### **INQUIRY QUESTION**

(Question No. 1)

Senator Lisa Chesters asked the Australian Submarine Agency the following question, upon notice, on 24 October 2024:

Do you have any ideas on how many new recruits you have coming on next year, or the number of new people you will need within the next few years?

### Australian Submarine Agency provides the following answer:

The Nuclear-Powered Submarine Program is estimated to create over 20,000 direct jobs over the next 30 years across industry, the Australian Defence Force and the Australian Public Service.

In the next few years, there is a requirement to grow the workforce in preparation for Phase One – Submarine Rotational Force-West (SRF-West). This workforce will peak at around 500 in 2030. A range of initiatives are being undertaken to meet this demand, including:

- an international placement program, with over 100 Australian industrial shipyard workers due to undertake nuclear and non-nuclear skilling in Pearl Harbor Naval Shipyard by early 2025. These placements are anticipated to increase throughout 2025-2026; and
- the Jobs for Subs program, recently announced by the Prime Minister, which supports ASC Pty Ltd to recruit up to 200 additional entry-level personnel, predominantly in Western Australia.

In South Australia, ASC Pty Ltd and BAE Systems, as Australia's Sovereign Submarine Partners for the build of SSN-AUKUS, are investing in the defence industry workforce required.

The Mobilisation Deed, announced on 13 November 2024, will enable partners to begin growing, training and retaining the workforce, which is expected to grow to up to 5,500 personnel to support the build program.

Over the next few years, our Sovereign Submarine Partners will place up to 500 personnel in the US and the UK as aligned with current planning, to build the skills and expertise required.

# **INQUIRY QUESTION**

(Question No. 2)

Senator Lisa Chesters asked the Australian Submarine Agency the following question, upon notice, on 24 October 2024:

Skills have come up quite a bit as a risk as well—the skills crisis that we're experiencing across the country. What might the government be doing in various different areas to help mitigate that risk to achieve the build and the maintenance of the AUKUS submarines?

#### Australian Submarine Agency provides the following answer:

The Nuclear-Powered Submarine (NPS) Program will create around 20,000 jobs over the next 30 years across industry, the Australian Defence Force and the Australian Public Service. We have already started building the highly skilled workforce required to deliver Australia's NPS capability through a number of key workforce uplift initiatives.

In particular, as part of the 2023-24 Budget, the Australian Government provided \$128.5 million over four years to establish the Nuclear-Powered Submarine Student Pathways Program (NPS Student Pathways) — a targeted national competitive program providing an additional 4,001 Commonwealth Supported Places (CSPs) in STEM related courses. The 4,001 CSPs have been allocated over 2024 to 2027 across 16 universities nationally.

As part of the 2024-25 Budget, the Australian Government provided \$68.4 million over seven years from 2024-25 for initiatives delivered through the new Skills and Training Academy. The Australian Government also provided \$16.3 million over six years to establish the NPS Student Support Scholarships Program, delivering 3,000 scholarships for students studying undergraduate STEM courses relevant to the NPS enterprise.

Since 2022, a range of programs have supported more than 70 Australians from the NPS enterprise to undertake undergraduate and postgraduate nuclear studies at universities in the United Kingdom, the United States and Australia.

Since July 2024, Pearl Harbor Naval Shipyard in the United States has welcomed international placements for over 40 ASC Pty Ltd personnel, with the expectation of reaching over 100 personnel in country by early 2025.

In September 2024, the Prime Minister announced the Jobs for Subs program to enable ASC Pty Ltd to recruit and train up to 200 additional entry-level graduates, apprentices and trainees, predominantly in Western Australia, in preparation for Submarine Rotational Force-West.

In September 2024, the Royal Navy, with the support of the Australian Submarine Agency, delivered professional and general naval nuclear propulsion training for more than 250 Australian personnel in Canberra.

In November 2023, the Commonwealth and the South Australian Government released the South Australian Defence Industry Workforce and Skills Report and Action Plan, delivering a detailed strategy and 22 specific initiatives to grow and sustain South Australia's defence industry workforce for the future. As at November 2024, 19 of these initiatives have already commenced, with more coming online in 2025.

# **INQUIRY QUESTION**

(Question No.3)

Senator Dorinda Cox asked the Australian Submarine Agency the following question, upon notice, on 24 October 2024:

Some people have expressed concern that submarines of the type proposed will be made obsolete by new technologies before they can be deployed. What kinds of counter-submarine technologies should we make ourselves aware of?

#### Australian Submarine Agency provides the following answer:

The Government's National Defence Strategy highlighted that Australia's strategic circumstances have continued to deteriorate, consistent with the trends identified in the Defence Strategic Review. The acceleration of these trends supports the ADF's transition from a balanced force to an integrated, focused force that is capable of addressing the nation's most significant strategic risks.

