed to promote socialist economic construction and raise the living standards of the people, while strengthening national defence capabilities “without increasing the defence budget” according to defence intelligence news service GlobalSecurity.org. Even a single nuclear device will serve as psychological deterrence and reduce expenses on the production, storage and utilisation of conventional weapons. “Byungjin” aims to solve the chronic energy problems as it emphasises an “independent nuclear energy industry while strengthening nuclear weapons capabilities”. In other words, this policy signifies that North Korea does not differentiate its peaceful nuclear program from the military one as they both rely on the dual-use technologies. Also, the North Koreans insist that the international Nuclear Non-Proliferation Treaty (NPT) is not violated since Pyongyang’s nuclear program is purely indigenous and defence-oriented.

Less than five years after being declared, the policy has invigorated the economy and made North Korea’s nuclear deterrence unquestionable. North Korea has made a calculated decision to enhance its nuclear capability and further developed its ballistic missile program in defiance of the UN Security Council resolutions. Even the reduction of trade with China and Russia have not shaken Pyongyang’s resolve to develop, test and possess the most lethal weapon. The explosive yield of North Korea’s sixth nuclear test is estimated to be between 120 and 400 kilotons of TNT explosive equivalent, which is 10 times more powerful than all devices previously detonated by the North.

Everyone in Korea and beyond understands the risks associated with the first strike and assured nuclear retaliation. What was previously possible—or at least hypothetically imaginable—with regards to military action against Pyongyang is simply out of the question today. Any military strike (conventional or nuclear) would lead to a disaster. Firstly, it would be suicidal for the aggressor and equally catastrophic for the victim of aggression. Second, when the nuclear dust settles the presumed victor would not know what to do with the trophy. The Kim dynasty would not survive another attempt at unification. The Seoul government would not know how to rule the third of its newly acquired population (or what will be let of it), which is not familiar with the concept of freedom or the market economy.

The cost of rebuilding damaged physical infrastructure would be dwarfed by the long-term expenditure required to maintain social order in the conquered territories and to re-educate the captured population. Survivors would prefer to seek refuge in a third country out of fear of revenge and reprisals. The exodus resulting from Korean reunification is not something that regional neighbours would be ready to welcome or absorb. It would take years and trillions of dollars before Korea could recover after the final shock of the war for unification.

Little is being done to resolve the long-standing conflict. Washington refuses to talk to Pyongyang directly and outsources the problem to Beijing and Moscow, whose influence over North Korea is minimal. Tokyo has withdrawn from discussions with Pyongyang until a separate humanitarian issue is resolved. Pyongyang refuses to talk directly to Seoul seeing in it an American puppet. Unsurprisingly, the worse the inter-Korean relations get, the
stronger the ties between Seoul and Washington become. As the US nuclear strike group is steaming to the peninsula, a confrontation of hostilities in Korea seems inevitable.

US News’ Paul D. Shinkman recently reported that despite the joint proposal coming from Beijing and Moscow, known as ‘double freeze’ or ‘double suspension’, joint military exercises south of the DMZ would continue. Instead of suspending the drills in exchange for the North’s temporary freeze of its nuclear and missile tests, South Korean, US and Australian defence forces rehearsed the mock bombing and simulated landing operations in August 2017. To reciprocate, two weeks after the beginning of war games in the South, the North detonated its first thermonuclear device. Rising tensions leave little hope for diplomatic solution.

The Korean issue cannot be resolved militarily without triggering a Third World War. The Australia, New Zealand, United States Security (ANZUS) Treaty alliance will work the same way as the Sino-North Korean Mutual Aid and Cooperation Friendship Treaty. Should the war in Korea be resumed, Australia is likely to find itself at war (this time a nuclear one) with China. When Pyongyang recently threatened Canberra with “unimaginable disaster” as a punishment for Australia “zealously joining the frenzied political and military provocations of the US against the DPRK” they meant a major cataclysm in the region on which the Australian economy is tectonic shifts in the region, which collectively produces and consumes approximately 19 per cent of the global gross domestic product. In the meantime, the Director-General of the North American affairs bureau at North Korea’s Foreign Ministry, Choe Son-hui, while attending the international denuclearisation conference in Moscow in October 2017, reiterated her government’s position: “The North will never give up its nuclear weapons as long as the US’ hostile policy, including military activities, sanctions and pressure, continue”.

The North Korean diplomat called upon the US to make the “right choice” of recognising North Korea as a nuclear-armed state, saying that it would lead to a “way out” from the current stalemate. “This is a matter of life and death for us,” said Choe, maintaining that North Korea’s nuclear weapons are needed for defence only but promising to “respond to fire with fire”.

One can assume that denuclearisation of North Korea will not happen while the US is committed to the principle of extended nuclear deterrence that requires it to demonstrate a strong and resolute security posture to protect its allies. International inspectors would verify whether these promises are adhered to. In a reciprocal move, all non-nuclear nations would affirm that they would not intend to acquire nuclear weapons either.

North Korea, although representing a special case of a non-recognised but de-facto nuclear state, would also be invited to sign onto this agreement with the idea of freezing its work on producing, testing and using its nuclear arsenal. Pyongyang has already declared that it would halt all nuclear and missile testing if the Korean War is formally ended and security is guaranteed. North Korea’s overtures to the US for peace talks began soon after Richard Nixon met with Mao Zedong in Beijing in 1972. Nevertheless, the US State Department did not consider peace with North Korea until October 2000, when the former US President Bill Clinton was prepared to end the war and establish full diplomatic relations followed by a normalisation of economic relations with Pyongyang. The defeat of the Democratic candidate in the presidential election and the subsequent change of US administration in 2001 disrupted these plans and restored the hostile status quo.

Another dramatic shift in US foreign policy occurred in 2017 with the arrival of the Trump administration. The opinion expressed by Mohammad Javad Zarif, the Iranian Minister of Foreign Affairs — “What the United States is doing, in addition to being unpredictable, is proving that it is unreliable” — must have strongly resonated with Pyongyang’s lack of willingness to trust the Americans. After the fall of Saddam Hussein and Muamar Kaddafi, Kim Jong-un will not invite international inspectors or trade the nuclear program for economic aid. For him and many members of the North Korean elite the choice is simple: the continuing nuclear buildup for the regime’s survival or the US-led invasion resulting in humiliating defeat, death or exile.

Even if a peace treaty with the totalitarian regime is repugnant to US policy, there is a solution that would help to bypass the ethical conflict and the lack of trust. A set of multilateral security treaties would guarantee peace and instil trust in Koreans of the North and South. For example, if Beijing and Washington agreed to guarantee security to Pyongyang that would be the first step out of the current deadlock. Similarly, an agreement between Moscow and Washington to assure Seoul that there will be no second North Korean invasion would only strengthen the South Korea-US alliance without antagonising North Korea. Tokyo, Canberra, Wellington, Ottawa and other regional parties would be welcome to join in and develop their own two-Korea policies. Without such collective effort, the Cold War security dilemmas and trilemmas will continue to beset the region.

The continuing sanctions against North Korea are hurting all sides. It is unlikely that anything in these sanctions will break the back of the North Korean regime or change the mood of domestic support. Even the North Korean textile trade is largely a labour export without moving the laborers. However, when translated into missed opportunities, sanctions will lead to distrust and one day may result in open confrontation.

Kim Jong-un is a hopeless diplomat, but at home he has enjoyed far more success than his father or grandfather. He has dropped the ‘military-first’ policy and instead pursued the policy of simultaneous strengthening of national security and the economy. That change has resulted in sustained economic growth and nuclear build-up. If Kim Jong-un plays his cards right, he might achieve international recognition for North Korea as a nuclear power, the same degree of recognition that other non-NPT signatories, like India, Pakistan and Israel, are already enjoying. Nobody can pressure Kim Jong-un into changing his course but his own people. And while the North Korean elites and ordinary people live in fear of war and invasion they will stay loyal to their leader. Neither the US nor China or Russia can do much about it, except for offering to Koreas a comprehensive security assurance convincing enough to dissipate their fears of war and their belief that nuclear weapons and missiles can save them. Everything short of that, including additional sanctions and belligerent rhetoric, would simply prove to North Koreans that they are doing the right thing.
Assuming that lessons are learnt and potential crises managed in the decade ahead, advances in Chinese and Indian technology may eventually contribute to a new phase of relative strategic stability where the existence of nuclear weapons keeps the peace.
In theory, submarines armed with nuclear weapons are the ultimate deterrent and peacekeeper. They can be extremely difficult to detect. They carry devastating firepower: one submarine can carry tens of warheads, enough nuclear weapons to inflict destruction across an entire country. They can thus keep the peace by guaranteeing their possessors’ what is known in the nuclear strategy lexicon as an ‘assured second-strike capability’, the ability to deliver horrendous retaliation and thus deter the other side from starting or escalating a war in the first place. It is little wonder that such ballistic missile submarines, known as SSBNs or ‘boomers’, helped keep the Cold War cold, and have long been fundamental to US, Russia, British and French defence.

The nuclear powers of maritime Asia, also known increasingly as the Indo-Pacific, now seem intent on following the sea-launched trajectory. But this strategy is beset with several kinds of risk. To the extent that the region’s emerging nuclear-armed submarine programs succeed, the strategic balance will be altered—sometimes in destabilising ways. For instance, an effective Chinese SSBN force could reduce the likelihood of the US chancing a war in the first place. It is little wonder that such ballistic missile submarines, known as SSBNs or ‘boomers’, helped keep the Cold War cold, and have long been fundamental to US, Russia, British and French defence.

The nuclear powers of maritime Asia, also known increasingly as the Indo-Pacific, now seem intent on following the sea-launched trajectory. But this strategy is beset with several kinds of risk. To the extent that the region’s emerging nuclear-armed submarine programs succeed, the strategic balance will be altered—sometimes in destabilising ways. For instance, an effective Chinese SSBN force could reduce the likelihood of the US chancing a war in the first place. It is little wonder that such ballistic missile submarines, known as SSBNs or ‘boomers’, helped keep the Cold War cold, and have long been fundamental to US, Russia, British and French defence.

Also troubling, though, is the prospect of the new nuclear-armed submarine forces failing to achieve high levels of invulnerability or deterrence. There are deep uncertainties about how they would be used in a crisis, or indeed whether their very existence could help precipitate one. For instance, there are real possibilities ahead of ‘incidents at sea’—collisions or other hazardous encounters—involving submarines in Asia. This has occurred in the past, including between British and French boats in the Atlantic. And submarine commanders may have extraordinary decisions to make during moments of geopolitical confrontation and unreliable communications. One of the most truly tense episodes in the Cold War involved the on-the-spot decision of a Soviet Union submarine commander to refrain—despite his rules of engagement—from firing a nuclear-tipped torpedo at US forces during the 1962 Cuban Missile Crisis. Had he not held back, the rest—everything—would have been history.

It is not at all clear whether the technological achievements of Chinese, Indian, North Korean or Pakistani weaponry will be matched by the command, communications and doctrinal maturity and discipline required to make undersea arsenals truly reliable—with calculated strategic restraint being an element of that reliability. This concern is reinforced by the anticipated development of anti-submarine warfare (ASW) capabilities in the years and decades ahead.

China is believed to have four Type-094 or Jin-class SSBNs operational. JL-2 submarine launched ballistic missiles (SLBMs) can travel about 7,200 kilometres. China and to a lesser degree India have made significant advances in recent years in their ability to put a nuclear-armed submarine fleet to sea. According to unclassified Pentagon reports, China is believed to have four Type-094 or Jin-class SSBNs operational, based near the city of Sanya on Hainan Island in the South China Sea. These are believed to carry JL-2 submarine launched ballistic missiles (SLBMs) that could travel about 7,200 kilometres. The Pentagon calls this China’s first ‘credible at-sea second-strike nuclear capability’ and has speculated that ‘deterrent patrols’ by these submarines could have begun in 2016. However, it is not clear whether the Chinese subs carry nuclear warheads yet, whether the warheads are ‘mated’ to the missiles, or whether the all-important systems for command, control and communication have yet been established. This is a big question, since for countries like China or India to convincingly make deterrence threats with their at-sea nuclear weapons, they would need to radically alter their overall nuclear doctrines and postures, which have previously relied on strict political (as opposed to military) control of nuclear decision-making. China is already believed to be working on a successor generation of submarines with greater stealth and larger numbers of longer-range missiles. In time, it aims to be able to target the continental US from the safety of the South China Sea.

India, meanwhile, is reportedly about to launch its second SSBN, the INS Arihant, to complement the INS Arishan, its trainer and ‘technology demonstrator’, which was launched in 2009 and inducted into service in 2016. There are reported to be ambitions to build at least another two boats in this class. India is behind China in its SLBM program. Its initial SLBM, the K-15, reportedly has a range of not much more than 750 kilometres, meaning that boats would

The nuclear powers of maritime Asia, also known increasingly as the Indo-Pacific, now seem intent on following the sea-launched trajectory. But this strategy is beset with several kinds of risk.

China is believed to have four Type-094 or Jin-class SSBNs operational. JL-2 submarine launched ballistic missiles (SLBMs) can travel about 7,200 kilometres.
Of particular cause for concern is that North Korea and Pakistan have proclaimed an interest in deploying nuclear armaments on their own (albeit diesel electric-powered) submarines. Other nations are beginning to take seriously the undersea nuclear ambitions of North Korea especially, though it is fortunate that such capabilities are notoriously difficult to master.

