

# BrahMos JV has fortified military relations between India and Russia

*The two partners are geared up to launch even more advanced variants of the missile*

**A**S THE India-Russia BrahMos JV programme marks 20 incredible years of its supersonic journey, it has strongly fortified the vibrant, multi-dimensional relationship between the two important world powers. The decades-old strategic partnership between New Delhi and Moscow, with military technical cooperation being its cornerstone, has withstood testing times and remains intact despite the rapidly evolving geostrategic changes at the regional and global levels.

The Defence JV, created in February, 1998 with India's DRDO and Russia's NPOM jointly establishing BrahMos Aerospace as the designer, developer and producer of the versatile, state-of-the-art BRAHMOS Weapon System, has been globally reckoned as the most successful defence partnership programme to date. It has produced and delivered a modern precision strike weapon for the Army, Navy and Air Force with unbeatable land-attack and anti-ship capability.

In the last 20 years, the formidable BRAHMOS supersonic cruise missile has been tested over 60 times from various platforms with a success rate no other weapon of its genre has achieved. The best of scientific minds from India and Russia have contributed to making BRAHMOS a world-class missile. The missile programme has transformed the "buyer-seller" relationship between India and Russia into that of "equal technology sharing" partners.

The most significant milestone for the formidable BRAHMOS was realised on 22nd November, 2017 when the tactical weapon in its advanced air-to-ground version was successfully test-fired for the first time from the Indian Air Force's Su-



30MKI strike fighter against a sea target. That successful test-firing yet again proved the excellent synergy and cooperation between the scientists,



engineers and all the leading entities from both the countries working on the project, to accomplish a highly coveted mission which became a world-record feat. It made India the first country in the world to complete a supersonic cruise missile triad. BrahMos Aerospace became the first entity to successfully integrate and flight-test such a powerful missile from a frontline supersonic strike fighter of the IAF and showed the weapon's capability to strike ships from air.

With India now prioritising defence indigenisation to attain self-sufficiency while ensuring national security, the BrahMos JV programme has taken a remarkable lead in this direction with full support from its Russian partner. While indigenisation of the weapon has been taken up in a phased manner, the two partner nations are now focussed on developing and producing even more

advanced variants of the powerful missile which include the BRAHMOS-NG and the hypersonic BRAHMOS-II (K). The new missile variants promise to bring in a paradigm shift in future warfare.

With its world-class quality, BRAHMOS has also emerged as a potential weapon of export in the international market. India and Russia have agreed to sell the multi-role, multi-platform missile to chosen friendly countries with a final decision expected to be taken at the governmental level of both nations.

The BrahMos JV has come a long way in the past two decades and attained glorious milestones. With New Delhi and Moscow now intending to take this incredible journey to the next level, the world awaits witnessing even greater achievements by the two strategic allies in successfully integrating new technological breakthroughs and making BRAHMOS retain its "world-leader" tag in the distant future.