In the maritime domain, the transition from a diesel-powered submarine force to a nuclear-powered submarine fleet is a priority. The trajectory of the Indo-Pacific's future security environment means that over time, the ability of diesel-powered submarines to meet Australia's capability needs will diminish.

Unlike diesel-powered submarines, nuclear-powered submarines do not have to routinely operate near the surface to recharge batteries.

Nuclear-powered submarines can operate at a depth and location of their choosing, with vastly superior sensors and weapons. This ability to operate undetected introduces significant uncertainty in the mind of an adversary. The range and endurance of nuclear-powered submarines will enhance deterrence, keep maritime threats farther away from Australia, and better protect Australia's economic connection to the world. These are core tenets of the 2024 National Defence Strategy.

Defence is aware of speculation around the potential for future technologies to create 'transparent oceans' and thus render submarines obsolete. It is important to remember that the ocean is not a homogenous body of water and is an extremely complex and dynamic system – this significantly complicates any plan or technical solution to render the ocean 'transparent'.

Defence assesses that these technologies will not mature in a way that materially impacts the planned introduction of a nuclear-powered submarine capability. The ongoing investment in nuclear-powered attack submarines by the major navies of the United States, United Kingdom, China, Russia, and France indicates a widespread assessment that any 'transparent ocean' technologies are not maturing in a way that materially impacts the significant resources these countries are investing in nuclear-powered submarines.

# **INQUIRY QUESTION**

(Question No.4)

Senator Dorinda Cox asked the Australian Submarine Agency the following question, upon notice, on 24 October 2024:

- 1. If the US walked away from the AUKUS deal, would Australia have any clawback mechanism to get the billions of dollars we have already given to the US?
- 2. The Agreement states that Australia must indemnify the US and UK for any "liability, loss, costs, damage, or injury" associated with the use of nuclear submarines. Why was this clause considered necessary?
- 3. Why is the US allowed to decide the price for the uranium it is selling us, noting that there is no market price for this?
- 4. Why do you think the Government signed up to an agreement that will allow the US to walk away at any moment and take all their stuff with them?
- 5. Under this agreement, if the US sells us a second-hand submarine that breaks down and the nuclear reactor starts leaking radioactive waste into Australian waters and harming soldiers on board, Australia not the US, pays the damages. Why do you think the Government agreed to indemnify the US and UK in this way?

#### Australian Submarine Agency provides the following answer:

1. AUKUS is in the strategic interest of all three countries, as leaders have emphasised most recently in September 2024 in their statement marking the third anniversary of the AUKUS announcement.

The US and the UK have publicly and consistently emphasised their commitment to AUKUS, and to enabling Australia's acquisition of a conventionally armed, nuclear-powered submarine capability at the earliest possible date. The Agreement among the Government of Australia, the Government of the United Kingdom of Great Britain and Northern Ireland, and the Government of the United States of America for Cooperation Related to Naval Nuclear Propulsion (the Agreement) is a further tangible demonstration of that commitment.

The Agreement is critical to enabling the pathway for Australia's acquisition of conventionally armed, nuclear-powered submarines. It establishes the foundation, and legal authority, necessary for the continued communication and exchange of naval nuclear propulsion information between AUKUS partners, and the transfer of naval nuclear propulsion technology from the US and the UK to Australia. This Agreement will be one of a range of instruments developed to support this program.

Like most international agreements, the Agreement provides all Parties, including Australia, the option to terminate the Agreement with one year's notice and following consultation. The inclusion of such a provision is consistent with general treaty practice.

The exercise of the right to require return in the Agreement would be subject to mutual consultations between the Parties, in advance of finalising such a determination or decision.

- 2. Under the Agreement, Australia will indemnify the US and the UK for liability arising out of, related to, or resulting from "nuclear risks" connected with the nuclear material or equipment transferred or to be transferred to Australia as part of its nuclear-powered submarine program. Nuclear risks are risks attributable to the radioactive, toxic, explosive, or other hazardous properties of nuclear material.
  - The indemnity provisions of the Agreement recognise and govern the specific risks of the material and equipment being transferred to Australia under the Agreement. These provisions are consistent with Australia's commitment to being a sovereign and responsible steward of naval nuclear propulsion technology that will ultimately be owned and operated by Australia. The indemnity also reflects the activities that the US and the UK will undertake on Australia's behalf under the AUKUS partnership.
- 3. AUKUS is the first time in over 60 years that the US and the UK will share highly sensitive nuclear technology with another country, including sealed reactors containing enriched uranium. The Agreement states that Australia will compensate the UK and/or the US for nuclear material at a price based on the fair market price of comparable enriched uranium at the time of sale.
  - Where there is no commercial market for certain types of enriched uranium, the price will be mutually determined by the US and the UK. That price will also need to be acceptable to Australia for the transfer to take place.
- 4. See response to Question 1.
- 5. See response to Question 2.