



AVNL: A Modernised Powerhouse in Indian Defence Manufacturing

AVNL's
PR & CC Team

Armoured Vehicle Nigam Limited (AVNL), a restructured DPSU from Ordnance Factory Board, advances India's defence modernisation through innovation, R&D, and indigenisation. Notable projects include T-90 tanks, BMP-II upgrades, future combat vehicles, and eco-friendly engines, promoting self-reliance, exports, sustainability, and community development.

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AVNL (Armoured Vehicles Nigam Limited) is one of seven new Defence Public Sector Undertakings (DPSUs) carved out from the erstwhile Ordnance Factory Board (OFB), a historic institution with a legacy of over 220 years. This transformation involved reorganizing 41 factories into seven distinct DPSUs, each tasked with driving forward India's defence modernisation efforts.

Since its establishment on October 1st, 2021, AVNL has undergone a rapid evolution. In just three years, the company has shifted its focus from fulfilling basic orders to driving innovation and modernization. We are not only meeting the expectations of the Indian Army and paramilitary forces but also collaborating with both domestic industries and international Original Equipment Manufacturers (OEMs) to streamline our supply chain and promote Aatmanirbhar Bharat. Our commitment to indigenization is evident as we continue to upgrade existing products and develop new platforms for cutting-edge research and development (R&D).



AVNL boasts of the best infrastructure for making armoured vehicles in India

Strategic Advantages and International Growth

AVNL has several unique capabilities that give it a strategic advantage in the defence sector. Through focussed R&D efforts, AVNL aims to acquire international clients and establish itself as a trusted global brand in arms and armament technology. Our expertise ensures we remain at the forefront of global innovation in defence systems, building a reputation for precision and excellence.

Our employee strength of over 10,500 people has been pivotal in revitalising the core of India's defence manufacturing. The synergy within our teams is driving the company's transformation, allowing us to meet ambitious goals and expand our reach.

Key Contracts and Deliveries

One of the most significant milestones for AVNL has been the Indian Army's contract for 464 T-90 MK-III tanks, valued at approximately ₹18,000 crores. This is part of a broader order portfolio worth around ₹32,000 crores, which includes the supply of various systems such as Kavach, BMP-II, Arjun MK-II, T-90 Bhishma, T-72 Ajeya, of tank and BMP overhaul services, among others. In addition, we have met our commitments to the Central Reserve Police Force (CRPF) by delivering a batch of Mine-Protected Vehicles (MPVs) on schedule. One of our biggest challenges has been the indigenization of

the T-90 tank. However, thanks to consistent efforts by our manufacturing facilities, we are on track to achieve nearly 98% indigenisation of the T-90 tank by the end of next year. This marks a significant milestone in reducing India's dependency on foreign suppliers.

Technological Advancements: T-90 MK-II and More

The T-90 MK-II is an advanced version of the T-series main battle tank, built on a state-of-the-art weapon platform. It offers enhanced firepower, mobility, and protection. Equipped with a 125mm smoothbore gun, stabilized in both axes, the T-90 MK-II enables accurate firing while on the move. It also features a 1,000 HP diesel engine, a range of 1,800 meters for aimed firing with the Thermal Imaging Fire Control System (TIFCS), and the ability to fire Laser Guided Missiles up to a range of 5,000 meters.

AVNL is also aiming for 100% indigenisation and this ambitious goal is part of our larger vision to eliminate India's dependency on foreign sources for defence equipment, strengthening the nation's self-reliance in defence production.

Innovative Future Platforms

Looking ahead, AVNL is focused on developing next-generation platforms to meet evolving defence needs. These include the Future Ready Combat Vehicle (FRCV), Future Infantry Combat Vehicle (FICV), and the ICV Command vehicle. Additionally, we are working on the development of hydrogen-based internal combustion engines (IC engines) for military vehicles. These engines are not only eco-friendly but also offer a stealth advantage due to their quieter operation.

Other upcoming projects include hybrid tanks and the development of a 1,400 HP engine for the Arjun main battle tank for further enhancing its capabilities to become self-reliant.

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Upgrades and Strategic Contracts

AVNL is also committed to upgrading existing defence platforms to ensure they remain at the cutting edge. The BMP-II, for instance, is undergoing significant upgrades, including improvements in armament, sights, and fire control systems. The Indian Army has placed an order to upgrade 693 BMP-II Sarath vehicles. These upgrades will enhance the vehicles' firepower, incorporate night-enabled Fire Control Systems (FCS), automatic target tracking, and next-generation missile firing capabilities. The BMP2M, developed through in-house R&D, has successfully completed rigorous field trials, ensuring its readiness for the most demanding operational environments.

Additionally, the engine for the T-72 has been uprated to provide improved performance at higher altitudes, addressing a critical operational need.

Contributing to "Viksit Bharat

As part of the national vision of a Viksit Bharat, AVNL is committed to significantly boosting India's defence export market. By enhancing our technological capabilities, indigenizing production, and establishing international partnerships, AVNL aims to play a key role in positioning India as a global leader in defence manufacturing.

Commitment to Social Responsibility, Environmental Sustainability, and Community Development

AVNL's operations are assessed not only by financial performance but also by its commitment to stakeholders, society, and the environment. The company continually strives to fulfill its social responsibility, particularly towards marginalised communities and the ecological environment in which it operates. Notably, AVNL has partnered with the Indian Army's 10th Infantry Division (J&K) and NIEDO to offer free coaching and mentoring for students pursuing engineering and other job-oriented courses, benefiting 30 students in its first batch. Additionally, AVNL collaborates with the State TB Office of Tamil Nadu and the Municipal Hospital in Ambarnath, and sponsors health and nutrition programs for vulnerable groups in Odisha and Chhattisgarh. The company also supports facilities for pilgrims and tourists at prominent

temples across India in partnership with the National Culture Fund.

For 'Ek Ped Maa Ke Naam', AVNL and its units planted close to 20,000 saplings to support this mission. In addition, the event featured the planting of saplings of indigenous trees across the campus, reflecting a commitment to environmental sustainability and contributing to the green cover of the area. The Swachhata Action Plan had the active participation of all Units of AVNL. Not only were the offices and premises cleaned, important places used by the public in the towns and cities of the units were also made part of the campaign, with participation from public officials and civic society. At the end



Shri Sanjay Dwivedi, CMD/AVNL (2nd from left), Shri Ramachandran, Dir Finance (extreme left); seen on the other side, from the left are Shri B Pattanaik, Dir HR, Shri Praveen Kumar, CGM HR

of the campaign, 262 sites were cleaned, 1,93,104 square feet was freed and 1,50,40,645 INR was earned from scrap disposal.

AVNL is also affiliated with esteemed organisations such as SIDM, IOD, CII, FICCI, ASSOCHAM, MMA, and SCOPE.

In Conclusion. In a short span, AVNL has made impressive strides in modernising India's defence sector. From indigenisation efforts to developing advanced military platforms, AVNL is committed to strengthening the country's defence capabilities while contributing to the broader goal of self-reliance. With a strong focus on innovation, quality, and strategic partnerships, AVNL is poised to play a leading role in India's defence manufacturing for years to come. SA