# **NUCLEAR SUBMARINES: BRIEFING PAPER**

# **NOVEMBER 2022**

# BACKGROUND

Australia has announced its intention to acquire nuclearpowered submarines (SSNs). There are numerous risks and issues.

# Safety

Communities in proposed and existing port sites **strongly oppose** naval nuclear reactors. Naval nuclear reactors - like all nuclear reactors - pose **potentially serious** risks for people and the environment. But unlike other reactors, most information about naval reactors is kept classified. Safety regulations that apply to civilian ports and commercial nuclear reactors do not apply to military vessels. There is strong precedent for withholding naval nuclear safety information from the public, even when there are safety breaches and risks.

#### Nuclear weapons proliferation

It is unprecedented for a non-nuclear armed nation to acquire nuclear-powered submarines. The UK and US submarines use uranium highly-enriched to 93-97%, which is nuclear weapons grade. Each sub is estimated to carry material for 20 nuclear weapons. The proposed acquisition **exploits** a loophole in the Nuclear Non-Proliferation Treaty (NPT) safeguards agreements and **undermines** the treaty.

Argentina, Brazil, Iran, Japan, Saudi Arabia and South Korea are now also considering SSNs.

# Supply chain

Australia has no domestic nuclear technology capability and must rely on overstretched US and UK industries to supply naval nuclear technology, materials, parts, skills, and labour. Both UK and US nuclear submarine industries have faced production and sustainment issues, causing **significant backlogs** in building and maintaining nuclear submarines. In January 2022 the US Government Accountability Office warned that backlogs, delays, and cost blowouts could result in insufficient submarines to meet US Strategic Command requirements over the next two decades. SSNs cannot be built for Australia on time or on budget.

# RECOMMENDATIONS

The nuclear-powered submarines (SSNs) proposal is high-risk and high cost.

This secretly negotiated plan has not been scrutinised by parliament or the Australian people. It undermines the Nuclear Non-Proliferation Treaty and does not satisfy the ALP's stated criteria for support. It is deeply flawed and must be rejected.

# Decommissioning

SSNs have lifecyles of 33-40 years and must be decommissioned and replaced. The British Navy has failed to dismantle 20 submarines retired since 1980, meaning that the British Navy stores **twice as many** submarines as it operates. Australia will be required to manage and store spent nuclear fuel, and radioactive parts from decommissioned SSNs.

#### **Other risks**

- Damage to independent foreign policy tying Australia even more to involvement in overseas wars. The submarines would be part of US nuclear war plans.
- Increasing Australia's vulnerability as a nuclear target.
- Escalating regional tensions. Our neighbours are worried about impacts on nuclear proliferation, and have concerns this will lead to a regional arms race.
- Opportunity costs an estimated \$171 billion, when health, housing, climate, environmental remediation measures, education and many other needs are not being met.
- Far cheaper diesel-powered submarines are available, which would leave no "capability gap" and would be much better suited to defending Australia.
- Losing our naval/defence manufacturing sovereignty. Conventional subs could be built here.
- Given the proposed delivery dates of 2040 to 2060, SSNs may well be obsolete.