

## POLISH KILO-CLASS SUBMARINE TO REMAIN IN SERVICE FOR ANOTHER DECADE

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**The Polish military is willing to extend the lifetime of the 53-65KE torpedoes for another ten years. These torpedoes are used solely by the ORP Orzeł submarine operated by the Polish Navy. The above means that the Navy is probably planning to operate the aforesaid sub for at least one more decade.**

12th Military Economic Element [Wojskowy Oddział Gospodarczy] based in Toruń announced that an entity has been selected on 16th April 2019 to carry out the task of "Recovering technical readiness and defining a new technical lifespan of the 53-65KE" torpedoes. The available information suggests that Thormex Sp. z o.o company based in Warsaw has been tasked with verifying the technical condition of eight 53-65KE torpedoes and their components, repairing them and extending their lifespans for another decade (the works would not concern all of the torpedoes as such used by the Navy). The work is going to have associated cost of PLN 11.3 million.

The contractor selection shall not be seen as surprising. According to the official information published by the Thormex company on its website, the entity deals with deliveries of armament, special purpose equipment and spares for the Polish and foreign uniformed services and government organizations, including the military, police and secret service. The company also carries out overhaul and modernization projects, including overhauls of undersea weapons and naval guns.

The company, in the past was tasked with, for instance, overhaul of the undersea weapons system onboard the ORP "Kaszub" corvette and delivery, within the scope of an agreement signed back in 2010, of propellants and lubricants for the Swedish TP-617/P torpedoes utilized on the Kobben-class subs. Thormex is the sole Polish company that remains in possession of authorization to provide support, within the scope of logistics, for the aforesaid torpedoes.

In the present case, however, Thormex would be tasked with recovery of readiness of the heavy 53-65KE torpedoes that are used solely in case of the Polish ORP "Orzeł" vessel, of Kilo Class. The task is difficult as it requires special purpose equipment, including tools that are used to safely maintain the kerosene-oxygen turbine power plant of the weapon. The Polish Navy has acquired that equipment along with the vessel back in the 1980s. Thormex has been awarded with the aforesaid order for other reasons as well - it is the only company that remains in possession of an ability to extend the 53-65KE torpedo's lifecycle. The company works with the original Kazakh manufacturer of the weapon directly, and that collaboration is exclusive.

### **Why extend lifecycles of the "old" torpedoes?**

The readiness extension plan created with the 53-65KE torpedoes in mind means that ORP "Orzeł" is expected to remain in active service for at least another decade, thus, the Navy would need to recover the full operational capability of the vessel. The activities undertaken by the aforesaid vessel

suggest that some limitations may apply to it (especially with regards to the way in which it dives).

The work is worth to be carried out. Despite the fact that "Orzeł" became a part of the Polish Navy back in 1986, it still offers a major combat potential. When it comes to the armament, the submarine uses 6 torpedo launchers in its bow (533 mm calibre, arranged into two rows). The launchers may currently accommodate the Russian 53-65KE oxygen torpedoes. The primary purpose of this weapon is to act against surface vessels, their range is defined as 19000 metres. The vessel also uses the electric TEST-71ME remotely controlled torpedoes, destined to be used against submarines. The TEST-71ME's range is 20000 metres.

The submarine may carry 6 torpedoes in total, in its launchers, along with 12 spares, the reloading of which is partially automated. There is also an ability available to carry sea mines, if less torpedoes are carried by the sub.