

TROUBLED WATERS:

NUCLEAR SUBMARINES,
AUKUS AND THE NPT

JANUARY 2022

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INTERNATIONAL CAMPAIGN TO ABOLISH
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INTRODUCTION

MARIANNE HANSON AND GEM ROMULD

Nuclear weapons risks remain unacceptably high, disarmament is not progressing, and nuclear proliferation remains a serious and continuing concern.

Against this complex and uncertain background on September 16, 2021 the Australian, UK and US governments announced an expanded trilateral partnership, AUKUS. A key element of this agreement is the proposal to deliver eight nuclear-powered submarines to Australia. These are likely to utilise significant quantities of highly enriched uranium (HEU).

The AUKUS announcement came as a surprise to the vast majority of Australians. Many were perplexed by the decision and remain concerned about its domestic and international ramifications. The current Australian government, by comparison, seems remarkably sanguine about acquiring nuclear propelled submarines, and has dismissed concerns about any negative impact on the non-proliferation regime.

Many observers do not share this complacency or the assumption that the challenges this plan poses to IAEA verification procedures and the wider non-proliferation architecture can be easily managed.

Australia's acquisition of nuclear-powered submarines is an unnecessary and retrograde step and we continue to call on the federal government to re-think this decision. ICAN Australia is not alone in this approach. When a public response to the Exchange of Naval Nuclear Propulsion Information Agreement was invited by the Australian Joint Standing Committee on Treaties over one hundred substantive submissions were received, despite only four days being provided for public comment. These submissions were overwhelmingly against the nuclear submarine proposal and reflected concerns about such a profound reorientation of Australian security, defence, and nuclear policy(1). Unusually, former prime ministers from both parties of the government have spoken strongly against the proposal.

(1) Submissions can be viewed at

https://www.aph.gov.au/Parliamentary_Business/Committees/Joint/Treaties/ENNP/IA/Submissions. Writers noted the following concerns: the lack of consultation with the Australian public; the diplomatic and economic consequences of reneging on the existing French submarine deal; the likely cost (up to \$170 billion) to purchase nuclear submarines from the US or the UK; the possibility of nuclear accidents and their environmental repercussions; the de-stabilising potential that AUKUS might present to the Asia-Pacific region at a time when diplomatic rather than sharp military responses to the rise of China are needed; the need to uphold the long-standing policy against a domestic nuclear energy program, and the concern among Australia's near neighbours whose sensitivities to nuclear issues have been ignored.

(2) Alan Kuperman, 2021, 'Bomb-grade uranium for Australian submarines?', Kyodo News, 11 November, <https://english.kyodonews.net/news/2021/11/006a0287253b-opinion-bomb-grade-uranium-for-australian-submarines.html>

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... the planned submarine action breaks an existing taboo and sets a precedent which is already raising interest among other states to utilise the same logic to acquire similar sensitive nuclear material and capability.

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The agreement to acquire nuclear-propelled submarines, using nuclear material for non-proscribed military purposes, exploits a gap in the NPT. This gap is one which has been eyed by other states, all of which to date have ultimately refrained from setting a destabilising precedent. If this proposal goes ahead, Australia will become the first non-nuclear weapon state to receive this highly sensitive technology. A further concern is that HEU is the most suitable material for ready and rapid conversion into a nuclear weapon, including a rudimentary one well within the means of non-state groups.

Australia has long supported nuclear non-proliferation efforts. It has supported domestic and international efforts to reduce and remove HEU from civilian uses worldwide, and claims to support a treaty controlling fissile materials. Acquiring large quantities of HEU - some suggest there would be more than 20 nuclear weapons worth(2) per submarine, on mobile platforms for several decades outside of usual IAEA safeguards and scrutiny - undercuts rather than enhances fissile material minimisation and security.

Australian nuclear submarines will entail multifaceted escalation in many things nuclear: more nuclear engineers and capacity in and out of the Australian Defence Force, further nuclear military enmeshment with the US and UK and closer integration with the operations of US nuclear armed ships, submarines and aircraft. It could work to soften the public on the stationing or storage of foreign nuclear weapons on Australian soil.

The Australian Prime Minister has stated that AUKUS and the submarine plan do not alter Australia's policy not to acquire nuclear weapons. However, it is historical fact that Australia had ambitions to acquire nuclear weapons from the 1950s to the 1970s. Further, HEU-fuelled submarines could simplify and shorten the path for a future Australian government to build nuclear weapons in a number of ways, including from technical, regulatory and social perspectives. The Prime Minister's political assurance does not provide any enduring certainty and the planned submarine action breaks an existing taboo and sets a precedent which is already raising interest among other states to utilise the same logic to acquire similar sensitive nuclear material and capability.

The best assurance the Australian Government can give of its commitment to nuclear non-proliferation and disarmament is to sign and ratify the UN Treaty on the Prohibition of Nuclear Weapons, which outlaws possession, hosting, transfer and assistance with the use of nuclear weapons. Further, the AUKUS proposal to supply Tomahawk cruise missiles to Australia to extend its long-range conventional strike capabilities, signals a possible weakening of Australian adherence to the Missile Technology Control Regime. Australia must strengthen, not weaken, this important agreement.

ICAN Australia has published this report to help inform consideration of this topic and its implications ahead of the long-awaited tenth NPT Review Conference. The Report assesses several issues:

- Trevor Findlay examines the impact that the nuclear submarine deal could have on the NPT, and how the military-to-military transfer of enriched uranium to a non-nuclear weapon state like Australia poses a problem for IAEA verification. He reminds us that the proposal could pave the way for a variety of other non-nuclear states – some with possible proliferation motivations – to acquire nuclear materials and/or to avoid compliance with safeguards.
- Talei Mangioni surveys the impact that the submarine announcement has had on Australia's South Pacific neighbours, for

whom the humanitarian impacts of nuclear accidents and tests are ongoing.

- Richard Tanter surveys the broad strategic implications of enmeshing Australian defence capabilities more closely into American and British military postures, and the exacerbation of regional tensions and the risk of war.
- Monique Cormier raises questions of whether a non-peaceful nuclear activity – that is, the use of enriched uranium for the military purpose of fuelling a submarine – contradicts the NPT's object and purpose, and whether this is a legitimate action to take for a state-party that otherwise professes to be a champion of nuclear non-proliferation.
- Muhadi Sugiono notes that AUKUS has created proliferation, strategic, and political concerns among some of Australia's closest neighbours in South-East Asia, even as some Asian states have cautiously welcomed a greater role for the US and UK in the region.

This report conveys a diversity of concerns and reservations about the AUKUS nuclear submarine proposal held by many in our region. We hope that it will encourage active and critical engagement by the international community. Of key concern is the threat posed by this plan to the NPT, especially its non-proliferation and safeguards provisions, as well as the wider non-proliferation and nuclear security frameworks.

The threats of the COVID pandemic and rapid climate change have further highlighted our global interdependence and the importance of international collaboration and cooperation. Efforts to advance nuclear non-proliferation are of critical importance and in a context where the Treaty on the Prohibition of Nuclear Weapons has entered into force and is gathering increasing support, the planned AUKUS step towards, rather than away from, utilisation of weapons-usable fissile material and technology carries unacceptable and unnecessary risks.

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Image: Negotiations on the Treaty on the Prohibition of Nuclear Weapons, 2017. Credit: ICAN.

THE AUKUS SUBMARINE PROJECT AND THE NUCLEAR NONPROLIFERATION REGIME

TREVOR FINDLAY

The surprise announcement by Australia, the United Kingdom, and the United States on 16 September 2021 promises to make Australia the first state without nuclear weapons to acquire nuclear-powered submarines. The announcement has been followed by a treaty signed by the three partners on 22 November that will facilitate information exchanges, training and visits to help Australia decide whether to proceed with the project. Ratification of the treaty is subject to domestic approval processes.