Pakistan, meanwhile, tested in January 2017 what is believed to have been a nuclear-capable submarine-launched cruise missile (SLCM), the Babur-3. Analysts suggest that Pakistan's intent is to put these to sea with nuclear warheads, aboard either its existing Agosta submarines or eventually on the Type 041 Yuan-class submarines it is purchasing from China. This has implications for strategic stability in the already fraught relationship with India. It also raises real questions about the security of the weapons on board, given the record of infiltration by jihadist extremists in parts of Pakistan's armed forces. Whatever precautions the Pakistani authorities put in place, one of the more conceivable risks of a nuclear weapon falling into the hands of terrorists is through theft from the Pakistani arsenal.

As with the broader nuclear weapons landscape, undersea nuclear deterrence in the Indo-Pacific will be multipolar and complicated and stable deterrence—if it is ever attained—will take probably decades to achieve. Fundamental questions need to be asked about, not only the capabilities these countries are developing, but also the doctrines and strategies for the potential use of those capabilities, and the protocols and systems for command and communications—all of which point to the vital and often opaque human factor.

Overlaying all of this is the possibility of disruptive shifts in capabilities to detect submarines. Scientific advances including in quantum computing and unmanned systems could make submarines easier to find, even if the prospect of absolute transparency of the oceans remains elusive. Alternatives to sonar have existed in theory but have not yet been deployed with greater caution.

But strategic stability during the Cold War was never a forgone conclusion. It required evolutions in technology, posture and doctrine, as well lessons learned through crises which could have escalated to catastrophe. The undersea dimension of the Indo-Pacific strategic competition is likely to go through a long passage of tempest and risk before we can envisage the prospect of stability and calm.

Professor Rory Medcalf
Today, China’s ability to conduct a large-scale, conventional missile strike against the US and its allies carries the real risk that, to borrow a Cold War phrase, the Chinese People’s Liberation Army leadership might think it can brief the Politbureau with a plausible theory of victory.
This is not to say that scope does not remain for significant technological improvement of many of these arsenals. All of Asia’s nuclear powers are working on submarine-launched missiles, but technological difficulties and the need to make the submarines themselves survivable against an adversary’s submarine forces mean land-based capabilities will for many years remain the mainstay of their nuclear arsenals.

India’s Agni V and North Korea’s Hwasong-14 remain under active development and testing. The failure of North Korea’s second test of the missile in late July 2017 was probably due to a more advanced re-entry vehicle design. India and China have joined Russia and the US in the ability to use solid-fuel engines for ICBMs, while Pakistan and Iran are working to transition their medium-range ballistic missile (MRBM) and intermediate-range ballistic missile (IRBM) programs away from liquid fuel. North Korea’s long-range missile programs however—perhaps due to their heavy reliance on creative re-use of Soviet technology—still heavily rely on liquid fuel engines. And the precision of modern US warheads, which has given all its ICBMs an even greater ability to destroy hardened point targets than they had during the Cold War, remains far greater than that achieved by any Asian nuclear power.

And yet, these differences today reflect strategic choices as much as basic technological ability. During the Cold War, Russia and the US used precise missiles with multiple independently targetable re-entry vehicles (MIRVs) to improve their missile exchange ratios in a nuclear counterforce campaign. China has now also deployed MIRVed warheads on some of its missiles, while India and Pakistan continue to research this technology. However, their interest lies in increasing the lethality of their small arsenals in general, and of the fraction that might survive an adversary’s counterforce strike and ballistic missile defence (BMD) system in particular. The slow pace of China and India’s long-range missile modernisations remains consistent with their underlying minimum deterrence postures, and indicative of the relatively low priority placed on the modernisation of their nuclear arsenals.

Access to technology has thus ceased to be the major constraint on the proliferation of the nuclear powers in Asia. This is a fundamental change from the situation during the Cold War and the 1990s, when export controls in general, and the Missile Technology Control Regime (MTCR) in particular were the main levers used by industrial nations to manage the threat of missile proliferation. It is a development that was correctly forecast in the 1998 report of the independent Commission to Assess the Ballistic Missile Threat to the US (or ‘Rumsfeld Commission’ after its chairman, the previous and future Secretary of Defense Donald Rumsfeld). This report, in turn, was a major influence on the George W. Bush Administration’s decision in 2002 to withdraw from the 1971 Anti-Ballistic Missile (ABM) treaty, and proceed with a crash program to field a rudimentary ability to defend the US homeland against an ICBM attack.

In hindsight, the debates on the merits of missile defence in the US during the second Clinton and first George W. Bush administrations were echoes of earlier Cold War debates, and not reflective of the new, multipolar nuclear world facing the US and its allies today. The argument that a nuclear missile threat was best met by embracing the vulnerability of one’s own population, that it was ‘destabilising’ if not even morally wrong to seek to defend oneself against such a threat, did not survive long the reality of Iranian and North Korean missile and nuclear programs in the first decade of the 21st Century. The Australian Government’s rejection of ‘unilateral national missile defence systems’ in its 2009 Defence White Paper (DWP) was thus less a return to, than an epiphan of the inter-allied BMD debates of the 1980s that had raged on the Reagan Administration’s plans for a ‘Strategic Defense Initiative’.

Today, the US and, in its geographic context, Israel are most advanced in terms of the technology, breadth and number of their BMD systems. Most numerous and reliable are point-defence systems that grew out of general air defence missiles and that can intercept short-range missiles inside the atmosphere, such as Patriot or Standard Missile (SM)-2 block IV. Terminal High-Altitude Area Defense (THAAD) batteries suitable to defend larger areas against longer-range MRBM are now deployed on the US island of Guam and in South Korea. However, the development of exo-atmospheric systems, which can intercept longer-range ICBM and IRBM warheads in space, has been less straightforward. The Ground-Based Interceptors (GBI) and ship-based SM-3 that were pressed into service in the mid-2000s were based on technology demonstrators, not regular development programs. By the end of 2017 there will be 44 GBI installed, mainly in silos in Alaska. They are the only systems able to defend the continental US from an ICBM attack, but the GBI production line has been shut down pending the successful test of a complete new kill vehicle that will address the shortcomings of existing designs.

Hence, North Korea’s demonstration of its ICBM capability has even further increased public and policy focus on the SM-3 system. SM-3 has had a relatively more successful test record, and greater visibility and political relevance for allies as it is forward deployed on US Navy Aegis ships, co-produced with Japan and in service with the Japanese Navy. However, the block II version with an enlarged booster that makes full use of the space available in the Mk41 Vertical Launch System (VLS), is also yet to enter service. While this will provide both greater speed and increased range, and hence broaden the geometry of feasible intercept locations, the size limitations of naval launch systems will always make SM-3 more suitable for intercept of IRBM than of the ICBM, especially if these are launched from inland. Despite the limitations of early interceptor designs, US and allied missile defence capabilities will thus continue to improve, not least because of improvements to battle management systems that link different sensors and enable more flexible employment of interceptors. Shore-based installation of SM-3, as existing in Romania, under construction in Poland and planned for Japan, will address some of the cost, capacity and availability issues that come with deployment on ships. However, short of fundamental technological breakthroughs in direct energy, electromagnetic guns or space-based systems, the capacity of BMD systems will continue to lag by an order of magnitude the large conventional missile arsenals of Russia and China: US THAAD or SM-3 interceptor numbers measure in the low hundreds and are dispersed not just within Asia, but also in the Middle East and Europe. How much can missile defences thus really contribute to managing threats from missiles in Asia?

Intercepting adversary missiles is ultimately only a means to deny the adversary the strategic objectives they seek through missile use.

The failure of North Korea’s second test of the missile in late July 2017 was probably due to a more advanced re-entry vehicle design. India and China have joined Russia and the US in the ability to use solid-fuel engines for intercontinental ballistic missiles, while Pakistan and Iran are working to transition their medium-range ballistic missile and intermediate-range ballistic missile programs away from liquid fuel.
In war, ballistic missiles have repeatedly been used in large numbers against civilian targets to impose generalised cost and hardship on the adversary, including by Germany in the Second World War, and by Iran and Iraq in the 1980s.

North Korea, as well as China in the 1995-96 Taiwan Straits Crisis, have sought to use missile ‘tests’ for political signalling and intimidation—to ultimately counterproductive effect. Today, the US and Japan have the technical ability to intercept North Korean missile tests. Incentives to do so will only increase if Pyongyang makes good on its threat to test a live nuclear missile in the Pacific. In war, ballistic missiles have repeatedly been used in large numbers against civilian targets to impose generalised cost and hardship on the adversary, including by Germany in the Second World War, and by Iran and Iraq in the 1980s. This is the most challenging setting for missile defence systems from a cost-benefit calculation of individual intercepts, but also where missile defences have in recent years proved most effective in the defence of Israel against persistent attacks from the Gaza strip, and of Saudi Arabian cities against dozens of Scud and other missiles fired by from Yemen since 2016. In both conflicts, blunting the missile arsenals of Hamas and the Houthi rebels meant that Israel and Saudi Arabia were able to maintain control over the pace and intensity of these conflicts.

In Asia, however, China’s conventional ballistic missiles directed against US, Taiwanese and Japanese forces and bases are far greater in number, as would be the cost of failing to intercept a single nuclear-tipped missile. Even limited missile defence, as now exists at strategic bases in Japan, South Korea and Guam, and of centres of government in Taipei, Seoul and Tokyo, can help limit damage (for example, by allowing vulnerable large-bodied aircraft to depart before interceptors are exhausted), or make a decapitation strike far less likely to succeed. There is a good chance that even limited defences of the US continent would deny success to a North Korean ICBM attack, reduce the ability of China to impose limited use of nuclear weapons in a conflict with the US, or blunt retaliation after a US counterforce campaign to destroy an adversary’s nuclear arsenal.

In these scenarios, however, the value and role of missile defence capabilities only arises from their interaction with offensive forces. Controlling nuclear (and conventional) dangers from missiles in Asia must rest on nuclear deterrence, conventional counterforce capabilities and missile defences, and there are signs that the value of ballistic missiles for the US and its allies in this mix of forces is starting to be increasingly recognised once more. This is most obvious in the case of South Korea, which in 2012 agreed with the US on a relaxation of earlier restrictions on its ballistic missile capabilities, and is now fielding ballistic missiles of 800-kilometre range that can target all of North Korea. More recently, US President Donald Trump also agreed that South Korea may field warheads above 500 kilograms, which will allow it to hold at risk a larger number of North Korean hardened bunkers. In wartime, South Korea’s own missile capabilities will thus be a major factor blunting the missile threat from the North.

The ballistic missile capabilities of the US itself, however, remain limited by the 1987 Intermediate-Range Nuclear Forces (INF) treaty with Russia that bans it from operating or testing land-based cruise and ballistic missiles with a range of 500 to 5500 kilometres: exactly the type of arsenal that, in Chinese hands, is today a major threat to US military forces and installations in East Asia. The US and German Pershing II missiles that were destroyed after 1987 were the first true precision-guided ballistic missiles. As long as the INF treaty remains in force, China can gain all the benefits of using conventional ballistic missiles—such as survivability, speed, throw-weight and ability to mass attack—against US and allied targets, while bearing none of the cost of having to cope with the same threat itself. And even in Europe, the North Atlantic Treaty Organization (NATO) has now lost its non-INF nuclear systems of similar range (such as the F-111 bombers and French land-based missiles), while Russia continues to use Backfire bombers to intimidate NATO members and neutrals like Sweden, and has violated the treaty by testing a prohibited system from a land-based launcher.

The future of the INF treaty is thus not only a major question for international arms control and NATO-Russia relations, but also for the strategic balance in East Asia. Given the heavy reliance by Asian nuclear powers on ballistic missiles for their minimum deterrents, there are no incentives for them to disarm by joining the INF treaty. Ultimately, however, the purpose of arms control is to help stabilise regional balances and reduce incentives for conflict. Today, China’s ability to conduct a large-scale, conventional missile strike against the US and its allies carries the real risk that, to borrow a Cold War phrase, the Chinese People’s Liberation Army (PLA) leadership might think it can bribe the Politbureau with a plausible theory of victory. To reduce the threat from missiles in Asia, the US and its allies may have to acquire more of their own.
As global power continues to shift to Asia, the main danger for Russia is to avoid being caught up in the seeming path dependency of the China-US relationship. Its progress in this respect so far has been poor.

With regional attention firmly fixed on North Korea and broader Chinese-United States competition, Russia is frequently overlooked as a player in Asian nuclear politics. To an extent this is understandable. The crisis of the post-Soviet state in the 1990s under its first President Boris Yeltsin, coupled to current President Vladimir Putin’s preoccupation with security dynamics in Europe, has tended to reinforce the view that the Russian Federation has been largely disinterested in Asian security affairs, up to and including nuclear security. Certainly, Russia was virtually invisible during the Six Party Talks process, perceiving that North Korea was a problem best left to the US and China. Limited Russian leverage over Pyongyang, with few opportunities to play the role of honest broker or alternative partner, also contributed to Moscow taking a back seat in negotiations to prevent the nuclearisation of the Korean Peninsula.

Given this, one could easily conclude that Russian interests, capabilities and motives are at best a sideshow in Asia’s evolving nuclear order. But this would be mistaken. While Russia will in all probability contribute little to the resolution of regional nuclear challenges, this misses the point that it actually has very little interest in doing so. On the contrary, its current posture means Russia’s role in Asia’s nuclear politics is likely to diminish stability rather than enhance it.

