RINA/IMarEST Technical Presentation

Nuclear Maritime Propulsion Roadmap for Australia

Presenter	Christopher Skinner Editor Nuclear Propulsion Roadmap for Australia
Date	Wednesday 1 September 2021
Time	6:30 pm AEST
Meeting	This presentation will be held as a video-conference webinar using the Zoom software platform hosted by RINA. Registration for the presentation is required (see below).

Nuclear propulsion for marine vessels, in particular submarines, confers extraordinary performance both in power and in endurance.

The adoption of nuclear propulsion for future Australian submarines has been advocated for several years but has been discounted, mostly due to a lack of a nuclear power industry for generation of electrical energy. This lack is due to several factors including legislative bans, which have been reviewed in recent years without producing bipartisan agreement for repeal or revision of these laws.

A more recent argument has been about costs of nuclear power generation as an emissions-free source compared with renewable energy technologies.

This presentation is based on the alternative premise that nuclear propulsion should lead the creation of an Australian nuclear power industry, as it is not expressly prohibited by either federal or state laws.

The process is proposed through a roadmap as follows:

1. Why nuclear propulsion for submarines?
2. History of nuclear propulsion globally
3. Challenges for Australia in adoption of nuclear propulsion
4. Nuclear fuel cycle for nuclear propulsion
5. Infrastructure required for nuclear propulsion
6. Construction of nuclear submarines in Australia
7. Workforce development for Australian nuclear propulsion
8. Regulatory needs for Australian nuclear propulsion
9. Implications of nuclear propulsion for Australian civil nuclear power
10. Timelines for implementation of the Nuclear Propulsion Roadmap

The presentation then presents a number of issues for consideration in naval architecture and in ship systems integration.

Registration   Registration for this presentation may be completed at

https://forms.gle/7mzSGzZXoByDKxUr7

Registrations close at 12:00 noon on Tuesday 31 August. Those registered will receive a weblink and password via email on the afternoon/evening of Tuesday 31 August before the presentation.

Register and put this date in your diary now, and we look forward to you joining the presentation.