

## Policy Paper Proposal: Precedents of the AUKUS agreement for fissile-materials control

Alex Horne  
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Immediately after declaring my interest in improving bilateral relations between the United States and the Islamic Republic of Iran, I was caught flat-footed by two geopolitical events: Iran acceded to the Shanghai Cooperative Organisation as a full member, and the US, United Kingdom, and Australia announced the formation of a tripartite military alliance, known by the clumsy acronym AUKUS. The prospects of the US finding common ground and shared interests with Iran have diminished significantly, in my view, while the arrival of a new technology-sharing bloc in the Pacific concerns me gravely. Thus, I've decided that my attention would be best directed at scrutinising the alarming precedent for fissile-materials control which AUKUS sets. My position is that the international regime controlling fissile materials will be under unnecessary stress thanks to the AUKUS alliance.

Based on preliminary readings from the Bulletin of Atomic Scientists, AUKUS members commit to sharing nuclear-submarine technology with Australia, the only non-nuclear power in the alliance. Here lies the problem: where will Australia acquire the fuel for its upcoming fleet of nuclear subs? The island nation does not possess the means to enrich enough fuel for one sub, let alone many, nor can it adequately maintain them. Observers expect that AUKUS will build-up this capacity in the next decade, but so far it is unclear what that capacity will be: purely maintenance and support, or building the capacity to enrich material themselves? If the former, then the other members will likely supply that fuel, which leads to another concern: the US and UK focus exclusively on high-enriched uranium, otherwise known as weapons-grade uranium. Other nations, such as France and Brazil, have investigated the use of low-enriched uranium for power-purposes, but are notably not part of the new alliance and have not offered that technology to allies.

Australia has stated that it will not construct nuclear weapons in any case, but that is not what is so concerning. The precedent of providing enriched uranium to military allies is a bad one, even if the intended and eventual uses is non-explosive. One can easily imagine, with the proverbial shoe switching feet, that less-trustworthy states might abuse this loophole and cite the AUKUS precedent as further reason to do so. Even if all world powers could be trusted, the nuclear-non-proliferation regime is not perfect: one can imagine catastrophic and surprising changes in international politics where weapons-grade fuel falls into the wrong hands.

My preliminary bibliography starts with Frank von Hippel's report, "Banning the Production of Highly Enriched Uranium," and Sébastien Philippe's topic

paper, “Safeguarding the Military Naval Nuclear Fuel Cycle.” I anticipate that most of the literature will be current enough to apply to present circumstances, but the watershed announcement of AUKUS means that my paper will have the chance to explore rather than mere comment. Secondly, I anticipate working with quite imperfect information, since public scrutiny is widely denied in this issue area. Third, I am keenly aware of the dangers of “getting it wrong” with something as important as arms-control and the upcoming Second Cold War. I don’t want to *draft* a model by which the AUKUS agreement can “do technology sharing right” and in so doing legitimise their work. Thus, the intended audience of the paper will be the International Atomic Energy Agency.

## Preliminary Bibliography

Philippe, 2014. *Safeguarding the Military Naval Nuclear Fuel Cycle*. Journal of Nuclear Materials Management. <https://scholar.princeton.edu/sites/default/files/sp6/files/jnmm-philippe-2014.pdf>

Zippel, 2016. *Banning the Production of Highly Enriched Uranium*. International Panel on Fissile Materials. <https://fissilematerials.org/library/rr15.pdf>