Continues on next page •
Don’t look to Moscow

Russia’s stance in nuclear Asia remains important for three reasons. The first concerns Russia’s interest in Asian strategic instability. In spite of its recent apparent successes in Crimea, Ukraine and information operations, Russia’s overall power trajectory is declining. It faces diminishing influence in its immediate Central Asian sphere of interest at the same time as it attempts to increase its regional footprint, via an Asian rebalance that is both partial and heavily contingent on factors—such as China’s One Belt and One Road (OBOR) Initiative—that are largely beyond its control. Given this, Moscow seeks a divided and weakened Asian region in which it can adopt spoiler and pivot roles, instead of being tied to the fortunes of any one major power.

Second, Russian military doctrine has shifted markedly in recent years. It has moved away from an ever-increasing reliance on nuclear weapons, brought about by its ossified conventional capabilities. Instead, it has embraced a central role for nuclear weapons in conventional warfighting, effectively threatening escalation in order to deter the West from seeking to match with force any future Russian territorial aggrandisement. This makes Russia an even more problematic actor with respect to nuclear futures in Asia because it is effectively opting out of strategic stability, itself centrally tied to de-escalation, in favour of a doctrine that explicitly relies on brinkmanship.

Third, Russia is enhancing both its conventional and nuclear capabilities in the Asian theatre, including a revamp of its Pacific Fleet. It also includes the deployment of the SS-26 Iskander mobile short range ballistic missile (SRBM) to Russia’s Kaliningrad enclave, the development and deployment of the RS-56 Bulava submarine-launched ballistic missile (SLBM) and the RS-24 Yars variant of the Topol-M intercontinental ballistic missile (ICBM), with four to 10 multiple independently targetable re-entry vehicles (MIRVs). On some issues, such as the US decision to station the Terminal High-Altitude Air Defence (THAAD) system in South Korea, this has led to increased cooperation with China. On others, such as the modernisation of its ballistic missile submarine (SSBN) fleet via the Borei-class platform, Russia is clearly hedging against increased Chinese power, and seeking to enhance the survivability of its nuclear counterforce assets.

The upshot of this is that Russia has a diminished stake, diminished means, and diminished intentions in playing a constructive role in the mitigation of regional dangers, including nuclear ones. While it remains notionally interested in non-proliferation, this does not extend to North Korea, which in any event has now become a deterrence problem. The Kremlin sees no threat from Pyongyang and has even hinted at some amusement with the inability of the US or South Korea to make headway on resolving the issue. It has no real allies to whom it might offer an extended nuclear umbrella, notwithstanding the fact that such a move would likely be dismissed as incredible. And it is disinclined to make compromises on its own nuclear forces, given its perception of US intentions as hostile, and its wariness of China’s potential capabilities.

Russia’s stake

Unlike China and the US, the main nuclear challenges Russia faces in Asia are related to simple deterrence. Regional change has given rise to debates about multipolar nuclear orders, nuclear trilemmas, and deterrence postures that incorporate conventional forces and ballistic missile defence (BMD) in addition to nuclear capabilities. Hence, it is argued, the formula as to what constitutes effective deterrence has altered from the mutual capacity to inflict massive destruction, to more intricate calculations about denial and deterrence in-depth. Under this formulation, nuclear weapons become fundamentally tied to questions about regional strategic stability. In other words, they shift from a static condition threatening unacceptable costs to a more dynamic, complex and graduated one that makes escalation a multifaceted unacceptable risk.

China and the US have approached this problem in different ways. China has preferred a minimum sufficiency in nuclear forces, based on the assumption that the US is not prepared to risk large-scale war in the Asia Pacific. The US, on the other hand, has sought to leverage its superiority in numbers and platforms with its conventional capabilities, alliance networks and technological advancements in missile defence. The goal is to construct conditions whereby nuclear weapons are only one part of the strategic landscape. Hence the impetus for both actors is to minimise instability, because escalation risks between two powers can cause cascade effects that negatively affect broader regional strategic order.

For Moscow, however, these challenges are less important. It faces only two significant regional nuclear deterrence dyads: Russia-US and Russia-China. It is neither a declining regional hegemon nor an aspiring one. Its fortunes are much more tied to the effects of Sino-US competition than having a fundamental stake in driving how regional order evolves in the first place. If anything, its preferred outcome would be for regional strategic conditions to be as chaotic as possible. That would serve its

The Kremlin sees no threat from Pyongyang and has even hinted at some amusement with the inability of the US or South Korea to make headway on resolving the issue. It has no real allies to whom it might offer an extended nuclear umbrella, notwithstanding the fact that such a move would likely be dismissed as incredible.
The Russian rearmament process launched by Putin after the Russo-Georgian war of 2008 dovetailed with a refinement of Russian military thought, which highlighted the risks inherent in leaving escalation control to a potential adversary.

broader agenda in both the European and Asian theatres in preventing dominance—and thus a decline in Moscow’s policy flexibility—by any one particular player. This is also consistent with its doctrine of multipolarity, in which the core objective of Russian policy has been to engender conditions that assist opportunism and independence in the Euro-Pacific space.

Russian military doctrine

During its era, the Soviet Union maintained an explicit ‘no first use’ doctrine on nuclear weapons. This was in contrast to the North Atlantic Treaty Organization (NATO), which regarded Russian conventional superiority in numbers as sufficiently threatening that it adopted a ‘first use if necessary’ posture. After the collapse of the Soviet Union, however, the Russian Federation found itself relying increasingly on its nuclear arsenal for deterrence purposes. It abandoned no first use in 1993, and moved ultimately to an ‘assured first use’ strategy during the late 1990s, at a time when its conventional forces had undergone a period of effective de-modernisation and neglect prompted by the collapse of the Soviet Union, and the subsequent economic chaos of the Yeltsin era.

The Russian rearmament process launched by Putin after the Russo-Georgian war of 2008 dovetailed with a refinement of Russian military thought, which highlighted the risks inherent in leaving escalation control to a potential adversary. Instead, Russian strategists sought a new emphasis on nonstrategic nuclear weapons (NSNWs) as both effective supplements to conventional forces on the battlefield and as important instruments to prevent escalation dominance by NATO in any future conflict.

The product of this was the ‘escalate to de-escalate’ doctrine that envisaged limited nuclear use in order to stop a conventionally superior force from swiftly overrunning Russia’s armed forces. The Kremlin began referring to ‘regional war’ as distinct from ‘global war’, justifying the limited first use of nuclear weapons as the only way to deter NATO in the initial phases of a conflict that Russia felt it could not win conventionally.

The risk in Russian strategy, though, is that it is making the same assumption made by China in a broader Asian context: that the US and its NATO allies are not prepared to risk major war. More worryingly, though, Russia’s approach has recently been extended to include what it calls ‘local war’. The implication here is that nuclear weapons could support and exploit a conventional conflict where Russian forces are on the offensive, and solidify Russian gains by pre-emptively deterring a response. And tempting though it might be to dismiss its moves as a bluff, it is sobering that all of Russia’s major military exercises since 2010—including the most recent Zapad military operations in 2017—have included limited nuclear strikes.

The future

As global power continues to shift to Asia, the main danger for Russia is to avoid being caught up in the seeming path dependency of the China-US relationship. Its progress in this respect so far has been poor. The annexation of Crimea and support for separatists in the Donbas region of Ukraine have resulted in a Western sanctions regime that has pushed Moscow far closer to China than it would ideally be comfortable with. Reliance on Chinese investment to develop Russian energy infrastructure in its Far East has guided the Kremlin’s Asian rebalance in Beijing’s favour. Moscow is defaulting to Chinese interests in Central Asia, and has few prospects of developing alternative trade pathways to the ORBO Initiative. It is an equal in Chinese President Xi Jinping’s new great power relations model in name only and has been forced to accept the unpalatable position of junior partner.

Unfortunately for Russia, it has few alternative options. It is banking heavily on meeting increased Asian appetites for its oil and gas as well as other raw materials, but its employment of resource diplomacy in Europe has led to questions over its reliability as an energy supplier. It has sought to engage Japan with some success over the proposed joint development of the Northern Territories/Kuril Islands, but Tokyo’s reliance on the US alliance will override any major reset of Russo-Japanese relations. Its ties to India are being eroded by its Prime Minister Narendra Modi’s desire to ‘Act West’ as well as East. And the Association of Southeast Asian Nations (ASEAN) see Russia as only interested in seeking commercial gains bilaterally, rather than being part of a broader multilateral order.

Hence although Russia may seek an independent role in Asia, it is increasingly likely to see its posture shaped by Chinese interests. But one arena still untouched by this is its nuclear policy. Putin has repeatedly indicated that Russia’s independent nuclear deterrent is a potent symbol of its prestige and status. Moscow’s reliance on nuclear weapons, not only for escalation control but also to supplement conventional warfighting, its lack of enmeshment in regional order, and its interest in regional instability will remain important parts of its strategic calculus. Given those conditions, anyone seeing in Russia an honest broker, an alternative negotiating partner to the US or China, or a force for coherence and clarity in Asia’s evolving order should probably look elsewhere.
Trump’s diabolical decision, which has been taken against the advice of his Secretaries of Defense and State, as well as America’s formal European and non-European allies, more relevantly Australia, entails serious implications...

President Donald Trump’s refusal on 13 October 2017 to re-certify to the Congress the Joint Comprehensive Plan of Action (JCPOA) or the ‘nuclear agreement’, signed between the Islamic Republic of Iran and the five permanent members of the United Nations Security Council, plus Germany (P5+1) on 14 July 2015, is a serious blow to the cause of non-proliferation, and of diplomacy over confrontation. Whilst all the other signatories have remained committed to the agreement and have, along with the UN nuclear watchdog (the International Atomic Energy Agency - IAEA), confirmed that Iran has complied with the agreement, President Trump’s action has thrown a spanner in the works. In the event of the US Congress failing to ask for a renegotiation of the agreement to ‘fix’ it in accordance with Trump’s preferences or reimposing sanctions on Iran within 60 days or the president cancelling the agreement, as he has threatened, Tehran may react in one of two ways. One is to keep the agreement as it is, which Iran has said is non-renegotiable. Another is to return its nuclear program to the pre-JCPOA position at an even higher level. Neither of these will be acceptable to Trump and both carry the risk of a military confrontation between the two sides, with devastating consequences.

Continues on next page »
Under the JCPOA, Iran has agreed to curb its nuclear program until 2025, with implications for renewal, in return for the lifting of international sanctions against it. The agreement came into full effect six months after its signing, when the IAEA verified Iran's full compliance through a very stringent regime of inspections. The JCPOA was the fruit of nearly two years of hard-hitting negotiations. They commenced in secret discussions between Iranian and American officials in the Sultanate of Oman, leading to direct negotiations between US Secretary of State John Kerry and Iranian Foreign Minister Javad Zarif in Geneva under the auspices of the High Representative of the European Union (EU) for Foreign Affairs and Security Policy, Federica Mogherini, with the participation of Britain, France, Germany, Russia and China.

The ice-breaker preceding the Geneva negotiations was a meeting of the minds between US President Barack Obama (2009-2017), who had made overtures to the Iranian Islamic regime for improved relations, and President Hassan Rouhani (2013-), who came to power on the platform of a reform agenda, primarily to resolve the dispute over Iran's nuclear program as a prerequisite to lifting the international sanctions and addressing Iran's dire economic situation. Backed by Iran's supreme religious and political leader Ayatollah Ali Khamenei, Rouhani made a goodwill telephone call to President Obama on his way home from attending the UN General Assembly in September 2013—the first direct contact between an American and Iranian leader since the overthrow of the pro-Western monarchy of Mohammad Reza Shah Pahlavi and its replacement by the Islamic Government of Ayatollah Ruhollah Khomeini as an outcome of the Iranian Revolution of 1978-79. Within weeks, in another unprecedented occurrence, Kerry and Zarif intensified their negotiations to achieve historical compromises.

Washington had persistently accused the Islamic Republic of having a secret plan to produce nuclear weapons, which Tehran had rejected, claiming that its program was only for peaceful purposes, that nuclear weapons are “un-Islamic”, and that its activities were not in violation of its obligations as a signatory to the Nuclear Non-Proliferation Treaty. In return, the US and other signatories agreed to lift all the nuclear-related sanctions. The UN Security Council unanimously adopted Resolution 2231 endorsing the JCPOA on 20 July 2015, rescinding all previous Security Council resolutions regarding sanctions. There was no mention in the resolution of any UN oversight of Iran's non-nuclear military arsenals or sites. The implementation of the JCPOA began in mid-January 2016. The US supported Resolution 2231, but only in relation to the lifting of nuclear-related sanctions, and therefore not those concerning America's allegations of Iranian support of terrorism and human rights violations.

Washington had consistently accused the Islamic Republic of having a secret plan to produce nuclear weapons, which Tehran had rejected, claiming that its program was only for peaceful purposes, that nuclear weapons are “un-Islamic”, and that its activities were not in violation of its obligations as a signatory to the Nuclear Non-Proliferation Treaty. In return, the US and other signatories agreed to lift all the nuclear-related sanctions. The UN Security Council unanimously adopted Resolution 2231 endorsing the JCPOA on 20 July 2015, rescinding all previous Security Council resolutions regarding sanctions. There was no mention in the resolution of any UN oversight of Iran's non-nuclear military arsenals or sites. The implementation of the JCPOA began in mid-January 2016. The US supported Resolution 2231, but only in relation to the lifting of nuclear-related sanctions, and therefore not those concerning America's allegations of Iranian support of terrorism and human rights violations.