The trilateral submarine proposal presents yet another unwelcome challenge to the nuclear nonproliferation regime, this time by three states that have traditionally been among its greatest supporters. The foundations of the nonproliferation regime, which aims to prevent the spread of nuclear weapons to states that do not have them, are the 1968 Non-Proliferation Treaty (NPT) and the safeguards system operated by the International Atomic Energy Agency (IAEA). Safeguards entail declarations of nuclear holdings, nuclear material accountancy, containment and surveillance measures, on-site inspections, and increasingly remote sensing and sophisticated data analysis. As the implications of the Australian submarine proposal are studied by governments, nonproliferation experts, and the IAEA itself, the complexities and apparent dangers grow.

Australia, like other non-nuclear weapon states that are party to the NPT, has a Comprehensive Safeguards Agreement (CSA) with the IAEA that requires the Agency to verify that Australia is not diverting any nuclear material from peaceful purposes to weapons purposes. Australia has an excellent compliance track record and there is no suggestion that Australia seeks nuclear weapons. Its proposed submarines would be nuclear-powered but conventionally armed. The difficulty is that nuclear propulsion for submarines is not considered a peaceful use of nuclear energy, but a “non-explosive military use.” This is partly because submarine reactors use enriched uranium, either highly-enriched uranium (HEU) that can also be used for nuclear weapons, or low-enriched uranium (LEU) that with further enrichment can become bomb material. It is also because nuclear propulsion technology, including the reactor and fuel

design, unlike civilian nuclear power plants, is highly classified. The US Navy regards its nuclear submarine propulsion technology, shared so far only with the United Kingdom, as one of its “crown jewels.”

Australia’s CSA, like all others, seeks to skirt this obstacle by providing, in paragraph 14, that nuclear material may be removed from safeguards for the duration of its use in a submarine reactor and returned to safeguards afterwards. The drafters of this article, widely described as a “loophole”, apparently assumed that the state would be enriching its own nuclear material under safeguards and that all the material would be derived from and returned to peaceful uses. Paragraph 14 requires that the state notify the IAEA of its intention, the amount and composition of the material involved, and the estimated duration of its withdrawal from safeguards.

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A military to military transfer to a non-nuclear weapon state conducted completely outside the IAEA verification system would, however, make a mockery of the entire nonproliferation regime, both in logic and in law.

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From the little detail we have of the AUKUS proposal, it does not fit the model suggested in paragraph 14. On the contrary, it appears to envisage a “military to military” transfer completely outside safeguards. Australia’s vessels are apparently likely to be based on British or American designs and constructed in South Australia but provided with imported sealed reactors with “lifetime cores” of HEU that would be built into the hull. Australia has no current capacity for designing and building

reactors, enriching uranium or disposing of high-level nuclear waste or spent fuel. Since both the UK and the US are nuclear weapon states, the HEU would be military in origin and not withdrawn from peaceful uses under safeguards. At the end of the 30-year life span of the submarines, the reactors would be returned to the UK or US for decommissioning and disposal of the spent fuel outside of safeguards.

A military to military transfer to a non-nuclear weapon state conducted completely outside the IAEA verification system would, however, make a mockery of the entire nonproliferation regime, both in logic and in law. Fortunately, paragraph 14 requires a state contemplating a “non-explosive use of nuclear material” to negotiate an “arrangement” with the IAEA to satisfy it that the material is not being diverted to nuclear weapons. Such an agreement appears to require approval by the IAEA Board of Governors (of which Australia is more or less a permanent member) thanks to a request for clarification several years ago from, ironically, Australia. The Director General of the IAEA, Rafael Grossi, has already been notified by Canberra of its intentions and has convened a group of his senior safeguards experts to examine the issue. The three partners in the AUKUS arrangement have committed themselves to “the highest standards for safeguards, transparency, verification and accountancy measures to ensure the non-proliferation, safety and security of nuclear material and technology.” Australian officials, along with their American and British partners, will undoubtedly work diligently to ensure that the unprecedented “arrangement” with the IAEA attempts to fulfill these requirements.

Yet because no state has ever triggered the implementation of paragraph 14, this is unknown territory. There is no model for Australia to follow. Canada did begin discussions with the IAEA in the late 1980s before abandoning its submarine plans, but safeguards have become infinitely more complex since then. Even though it is currently building its own nuclear-powered submarine, using its own enriched fuel, Brazil has not yet notified the IAEA of its intentions. South Korea, Japan, and Pakistan have all expressed interest in nuclear-powered submarines. Worryingly, and herein lies the problem, Iran has informed the IAEA that it intends at some unspecified time to acquire them, undoubtedly yet another ploy to justify its suspect enrichment activities.

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tricky.” Any agreed arrangement will need to provide the IAEA (and its member states) with sufficient assurance of non-diversion of nuclear material, while also avoiding revealing proliferation-sensitive information to the Agency’s inspectors and analysts. Standard on-site inspection techniques applied to land-based nuclear power reactors, including nuclear material accountancy, the application of seals and the installation of cameras will be impossible. The US and UK may even be unwilling to declare even gross parameters of the amounts and type of nuclear materials involved. Satellite imagery will help verify that a submarine reactor and its fuel is not being



Image: A nuclear reactor vessel is lowered into a French ballistic missile submarine, Le Terrible, which runs on low-enriched uranium fuel. Credit: DCNS.

removed while the vessel is in port (HEU-fueled submarines apparently need to be cut open for this to happen). But what occurs at sea is naturally beyond the ken of the IAEA.

Proposals have been made for the AUKUS partners to investigate the use of LEU for Australia's submarines. This is technically feasible, as China and France use such fuel and Brazil is planning to do so. While this would be preferable from a non-proliferation standpoint in one respect, as LEU is not immediately usable in nuclear weapons, such vessels, using current technology, need to be periodically refueled. A verification scheme for this scenario would be even more challenging, especially if the refueling took place in Australia.

The U.S. Navy has been directed by Congress to study the use of LEU for its next generation of submarines. Some U.S. arms controllers, for nuclear security and nonproliferation reasons, are advocating LEU lifetime cores that would not require refueling. Research and development for such technology is likely to take an estimated 10-15 years, which would prolong even further the already elongated timeline for Australia's submarine replacement aspirations.

For the IAEA, having to devote time, personnel, and resources to devising a suitable scheme for Australia's benefit when the Agency is confronted by the non-compliance cases of Iran and North Korea, along with a host of other challenges, is daunting. China is already seeking to roil the political waters at the Agency by proposing a Board of Governors committee to study the Article 14 issue—an idea that is likely to get nowhere. For Australia there is an element of moral hazard here. In creating a precedent and safeguards model it could be paving the way for the proliferation of nuclear-powered submarines to a wide variety of non-nuclear weapon states. Some of these will have ulterior motives, some will be less than scrupulous in complying with safeguards, and some may be located not far from our shores.

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PACIFIC PERSPECTIVES ON PROPOSED AUKUS NUCLEAR-PROPELLED SUBMARINES

TALEI LUSCIA MANGIONI

The recently announced AUKUS security pact between Australia, the United Kingdom and the United States, which pledges a nuclear-powered submarine fleet for Australia, is vastly out of step with a strong sense of Pacific regionalism and their long-standing commitment to a Nuclear Free Pacific. The pact also promises "further trilateral collaboration under AUKUS to enhance joint capabilities and interoperability", including "cyber capabilities, artificial intelligence, quantum technologies and additional undersea capabilities"(1).

