Nuclear-powered submarines

Australia’s new submarine strategy

In response to a rapidly deteriorating strategic environment, Australia, with the support of AUKUS, will establish a pathway for the acquisition of at least eight nuclear-powered submarines.

Nuclear-powered submarines represent a significant capability enhancement, and will allow Australia to play a stronger role in contributing to stability and prosperity in our region. Submarines are an essential part of Australia’s naval capability, providing advantages in terms of surveillance and protection of our maritime approaches. Australia’s new submarines will not carry nuclear weapons.

Over the next 18 months, Australia will work with the United Kingdom and United States, to intensely examine the full suite of requirements that underpin nuclear stewardship, with a specific focus on safety, design, construction, operation, maintenance, disposal, regulation, training, environmental protection, installations and infrastructure, basing, workforce, and force structure.

Our acquisition of nuclear-powered submarines will form part of a suite of capabilities that will ensure Australia’s ability to shape our strategic environment, deter actions against Australia’s interests and respond with credible military force when required.

Capability edge

Nuclear-powered submarines offer an enhanced capability when compared to conventional submarines. They are powered by a nuclear reactor instead of a diesel-electric engine, which means they can generate more power and are not required to resurface (snort) in order to recharge their batteries.

Nuclear-powered submarines have superior characteristics of stealth, speed, manoeuvrability, survivability, and almost limitless endurance, when compared to conventional submarines. They can deploy unmanned underwater vehicles and carry more advanced weapons. This enables them to operate in contested areas with a lower risk of detection and deter actions against Australia’s interests.

www1.defence.gov.au/nuclear-powered-submarines