The nuclear deal had strong American, regional and Iranian critics prior to—and after—its conclusion. The conservative forces in the US mounted a vehement opposition to it. This opposition was also shared and deeply fanned by right-wing Israeli Prime Minister Benjamin Netanyahu. Leading the GCC, the Kingdom of Saudi Arabia also expressed deep apprehension. The main objection of the critics was that it did not contain a stricter inspection regime, that it was not valid indefinitely, and that it let Iran earn more revenue by resuming its oil exports to Europe and by enhancing its trade and economic ties that would enable it to engage in more destabilising activities and expansion of its regional influence. They contended that the agreement simply freed up and enriched Iran to augment its support for radical Shia groups in Lebanon, Iraq, Bahrain, Saudi Arabia and Yemen, as well as the dictatorship of Syria's Bashar al-Assad as Iran's only Arab strategic partner in the region, and one that the US and its Western and regional allies, most importantly Israel and Saudi Arabia and its GCC partners, wanted to see overthrown. The most adamant critics included the presidential aspirant, Donald Trump, who called it the “worst deal ever negotiated”, vowing during his campaign to scrap it should he become president. In a similar vein, Netanyahu, along with a chorus of Israeli senior figures, who have abhorred the Iranian Islamic regime and wanted to preserve Israel's nuclear monopoly.
in the region, denounced the agreement as “capitulation”. Netanyahu declared: “Iran is going to receive a sure path to nuclear weapons. Many of the restrictions that were supposed to prevent it from getting there will be lifted. Iran will get a jackpot, a cash bonanza of hundreds of billions of dollars, which will enable it to continue to pursue its aggression and terror in the region and in the world. This is a bad mistake of historic proportions.” He pledged to do whatever possible in his power to reverse it, with an implied threat of military action to disable Iran's nuclear and military capability—something that the Obama administration worked hard to prevent.

Riyadh had already repeatedly urged Washington to take punitive measures against Iran as Saudi Arabia's arch sectarian and geopolitical rival. In 2010, whilst referring to Iran, the late King Abdullah had exhorted the Obama administration “to cut off [sic] head of the snake”. Whilst disappointed with President Obama's overtures to Iran, Riyadh had sought to deepen its historical de facto strategic ties with the predominantly Sunni, nuclear-armed Pakistan. In early 2014, Crown Prince Salman ibn Abdul-Aziz, who became king in January of the following year, had made a celebrated visit to Pakistan, where he had announced US$1.5 billion aid to the country to help balance its budget and pledged another US$1.5 billion assistance, which triggered media speculation that this may have been a down payment for a Pakistani tactical nuclear bomb in the event of Iran developing such an arsenal. In a private conversation, this was confirmed to the author by a senior official in Washington in May 2015.

Meanwhile, the JCPOA had its detractors. President Rouhani’s conservative opponents, who have dominated the levers of power ever since the advent of Iran’s Islamic regime, remained resolutely opposed to any opening up to the US. They had historically viewed the US as a hegemonic world actor, which has consistently conspired to have the highly strategically valued oil-rich Iran in its orbit following the Second World War. Shaping this view have been a number of variables, including most importantly, the overthrow by the Central Intelligence Agency (CIA) of the elected, reformist and nationalist government of Prime Minister Mohammad Mossadegh in favour of re-installing the pro-Western Shah (who had fled Iran a week earlier in August 1953) on his throne to rule Iran at the US’s behest for the next 25 years, and America’s numerous military interventions in Iran’s neighbourhood and threats to change the Islamic regime. Rouhani has had the backing of Iran’s Supreme Leader in resolving the nuclear dispute, but always with a warning not to trust the US and to be vigilant of its hegemonic ambitions and actions.

While nothing short of substantially revising the JCPOA, including removing the sunset clause and instituting a more intrusive inspection regime, as well as imposing strict limitations on Iranian ballistic missile development and military capability, will satisfy the US, Israelis and Saudi leaders, the Rouhani government has made it abundantly clear that it will not re-negotiate the agreement. In contrast to Trump’s description of Iran as a “corrupt regime” dedicated to spreading violence, terror and instability, and to Netanyahu's and the Saudi King’s hailing of Trump’s decision as bold, brave and necessary, the other five world powers and the European Union have been joined by most leaders around the world in rejecting Trump's admonitions. Mogherini has summed up the European and, for that matter, global attitude by stating that the JCPOA is “working and delivering” with Iranian compliance, that the agreement is not a unilateral pursuit whatever the cost, and has condemned Trump’s action as “more than ever against the Iranian people.” Trump’s diabolical decision, which has been taken against the advice of his Secretaries of Defense and State, as well as America’s formal European and non-European allies, more relevantly Australia, entails serious implications, the most of important of which are four.

First, it constitutes a mortal blow to non-proliferation and the credibility of the US as a reliable and dependable negotiator. This can only provide more reason for a state like North Korea to remain very distrustful of the US and not to negotiate with it seriously regarding its nuclear status. It also sends a similar message to all other countries, including America’s allies, which have already been bruised in different ways by Trump’s withdrawal from the Paris Climate Agreement and the Trans-Pacific Partnership Agreement, to give only two examples.

Second, it emboldens Iran’s regional adversaries, especially Israel, and Saudi Arabia and some of its GCC partners, to continue to treat Iran as enemy number one, and it obscures how their behaviour has also contributed to regional volatility. The Gulf and its wider environs badly need a degree of regional cooperation in order to address some of the conflicts which cannot be resolved without Iranian assistance. The division of the region between enemies and friends may suit the Trump administration by making the latter dependent on and vulnerable to US dictates, but it is detrimental to stabilising the region.

Third, it causes a serious rift between the US and its allies, particularly Britain, France and Germany, which remain dedicated to the preservation of the JCPOA for reasons of their own collective security. Trans-Atlantic relations have never been so low. It also opens up more space for adversarial powers, such as Russia and China, to fill the gap in world leadership at a cost to the United States.

Fourth, it could affect the texture of the Iranian domestic political scene, pushing it in a confrontationist direction. As the Supreme Leader and the conservative clusters, including the powerful Revolutionary Guard, which Trump has especially targeted as an evil force, have all along been highly sceptical of the US, they can now remind their moderate and reformist counterparts that they “told them so”. Given their strong hold on the power structure, they are now in a position to harden their attitude in response to Trump’s provocative actions. They may opt for restoring and accelerating Iran’s nuclear program that could lead to a military showdown with the US and its regional allies, with debilitating consequences not only for Iran, but also for its neighbourhood and American interests in the area. The Islamic Republic has built sufficient hard power capability and a regional network of activist groups to make any attack on it very costly for its perpetrator and its affiliates. Despite their political divisions, the Iranian public can be expected to unite behind the Islamic Government against an external intervention in a display of their devotion to resistant Shia Islamism and fierce nationalism, as they have repeatedly proved in history.

President Trump and the Congress will serve the best interests of the US and that of global security by not tampering with the Joint Comprehensive Plan of Action.
The urgent question now facing the international community is how to generate and sustain effective diplomatic momentum at a time when North Korea and the US are recklessly exchanging nuclear threats and counter-threats, US President Donald Trump’s administration is taking a rigid approach based on punishment, denial and military over-confidence, and all the while North Korea is conducting more missile tests, advancing its nuclear capability and increasing its international pariah status.

The rapid expansion of nuclear weapons capabilities in Northeast Asia has narrowed policy options to the extent that nuclear fatalism has taken hold in the expert community. This fatalism, the belief that disarmament diplomacy is permanently moribund and that only military responses to rising regional threats have any chance of success, could very well lead us down a path to further nuclear proliferation, nuclear accidents and nuclear war. The consequences would be catastrophic and yet despite the heightened sense of alarm that has set in among decisionmakers and commentators, not enough is being done to steer a safer path. It is imperative that those with deep knowledge of Northeast Asian security dynamics do not succumb to this spreading fatalism, and instead push for extraordinary diplomatic efforts to stabilise the region and reduce nuclear risks. Australia has an important and constructive role to play in this regard, especially in relation to the ongoing crisis over North Korea’s nuclear weapons program.

What is nuclear fatalism?

Nuclear fatalism describes the ‘no can do’ mindset of those who believe—against the evidence—that nuclear weapons programs cannot be peacefully rolled back or frozen once a state has weaponised its nuclear capability. It leads to diplomatic paralysis, as efforts to negotiate are considered increasingly futile and, despite the immense risks involved, only military responses—either pre-emption or deterrence—are regarded as credible methods for dealing with nuclear adversaries.
Why has it set in?

Nuclear fatalism has existed since the advent of nuclear weapons and has waxed and waned ever since. But it rose sharply after India and Pakistan conducted nuclear weapons tests in 1998, setting off a nuclear arms race in South Asia. It was widely believed that these tests ushered in a second nuclear age, making universality of the Nuclear Non-Proliferation Treaty (NPT) and the creation of a security environment more conducive to multilateral nuclear disarmament—much more difficult to achieve. Not surprisingly, North Korea’s withdrawal from the NPT in 2003 and a string of increasingly powerful nuclear and missile tests by Pyongyang, have spurred another dramatic rise in nuclear fatalism, to a point where not only is peaceful nuclear rollback in North Korea widely considered impossible, but the only policy responses that are considered feasible are military ones that are risky and even reckless.

What is the evidence?

Evidence of this dynamic abounds, both in the nuclear expansion and modernisation programs of the world’s nuclear-armed states and in the doctrinal and policy discussions among these states and their allies. It is also on display in United Nations bodies, and among academics, think-tankers, journalists and media commentators. In relation to nuclear developments in Northeast Asia specifically, these include proposals for the creation of a formal, North Atlantic Treaty Organization (NATO)-style strategic command in the Asia Pacific, the reintroduction of US tactical nuclear weapons into South Korea and Japan, the development of indigenous nuclear weapons programs by these states and Australia and—worst of all—calls for pre-emptive strikes against Pyongyang’s nuclear facilities. These proposals are being put forward in a fevered atmosphere in which their wider and longer-term negative consequences are either not being fully thought through, or are being accepted as inevitable or unavoidable. They’re also being put forward against a backdrop in which past disarmament successes are being ignored, previous diplomatic efforts to rein in Pyongyang’s nuclear ambitions are being ridiculed, derided and misrepresented (including the reasons for their failure), and new proposals for diplomatic engagement are being dismissed or undermined. False, superficial and misleadingly negative accounts of the Six Party Talks are part of this fatalist dynamic, which is being reinforced by ignorance of the detail of what was a complex and multifaceted diplomatic process. The Beijing-initiated talks, which brought North Korea, China, the United States, South Korea, Japan and Russia to the negotiating table from 2003-09, were tortuous and frustrating, but they were not the out and out failure that fatalists claim. Most importantly, they opened channels of communication, engaging the notoriously secretive Kim Jong-un regime in a process that temporarily de-escalated tensions. There are numerous reasons why the talks eventually stalled, including North Korean intransigence and duplicity, but handliners in the then US President George W. Bush’s administration were also to blame, as they caused US negotiators to keep moving goal posts at the most sensitive times in the negotiations, undermining confidence in the process and making it extremely difficult to sustain.

The dangers are real. In addition to the horrific humanitarian consequences of a nuclear war at the regional level, in which chemical and biological weapons could also play a part, there is grave potential for conflict escalation involving Russia and China, the implications of which need not be spelled out.

Why is it so dangerous?

When nuclear fatalism takes hold among political and military elites, it limits the policy toolbox, placing too much emphasis on the capacity of nuclear weapons to reduce or contain threats. There are numerous examples of this happening during the Cold War and it is generally accepted that luck intervened on more than one occasion to prevent what would have been a devastating nuclear exchange. In today’s more complex strategic environment, and amid rapid technological change, it is riskier than ever to design strategic choices around the hope for lucky outcomes, whether that applies to the capacity of pre-emptive strikes and missile defence to function in combination as denuclearisation tools, or on the capacity for traditional nuclear deterrence postures to manage nuclear threats and prevent nuclear use. Placing too much faith in either one of these military approaches, including pitting each against the other in a competition for the least bad option, locks in nuclear mindsets and leaves too much to chance. Add impulsive, narcissistic, over-confident personalities, political inexperience, high-alert postures and diminishing warning times into the equation, and it is easy to see how an over-reliance on nuclear weapons could lead to a nuclear war, whether deliberate or accidental. The dangers are real. In addition to the horrific humanitarian consequences of a nuclear war at the regional level, in which chemical and biological weapons could also play a part, there is grave potential for conflict escalation involving Russia and China, the implications of which need not be spelled out. Even a limited nuclear war would have far-reaching and devastating impacts, causing major disruption of production, supply chains, banking and insurance, to the extent that it has been described by some economists as ‘ground zero’ for global business, threatening to bring the world’s economy to its knees. Unilateral provocations could also have dire consequences: Pyongyang’s recent threats to conduct an atmospheric nuclear test (which would likely involve a live missile test loaded with an hydrogen-bomb), poses enormous environmental and humanitarian risks, adding urgency to the situation. Peacefully de-escalating the US-North Korea nuclear crisis should therefore be the international community’s number one priority and regional actors—including Australia—have a special responsibility to step up their efforts.

What can be done about it?