This decision results from escalating rivalry between the United States and China, in which Australia has been ridiculed as the "Deputy Sheriff" or otherwise, the "51st state of the United States of America." After several

decades of Australian flippancy in foreign policy approach towards the Pacific, this renewed interest fundamentally based on strategic competition has led Prime Minister Scott Morrison to champion a diplomatic "Pacific Step Up" since 2017. This "Rush for Oceania" (2) to counter an allegedly growing China through a maritime Belt and Road Initiative, exists alongside a chorus of other powers including, Britain's "Pacific Uplift" and the United States' "Pacific Pledge" in what they are expounding as an essential aspect of securitisation of the amalgamated "Indo-Pacific" region. AUKUS and its upscaling of military defence capabilities suggests an amplifying of hostilities and now situates the Pacific within the crosshairs of escalating nuclear threats and potential disasters.

(1) Prime Minister of Australia (2021) [Address: AUKUS - Canberra, ACT](https://www.pm.gov.au/media/address-aukus-canberra-act), <https://www.pm.gov.au/media/address-aukus-canberra-act>, accessed December 2021.

(2) Allan et al (2018) [SGDIA Working Paper Series The Rush for Oceania](https://www.researchgate.net/publication/331653641_SGDIA_WORKING_PAPER_SERIES_THE_RUSH_FOR_OCEANIA_CRITICAL_PERSPECTIVES_ON_TEMPORARY_OCEANS_GOVERNANCE_AND_STEWARDSHIP_Reclaiming_Oceania_Collective), https://www.researchgate.net/publication/331653641_SGDIA_WORKING_PAPER_SERIES_THE_RUSH_FOR_OCEANIA_CRITICAL_PERSPECTIVES_ON_TEMPORARY_OCEANS_GOVERNANCE_AND_STEWARDSHIP_Reclaiming_Oceania_Collective, accessed December 2021.

Nuclear Colonialism in the Pacific

With this act, Australia brutally overlooks the history of nuclear colonialism in the Pacific region. Over 315 atmospheric and underground nuclear tests took place across what is currently known as the Marshall Islands, Australia, Kiribati and French Polynesia when they were territories or colonies of the United States, the United Kingdom/Australia and France, respectively. The tests are responsible for displacement, severe environmental contamination and numerous health consequences for impacted communities. The fallout of these tests did not conveniently end at a state border drawn in the ocean or desert but was a form of transboundary harm that impacted many countries across the Pacific. This is exacerbated by improper nuclear waste disposal and dumping, nuclear storage and nuclear power gone wrong such as the case of Fukushima in 2011. The Pacific also has several of the United States military bases and port facilities that neither "confirm nor deny" the storage of nuclear weapons on their sea vessels. AUKUS and the proposed nuclear submarines are just another extension of this nuclear architecture in a Pacific world that has actively resisted and protested it for decades.

No consultation with "our dear Pacific family"

Morrison proposed that AUKUS would "enhance our contribution to our growing network of partnership in the Indo-Pacific region", especially "our dear Pacific family". However, despite the Pacific being described as "family" to Australia, a former member of the U.S. House of Representatives, Dr Robert Underwood, points out that again, "It goes without saying that no one in the island Pacific was consulted or given advanced notice." AUKUS came as an unwelcome surprise in many respects, given the Pacific's nuclear history. Marshall Islands National Nuclear Commission Chair Rhea Moss-Christian asserted that "we have nuclear legacies we are still contending with..." and therefore "for the benefit of regional partnership consultation is the way to go"(3).

Similarly, Prime Minister of Kiribati Taneti Maamau stressed the nuclear harms that were inflicted on Kiribati when the United Kingdom and the United States tested more than 30

atomic and nuclear hydrogen tests between 1957 and 1962. He maintained: "Our people were victims of nuclear testing... we still have trauma... with that in mind, with anything to do with nuclear, we thought it would be courtesy to raise it, to discuss it with your neighbours."

Several Pacific leaders made statements about the nuclear history of the Pacific region at the United Nations General Assembly 76th General Debate Summit. Solomon Islands Prime Minister Manasseh Sogavare stated that the Solomon Islands as a state-party to the Rarotonga South Pacific Nuclear Free Zone, "would like to keep our region nuclear-free and put the region's nuclear legacy behind us"(4). He highlighted that the "Solomon Islands is committed to ensuring the Pacific region remains a peaceful region where its people can live free and worthwhile lives. We do not support any form of militarisation in our region that could threaten regional and international peace and stability."



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Fiji's Prime Minister Voreqe Bainimarama captured a long-standing tension in the Pacific between strategic competition and climate change, stating, "If we can spend trillions on missiles, drones, and nuclear submarines, we can fund climate action"(5).

(3) ABC Pacific Beat (2021), [Australian nuclear-powered submarine deal raises concerns in the Pacific](https://www.abc.net.au/radio-australia/programs/pacificbeat/australian-nuclear-submarine-deal-raises-concerns-in-the-pacific/13546104?), <https://www.abc.net.au/radio-australia/programs/pacificbeat/australian-nuclear-submarine-deal-raises-concerns-in-the-pacific/13546104?>, accessed December 2021.

(4) Solomon Islands (2021), [Statement by Honourable Manasseh Damukana Sogavare, Prime Minister](https://estatemnts.unmeetings.org/estatemnts/10.0010/20210925/dJqXDXV2hTWs/YDr5OuU1wB3k_en.pdf), https://estatemnts.unmeetings.org/estatemnts/10.0010/20210925/dJqXDXV2hTWs/YDr5OuU1wB3k_en.pdf, accessed December 2021.

(5) Fiji (2021), [Fiji's National Statement to UNGA76](https://estatemnts.unmeetings.org/estatemnts/10.0010/20210925/98yJHEsSga5z/MItsCOdnC6J2_en.pdf), https://estatemnts.unmeetings.org/estatemnts/10.0010/20210925/98yJHEsSga5z/MItsCOdnC6J2_en.pdf, accessed December 2021.

Image: Protest march for nuclear justice in Suva, Fiji, September 2020. Credit: Youngsolwara.



Globalisation observed that the Pacific views "Australia playing a key, often unilateral role, taking decisions around peace and security which is not aligned with Pacific peoples' immediate priorities around security, in particular human security."

The Pacific Conference of Churches leader Reverend James Bhagwan has recognised the cost nuclear accidents may impose on the Pacific's spiritual, cultural and economic base: the ocean. He explains, "The ocean impacts our life...We are the fish basket of the world. So if one submarine comes in and something goes wrong and the nuclear waste from that submarine gets into our ocean, that's too much already."

Marshall Islands President David Kabua reiterated the immense economic, cultural and humanitarian costs from nuclear weapons testing on the Marshall Islands, emphasising that "Despite our commitment, we simply lack the capacity to fully address our local needs. We tirelessly underscore that no people or nation should ever have to bear a burden such as ours, and that no effort should be spared to move towards a world free of nuclear weapons and nuclear risk, through any and all effective pathways"(6).

New Zealand Prime Minister Jacinda Ardern swiftly responded to the news and publicly announced that New Zealand would ban nuclear submarines from entering its waters. In calling attention to her own state's history of promotion of a nuclear free nation, she alluded to New Zealand's "tireless efforts to rid the world of nuclear weapons and the spectre of a conflict that no one can recover from"(7).

Separately from the UNGA session, New Caledonia's pro-independence President Louis Mapou said that the announcement of AUKUS has drastically destabilised the region. He raised that "the breach of the submarine contract between France and Australia and announcement of a new Anglo-Saxon strategic axis inevitably places New Caledonia at the heart of French geopolitics in the Indo-Pacific zone from a diplomatic point of view."(8)

Maureen Penjueli of the Pacific Network on

Youngsolwara and Pacific Network on Globalisation campaigner Joey Tau critiqued AUKUS, saying that "It contradicts what [Australia] has continued to commit to the Pacific in terms of ensuring it is a nuclear-free zone"(9). Tau pointed out that the issues of climate change and COVID-19 are more critical issues to be addressed today.

Indeed, Australia's persistent declaration that it is a member of the "Pacific family" in the context of flagrant inattention to the calls for solidarity with the region's Nuclear Free Pacific vision has been met with both condemnation and disappointment.

