

# VAYU on-the-spot report

## Interview with Mr. Igor V. Vilnit, CEO of Rubin Design Bureau



Rubin CEO Igor Vilnit

When Rubin had designed the Kilo class – one of the most successful classes among non-nuclear submarines in the 20th century – India retained for Russia the position of priority partner. A large series of these submarines was delivered to the Indian Navy. What’s interesting, India is the first foreign customer who received boats with the Club-S missile system. An advanced level of automation in the final of the series – INS Sindhushastra – made it then the most state-of-the-art submarine in the world among diesel-electric boats.

In recent years, Rubin has been rendering assistance in service life extension of Project 877EKM including installation of Indian made equipment. That’s why, we are fully aware of the situation in the fast growing shipbuilding industry of India.

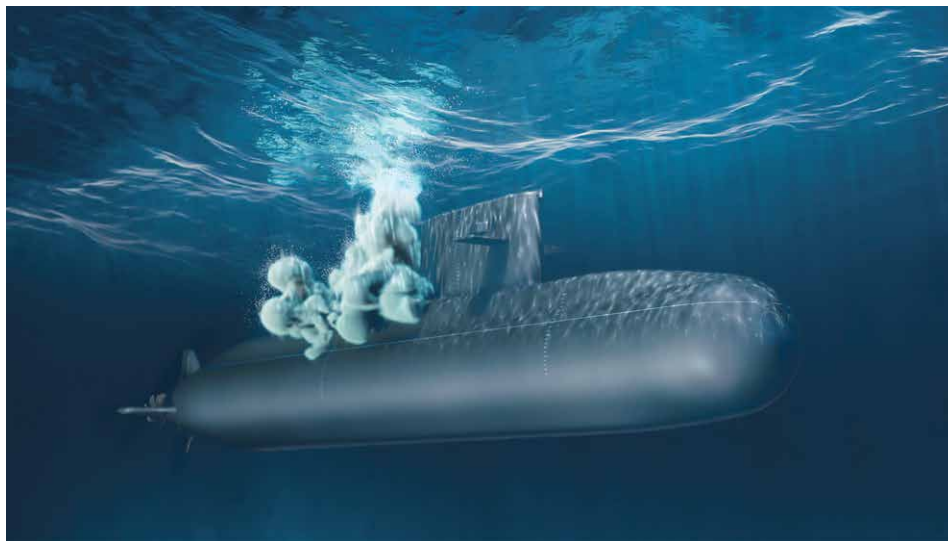
A new interesting trend has now appeared in our cooperation. Rosoboronexport (Russian State Intermediary) and Rubin discuss opportunities for AUV joint design with the Indian side. We had multiple contacts on this point, Indian representatives visited Rubin, and we described our expertise. Availability of AUVs is of great interest for awareness of the situation in the

ocean as well as exploration/mining of mineral resources. The Indian Ocean is very deep, its average depth is about 3700 metres, maximum depth is over 7700 metres, therefore to conduct multifaceted activities in this ocean, deep-water AUVs and AUVs with high endurance are required, and this is the domain where Rubin works.

We designed and manufactured a number of deep-water AUVs. In 2020, our deep-water autonomous unmanned vehicle Vityaz-D was the first in the world to perform a mission in the Mariana Trench. Descending by 10028 metres, Vityaz-D passed three kilometres above the trench

bottom. The mission lasted for three hours, and Vityaz-D acted on its own all this time. Project Vityaz-D allowed us to make a major step in the development of AI control systems and in introduction of new structural materials. At the Army-2024 show, we are demonstrating AUV from the Argus family. Its depth rating is 1 km, 3 km and 6 km depending on customer’s tasks. The first in Russia AUV with detachable payload – Argus-D – is also being shown here at Army 2024.

**VAYU:** *How is the Rubin Design Bureau supporting Indian Navy in maintenance activities and infrastructure development in the maritime domain?*



Amur 950 ocean submarine with vertical launchers

**VAYU:** *How have the relations nurtured between Rubin Design Bureau and India over time?*

**CEO:** Rubin is proud to be part and parcel of Indian submarine fleet development. Next year it will be 60 years since the agreement was signed for construction for India of four large diesel-electric submarines of Kalvari-class developed by Rubin. Pretty much, we were receiving training together because it was the first submarine for India and as for Rubin Design Bureau and Admiralty Shipyard in Leningrad (today St. Petersburg), where the submarines were built, it was the first submarine constructed as required by a foreign customer.