It is true that there are no easy options. Every state that has developed nuclear weapons, whether they did so before the NPT was negotiated or after, believes that threatening their adversaries with nuclear attack and exposing the world (including, potentially, their own populations) to the resulting humanitarian catastrophe, is a legitimate response to security challenges. As a result, non-proliferation, arms control, and disarmament efforts are fraught with difficulty and plagued with roadblocks, so much so that nuclear fatalists can and do cite one failed or flawed diplomatic initiative after another as evidence in support
of their own arguments. But behind these diplomatic failures lies a reluctance on the part of the nuclear-armed states and their allies to acknowledge that the risks posed by nuclear weapons (their own, not just those of their adversaries) are rising, and that finding ways to reduce reliance on them during a period of rapid strategic and technological change is a shared responsibility worthy of major political and financial investment.

The urgent question now facing the international community is how to generate and sustain effective diplomatic momentum at a time when North Korea and the US are recklessly exchanging nuclear threats and counter-threats, US President Donald Trump’s administration is taking a rigid approach based on punishment, denial and military over-confidence, and all the while North Korea is conducting more missile tests, advancing its nuclear capability and increasing its international pariah status. To date, few diplomatic proposals have been put forward, and those that have are not receiving adequate regional and international backing. There have been numerous calls from the South Korean and Japanese expert communities to try to resume the Six Party Talks (or variations on them), but these are not being taken seriously. China has also put forward a formal dual-track diplomatic proposal (the only state so far to do so), a so-called ‘freeze for freeze’, whereby Pyongyang would agree to suspend all nuclear and missile tests and Washington and Seoul would suspend their Foal Eagle joint field training exercises (one of the largest military exercises in the world and a long-running source of North Korean insecurity). The idea behind this is to defuse tensions and create space for negotiations over a series of inducements (the establishment of a permanent peace treaty to replace the 1953 Korean War Armistice Agreement, the normalisation of North Korea’s diplomatic relations with the US and Japan and the promotion of economic and energy cooperation) in return for nuclear disarmament by North Korea.

Beijing’s proposal has been prematurely rejected by the Trump Administration, which, while claiming to be trying to exhaust all diplomatic options, is actually issuing threats and applying forceful pressure without offering inducements of any kind - a tactic it must know has no chance of success. Predictably, North Korea’s Kim regime has shown little interest in dialogue. Despite this, immediate discussions, on how the Chinese proposal might work in practice would be helpful, because a window of opportunity exists before the next round of US-South Korea joint military exercises, which are due to take place in March 2018.

What can Australia do?

Having signed the 1953 Armistice, Australia is committed to defending South Korea in the event of an attack by the North—an international obligation that Canberra is bound by, whatever the status of its alliance with the US, or its opinion of the Trump Administration’s reckless nuclear diplomacy. The ongoing nuclear crisis thus has serious strategic implications for Australia, a point that should propel herculean diplomatic efforts to cool the situation. On a positive note, there have been some high-level attempts by Canberra to directly and indirectly engage Pyongyang—these efforts need to be sustained, even though the task is difficult, unpalatable, costly and often politically awkward. There are other urgent steps Australia can take, too. For example, rather than relying on sanctions and repeating the US line that China should be doing more to resolve the North Korean crisis, Australia can offer its support for China’s diplomatic efforts, including the freeze for freeze proposal, which will have a stronger chance of uptake if states in the wider region push for it to be pursued. Canberra can also do more to push back against nuclear fatalism, including by acknowledging, reducing and eliminating the nuclear dangers that their own nuclear arsenals pose. This kind of big picture, long-term, holistic approach is necessary because the failure of any state to actively work towards the goal of nuclear elimination reinforces nuclear mindsets, weakens the nuclear non-proliferation regime and undermines every targeted attempt to deal with specific proliferators. On this point, by reconsidering its high-profile opposition to the Nuclear Weapon Ban Treaty (NWBT), and instead focusing on how to ensure a prohibition regime can coexist with and build upon the NPT, Australia would be making a major contribution to nuclear risk reduction in Northeast Asia and beyond.

and adversaries alike. Polls indicate that the Australian public would support this approach, with more than 80 per cent support across the political and social spectrum for the Turnbull government to step up its diplomatic efforts.

Longer-term, the success of diplomatic initiatives in Northeast Asia will be dependent on the nuclear policies of the world’s nuclear-armed states, and here Australia can play a much more constructive role than it currently does. Most importantly, it can use international forums, including the 2018 UN High-Level Conference on Nuclear Disarmament, to emphasise the need for nuclear-armed states to demonstrate their commitment to nuclear risk reduction, including by acknowledging, reducing and eliminating the nuclear dangers that their own nuclear arsenals pose. This kind of big picture, long-term, holistic approach is necessary because the failure of any state to actively work towards the goal of nuclear elimination reinforces nuclear mindsets, weakens the nuclear non-proliferation regime and undermines every targeted attempt to deal with specific proliferators. On this point, by reconsidering its high-profile opposition to the Nuclear Weapon Ban Treaty (NWBT), and instead focusing on how to ensure a prohibition regime can coexist with and build upon the NPT, Australia would be making a major contribution to nuclear risk reduction in Northeast Asia and beyond.
Since the Hiroshima and Nagasaki bombings by the United States in Japan in August 1945, there have been ongoing efforts to contain and eliminate global nuclear threats, even as the arsenals of the nuclear powers grew, and as the number of nuclear weapon-possessing states increased. This essay sketches the legal and formal institutional frameworks that have resulted from these efforts, and the various multilateral and national arrangements that constitute the broader international non-proliferation regime. Many of these arrangements were shaped by the strategic landscape of the day: the Cold War. Nevertheless, their reach was global, and they continue to evolve, however imperfectly, to the new multipolar Asia Pacific-centric nuclear environment. Others have been more recent creations in direct response to changed international security conditions, e.g. the spike in terrorist activity. These institutions have been remarkably successful and continue to be necessary though not sufficient for addressing current threats. Yet, there is much that can be done to make them even more powerful. This review of existing arrangements concludes with some recommendations on how regional governments might better exploit these tools and help adapt them to the specific challenges of reducing nuclear risks in the Asia Pacific.

Continues on next page 
The focus here is on arrangements that directly address nuclear weapons proliferation and nuclear security, measures designed to keep nuclear materials out of the reach of non-state actors. It does not extend to arrangements addressing the safety of peaceful nuclear operations, though good safety practices undoubtedly contribute to nuclear security. Nuclear risks are rooted in the broader politico-strategic realities of a region. Accordingly, security, political and economic arrangements such as the East Asia Summit and the Shanghai Cooperation Organisation will need to be more engaged, but their potential roles are not considered here.

International non-proliferation instruments

Atoms for peace not war
The International Atomic Energy Agency (IAEA) is the pre-eminent global institution for dealing with nuclear matters and has a mandate to promote peaceful uses of nuclear energy while providing safeguards against the diversion of nuclear materials to non-peaceful activity. Foreshadowed in former US President Eisenhower’s Atoms for Peace statement to the United Nations in 1953, its creation was approved by 81 countries in 1956. Original members from the Asia Pacific included Australia, India, Indonesia, Japan, South Korea, Myanmar, New Zealand, Pakistan, Sri Lanka, Thailand and Vietnam. China joined in 1984. Today all Asian countries belong to the IAEA with the notable exception of North Korea, which joined in 1994 but withdrew in 1994. Current membership stands at 169. While it has its own statute, the IAEA operates as part of the UN system. It has a staff of over 2,500 and an annual budget of around €500 million (A$755 million).

Day-to-day operations of the IAEA Secretariat are guided by a Board of Governors with the Annual General Conference of all members providing overarching policy direction. The membership is weighted in favour of those most advanced in nuclear technology, “including the production of source materials”—a provision that is helpful to Australia’s long-term retention of a place in the board.

Over the decades, questions have been asked as to whether the IAEA can be simultaneously a promoter of nuclear power and other applications while being the world’s nuclear watchdog. By and large, the IAEA has managed the two components, in part by stove-piping: far from a perfect solution but pragmatic. Despite decades of constraint on the growth of the regular budgets in the UN system, the IAEA has continued to expand to meet emerging demands, but has also become increasingly reliant on voluntary contributions of funds and expertise, with attendant risks.

Asia Pacific, as the one major growth region of nuclear power, and the epicentre of global nuclear threats, is arguably under-represented on the IAEA Board and in the higher levels of the Secretariat, despite efforts of its current Director General, Yukiya Amano, from Japan. Modernising the membership has proven as difficult as reform of the Security Council.

The IAEA safeguard systems outlined in the Statute crucially links the IAEA to the UN Security Council as a potential enforcer. Detailed procedures for the conduct of inspections evolved during the 1960s through a system of onsite inspections according to agreements negotiated for specific nuclear facilities and materials. These arrangements provided very inadequate assurance about the use to which facilities were put and indeed several such facilities did contribute to the proliferation of nuclear weapons. This changed dramatically with the advent of the Nuclear Non-Proliferation Treaty (NPT).

Ending the spread
Nuclear Non-Proliferation Treaty

Faced with the threat of a global proliferation cascade in the 1960s, many countries in the UN started negotiations, initially led by Ireland, but largely driven by the US and the Soviet Union, that resulted in the adoption in 1970 of the NPT. Like the IAEA Statute, the NPT embodies a basic bargain that peaceful nuclear activity would be encouraged alongside undertakings to subject all peaceful nuclear activities to international inspection—not just those facilities and materials provided by an external supplier. The NPT provides for verification through ‘comprehensive safeguards’ provided by the IAEA, whose inspectors were to check the ‘correctness’ of the declarations member states made about their nuclear activity. However, a fundamental weakness in this system was revealed in the late 1980s when concerns arose that Iraq and then North Korea had concealed nuclear activities from IAEA inspectors. The new demand was that inspectors not just verify correctness but also the ‘completeness’ of national declarations to provide assurance that there was no clandestine nuclear activity.

Stopping cheating
The Additional Protocol

The result of this strengthening of IAEA safeguards was the adoption in 1997 of the model Additional Protocol to bolster the IAEA’s comprehensive safeguards agreements. While there are ongoing refinements under discussion in the IAEA, the Additional Protocol is currently best practice. Yet several states in Asia Pacific have yet to make the upgrade.

When Verification is challenged
Beyond the Additional Protocol

There have been specific circumstances when additional measures have been deemed necessary: examples include how the UN Security Council has mandated special inspections in Iraq in the 1990s, measures to curb North Korea’s nuclear activity and the current very intrusive arrangements for confirming agreed limitations on Iran’s nuclear activity. States may also commit to enhanced mutual assurance arrangements through nuclear weapon-free zones. In the Asia Pacific there are two such arrangements covering the Association of Southeast Asian Nation (ASEAN) countries and Australia and the South Pacific. There are also proposals for a Northeast Asia nuclear weapon-free zone as a component of any settlement of the North Korea nuclear crisis.

Ending nuclear testing

Comprehensive Nuclear-Test-Ban Treaty

Partial limitations on nuclear testing were negotiated during the Cold War, but with its end there was a broad-based push for a complete test ban culminating with the adoption of the Comprehensive Nuclear-Test-Ban Treaty (CTBT) by the UN General Assembly in 1996. The CTBT reinforces non-proliferation, inhibits the improvement of weapons stockpiles and reduces environmental damage.

Over 160 countries have ratified the CTBT, but the treaty requires 44 specified nuclear technology holder countries to ratify as a precondition to it entering into force. Eight of those states have yet to ratify, including China (signed only), India and Pakistan in addition to North Korea. Importantly, Indonesia ratified in 2012 in an unsuccessful attempt to break the log jam, but there has been no movement since. Several other regional states party to the NPT have also inexplicably still not ratified.

Over the decades, questions have been asked as to whether the IAEA can be simultaneously a promoter of nuclear power and other applications while being the world’s nuclear watchdog.
Paradoxically, despite not being legally in force, the CTBT has heralded a de facto test ban only broken by India and Pakistan in 1998, and North Korea since 2006. Also, its Provisional Secretariat has created a powerful global network of some 300 monitoring stations, has undertaken on-site inspection exercises and is thereby already providing reassurance that those who have ratified the treaty are abiding by their commitments. It is also providing timely advice and impartial assessment of breaches of the de facto moratorium.

Keeping weapons off the market

Nuclear security

Once the jealous preserve of powerful national nuclear authorities, the challenge of keeping nuclear facilities and materials out of the hands of criminals, saboteurs and terrorists has become a growing area of international cooperation and regulation, focused on work undertaken in the IAEA but supplemented in recent years by a series of international summits initiated in 2010 by then President Barack Obama.

The 1987 Convention on the Physical Protection of Nuclear Material deals with the prevention, detection and punishment of offences primarily related to nuclear material in international transport. This convention was supplemented and superseded by an amendment adopted in 2005 (but only entering into force in 2016) which extends the obligations to facilities and material in peaceful domestic use, and to cooperate to locate and recover stolen or smuggled nuclear material. The Convention has over 150 parties, whilst 115 have accepted the amendment. In the Asia Pacific, several states did not ratify the Convention and many have yet to adopt the Amendment, thereby weakening its global impact.

In the wake of the terrorist attacks in the US in 2001 the UN Security Council adopted resolution 1540 (2004) imposing mandatory obligations on all states to prohibit nuclear activity by terrorist groups and proliferation activity. This resolution has evolved over time as has its reporting requirements. While very imperfectly implemented by UN members, it can be a powerful tool.