A Nuclear-Free Blue Pacific

Today, a newly articulated vision of the Blue Pacific re-centres the Pacific's historical and political sense of regionalism based upon the protection of their ocean. Journalist Nic Maclellan, gesturing to the work of Pacific Studies scholar Epeli Hau'ofa, highlights that this sense of regionalism rests upon the historic struggle for a nuclear free Pacific movement, with the 1985 Rarotonga Treaty or South Pacific Nuclear Free Zone treaty being a primary example of this.

Pacific politics scholar Greg Fry warns that AUKUS, with the arrangement that includes "home-basing" in particular may contravene South Pacific Nuclear Free Zone prohibitions

(6) Republic of the Marshall Islands (2021), [President H.E. Mr David Kabua](https://estatements.unmeetings.org/estatements/10.0010/20210922/QsJ9c7Io0I5b/peY1lawwuAmL_en.pdf), https://estatements.unmeetings.org/estatements/10.0010/20210922/QsJ9c7Io0I5b/peY1lawwuAmL_en.pdf, accessed December 2021.

(7) New Zealand (2021), [New Zealand Statement delivered by Rt Hon Jacinda Ardern](https://estatements.unmeetings.org/estatements/10.0010/20210924/ajen3uMeQSDH/tWu353daRXCC_en.pdf), https://estatements.unmeetings.org/estatements/10.0010/20210924/ajen3uMeQSDH/tWu353daRXCC_en.pdf, accessed December 2021.

(8) Anthony Galloway, SMH (2021) [New Caledonia caught in the middle of Australia-France submarine spat](https://www.smh.com.au/politics/federal/new-caledonia-caught-in-the-middle-of-australia-france-submarine-spat-20211125-p59c4v.html), <https://www.smh.com.au/politics/federal/new-caledonia-caught-in-the-middle-of-australia-france-submarine-spat-20211125-p59c4v.html>, accessed December 2021.

(9) ABC Pacific Beat (2021), [Australian nuclear-powered submarine deal raises concerns in the Pacific](https://www.abc.net.au/radio-australia/programs/pacificbeat/australian-nuclear-submarine-deal-raises-concerns-in-the-pacific/13546104), <https://www.abc.net.au/radio-australia/programs/pacificbeat/australian-nuclear-submarine-deal-raises-concerns-in-the-pacific/13546104>.

(10) Nic Maclellan (2021), [AUKUS disrupts "a very peaceful part of planet Earth"](https://insidestory.org.au/aukus-disrupts-a-very-peaceful-part-of-planet-earth/), <https://insidestory.org.au/aukus-disrupts-a-very-peaceful-part-of-planet-earth/>, accessed December 2021.

"under article 5 of the Rarotonga treaty, on the stationing of nuclear weapons within the zone" (11).

AUKUS stands in stark contrast to the renewed interest of the primary regional body of the Pacific Islands Forum (of which Australia is a member) in a Nuclear Free Pacific. This arose after Japan's recent announcement that it would be releasing one million tonnes of radioactive wastewater from Fukushima, which the Pacific has vehemently protested(12).

In honour of the International Day Against Nuclear Tests, the Pacific Islands Forum held a public panel entitled "Securing a Nuclear-Free Blue Pacific." Secretary-General of the Pacific Islands Forum, Henry Puna again emphasised the history of the region's deep political struggle for a Nuclear Free Pacific. Puna stated: "The strong leadership of all our Forum leaders past and present who in unity and solidarity with those affected have vowed never to allow these atrocities to befall our beloved blue Pacific home again. Nuclear testing is a legacy that no people or nation should ever have to endure. Indeed nuclear testing was a key political driver for the establishment of our Pacific Islands Forum 50 years ago"(13).

The Chair of the Pacific Islands Forum, Fiji Prime Minister Voreqe Bainimarama, with his father, a veteran survivor of the Grapple test series in Kiribati, reiterated the unresolved nuclear testing legacy to "continue to pose as a clear and present danger to the livelihoods of the peoples of the Blue Pacific". He asserted: "a just resolution remains evasive to this date and we call on those responsible to take meaningful steps to address these lingering issues"(14).

The Pacific Islands Forum has since moved to host a meeting for Nuclear Weapon Free-Zones in the Blue Pacific in 2022. As AUKUS continues to pose yet another nuclear threat to Pacific livelihoods, Pacific peoples from all levels of society continue to speak against militarization and nuclear proliferation in defence of peace in their region.

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Image: Protest march for nuclear justice in Suva, Fiji, September 2020. Credit: Youngsolwara.

(11) Greg Fry (2021), AUKUS undermines Australia's "Pacific family", <https://devpolicy.org/aukus-undermines-australias-pacific-family-20211104/>, accessed December 2021.

(12) Tau and Mangioni (2021) If it's safe, dump it in Tokyo. We in the Pacific don't want Japan's nuclear wastewater, <https://www.theguardian.com/world/2021/apr/26/if-its-safe-dump-it-in-tokyo-we-in-the-pacific-dont-want-japans-nuclear-wastewater>, accessed December 2021.

(13) Pacific Islands Forum (2021) Blue Pacific Talanoa Series 2021, Episode 1, August 27, 2021, https://www.youtube.com/watch?v=RSR_3mj4OnA, accessed December 2021.

(14) Ibid.

NUCLEAR-POWERED SUBMARINES FOR AUSTRALIA – STEPPING BACK INTO THE ANGLOSPHERE AND INTO A NEW ASIAN ARMS RACE

RICHARD TANTER

The Australian government's announcement in September 2021 of a new set of military agreements between Australia, the United States and the United Kingdom was a surprising, retrograde and risky step.

For many Australians, the idea of the UK being of any serious strategic importance to Australia, more than 60 years after that country withdrew from its military positions 'East of Suez', was a step back in time to the formation of the Australian state as part of the British empire in 1901.

Just as Australians are slowly beginning to recognize the realities of their location in Asia, a deepened alliance with the United States and a post-Brexit reboot of the UK has put the 'Anglo' back in the racialised identity that makes up the Anglosphere.

The most well-known aspect of AUKUS is the agreement with the US and the UK to supply Australia with nuclear-powered submarines – or more precisely, with nuclear-propulsion technology. While much is unclear about this proposal and much about it problematic in terms of weakening the nuclear non-proliferation regime and exacerbating the strategic arms race in Asia, what is clear is that the decision will have major strategic consequences for Australia, and from the perspective of China, potentially existential consequences.

The prelude to AUKUS – by just a matter of minutes – was the cancellation of a 2016 Australian contract with a French government-owned shipbuilder for eight French conventional diesel/electric-powered submarines, expected to be worth more than A\$100bn. Under AUKUS, the US will allow the export to Australia of naval nuclear power technology, either directly or by licence through the UK (with the latter making up an Australian and US subsidy to post-Brexit Britain).

Almost everything else about the submarines – what type they will be, what their operational capabilities will be, which country will build them, and when they will be delivered – is to

be decided following a review to be completed in 2023. Effectively, the AUKUS submarine decision amounts to a \$100 bn plus blank cheque.

Nothing is known about the next Australian submarine except for one fact: nuclear-propulsion. Nuclear naval reactors are, the Australian government has stated, required for long-range, long endurance, high speed capability operations in waters distant from Australia's immediate neighbourhood.

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What strategic need is it intended to meet, and what are the strategic consequences of that acquisition?

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The two most important questions to ask about any major weapons system platform concern its primary strategic purpose: what strategic need is it intended to meet, and what are the strategic consequences of that acquisition?

In the case of what will become the largest Australian military purchase ever, the answers to these basic strategic questions are deeply troubling, and both involve China.

Whether based on the US Virginia class hunter-killer submarines or the UK's troubled Astute class attack submarines or some new design, the vessels will be more than double the tonnage of both Australia's current submarines and their now-abandoned French replacements.