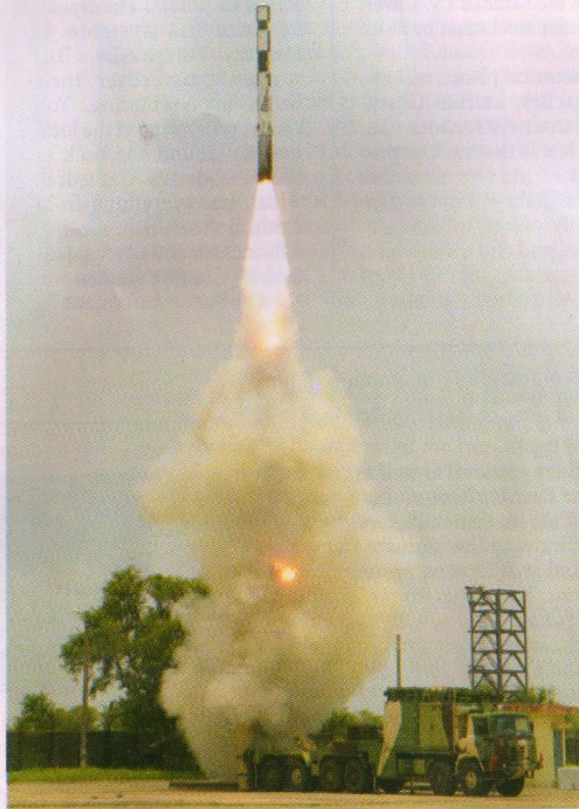
# BRAHMOS is a mission of trust

The successful missile, jointly developed by a team of dedicated scientists, specialists, engineers and technicians from both India and Russia, stands out as a brilliant example of pooling global efforts in developing new weapon systems

India and Russia have traditionally enjoyed a very comprehensive partnership in defence. The special and privileged strategic partnership shared between Republic of India and the Russian Federation has always been a key pillar of India's foreign policy. This strategic bond significantly highlights the deep-rooted relationship of the two governments to further strengthen the military and technical collaboration in the sphere of joint research, development, production and after sales support of advanced defence technologies and systems.

The potential BRAHMOS supersonic cruise missile, developed as a fusion of great scientific minds from India and Russia, is the best example of technological and productive cooperation in this regard. The BRAHMOS missile system has grown from strength to strength over the years and added new capabilities to meet divergent war scenarios for Armed Forces. BrahMos Joint Venture has also redefined the business of selling military products from a purely buyer-seller relationship to joint research, design, development, production and marketing of state of the art military systems.

BRAHMOS, the product of an exemplary India-Russia Joint Venture (JV), between India's Defence Research & Development Organisation (DRDO) and Russia's JSC MIC NPO Mashinostroyeniya (NPOM), is the most potent weapon system and a force multiplier in network centric warfare. The successful BRAHMOS missile was jointly built by team of dedicated scientists, specialists, engineers and technicians from both India and Russia and stands out as a brilliant



example of pooling of global efforts in developing new weapon systems.

The JV has also successfully set up a consortium of defence industries from India and Russia for producing various systems and sub-systems for the world-class BRAHMOS weapon complex. It has brought together a number of competent defence industries, both public and private, and various R&D laboratories from the partnering countries in developing and producing different sub-systems for the universal missile system which has rendered a unique strength to the Indian armed forces.

versal missile can be fired either from static, mobile platforms (land and sea) or fighter aircraft, in solo or salvo mode. This multiplicity makes the weapon all the more versatile in taking on the enemy anywhere, anytime.

Indian Prime Minister Narendra Modi and Russian President Vladimir Putin have always praised the remarkable BRAHMOS missile system as a successful role model highlighting the time-tested friendship and trust between India and Russia.

The emergence of BRAHMOS has not only strengthened India's technological base but also elevated its image in the global arena. As a high technology defence product, BRAHMOS has great potential of becoming India's major weapon export in the coming decades giving the country a share of the arms business. The tremendous success of the supersonic cruise missile system has proved to the world that a joint venture of advanced technology can lead to a high performance product in the shortest possible time with far-reaching capabilities.

The contribution of BRAHMOS to India's arsenal is noteworthy in a quest to maximise its firepower potential and strengthening the armed forces. With the changing technological trends in the evolving world security scenario, BRAHMOS definitely promises to play a key role in redefining the future of modern warfare.

BRAHMOS Supersonic cruise missile is a precision strike weapon for Army, Navy and the Air Force. The supersonic cruise missile system has added tremendous firepower capability to armed forces for targets as deep as 300 km. The 300-km range BRAHMOS, initially conceived and developed as an anti-ship cruise missile (ASCM) system, has evolved over the years and added many more variants — from sea-to-land, sea-to-sea, land-to-land, land-to-sea, sub-sea-to-land, sub-sea to sea and air-to-land configurations. The uni-