Coalitions of the willing

Multilateral diplomacy engaging the entire UN membership is at best slow, highly complex and tending towards the lowest common denominator. At worst it descends into total stalemate and inaction: witness the UN Committee on Disarmament which has been deadlocked for the last 20 years. Accordingly, national security objectives are often pursued through smaller groupings of the like-minded. Such coalitions of the willing are usually informal, in that they are not backed by legal commitments. Size varies but some have grown large memberships, establishing secretariats and complex meeting structures.

One like-minded grouping, the Korean Economic Development Organisation, was a very creative if ultimately unsuccessful attempt to address the North Korea nuclear threat. Existing global coalitions of direct relevance to the management of nuclear affairs in the Asia Pacific are the Nuclear Suppliers Group (NSG) and the Proliferation Security Initiative (PSI).

Controlling the spread of nuclear technology

The Nuclear Suppliers Group

The Nuclear Suppliers Group (NSG) website coyly explains its origins thus: “The Nuclear Suppliers Group was created following the explosion in 1974 of a nuclear device by a non-nuclear weapon state, which demonstrated that nuclear technology transferred for peaceful purposes could be misused.”

The non-nuclear weapon state was India, a country now ironically seeking to join the NSG.

The NSG has a rotating chair and secretariat with the only Asia-Pacific chair to date being South Korea.

Coalitions of the willing

Multilateral diplomacy engaging the entire UN membership is at best slow, highly complex and tending towards the lowest common denominator. At worst it descends into total stalemate and inaction: witness the UN Committee on Disarmament which has been deadlocked for the last 20 years. Accordingly, national security objectives are often pursued through smaller groupings of the like-minded. Such coalitions of the willing are usually informal, in that they are not backed by legal commitments. Size varies but some have grown large memberships, establishing secretariats and complex meeting structures.

One like-minded grouping, the Korean Economic Development Organisation, was a very creative if ultimately unsuccessful attempt to address the North Korea nuclear threat. Existing global coalitions of direct relevance to the management of nuclear affairs in the Asia Pacific are the Nuclear Suppliers Group (NSG) and the Proliferation Security Initiative (PSI).

Controlling the spread of nuclear technology

The Nuclear Suppliers Group

The Nuclear Suppliers Group (NSG) website coyly explains its origins thus: “The Nuclear Suppliers Group was created following the explosion in 1974 of a nuclear device by a non-nuclear weapon state, which demonstrated that nuclear technology transferred for peaceful purposes could be misused.”

The non-nuclear weapon state was India, a country now ironically seeking to join the NSG.

The NSG has a rotating chair and secretariat with the only Asia-Pacific chair to date being South Korea.

Counteracting proliferation

Developing interdiction capabilities

The Proliferation Security Initiative (PSI) is a US-driven post-9/11 measure designed to strengthen national capacities to prevent state and non-state trafficking of weapons of mass destruction (WMD)-related goods through heightened awareness, capacity building and interdiction exercises. While working within confines of international law the PSI encourages a robust approach to air, sea and land trafficking threats.

From an original group of 11, the PSI principles have now been endorsed by 105 countries. Concerns over WMD and missile trafficking to and from North Korea have ensured that the Asia Pacific has been in the forefront of PSI activity. Seventeen Asian and Pacific Island states subscribe to the PSI and regular regional maritime and air exercises rotate between Australia, New Zealand, Japan, South Korea, Singapore and the US. The absence of China, India and Pakistan is regrettable.

National programs reaching the Asia Pacific

A third category of tools potentially deployable to nuclear threats in the Asia Pacific are essentially national programs and policies used to address international problems. An early example was the Soviet Union’s approach to sharing nuclear technology: its sales of power reactors were accompanied by a commitment to provide fuel and remove the spent fuel (and its plutonium). While this doubtless suited the Soviet Union’s financial interests, it was a highly effective non-proliferation strategy which is still being employed today in the case of Russia’s sale of reactors to Bangladesh. Similar strategies could have wider application in the Asia Pacific.

The US Nunn-Lugar Cooperative Threat Reduction assistance to securing nuclear facilities in the former Soviet Union is another very powerful model with potential applicability elsewhere.

Conclusions and recommendations

While additional structures will be needed to address the most challenging nuclear threats in the Asia Pacific, existing institutions will provide vital underpinnings.

Regional governments could wisely invest in ensuring their optimal availability by:

- support for and greater engagement with the IAEA, to help shift the global focus on nuclear issues from the Atlantic to the Asia Pacific
- adherence to all relevant legal instruments, particularly the Additional Protocol providing current best practice assurance of the exclusively peaceful use of nuclear technology
- commitment to regional cooperation in safeguards including through the Asia Pacific Safeguards Network (apsn-safeguards.org)
- Indian and Pakistan membership of the NSG
- greater regional involvement in the PSI
- better regional observance of obligations under UN Security Council resolutions - especially 1540
- enhanced bilateral cooperation between nuclear powers to enhance confidence (nuclear cooperation between Indonesia and Australia is a good example)
- more assistance from those with advanced nuclear capabilities to help others achieve best practice standards of legal and regulatory frameworks, and
- enhanced capacity of regional political and security arrangements to raise awareness of and formulate strategies to reduce regional nuclear threats.
The UN nuclear weapons ban treaty

The Nuclear Weapons Prohibition Treaty is not a magic wand that can be waved to make all nuclear weapons vanish. But the normative impact will lessen their attractiveness and change the incentive structures for states that possess them and others that rely on extended nuclear deterrence.

On 7 July 2017, 122 states voted to adopt a new Nuclear Weapons Prohibition Treaty (NWPT). It was opened for signature in the United Nations General Assembly on 20 September and 50 states signed immediately. It will come into effect 90 days after 50 states have ratified it. The treaty is historic on five counts.

It is the first treaty to ban the possession, transfer, use and threat of use of nuclear weapons, thereby closing the legal gap on the prohibition of all classes of weapons of mass destruction. Biological and chemical weapons were banned by international conventions in 1972 and 1993 respectively. The 1968 Nuclear Non-Proliferation Treaty (NPT) granted temporary exemptions for the continued possession of nuclear weapons by the five nuclear weapon states (NWS) that already had them, but banned their proliferation to anyone else. Like the old NPT, the new NWPT is legally binding only on signatories.

Second, the NWPT’s adoption marks the first divergence between the UN and the NPT. Hitherto they have had a mutually reinforcing relationship. The NPT has its origins in several resolutions adopted in the General Assembly calling for and authorising negotiations for such a global convention. The International Atomic Energy Agency (IAEA) oversees the peaceful transfer and applications of nuclear energy and acts as the international community’s nuclear watchdog in overseeing compliance with NPT safeguards obligations. Instances of non-compliance are referred to the UN Security Council for possible follow-up action, including a range of enforcement measures. Almost two-thirds of NPT parties voted to adopt the NWPT. But a strong one-third minority, including all the NWS and the five permanent members of the Security Council (P5)—who are also the five NWS—refused to engage in the negotiations.

Continues on next page
In a unanimous advisory opinion in 1996, the World Court strengthened its normative force by requiring Non-Proliferation Treaty parties to conduct and conclude good faith negotiations on nuclear disarmament. Yet, 49 years after the Treaty’s adoption and 21 years after the Court’s advice, around 15,000 nuclear weapons still exist in the arsenals of nine countries.

Motivation: frustration mixed with fears

Article VI of the NPT requires each party to engage in disarmament negotiations. In a unanimous advisory opinion in 1996, the World Court strengthened its normative force by requiring NPT parties to conduct and conclude good faith negotiations on nuclear disarmament. Yet, 49 years after the NPT’s adoption and 21 years after the Court’s advice, around 15,000 nuclear weapons still exist in the arsenals of nine countries. Moreover, all nine are modernising and upgrading their warheads and the four Asian possessor countries are even increasing their stockpiles.

On 10 December, Norway will face the visual embarrassment of the glittering annual Nobel Peace Prize ceremony in Oslo that recognises a treaty it opposed and honours a non-government organisation (NGO)–the International Campaign to Abolish Nuclear Weapons (ICAN)–to which it cut funding with the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly–where all 193 Member States have one vote–has asserted itself against the P5. Previously the Assembly has sometimes acted in the face of a deadlock in the 15-member Security Council. This is the first issue on which it has defied the P5, that too on national security. There was a hint of this shift in the balance of power from the geopolitical to the international humanitarian law treaty authored by non-Western countries.

On 10 December, Norway will face the visual embarrassment of the glittering annual Nobel Peace Prize ceremony in Oslo that recognises a treaty it opposed and honours a non-government organisation (NGO)–the International Campaign to Abolish Nuclear Weapons (ICAN)–to which it cut funding with the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly–where all 193 Member States have one vote–has asserted itself against the P5. Previously the Assembly has sometimes acted in the face of a deadlock in the 15-member Security Council. This is the first issue on which it has defied the P5, that too on national security. There was a hint of this shift in the balance of power from the geopolitical to the international humanitarian law treaty authored by non-Western countries.

On 10 December, Norway will face the visual embarrassment of the glittering annual Nobel Peace Prize ceremony in Oslo that recognises a treaty it opposed and honours a non-government organisation (NGO)–the International Campaign to Abolish Nuclear Weapons (ICAN)–to which it cut funding with the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly–where all 193 Member States have one vote–has asserted itself against the P5. Previously the Assembly has sometimes acted in the face of a deadlock in the 15-member Security Council. This is the first issue on which it has defied the P5, that too on national security. There was a hint of this shift in the balance of power from the geopolitical to the international humanitarian law treaty authored by non-Western countries.

On 10 December, Norway will face the visual embarrassment of the glittering annual Nobel Peace Prize ceremony in Oslo that recognises a treaty it opposed and honours a non-government organisation (NGO)–the International Campaign to Abolish Nuclear Weapons (ICAN)–to which it cut funding with the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly–where all 193 Member States have one vote–has asserted itself against the P5. Previously the Assembly has sometimes acted in the face of a deadlock in the 15-member Security Council. This is the first issue on which it has defied the P5, that too on national security. There was a hint of this shift in the balance of power from the geopolitical to the international humanitarian law treaty authored by non-Western countries.

On 10 December, Norway will face the visual embarrassment of the glittering annual Nobel Peace Prize ceremony in Oslo that recognises a treaty it opposed and honours a non-government organisation (NGO)–the International Campaign to Abolish Nuclear Weapons (ICAN)–to which it cut funding with the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly–where all 193 Member States have one vote–has asserted itself against the P5. Previously the Assembly has sometimes acted in the face of a deadlock in the 15-member Security Council. This is the first issue on which it has defied the P5, that too on national security. There was a hint of this shift in the balance of power from the geopolitical to the international humanitarian law treaty authored by non-Western countries.

On 10 December, Norway will face the visual embarrassment of the glittering annual Nobel Peace Prize ceremony in Oslo that recognises a treaty it opposed and honours a non-government organisation (NGO)–the International Campaign to Abolish Nuclear Weapons (ICAN)–to which it cut funding with the election of a conservative government in October 2013.

Fifth, reflecting the second and third arguments, this is the first occasion in the UN system when the General Assembly–where all 193 Member States have one vote–has asserted itself against the P5. Previously the Assembly has sometimes acted in the face of a deadlock in the 15-member Security Council. This is the first issue on which it has defied the P5, that too on national security. There was a hint of this shift in the balance of power from the geopolitical to the international humanitarian law treaty authored by non-Western countries.
Roots: humanitarian concerns

Increasingly exasperated at the lack of nuclear disarmament anytime soon, driven by fear of a catastrophic nuclear war with incalculable humanitarian consequences if nuclear weapons are not abolished, and inspired by humanitarian principles, a growing number of non-NWS joined with civil society actors to explore an alternative avenue. The 1996 World Court Advisory Opinion contained two other relevant conclusions. Most judges believed that any use of nuclear weapons would generally be contrary to international and in particular humanitarian law, violating the principles of proportionality, civilian-combatant distinction, and the need to avoid superfluous injury and unnecessary suffering. In addition, they could not conclude definitively that the use of nuclear weapons would be justified in self-defence even when the very survival of the state was threatened.

The essence of the humanitarian consequences movement can be summarised in three propositions:

1. No country individually, nor the international system collectively, has the physical and organisational capacity to cope with the humanitarian consequences of the use of nuclear weapons.
2. It is in the interests of the very survival of humanity that nuclear weapons are never used again, under any circumstances.
3. The only guarantee of non-use is the total, irreversible and verifiable elimination of nuclear weapons.

The main impact of the nuclear ban treaty will be to reshape the global normative milieu: the prevailing cluster of laws (international, humanitarian and human rights), norms, rules, practices and discourse that shape how we think about and act in relation to nuclear weapons.

Impact: normative, not operational

After the vote on 7 July, in a joint press statement, the ambassadors of the US, UK and France said they had not taken part in the negotiations and did not intend to sign it because it “disregards the realities of the international security environment” and “is incompatible with the policy of nuclear deterrence, which has been essential to keeping the peace in Europe and North Asia for over 70 years”. Western allies, including Australia, Japan and South Korea, joined them in criticising the treaty as ineffectual, impractical and lacking credibility. Their protestations notwithstanding, the hard reality is that not one warhead has been eliminated by the NPT. Almost 50 years since the NPT’s adoption, not one nuclear weapon has been eliminated through a multilateral agreement and no multilateral negotiation on nuclear weapons has ever been held under its rubric. Unlike the NPT, the prohibition treaty will have a powerful normative impact on both the military utility and political value of nuclear weapons.