The very long range and great size of the likely US or UK nuclear submarines means that they are not principally designed for operations in Australian waters and their approaches - the traditional and understandable defence concern

for Australian naval planners. For the most part, large, fast nuclear-powered submarines are not the most appropriate choice for the relatively shallow waters of most of littoral Southeast Asia and the waters north and northeast of Australia.

Australia's prospective nuclear-powered submarines will in fact be primarily designed for operations in distant waters working in concert with the US Navy in two key types of operations against China.

One mission will be to join US hunter-killer submarines in protecting US-led aircraft carrier taskforces attacking Chinese air, naval and ground targets from the Pacific or the South China Sea. Since 1945 the US has been able to move on to the offence with impunity by bringing its carrier taskforces in range of mainland Asian targets.

In the past, there was little China could do to respond. Now, with Chinese coastal defences significantly improved, the US will have to proceed more cautiously, hopefully protected against Chinese submarines by a phalanx of US and coalition anti-submarine warfare assets, including hunter-killer submarines. Australia is offering to make a marginal contribution to such an attack on the Chinese homeland.

The second, even more serious mission involves a marginal Australian contribution to an even more dangerous attack on Chinese military capabilities in time of war: hunting, in concert with US attack submarines, Chinese nuclear ballistic missile submarines that make up the core of their survivable nuclear deterrent force.

China's hope is that its nuclear ballistic missile submarines hiding in the deeper parts of the South China Sea or in the abyssal trenches of



Image: Prime Minister Scott Morrison announcing the AUKUS partnership with UK Prime Minister Boris Johnson and US President Joe Biden, 16 September 2021.

the western Pacific will be hard for the US and its allies to find and destroy. In contrast, China's land based missiles are highly vulnerable to a US nuclear first-strike and to interception by US missile defence systems.

China hopes that even with that vulnerability to a US first strike, its nuclear missile submarines would provide the basis of a retaliatory second strike – and thereby deter the US from any nuclear attack on China.

Whatever one's doubts and objections about the validity of deterrence theory generally, there can be little doubt that China, like the United States, takes the deterrence of nuclear attack by the possession of nuclear weapons that can survive a surprise attack very seriously.

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Australia cannot hope to evade Chinese enduring enmity from such considered and direct assistance to an attempt to make China profoundly existentially vulnerable to US nuclear attack.

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There are of course a number of other important strategic uncertainties and concerns involved in this decision. Planning for long-range Australian submarine missions against Chinese targets assumes unimpeded passage through the waters of countries to Australia's north – an assumption that in itself indicates Australian arrogance and disregard for its neighbours in the Southeast Asia Nuclear Weapon Free Zone.

Moreover, a number of senior Australian defence experts and former senior officials see the plan as driven by domestic political and alliance management considerations rather than by careful and balanced assessment of Australia's primary strategic defence needs.

Others see the program as hopelessly unrealistic in terms of budget and defence procurement capability, and doubt Australia will

in fact acquire the promised nuclear-powered submarines.

Apart from the likely prohibitive costs and the politics-driven wrangling about which country and company will build what where, US and UK nuclear-powered submarines are as a matter of policy fuelled for their lifetimes by highly-enriched uranium (over 90%-enriched uranium).

This is concerning for three further strategic reasons.

Firstly, Australia has no civil technology base to maintain and operate nuclear power plants of any kind, let alone naval nuclear reactors for sub-surface combat conditions.

Secondly, as Monique Cormier and Trevor Findlay argue cogently elsewhere in this report, while export of naval nuclear reactors is not prohibited under the Non-Proliferation Treaty and IAEA safeguards, the planned export of highly-enriched uranium to power the submarine reactors undermines the spirit of

nuclear non-proliferation embodied in the South Pacific and Southeast Asian Nuclear Weapon Free Zones embraced by all of Australia's neighbours.

And thirdly, since previous requests to the US for the same nuclear-propulsion technology from Asian allies more important to the US than Australia such as South Korea have been refused, that US policy will be diplomatically unsustainable. The inevitable result will be an escalating naval arms race in East and Southeast Asia – a development that in itself works against the enduring defence interests of all concerned.

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IMPLICATIONS FOR THE INTERNATIONAL LEGAL REGIME

MONIQUE CORMIER

There has been a lot of early commentary on the potentially significant operational, political and security ramifications of AUKUS. This chapter provides a snapshot of some of the implications of AUKUS for the various international non-proliferation legal regimes. If Australia's plan to acquire nuclear-powered submarines goes ahead, it will be the first non-nuclear weapon state (NNWS) to possess such vessels and it will test the limits of an already fragile network of non-proliferation agreements.

Treaty on the Non-Proliferation of Nuclear Weapons

The 1968 Treaty on the Non-Proliferation of Nuclear Weapons (NPT) is the cornerstone international agreement for the non-proliferation of nuclear weapons. It contains different sets of disarmament and non-proliferation obligations for those states that

possess nuclear weapons (NWS) and those that do not (NNWS), and the NPT obliges NNWS not to manufacture or acquire nuclear weapons or nuclear explosive devices (1). In return, they are allowed to develop nuclear energy for 'peaceful purposes' subject to the important safeguards system implemented and monitored by the International Atomic Energy Agency (IAEA) (2). The NPT itself is silent on the use of nuclear material for military purposes other than the prohibition on NNWS acquiring or using nuclear weapons or explosive devices, meaning that there is a potential loophole in the regime that would allow NNWS to develop or acquire nuclear technology to be used for non-peaceful, non-proscribed military purposes (3). This gap in the NPT regime did not come about by accident – during the drafting, some NNWS wanted to ensure that naval nuclear propulsion would not be precluded by the NPT (4). Italy and Sweden, for example, had nascent nuclear-

(1) [Treaty on the Non-Proliferation of Nuclear Weapons](#), opened for signature 1 July 1968, 729 UNTS 161 (entered into force 5 March 1970) art II.

(2) *Ibid*, arts III – V.

(3) Marie-France Desjardins and Tariq Rauf, 'Opening Pandora's Box? Nuclear-Powered Submarines and the Spread of Nuclear Weapons' *Aurora Papers* 8 (The Canadian Centre for Arms Control and Disarmament, 1988) 13-23.

(4) David Fischer and Paul C Szasz, [Safeguarding the Atom: A Critical Appraisal](#) (Stockholm International Peace Research Institute, 1985) 81.

power submarine programs at the time, although they ultimately did not progress. The comprehensive safeguards agreements between the IAEA and NNWS then make this apparent gap in the NPT explicit, by allowing for nuclear material to be removed from IAEA safeguards if it is to be used for such non-peaceful, non-proscribed purposes.

Trevor Findlay's paper in this report explains the legal grey area in the NPT-IAEA verification regime that would allow Australia to remove nuclear material from IAEA safeguards. If Australia invokes this verification loophole, it will be the first time it has ever been used. The key concern here is not that Australia itself would divert unsafeguarded nuclear material to the development of nuclear weapons, but that it would set a dangerous precedent for other NNWS to follow. If Australia can remove nuclear material from the IAEA safeguard system, why not others? And there would be no guarantee that other states would not exploit this loophole and divert nuclear material to weapons manufacture in clear breach of the NPT.

The NPT's silent acquiescence to NNWS possession of nuclear-powered submarines therefore has significant potential ramifications for non-proliferation. In international law, the

“ This therefore raises the question of whether a non-peaceful nuclear activity with the potential to contradict the NPT's object and purpose is really a legitimate action to take for a state party that otherwise professes to be a champion of nuclear non-proliferation ”



Image: Nuclear Non-Proliferation Treaty Review Conference, 2015. Credit: IAEA.

the object and purpose of treaties is given particular significance – signatories and states parties must not defeat the object and purpose of a treaty (5). In essence, the NPT's object and purpose is nuclear disarmament and the prevention of the proliferation of nuclear weapons. This therefore raises the question of whether a non-peaceful nuclear activity with the potential to contradict the NPT's object and purpose is really a legitimate action to take for a state party that otherwise professes to be a champion of nuclear non-proliferation (6).

