



RUSSIAN-INDIAN COOPERATION

Presently, Joint Stock Company "Central Design Bureau for Marine Engineering "Rubin" (JSC CDB ME Rubin) is a diversified design bureau – the leader in the field of concept development, design, project management, life-cycle support for multi-purpose naval equipment: submarines, technical facilities for offshore oil and gas field development, underwater robotic systems and floating power generating systems. CDB ME Rubin is a part of the United Shipbuilding Corporation that consolidates most of the design bureaus, shipyards and other enterprises related to Russian shipbuilding industry.

One of the most important areas of activity of CDB ME Rubin is military and technical cooperation. CDB ME Rubin has been engaged in this activity for over sixty years. Over 110 submarines designed by Rubin were delivered to 15 countries. At present, export deliveries of submarines are going on successfully along with execution of a large work package on maintenance of earlier delivered submarines.

For several decades CDB ME Rubin and Indian Navy have been engaged in a special and privileged partnership.

Diplomatic relations between the USSR and India were established in 1947, which currently have grown into strategic partnership based on commonality of national interests and mutual respect.

On the 1st of September 1965, the Soviet Union and the Republic of India signed the first contract for the delivery of naval equipment: four Project I641 diesel-electric submarines, five Project 159E corvettes and five Project 368P motor boats. The agreement also envisaged rendering Soviet technical assistance for the construction of submarine naval base in Vishakhapatnam.

The first four submarines of Project I641 were delivered to India from 1967 to 1969. These were the first submarines built in our country under a special export order. It is pertinent to note that India was the first to become a foreign customer for whom ships were constructed based on dedicated export designs. Before that, only "standard" ships and motorboats had been delivered to foreign countries.

Later in 1972-1974, another four submarines of improved Project I641K were built for India.

From 1986 to 2000, India received ten Project 877EKM diesel-electric submarines built in Russia. The delivery of these boats definitively made India the largest buyer of Russian submarines. The last submarine of the series –Sindhushastra – was built based on a modified design and was the first boat to be equipped with the Club-S missile complex.

It should be noted that in the course of Indo-Russian cooperation that goes on for over 50 years, our country has always offered the most state-of-the-art naval equipment to the Indian mariners and Russia is



Submarine Vladikavkaz of upgraded project 877 is currently operated by the Russian Navy

willing to successfully develop this principle of partnership in the 21 century.

Indian MoD has always paid a lot of attention to optimization of submarine force levels.

Nowadays, a major programme related to optimization and conduct of second mid-life refits of Project 877EKM submarines both in Russia and in India is being successfully undertaken.

Along with that, the Russian side is ready to propose and implement delivery of advanced submarines of Project 636 to Indian partners within short time frames to enhance combat capabilities of the submarine force, should there be a request from the Indian Navy. Well-proven technologies of construction, well-established cooperation of equipment suppliers ensure construction of these submarines within short time frames, which has been proven by series deliveries of similar submarines for the Russian Navy.

State-of-the-art conventional submarines, owing to their relatively small dimensions, are considered to be complex engineering objects that meet extremely stringent requirements and therefore very few countries can afford them.

Undoubtedly, India, due to a well-developed industrial base and high scientific capability, should have indigenous submarines built by Indian shipyards for the Indian Navy.

Our company fully supports Projects P-75(I) planned for implementation by Indian MoD. CDB ME Rubin closely cooperates with the Indian Naval Headquarters for this Project and offers a modern low-noise

ship Amur-1650 equipped with AIP and powerful torpedo-missile complex Club-S that is a major advantage of the project.

The Russian side confirms that it is possible to meet the requirements of the Indian Navy specified for this submarine.

In addition, transfer of technologies and indigenization by Indian companies are the priorities to be met during implementation of Project P-75(I). CDB ME Rubin has gained vast experience in development of different classes of submarines and collaboration with equipment developers, manufacturers and scientific organizations, which come up with cutting-edge solutions for construction of modern submarines, and so it is ready to offer latest approaches to ensure utilization of this experience to the maximum extent possible.

We believe that the optimum way of cooperation could be joint implementation of all the stages of development of Project 75 (I) submarines by the sides, including design, development and manufacture of required equipment, construction and subsequent maintenance throughout the life cycle. Russia is one of the few countries that has in its possession all design technologies for various ships and this diversified experience might be useful to the Indian Navy.

CDB ME Rubin is always ready for development of fruitful cooperation with Indian MoD, as well as with state-owned and private Indian companies and yards.

For more information you are welcome to visit site www.ckb-rubin.ru



Saint Petersburg is the lead submarine in a series of advanced conventional submarines of Project 677 (Lada class)



Rubin offers low-noise submarine Amur-1650 for India's Project P-75(I) tender