

PRESS RELEASE

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Naval Group presents LIB^{RT}, its new generation of Lithium-ion batteries system for submarines

LIB^{RT}: the new Lithium-ion batteries system Made in France!

Naval Group has developed a high performance and highly secure Li-ion batteries system to provide its conventional submarines with outstanding operational capabilities, as well as an immersion period and reloading time largely optimised.

The navies that will operate this new technology will boast a major technological superiority on theatres of operations.

This success is the result of a close cooperation between Naval Group, Saft, CEA Tech and EDF R&D.

The Li-ion batteries system LIB^{RT}, improved security and performances on-board submarines developed by Naval Group

LIB^{RT} increases significantly the submarines' submerged endurance and improves its stealth, while guaranteeing better security conditions.

This cutting-edge technology offers twice more available energy while reducing significantly the reloading time.

In hostile environments, the submarine will therefore take advantage from an increased submerged operating range as well as from the capability to evade all kinds of naval threats. Fast loading battery limits the time spent in periscopic immersion, thus enhancing the undetectability of the submarine. These are valuable operational advantages that provide the submarines with a real technological superiority compared to current generations. As for security, nothing has been left to chance. To fit a batteries system on-board a submarine requires upstream precautions to ensure complete security. These requirements have been integrated from the earliest stage of the design of this new batteries system, being for the choice of electrochemistry or for the conception of the embedded system.

To do so, Naval Group has implemented the same methodologies and security requirements as for the conception of nuclear submarines for the French Navy.

The Li-ion batteries system LIB^{RT}, all the power of Made in France

This is a tight-knit and fully dedicated French Team that is mobilised over the development and the implementation of this new batteries system.

Thanks to the high level of competences and experiences of Saft, CEA Tech, EDF R&D and Naval Group – all leaders on their respective markets – the Li-ion batteries system LIB^{RT} epitomizes the French innovating and creativity spirit.

Naval Group brings its experience as a system provider and integrator, Saft its expertise in the conception and production of state-of-the-art Li-ion batteries, CEA Tech provides Naval Group with its research capacities in the fields of chemistry, structure and electronics and, finally, EDF R&D volunteers its experience and its first rank testing facilities for energy production systems requiring high levels of safety, reliability and security.

The Li-ion batteries system LIB^{RT}, a project supported by the French DGA

This innovating batteries system has been developed in the frame of Naval Group's strategic R&D roadmap, in close technical partnership with the French Defence Procurement Agency (DGA) that has been monitoring that high levels of security and safety were applied.

Alain Guillou, Senior Executive Vice-President declared "the successful development of the LIB^{RT} Li-ion batteries systems is a huge technological stride for the new generation of submarines developed by Naval Group. It provides utmost security guarantees as well as operational and technological superiority to all our clients worldwide."

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About Naval Group

Naval Group is a European leader in naval defence. As an international high-tech company, Naval Group uses its extraordinary know-how, unique industrial resources and capacity to arrange innovative strategic partnerships to meet its customers' requirements. The group designs, builds and supports submarines and surface ships. It also supplies services to shipyards and naval bases. In addition, the group offers a wide range of marine renewable energy solutions. Attentive to corporate social responsibility, Naval Group adheres to the United Nations Global Compact. The group reports revenues of €3.7 billion and has a workforce of 13,429 (data for 2017).

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