



PRESS RELEASE - Jakarta, 2 November 2022

Naval Group, PT PAL and their partners kick start the Energy Research Lab to develop the future of submarine energy in Indonesia

On November 2nd 2022, Naval Group and PT PAL signed a Memorandum of Understanding to start the creation of an Indonesian Energy Research Lab to cooperate on energy and propulsions solutions in the naval field.

Naval Group and PT PAL, together with other Indonesian industry and research partners, are working on an ambitious R&D collaboration project to prepare the future of naval technologies. This project consists of the creation of the Indonesian Energy Research Lab to develop, in Indonesia, the next generation of submarine energy solutions. This network will bring together industry and research partners as well as universities.

Within the framework of their strategic partnership in the submarine domain signed in February 2022 and that of the strategic partnership between Indonesia and France, Naval Group and PT PAL are committed to strengthening Indonesian maritime autonomy and sovereignty as well as creating long-term economic benefits, including highly qualified jobs, over the very long term in the country.

Several key Indonesian stakeholders (academics, industrial partners, scientists) have been identified to develop the next generation of submarine energy solutions. They will work together on various research and development topics such as embedded electrical network, new energy storage or new generation Li-Ion battery.

On 2nd November, Naval Group and PT PAL also signed a Memorandum of Understanding with PT Garda which will develop and maintain lead batteries in Indonesia, in the framework of the Energy Research Lab, thanks to a transfer of technology and knowledge from Naval Group.

During the signature, Dr. Kaharuddin Djenod, CEO of PT PAL said: *"We all know that Naval Group is a leading company in the world, which has leading defense equipment products, especially Scorpene submarines. So that this strategic cooperation will provide added value for Indonesia, especially for PAL in mastering defense technology. In the future, with the trust of the government, Indonesia will have the ability to be equivalent to developed countries in the construction technology of submarines independently, not only limited to one type of submarine."*

Nicolas de La Villemarqué, Vice President India, Asia & Pacific at Naval Group said *"We are proud to be engaged in this important project to work on the future of Indonesian naval capacities. Our goal is to develop a long-term partnership with Indonesian partners for the Submarine program, either during construction and maintenance phase, but and also to collaborate on R&D projects so as to prepare the future of the naval domain in Indonesia."*

Press Contacts:

PT PAL

Rariya Budi Harta
Corporate secretary of PT PAL Indonesia
Telepon: 031-3292275 ext.2002
Email: humas@pal.co.id

Naval Group

Faïza Zaroual
Tel.: +33 (0)1 40 59 56 44
Mob.: +33 (0)6 31 65 78 25
faiza.zaroual@naval-group.com

About PT PAL

PT PAL Indonesia (Persero) is the largest shipbuilding company in Indonesia. We have business advantages in the capabilities of Warships and Commercial Ships Construction and design; Construction and Maintenance, Repair, and Overhaul (MRO) of Submarines; Maintenance, Repair, and Overhaul of Warships, Commercial Ships, and maritime products; General Engineering for Energy and Electrification products; and Technology Development.

About Naval Group

Naval Group is a partner to its customers' maritime sovereignty. An international player in naval defence and heir to French naval know-how, Naval Group develops innovative solutions to meet the needs of navies. Present throughout the entire life cycle of the ships, the group designs, builds, integrates and maintains submarines and surface ships, as well as their systems and equipment, through to dismantling. It also provides services for shipyards and naval bases. A high-tech company, it builds on its exceptional expertise, its unique design and production resources and its ability to set up strategic partnerships and successful transfers of technology. With operations on five continents, the group has a turnover of 4.1 billion euros and employs 16028 people (full-time equivalents / December 2021 data).