South Pacific Nuclear Free Zone Treaty

Australia is a party to the 1986 South Pacific Nuclear Free Zone (SPNFZ) Treaty, also known as the Treaty of Rarotonga (7). While intended to be a comprehensive multilateral pact to create a broader nuclear-free zone (as opposed to a nuclear weapons-free zone), there is nothing in the Rarotonga treaty that expressly prohibits states parties from acquiring nuclear-powered submarines. Nor is there anything in the text of the treaty that would prevent nuclear-powered submarines from entering and passing through the zone. China has inferred that Australia's acquisition of nuclear-powered submarines via AUKUS may nevertheless be a violation of the Rarotonga Treaty (8). Such an accusation is not without precedent. During the 1982 Falklands/Malvinas War, Argentina accused the UK of breaching Latin America's nuclear weapons free zone (9) by deploying nuclear-powered submarines into the area (10). States parties to the Treaty of Tlatelolco may

(5) Vienna Convention on the Law of Treaties, opened for signature 23 May 1969, 1155 UNTS 331 (entered into force 27 January 1980) arts 18, 60(3)(b). For a more detailed discussion of the importance of a treaty's object and purpose, see Duncan B Hollis (ed), 'Initial Decisions on Treaty-Making' in Duncan B Hollis (ed), *The Oxford Guide to Treaties* (2nd ed, 2020) 647.

(6) See, eg Department of Foreign Affairs and Trade, *Nuclear Issues* (website) <https://www.dfat.gov.au/international-relations/security/non-proliferation-disarmament-arms-control/nuclear-issues>.

(7) *South Pacific Nuclear Free-Zone Treaty*, opened for signature 6 August 1985, 24 ILM 1442 (entered into force 11 Dec 1986).

(8) Embassy of the People's Republic of China in the Commonwealth of Australia, *Chinese Foreign Ministry Spokesperson's Remarks* (press release, 23 September 2021) https://www.mfa.gov.cn/ce/ceau/eng/sghdxwfb_1/t1909396.htm.

(9) Established by the *Treaty for the Prohibition of Nuclear Weapons in Latin America and the Caribbean*, opened for signature 14 February 1967, 634 UNTS 281 ('Treaty of Tlatelolco').

(10) The UK is party to Additional Protocols I and II of the Treaty of Tlatelolco.

only use nuclear material 'exclusively for peaceful purposes' within the zone and the UK's use of nuclear-propelled submarines 'in war-like actions' was denounced at the time by the Treaty's oversight agency (11). The Treaty of Rarotonga, however, does not contain a clause that guarantees nuclear material will only be used for peaceful purposes within the nuclear free zone. This means that there is little in the agreement that would support the assertion that nuclear powered submarines are in and of themselves a contravention of the South Pacific Nuclear Free Zone (12).

Of greater concern for Rarotonga might be the possible environmental implications of having nuclear-powered submarines operate within the area. The treaty's preamble declares that states parties are 'determined to keep the region free of environmental pollution by radioactive wastes and other radioactive matter'. Nine nuclear-powered submarines have sunk in various parts of the world since the end of the Second World War, releasing radiation into the sea (13). Any risk of an accidental or deliberate sinking of nuclear-powered submarines should be unacceptable given the potentially devastating environmental consequences that would follow. While the Treaty of Rarotonga prevents dumping at sea of any radioactive waste or matter anywhere within the nuclear free zone (14), this does not encompass unintentional leaking of such material.

Ultimately, the Treaty of Rarotonga is unlikely to pose any real challenge to Australia's acquisition of a nuclear-powered submarine fleet. Article 5(2) of the Treaty allows states parties to decide for themselves if they wish to allow foreign vessels that are nuclear powered or carrying nuclear weapons into their territorial waters or to visit their ports. Aotearoa New Zealand, for example, has domestic legislation that prevents any nuclear-powered ships (which includes submarines)

from entering its internal waters (15). Other Rarotonga states parties may choose to follow suit to reinforce the nuclear free principles that are in danger of being eroded by AUKUS.

Other Non-Proliferation Regimes

AUKUS will potentially have negative implications for some other non-proliferation regimes that, while not legally binding, are part of Australia's commitment to nuclear safeguards and arms control.

As a uranium exporter, Australia is a participant of the Nuclear Suppliers Group which endeavors to ensure that trade of nuclear technology, material and equipment is only conducted for peaceful purposes and does not contribute to the proliferation of nuclear weapons (16). Australia's commitment to strict export controls on its uranium in accordance with IAEA safeguards could be at risk under AUKUS.

Australia has a network of bilateral nuclear cooperation agreements designed to ensure that any nuclear material, equipment or technology is shared for exclusively peaceful purposes and is subject to stringent IAEA safeguards at all stages of the nuclear fuel cycle. These agreements specifically provide that any transferred material, equipment or components will not be used 'for any military purpose'. 'Military purpose' is defined as including 'military nuclear propulsion' (17).

It is unknown whether any Australian uranium exported to the US or the UK will be used in the naval nuclear reactors. If the reactors are powered by Highly Enriched Uranium (HEU), it is intended that the nuclear material will be drawn from the existing US military stockpile of HEU. The use of HEU means that the vessels will contain 'lifetime cores' with no refueling required for the 30 year lifetime of the

(11) Agency for the Prohibition of Nuclear Weapons in Latin America and the Caribbean ('OPANAL'), Resolution 170 (VIII) *Report on the introduction of nuclear weapons by the United Kingdom of Great Britain and Northern Ireland into the Zone and areas of the Malvinas, South Georgias and South Sandwich Islands* (18 May 1983). <https://www.opanal.org/wp-content/uploads/2015/12/CG08res170i.pdf>.

(12) See further, Ryan A Musto, 'Does AUKUS Violate the Pledge of a Nuclear-Free South Pacific? China Thinks It Might' *The Diplomat* (22 October 2021) <https://thediplomat.com/2021/10/does-aukus-violate-the-pledge-of-a-nuclear-free-south-pacific-china-thinks-it-might/>; Ryan Alexander Musto, *Tlatelolco Tested: The Falklands/Malvinas War and Latin America's Nuclear Weapon Free Zone* (Nuclear Proliferation International History Project Working Paper 7, July 2015) https://www.wilsoncenter.org/sites/default/files/media/documents/publication/wp7-tlateloco_tested_final_-_ver_2.pdf.

(13) See, Alec Luhn, 'Russia's "slow-motion Chernobyl" at sea', *BBC* (2 September 2020) <https://www.bbc.com/future/article/20200901-the-radioactive-risk-of-sunken-nuclear-soviet-submarines>; Daniel Keane, 'Nuclear-powered submarines have "long history of accidents", Adelaide environmentalist warns' *ABC News* (18 September 2021) <https://www.abc.net.au/news/2021-09-17/nuclear-submarines-prompt-environmental-and-conflict-concern/100470362>.

(14) *Treaty of Rarotonga*, art 7.

(15) *New Zealand Nuclear Free Zone, Disarmament and Arms Control Act 1987* s 11. The submarines will be allowed innocent passage through New Zealand's territorial sea: s 12.