The nuclear disarmament goals are to delegitimise, prohibit, cap, reduce, and eliminate. Only those possessing nuclear weapons can undertake the last three tasks and the essay by Gareth Evans in this volume outlines pathways where the NPT and NWPT non-proliferation and disarmament goals converge. But the non-NWS can pursue the first and second goals of delegitimisation and prohibition on their own to exert pressure on possessor states to pursue the other goals. Thus, stigmatisation and prohibition are the necessary, although not sufficient, precursors to elimination. Moreover, the treaty will also draw on the UN’s unique role as the sole custodian and dispenser of politically significant approbation and anathematisation of state conduct.

The main impact of the nuclear ban treaty will be to reshape the global normative milieu: the prevailing cluster of laws (international, humanitarian and human rights), norms, rules, practices and discourse that shape how we think about and act in relation to nuclear weapons. Criticism of the NWPT deliberately but misleadingly confuses the normative impact of a prohibition treaty with the operational results of a Nuclear Weapons Convention. Stigmatisation implies illegitimacy of a practice based on the collective moral revulsion of a community. The ban treaty aims to delegitimise and stigmatisate the possession, use and deployment of nuclear weapons, plus the practice of nuclear deterrence, owing to the risks of possession and the humanitarian consequences of any use. The foreseeable effects of use make the doctrine of deterrence and the possession of nuclear weapons morally unacceptable to the international community.

The NWPT is not a magic wand that can be waved to make all nuclear weapons vanish. But the normative impact will lessen their attractiveness and change the incentive structures for states that possess them and others that rely on extended nuclear deterrence. The 1997 Ottawa Convention prohibiting antipersonnel landmines, too, is better understood as a humanitarian than an arms control treaty. The big producers and users are not parties, yet few officials of the non-parties would dispute that it has shaped their states’ behaviour. The great Australian international relations scholar Hedley Bull noted that “great powers are powers recognised by others to have, and conceived by their own leaders and peoples to have, certain special rights and duties”. The NPT recognised the major powers’ right to possess nuclear weapons as part of their special managerial responsibilities for world order; the leaders the NWS continue to assert that right; but in the NWPT, international society has derecognised the right.

By changing the prevailing normative structure, the NWPT shifts the balance of costs and benefits of possession, deterrence doctrines and deployment practices and will create a deepening crisis of legitimacy. It removes the fig leaf of international legitimacy, rooted in the NPT, that the NWS have used in which to cloak their nuclear weapons, while insisting that the pursuit of nuclear weapons by anyone else is both illegal (a violation of the law of treaties) and illegitimate (a violation of the global norm against nuclear weapons).

The fraying normative consensus around the NPT as the embodiment of the global nuclear order and the framework for setting global nuclear policy directions has been broken. In the short term, the nuclear-armed states may ignore the NWPT to double down on investment in nuclear weapons, doctrines and deployment practices. But the NPT’s five NWS will no longer be able to claim the mantle of international legality and legitimacy that the NPT had conferred on their possessor status. They may not like the result, but their constant refrain that the nuclear genie cannot be put back in the bottle is now turned against them: neither can the ban treaty. All countries must adjust to this new institutional reality.
It is difficult, if not impossible, to imagine the catalyst that would be needed to ensure global nuclear disarmament. It is important, however, for Australia to continue to contribute to counter-proliferation initiatives and to play our part in strengthening the international norms that discourage proliferation.
The DSP “would provide the United States with its earliest warning of intercontinental ballistic missile (ICBM) attack. The additional warning time assists in minimising the risk of nuclear conflict arising through accident or miscalculation, and so supports stability in the superpower strategic relationship... The presence in Australia of [the facilities at Nurrungar and Pine Gap] carries with it a risk that, in the event of superpower conflict, the facilities might be attacked by the Soviet Union. However, the risk that such conflict might occur, either deliberately or as a result of some accident, is very low and the functions carried out by the joint defence facilities help to ensure that this remains the case. Were Australia to cease our cooperation in the joint defence facilities there would only be adverse consequences for international security and higher risk of global war.” (In contrast, Australia’s 2016 Defence White Paper says only that “The Joint Defence Facility Pine Gap makes a critical contribution to the security interests of Australia and the United States.)

In the 30 years since publication of that White Paper, the Soviet Union has evolved into Russia, Australia has a chequered and complex history with the US, though difficult at times, is not as formidable as Russia’s and the relationship with the US, though difficult at times, is not as poisonous. Nevertheless, in the decades ahead, it is likely that China’s military capabilities will grow extensively, bringing a need to ensure the same kind of nuclear stability as with Russia.

In brief, for as long as it continues to host the Relay Ground Station, Australia should contribute to this aspect of nuclear stability too.

From an Australian point of view, the case of India and Pakistan calls for a different judgement. At least for now, their respective nuclear capabilities are likely to remain modest, and their strategic focus is more on each other than elsewhere. Other nations are better placed than Australia to emphasise to India and Pakistan the critical importance of understanding each other’s perspectives and where the red lines are—those activities which if undertaken or perceived to be likely, would lead to the use of nuclear weapons, either in response or pre-emptively. Nevertheless, Australia should take some opportunities that might arise to contribute to international efforts to help India and Pakistan keep their relationship stable. India’s relationship with China, while tense in some respects, is more stable and better managed than that with Pakistan, leading to fewer challenges with respect to the nuclear dimension of the relationship.

It is in the North Pacific that the greatest cause for concern is currently to be found. Two issues intersect: the ambitions of North Korea and the robustness of the commitment of the US to extend its nuclear deterrent to its Pacific allies: South Korea, Japan and Australia.

What, if any, are the limits to North Korea’s nuclear ambitions? Will it attempt to develop nuclear forces of the same sophistication as those of the superpowers, with decoys and multiple, independently-targeted re-entry vehicles, and a numerically significant arsenal? These are not easy questions to address, not least because we have been fortunate not to have experienced the use of atomic or nuclear weapons since the Second World War, and therefore have no precedents to use in making these assessments.

In Australia’s case, the 2016 DWP makes a brief but significant reference to the importance to us of extended deterrence: “Australia’s security is underpinned by the Australian, New Zealand, United States (ANZUS) Treaty.” This policy of relying on the US for nuclear deterrence is long-standing, and is the context in which Australia’s interests in its own nuclear weapons have long been set aside.

Australia has a chequered and complex history on the matter of nuclear weapons. There was significant interest in acquiring an Australian nuclear arsenal in the 1950s, 60s and into the early 70s, although the strength of that interest seems to have fluctuated over the period. In any event, such momentum as there was to go down the nuclear path seems to have abated quite quickly from beyond the early 1970s, especially once Australia had ratified the Nuclear Non-Proliferation Treaty (NPT) in 1973. Instead, the focus turned to the need to understand the lead time for a nuclear capability and what might need to be done to shorten it. The 1976 Australian Strategic Analysis and Defence Policy Objectives (at the time classified Secret Austcode) expressed it as follows: “No requirement is seen
The change in circumstances that would persuade Australia to go down the nuclear path would likely persuade other nations to do the same; Japan, but also South Korea and perhaps Taiwan, and Indonesia in the longer term.

for Australia now to acquire nuclear weapons. However, the possible requirement to keep the lead time for Australia matched with contingent developments in other relevant countries, calls for keeping up-to-date in developments and for a review periodically of Australia’s potential for development of nuclear weapons, against the possibility that the country might be forced to consider turning to them for protection at some indeterminate time in the future.” This is a more subtle thought than that which was expressed publicly at the time in the 1973 DWP. “Australia is a member of the Nuclear Non-Proliferation Treaty, which forbids manufacture or transfer of nuclear weapons.”

It appears that, in accordance with the views expressed above, at least some work was done in the 1970s on the nuclear lead time. This study would most likely have been highly classified and not widely circulated—thus contributing to its almost complete erasure from today’s corporate memory. As far as I am aware, there were no follow-up studies in later decades. Work conducted some 40 years ago in such a highly technical field would by now be out of date, given scientific developments and changes in the capabilities of Australian research institutions and industry since then. Current circumstances do not justify the degree of strategic pessimism that would be needed for Australia to have serious doubts about extended deterrence. Nevertheless, if the government were to have or to develop such concerns, a review of this earlier work would be a good place to start, if only to inform judgements on the size of the challenge, including the investment and other resources that would be needed, and to disabuse any optimists that the path would be easy. A new study could then offer a more contemporary assessment of the costs, lead times, and the steps which could be taken to shorten the lead time.

The change in circumstances that would persuade Australia to go down the nuclear path would likely persuade other nations to do the same; Japan, but also South Korea and perhaps Taiwan, and Indonesia in the longer term. Proliferation on this scale would introduce new complications and instabilities into the international relationships of our region, increasing the risk that nuclear weapons would be used, including by accident or gross miscalculation. It would be far better for the international system to evolve in such a way that confidence in extended deterrence continued to be justified and that the need for proliferation, including by Australia, did not arise. Continued economic and diplomatic pressure on North Korea would help in this respect, even though the prospects of getting that country to change its policies are unpromising.

What, then, is the priority for Australia to acquire its own defence against attack by ballistic missiles? It is difficult to conclude that the need is pressing. If Australian forces deployed overseas were at risk of such an attack, it is most likely that we would be supporting an operation led by the US, and it is reasonable to presume the US would be providing any necessary ballistic missile defence. As in the first Gulf War, Australia would expect to be involved in providing early warning of missile attack through its participation in the DSP.

In the case of the Australian continent, the key issue is whether North Korea would expend (or waste) any of the small number of missiles in its inventory by attacking a distant target of, at best, secondary relevance to its principal concerns. Sydney is a long way from Pyongyang, and my own imagination does not yet stretch that far. Nevertheless, given the trends in Australia’s geo-strategic circumstances, there is something to be said for taking steps now to understand the options and reduce the acquisition lead times. The government’s recent decision to acquire the Aegis combat management system for the nine Future Frigates, as well for the three Air Warfare Destroyers currently under construction, is an important step in this regard, as it would facilitate the later fitting of these vessels with the Standard Missile (SM)-3 missile for the mid-course interception of longer-range ballistic missiles and the SM-6 for interception in the terminal phase, as set out by Australian Prime Minister Malcolm Turnbull at the 2017 Pacific International Maritime Exposition. Defence against ballistic missiles is technologically challenging and the focus of much continuing development. Few, if any, systems can yet be said to be mature. There is no need to rush into a decision now, although Australia’s Department of Defence needs to keep a close eye on lead times.

It is difficult, if not impossible, to imagine the catalyst that would be needed to ensure global nuclear disarmament. It is important, however, for Australia to continue to contribute to counter-proliferation initiatives and to play our part in strengthening the international norms that discourage proliferation. Without constraint on proliferation, our world would be a far riskier place. We owe it to the world and ourselves to help keep these risks as manageable as possible.
I still believe that going back to the hard grind of step-by-step arms control negotiations, both bilateral and multilateral, is the only path to a safer and saner nuclear world.
Is the recently negotiated Nuclear Weapons Prohibition Treaty capable of being a game-changer? The treaty—which will be legally binding on the parties to it, and enter into force once 50 states ratify it, an easily realisable target—is not modest in its aspirations.

The Nuclear Weapons Prohibition Treaty was designed to make clear that the majority of UN member states regard nuclear weapons as morally unconscionable and want to see them completely prohibited. Its aspirations are manifestly normative rather than immediately practical.

The Nuclear Weapons Prohibition Treaty (NWPT) was designed to make clear that the majority of UN member states regard nuclear weapons as morally unconscionable and want to see them completely prohibited. Its aspirations are manifestly normative rather than immediately practical. Australia, shelter under their umbrella—continue to insist that their security concerns justify retaining a nuclear option, but other countries’ concerns do not, that is exactly how the nuclear weapons states will continue to be regarded.

Holding the line on the Iran deal is by no means a certainty, given the continuing desire of US President Donald Trump and others around him to tear it up—or so far curbed only by such adults as remain in the room—on grounds that have nothing to do with whether Tehran is in fact observing, as it has been, its side of the bargain. North Korea remains a much tougher case, and gets ever more so as its weapon and delivery system capability develop ever more rapidly. We all know the policy options are extremely limited: sanctions seem likely to continue to be unproductive; China is not willing to push the regime to its breaking point, even if it could, and threatening it with a trade war if it doesn’t, is as ignorant as it is reckless about the likely consequences; and pre-emptive military action is attractive only to the certifiably deluded. The only viable approach is one that combines containment, deterrence and keeping the door wide open for negotiations, without preconditions and through any mechanism, bilateral or multilateral, which seems likely to be productive. Hope should not be abandoned that at least a freeze could be negotiated, if the North Korean regime could be given sufficient confidence that its survival is not at risk: that is what Pyongyang wants, not a war which can only be suicidal.

Second, having more nuclear-armed states dramatically compounds the danger. As bad as the risks were during most of the Cold War years, when there were just two opposing major nuclear powers, they have become much worse since the proliferation developments that produced India, Pakistan and Israel as new nuclear armed states, and more recently North Korea. These countries already lie in areas of great regional volatility, with a history of violent conflict and less sophisticated command and control systems. And, of course, these risks would be compounded even more dramatically if there were to be further breakouts, particularly by others in the Middle East should Iran be perceived to be not fully back in its box, or in Northeast Asia in response either to North Korea or to a continued Chinese overall military capability (even though Beijing is continuing to show comparative moderation in the development of its nuclear weapons arsenal).