(16) 'About the Nuclear Suppliers Group' <https://www.nuclearsuppliersgroup.org/en/about-nsg>

(17) See eg, *Agreement between the Government of Australia and the Government of the United Kingdom of Great Britain and Northern Ireland on Cooperation of Peaceful Uses of Nuclear Energy*, [2021] ATS 1 (entered into force 1 January 2021), art 1(f), art V; *Agreement between the Government of Australia and the Government of the United States of America Concerning Peaceful Uses of Nuclear Energy*, [2010] ATS 25 (entered into force 22 December 2010), art 8.

submarines (18). If the submarines are powered by Low Enriched Uranium (LEU), they will need to be refueled at least once during their lifetime (19). The US is estimated to need new supplies of LEU by 2038 (20), which is well within the projected timespan of Australia's nuclear-powered submarine fleet. If Australian uranium ends up being used in the military nuclear fuel cycles, then the bilateral nuclear cooperation agreements between Australia and the US and the UK will almost certainly need to be modified to allow for the material's use in military nuclear propulsion. Alternatively, AUKUS might try to sidestep their Nuclear Suppliers Group commitments and create a new trilateral transfer agreement that makes no pretense that certain nuclear material, equipment and technology is to be shared for peaceful purposes. In any case, there will be considerable hypocrisy to Australia insisting that none of its many other trading partners (21) ever use Australian uranium for military purposes, when Australia is trading with the US and the UK for nuclear-powered submarines.

While Australia's future acquisition of nuclear-powered submarines is what has made headlines, AUKUS will also enable Australia to acquire 'additional long-range strike capabilities'(22), which could undermine the international benchmarks of the Missile



Image: Flag of the International Atomic Energy Agency.

Technology Control Regime (MTCR).

Missile Technology Control Regime

This regime aims to control trade in equipment or technology that could contribute to the proliferation of missiles capable of delivering weapons of mass destruction. The MTCR partner states (of which Australia is one) have agreed, for example, that there should be 'a strong presumption of denial' of transfers of missiles that can carry a nuclear or conventional payload of 500kg over a range of at least 300km (23).

Of particular concern for this regime, therefore, is the AUKUS plan for Australia to receive Tomahawk cruise missiles which can carry a payload of 500kg and have a range of at least 1000km. Given the poor example it sets, Australia's acquisition of such missiles will undoubtedly come as a blow to the 'fragile norm against missile proliferation' (24).

There is no international treaty or rule of customary international law that unambiguously outlaws the acquisition of nuclear-powered submarines by a NNWS. The danger of the AUKUS arrangement lies in the poor precedent it will set for other states as Australia exploits legal loopholes and technicalities that will allow it to acquire and use nuclear material, equipment and technology for non-peaceful, non-proscribed military purposes. This in turn may encourage other NNWS to do the same, which would substantially increase the risk that nuclear material is diverted to nuclear weapons and significantly undermine the efficacy of international non-proliferation regimes.

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(18) Trevor Findlay, 'The Australia-UK-U.S. Submarine Deal: Not Necessarily a Sure or a Good Thing', Arms Control Today (November 2021) <https://www.armscontrol.org/act/2021-11/features/australia-uk-us-submarine-deal-not-necessarily-sure-good-thing>. For a discussion of the non-proliferation concerns relating to supplying a NNWS with weapons-grade HEU, see Frank N von Hippel, 'The Australia-UK-U.S. Submarine Deal: Mitigating Proliferation Concerns' Arms Control Today (November 2021) <https://www.armscontrol.org/act/2021-11/features/australia-uk-us-submarine-deal-mitigating-proliferation-concerns>.

(19) Sébastien Philippe and Frank von Hippel, 'The Feasibility of Ending HEU Fuel Use in the U.S. Navy' Arms Control Today (November 2016) <https://www.armscontrol.org/act/2016-10/features/feasibility-ending-heu-fuel-use-us-navy>.

(20) US Government Accountability Office, 'NNSA Should Clarify Long-Term Uranium Enrichment Mission Needs and Improve Technology Cost Estimates' GAO-18-126 (February 2018). The US is also projected to run out of HEU by 2060.

(21) For a list of Australia's bilateral nuclear cooperation agreements, see Department of Foreign Affairs and Trade, Australia's network of nuclear cooperation agreements <https://www.dfat.gov.au/international-relations/security/non-proliferation-disarmament-arms-control/policies-agreements-treaties/nuclear-cooperation-agreements/Pages/australias-network-of-nuclear-cooperation-agreements>.

(22) Prime Minister of Australia, 'Australia to pursue nuclear-powered submarines through new trilateral enhanced security partnership' (Press release, 16 September 2021) <https://www.pm.gov.au/media/australia-pursue-nuclear-powered-submarines-through-new-trilateral-enhanced-security>.

(23) Missile Technology Control Regime, [Guidelines for Sensitive Missile-Relevant Transfers](https://mtrc.info/guidelines-for-sensitive-missile-relevant-transfers/), para 2. <https://mtrc.info/guidelines-for-sensitive-missile-relevant-transfers/>.

(24) Kolja Brockmann, 'The Missile Technology Control Regime at a crossroads', Stockholm International Peace Research Institute (1 October 2021) <https://www.sipri.org/commentary/topical-backgrounders/2021/missile-technology-control-regime-crossroads>; Anastasia Kapetas, 'Limiting the nuclear-proliferation blowback from the AUKUS submarine deal', The Strategist (21 September 2021) <https://www.aspirstrategist.org.au/limiting-the-nuclear-proliferation-blowback-from-the-aukus-submarine-deal/>.

INDONESIAN CONCERNS ABOUT THE PROPOSED AUKUS NUCLEAR-PROPELLED SUBMARINE DEAL

MUHADI SUGIONO

The agreement of a trilateral security pact between Australia, the United States and Britain (AUKUS) and especially the proposal that Australia will acquire nuclear-propelled submarines, brought several responses from Southeast Asian states, ranging from critical to cautiously welcoming.

Indonesia and Malaysia expressed their strong reservations over the decision to acquire nuclear-powered submarines, despite the Australian government's insistence that the submarines will not carry nuclear weapons. The Indonesian government responded to the announcement almost immediately, with a statement on 17 September stating that it was 'deeply concerned over the continuing arms race and power projection in the region.' The statement also stressed 'the importance of Australia's commitment to continue meeting all of its non-nuclear obligations.'

A month later, Foreign Minister Retno Marsudi reiterated the Indonesian view that the proposed submarine deal would 'certainly not benefit anyone.' She added that 'efforts to maintain a peaceful and stable region must continue', and that Indonesia did not want to see an arms race and greater power projection in the region (1).

The Indonesian government's view of the issue is not without basis. Indonesia is a strong proponent of nuclear disarmament. Former Indonesian Foreign Minister, Dr. Hasan Wirayuda, referred to nuclear disarmament as the 'DNA of Indonesian foreign policy.' Despite the government of Australia seeking to convince the Indonesian government that Australia does not have any intention to acquire nuclear weapons, the decision will undoubtedly increase Australia's capacity to produce nuclear weapons.

This view was further reflected in a statement in which Indonesia stressed the importance of Australia's commitment to continuing to fulfill all of its obligations on nuclear non-proliferation, and assuring the Indonesian government that its decision to acquire nuclear-powered submarines will not lead to the development of nuclear weapons.

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Allowing this to happen will open a Pandora's box of nuclear proliferation and set a precedent that other countries will follow.

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The commitment of the Australian government to fulfill all of its obligations towards the NPT is very important for Indonesia. The reason is that the acquisition of nuclear submarines opens a loophole in the NPT. While they don't fit into any of the three pillars of the NPT, nuclear submarines are definitely situated in a grey area. This means that even when they do not carry nuclear weapons, it does not make any sense to categorise military nuclearization under the peaceful use of nuclear energy. Allowing this to happen will open a Pandora's box of nuclear proliferation and set a precedent that other countries will follow. Nuclear proliferation could easily grow as more and more countries will pursue nuclear programs to support their military capability. To that end, the Indonesian government will bring the issue to the NPT Review Conference which will take place in January 2022.

The response to the Australian government's intention to acquire nuclear-powered submarines did not come only from the Indonesian government. As soon as the Indonesian Foreign Minister commented and raised concerns about the decision, the hashtag '#AustraliaBerbohong' (Australia Lied) became a trending topic on twitter. While it is unclear to what extent this trend reflects the views of the Indonesian population as a whole, the messages surely reflect the disappointment with the Australian government's decision.

(1) Quoted in Sebastian Strangio, 'Indonesia and Malaysia Reiterate Concerns About AUKUS Pact', The Diplomat, October 19. <https://thediplomat.com/2021/10/indonesia-and-malaysia-reiterate-concerns-about-aukus-pact/>



Image: Indonesian Foreign Minister Retno Marsudi.
Credit: Reuters.

Making such an important decision which will undoubtedly affect Indonesia as well as the geopolitical landscape of the region without informing its closest and the most strategic neighbour was seen as a betrayal of the serious efforts which have been made to improve bilateral relations between Indonesia and Australia.

Malaysia's response was similarly pointed. Its Prime Minister reiterated Malaysia's stance on not allowing nuclear-powered vessels to enter its territorial waters, while its Defence Minister publicly noted that he would visit China for consultations. Former Prime Minister Mahathir Mohamad warned that AUKUS increased the risk of great power conflict in Southeast Asia (2).

Other ASEAN states have been less outspoken. The Philippines, for example, has generally supported AUKUS, stating that it provides a counterbalance to what Manila sees as an increasingly assertive China. Nonetheless, following the AUKUS announcement, President Duterte's spokesman revealed that Duterte was concerned that the pact could result in a 'nuclear arms race' (3). Singapore, while not condemning the proposal, has nevertheless expressed hopes that the deal will 'contribute constructively to the peace and stability of the region and complement the regional architecture' (4). Cambodian Foreign Minister Prak Sokhonn noted that Cambodia expects that 'AUKUS will not fuel unhealthy rivalries and further escalate tension' (5). Vietnam's response, while recognising the AUKUS agreement as a counter to China's assertiveness in the South China Sea,

nonetheless reiterated the view that the uranium used in the Australian submarines must be reserved for peaceful purposes only, and that safety and environmental concerns should be paramount. The difficulty remains, of course, that the submarine deal would not be seen as a 'peaceful use' of nuclear materials. As many analysts have already noted, exchanging this material and technology would be regarded as a non-peaceful use of nuclear materials for non-proscribed military purposes.

Thus even as there was no joint ASEAN response to the nuclear submarines deal, Indonesian concern about nuclear proliferation and the possibility of arms racing in the region reflected the hopes and wishes of all ASEAN member countries to make Southeast Asia a peaceful zone free from the unnecessary interference of outside powers, and to ensure that Southeast Asia remains free from nuclear weapons, as manifested in the 1971 ASEAN declaration of ZOPFAN (Zone of Peace, Freedom and Neutrality) and, very importantly, the 1995 Southeast Asian Nuclear Weapon-Free Zone Treaty (SEANWFZ). The nuclear submarine deal suggests an Australian insensitivity to its neighbouring countries' aspirations. Above all, ASEAN does not wish to see proliferation and the emergence of nuclear weapons in the backyard of Southeast Asia.

South East Asian nations generally do not wish to 'take sides' in military competition between the US/UK/Australia and China. They remain concerned about any destabilising actions and the possibility of an escalating arms race in their regional environment. AUKUS, even without the nuclear submarine component, therefore causes some concern. But if the nuclear submarine deal goes ahead, it presages further tensions.

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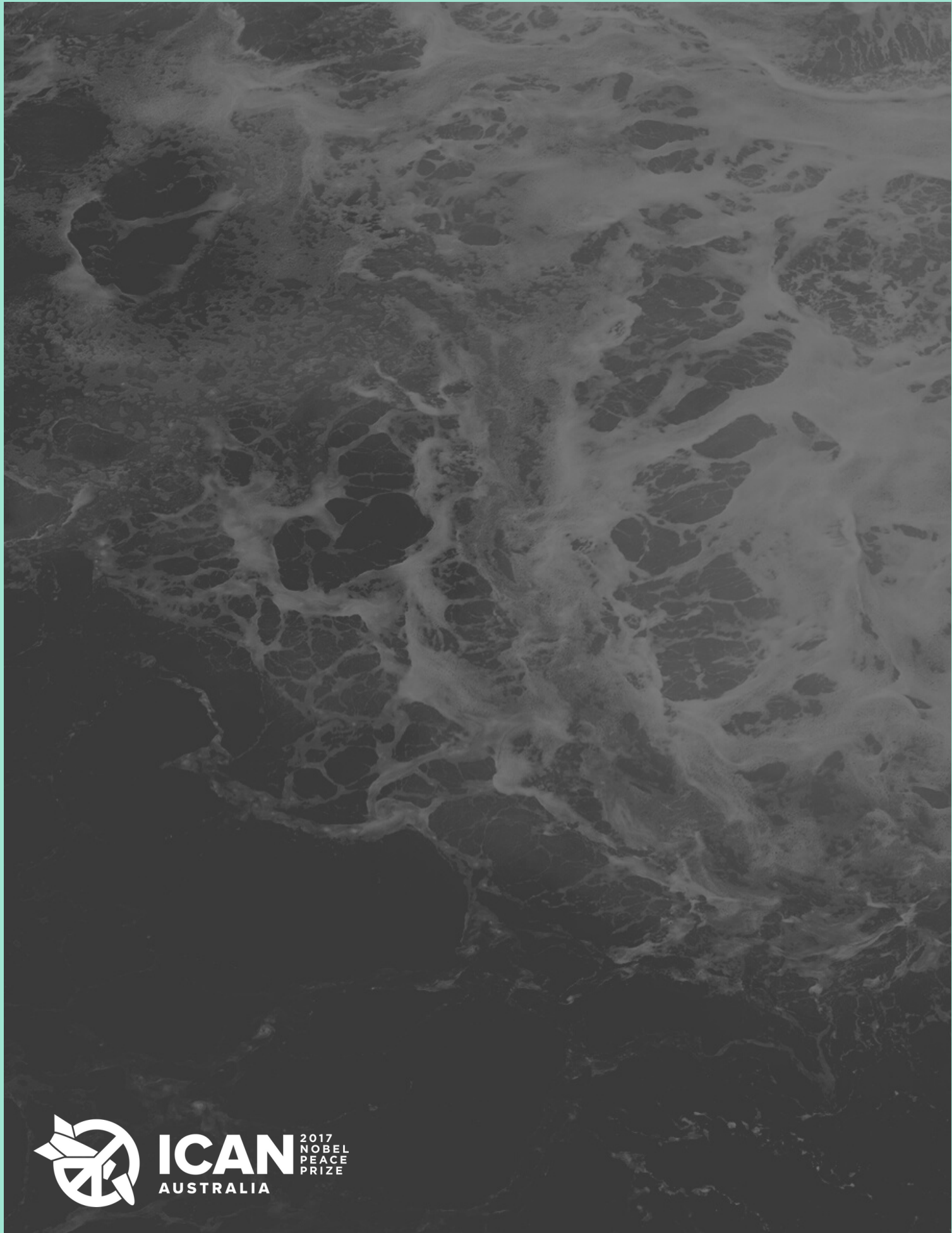
(2) William Choong and Ian Storey, 'Southeast Asian Responses to AUKUS: Arms Racing, Non-Proliferation and Regional Stability', ISEAS Yusof Ishak Institute Articles and Commentary, 14 October 2021. <https://www.iseas.edu.sg/articles-commentaries/iseas-perspective/2021-134-southeast-asian-responses-to-aukus-arms-racing-non-proliferation-and-regional-stability-by-william-choong-and-ian-storey/>.

(3) Quoted in William Choong and Ian Storey, op.cit.

(4) Quoted in Strangio op cit.

(5) Quoted in Strangio op cit.





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