Given what we now know about the Cold War United States-Soviet Union near-miss cases; given what we know about the rather more uncertain command and control, and mutual reassurance systems of the more recently nuclear-armed states; and given also what we now know, and can guess, about how much more sophisticated and capable cyber offence will be of overcoming cyber defence in the years ahead, that we have survived over seven decades without a nuclear weapons catastrophe is not a matter of inherent system stability or great statesmanship—just sheer dumb luck. And there is no reason why that luck should continue indefinitely.

The third reason for heightened concern about non-proliferation, the whole world would manifestly benefit from a strengthening of the current legal regime, including through tougher sanctions (in particular universal embrace of the International Atomic Energy Agency (IAEA)'s Additional Protocol), meaningful penalties for Non-Proliferation of Nuclear Weapons Treaty (NPT) non-compliance, a ban on fissile material production for weapons purposes, securing nuclear weapon-free zone protocol ratifications, bringing the Comprehensive Nuclear-Test-Ban Treaty (CTBT) finally into force and strengthening non-treaty mechanisms like the Proliferation Security Initiative. But it has been remarkably difficult, not least through the NPT review process, to get delivery on any of these measures. Although the nuclear-weapon states continue to be in denial about this, the basic problem is the perceived lack of serious commitment by these states to the Article VI disarmament commitments of the NPT. All the world hates a hypocrite. And so long as the nuclear weapon states—and those which, like the US and Russia, are each dramatically modernising their arsenals, and under current leaders showing no inclination whatsoever to engage in any serious new arms control. Everywhere in Asia, nuclear weapons numbers are increasing, not diminishing. And despite all the recent efforts of global civil society and the humanitarian impact movement—with two thirds of United Nations members supporting the newly negotiated nuclear weapons ban treaty—all the present nuclear-armed states and nearly all their partners and allies are vigorously opposing event tentative first steps toward disarmament.

As to non-proliferation, the whole world would manifestly benefit from a strengthening of the current legal regime, including through tougher sanctions (in particular universal embrace of the International Atomic Energy Agency (IAEA)'s Additional Protocol), meaningful penalties for Non-Proliferation of Nuclear Weapons Treaty (NPT) non-compliance, a ban on fissile material production for weapons purposes, securing nuclear weapon-free zone protocol ratifications, bringing the Comprehensive Nuclear-Test-Ban Treaty (CTBT) finally into force and strengthening non-treaty mechanisms like the Proliferation Security Initiative. But it has been remarkably difficult, not least through the NPT review process, to get delivery on any of these measures. Although the nuclear-weapon states continue to be in denial about this, the basic problem is the perceived lack of serious commitment by these states to the Article VI disarmament commitments of the NPT. All the world hates a hypocrite. And so long as the nuclear weapon states—and those which, like the US and Russia, are each dramatically modernising their arsenals, and under current leaders showing no inclination whatsoever to engage in any serious new arms control. Everywhere in Asia, nuclear weapons numbers are increasing, not diminishing. And despite all the recent efforts of global civil society and the humanitarian impact movement—with two thirds of United Nations members supporting the newly negotiated nuclear weapons ban treaty—all the present nuclear-armed states and nearly all their partners and allies are vigorously opposing event tentative first steps toward disarmament.

As to non-proliferation, the whole world would manifestly benefit from a strengthening of the current legal regime, including through tougher sanctions (in particular universal embrace of the International Atomic Energy Agency (IAEA)'s Additional Protocol), meaningful penalties for Non-Proliferation of Nuclear Weapons Treaty (NPT) non-compliance, a ban on fissile material production for weapons purposes, securing nuclear weapon-free zone protocol ratifications, bringing the Comprehensive Nuclear-Test-Ban Treaty (CTBT) finally into force and strengthening non-treaty mechanisms like the Proliferation Security Initiative. But it has been remarkably difficult, not least through the NPT review process, to get delivery on any of these measures. Although the nuclear-weapon states continue to be in denial about this, the basic problem is the perceived lack of serious commitment by these states to the Article VI disarmament commitments of the NPT. All the world hates a hypocrite. And so long as the nuclear weapon states—and those which, like the US and Russia, are each dramatically modernising their arsenals, and under current leaders showing no inclination whatsoever to engage in any serious new arms control. Everywhere in Asia, nuclear weapons numbers are increasing, not diminishing. And despite all the recent efforts of global civil society and the humanitarian impact movement—with two thirds of United Nations members supporting the newly negotiated nuclear weapons ban treaty—all the present nuclear-armed states and nearly all their partners and allies are vigorously opposing event tentative first steps toward disarmament.
My own preference would have been for a treaty, or treaty-making process, that—which being as clear as this one is about the ultimate destination—acknowledges the reality that nuclear weapons elimination is only ever going to be achievable on a step-by-step basis, and builds into its present all-or-nothing fabric a series of way-stations.

That said, those passionately in favour of nuclear disarmament need to do something more than just campaign to raise the profile of the NWPT and secure the maximum number of adherents. That approach may be working well with the Ottawa and Oslo treaties, on land mines and cluster bombs, where—despite several significant states holding out—the normative consensus continues to consolidate and grow to the extent it is possible to imagine achieving in the not too distant future a world in which these weapons are simply no longer used. But the stakes are much higher with nuclear weapons, given their existential destructive power, the psychological commitment to their retention by so many nuclear armed states and the fear that each has that even if they go collectively to zero they will be vulnerable to rogue state breakout in the absence of effective verification and enforcement machinery. It is just not credible to think that the present treaty, by itself, can get us to a nuclear weapon free world.

My own preference would have been for a treaty, or treaty-making process, that—while being as clear as this one is about the ultimate destination—acknowledges the reality that nuclear weapons elimination is only ever going to be achievable on a step-by-step basis, and builds into its present all-or-nothing fabric a series of way-stations. The nuclear-armed states that are nervous about going to zero while others still have nuclear weapons.

The reality is none of the existing nuclear-armed states, or their allies or treaty partners, endorsed the draft NWPT or are likely to join it any time soon or indeed for the indefinitely foreseeable future. But that is not to say that its negotiation has been a waste of time, or in any way counter-productive. The idea of this ban treaty—and the humanitarian consequences movement from which it was born—has already generated real normative momentum, and will continue to do so. Global stigmatisation, delegitimisation and the will to prohibit nuclear weapons may not be sufficient conditions for their elimination, but they are necessary conditions. And whether the nuclear-armed states like it or not—and whether others of us like Australia who think of ourselves as sheltering under their nuclear umbrella like it or not—that is the mood that is out there in the rest of the world.

Additional Protocol). Second, it is very light on the crucial question of verification—that’s for a competent international authority to be designated in due course by the states that are party to it. Third, it is silent on the even more crucial question of enforcement, understandably enough, because the issue of how to respond to a rogue state breakout in a nuclear weapons-free world is one to which no one has even a conceptually credible solution. And fourth, the provision that nuclear-armed states joining the treaty submit to a time-bound program for the complete and irreversible elimination of their stockpiles is not likely to be very attractive to those states that are nervous about going to zero while others still have nuclear weapons.

The reality is none of the existing nuclear-armed states, or their allies or treaty partners, endorsed the draft NWPT or are likely to join it any time soon or indeed for the indefinitely foreseeable future. But that is not to say that its negotiation has been a waste of time, or in any way counter-productive. The idea of this ban treaty—and the humanitarian consequences movement from which it was born—has already generated real normative momentum, and will continue to do so. Global stigmatisation, delegitimisation and the will to prohibit nuclear weapons may not be sufficient conditions for their elimination, but they are necessary conditions. And whether the nuclear-armed states like it or not—and whether others of us like Australia who think of ourselves as sheltering under their nuclear umbrella like it or not—that is the mood that is out there in the rest of the world.

That said, those passionately in favour of nuclear disarmament need to do something more than just campaign to raise the profile of the NWPT and secure the maximum number of adherents. That approach may be working well with the Ottawa and Oslo treaties, on land mines and cluster bombs, where—despite several significant states holding out—the normative consensus continues to consolidate and grow to the extent it is possible to imagine achieving in the not too distant future a world in which these weapons are simply no longer used. But the stakes are much higher with nuclear weapons, given their existential destructive power, the psychological commitment to their retention by so many nuclear armed states and the fear that each has that even if they go collectively to zero they will be vulnerable to rogue state breakout in the absence of effective verification and enforcement machinery. It is just not credible to think that the present treaty, by itself, can get us to a nuclear weapon free world.

My own preference would have been for a treaty, or treaty-making process, that—while being as clear as this one is about the ultimate destination—acknowledges the reality that nuclear weapons elimination is only ever going to be achievable on a step-by-step basis, and builds into its present all-or-nothing fabric a series of way-stations. The nuclear-armed states that are nervous about going to zero while others still have nuclear weapons.

The reality is none of the existing nuclear-armed states, or their allies or treaty partners, endorsed the draft NWPT or are likely to join it any time soon or indeed for the indefinitely foreseeable future. But that is not to say that its negotiation has been a waste of time, or in any way counter-productive. The idea of this ban treaty—and the humanitarian consequences movement from which it was born—has already generated real normative momentum, and will continue to do so. Global stigmatisation, delegitimisation and the will to prohibit nuclear weapons may not be sufficient conditions for their elimination, but they are necessary conditions. And whether the nuclear-armed states like it or not—and whether others of us like Australia who think of ourselves as sheltering under their nuclear umbrella like it or not—that is the mood that is out there in the rest of the world.

That said, those passionately in favour of nuclear disarmament need to do something more than just campaign to raise the profile of the NWPT and secure the maximum number of adherents. That approach may be working well with the Ottawa and Oslo treaties, on land mines and cluster bombs, where—despite several significant states holding out—the normative consensus continues to consolidate and grow to the extent it is possible to imagine achieving in the not too distant future a world in which these weapons are simply no longer used. But the stakes are much higher with nuclear weapons, given their existential destructive power, the psychological commitment to their retention by so many nuclear armed states and the fear that each has that even if they go collectively to zero they will be vulnerable to rogue state breakout in the absence of effective verification and enforcement machinery. It is just not credible to think that the present treaty, by itself, can get us to a nuclear weapon free world.

My own preference would have been for a treaty, or treaty-making process, that—while being as clear as this one is about the ultimate destination—acknowledges the reality that nuclear weapons elimination is only ever going to be achievable on a step-by-step basis, and builds into its present all-or-nothing fabric a series of way-stations. The nuclear-armed states that are nervous about going to zero while others still have nuclear weapons.

The reality is none of the existing nuclear-armed states, or their allies or treaty partners, endorsed the draft NWPT or are likely to join it any time soon or indeed for the indefinitely foreseeable future. But that is not to say that its negotiation has been a waste of time, or in any way counter-productive. The idea of this ban treaty—and the humanitarian consequences movement from which it was born—has already generated real normative momentum, and will continue to do so. Global stigmatisation, delegitimisation and the will to prohibit nuclear weapons may not be sufficient conditions for their elimination, but they are necessary conditions. And whether the nuclear-armed states like it or not—and whether others of us like Australia who think of ourselves as sheltering under their nuclear umbrella like it or not—that is the mood that is out there in the rest of the world.

That said, those passionately in favour of nuclear disarmament need to do something more than just campaign to raise the profile of the NWPT and secure the maximum number of adherents. That approach may be working well with the Ottawa and Oslo treaties, on land mines and cluster bombs, where—despite several significant states holding out—the normative consensus continues to consolidate and grow to the extent it is possible to imagine achieving in the not too distant future a world in which these weapons are simply no longer used. But the stakes are much higher with nuclear weapons, given their existential destructive power, the psychological commitment to their retention by so many nuclear armed states and the fear that each has that even if they go collectively to zero they will be vulnerable to rogue state breakout in the absence of effective verification and enforcement machinery. It is just not credible to think that the present treaty, by itself, can get us to a nuclear weapon free world.

My own preference would have been for a treaty, or treaty-making process, that—while being as clear as this one is about the ultimate destination—acknowledges the reality that nuclear weapons elimination is only ever going to be achievable on a step-by-step basis, and builds into its present all-or-nothing fabric a series of way-stations. The nuclear-armed states that are nervous about going to zero while others still have nuclear weapons.

The reality is none of the existing nuclear-armed states, or their allies or treaty partners, endorsed the draft NWPT or are likely to join it any time soon or indeed for the indefinitely foreseeable future. But that is not to say that its negotiation has been a waste of time, or in any way counter-productive. The idea of this ban treaty—and the humanitarian consequences movement from which it was born—has already generated real normative momentum, and will continue to do so. Global stigmatisation, delegitimisation and the will to prohibit nuclear weapons may not be sufficient conditions for their elimination, but they are necessary conditions. And whether the nuclear-armed states like it or not—and whether others of us like Australia who think of ourselves as sheltering under their nuclear umbrella like it or not—that is the mood that is out there in the rest of the world.
ANU College of Asia & the Pacific is the leading centre for research and teaching on the world’s most dynamic region.

The College combines disciplinary expertise with regional and policy focus to explore, understand and answer the challenges facing society now and into the future.

Research and teaching at the College is centred around five key themes that are designed to support transformative social change:

- Development
- Security
- Governance
- Sustainability and Prosperity
- Culture and Identity

Focusing on Asia and the Pacific ensures the College can provide individuals, communities and governments with insight on the region that will profoundly reshape the world we live in.

We encourage you to engage with our community and find out more about the consequential work of the College of Asia & the Pacific.

asiapacific.anu.edu.au
ANUasiapacific
ANUasiapacific
anu_asiapacific
ANU College of Asia & the Pacific