Partnering India to Make in India
Proud founding partner of defence manufacturing in India

We are a first mover amongst international companies to make a direct investment in local manufacturing in partnership with Indian industry.
With a history that dates back several decades, BAE Systems is a founding partner of defence manufacturing in India.

The establishment of the Air Force Technical College in 1949, the first such institution in Asia to train aeronautical engineers for military aviation; the development of Indian Navy Ship (INS) Nilgiri, a Leander-class frigate; the design and build of the first ever mine protected vehicle by the private sector in India; and the partnership with Hindustan Aeronautics Limited (HAL) to establish a world-class manufacturing facility for the Hawk advanced jet trainer are only some examples of our commitment to Make in India.

BAE Systems recognises India among its top global defence markets. We are one of the first international aerospace and defence companies to make a direct investment in local manufacturing. In addition, we have created partnerships with India’s Small and Medium Enterprises (SMEs) to create opportunities for them to become part of our global supply chain.

BAE Systems’ joint venture in partnership with HAL, named BAeHAL, is one of the first companies set up to focus on the aerospace and defence sector. Today, BAeHAL has built a track record of offering IT solutions to companies such as Airbus, Rolls Royce, Thales, MBDA, ISRO, BEL and DRDO.

The INS Viraat of the Indian Navy in the company of Harriers above the Indian Ocean. Also known as HMS Hermes, the Barrow-built Centaur Class aircraft carrier served in the Falklands and was sold to India in 1986. She was finally retired on 6 March 2017 as the oldest carrier in service anywhere in the world.
Hawk advanced jet trainer

The in-country manufacture of the Hawk advanced jet trainer in collaboration with HAL for the Indian Air Force (IAF) and the Indian Navy is a successful demonstration of the Indo-UK aerospace partnership to Make in India.

The Hawk programme in India was launched in 2004. To date, more than 120 Hawk Mk132 aircraft have been delivered to the IAF and the Indian Navy. The production line in HAL in Bengaluru is supported by a comprehensive maintenance capability at Air Force Station Bidar and INS Dega for the fleet at point of use.

More than 100,000 flying hours have been achieved in India, with sustained levels of high serviceability enabling over 600 combat pilots to be trained on the Hawk to date.

BAE Systems continues to work with HAL towards the successful completion of a potential order to supply products and services for the manufacture of a third batch of Hawk advanced jet trainer aircraft. The aircraft, to be built by HAL in Bengaluru, will fulfil the IAF’s requirement for its prestigious aerobatic team, the Surya Kiran.

M777 Ultra Lightweight Howitzer

The Indian and the United States (US) Governments have agreed on the supply of 145 BAE Systems M777 Ultra Lightweight Howitzers for the Indian Army. With more than 1,090 M777s in service globally, the M777 is the only battle-proven 155mm Ultra Lightweight Howitzer providing a rapid reaction that delivers firepower under sustained combat conditions. The M777 will remain at the forefront of artillery technology well into the future through the use of technical insertions, long-range precision guided munition developments and flexible mobility options.

BAE Systems has selected Mahindra as its business partner for an in-country Assembly, Integration & Test (AIT) facility for the M777 Ultra Lightweight Howitzer. The facility will become a fundamental part of the M777 production line and enable the Indian Army to access maintenance, spares and support for the M777 locally.

As part of this procurement, BAE Systems will make an offset investment of more than $200 million in Indian defence suppliers, providing them access to the BAE Systems group across its Air, Land, Sea and Security programmes.
Building on the success of the Hawk Mk132, BAE Systems with HAL is developing an Advanced Hawk. This will be the latest development of the world’s most successful jet trainer. The Advanced Hawk will enable training currently performed on frontline fighter aircraft to be delivered on this updated aircraft. This will reduce training demands on frontline aircraft, create additional capacity for operations and deliver cost-effective fast jet training in a safer environment. High commonality with the existing Hawk production and support infrastructure in India enables the Advanced Hawk to be manufactured and supported with maximum reuse of facilities, equipment and skills.

The Advanced Hawk aims to bring a new level of technology and aerospace knowledge to India which will result in a latest generation jet trainer for India and for export.

“Providing support to the Armed Services lies at the very heart of what we do as a company, demonstrated in the world-leading equipment and services we provide to those who protect us.”
Building an Indian supply chain for a global company

“We are developing critical industrial capabilities and technical expertise across local companies in India.”

Developing an in-country supply chain is key to our commitment to Make in India.

**M777 Ultra Lightweight Howitzer**
Approximately 40 Indian suppliers across the country have been assessed to join the global supply chain of the M777 Ultra Lightweight Howitzer.

With an offset commitment of over $200 million, our strategy is to open opportunities for the Indian supply chain across our Air, Land, Sea and Security programmes, both locally and globally, creating jobs, enhancing skills and building manufacturing capabilities in India.

The establishment of an in-country Assembly, Integration & Test (AIT) facility working with Mahindra will further grow the industrial capacity of India.

**Hawk advanced jet trainer**
HAL and BAE Systems have a collaboration on aircraft programmes spanning seven decades. The intention is to extend this partnership to provide integrated support for the Indian Hawk and Jaguar aircraft through the joint venture company, BAeHAL.

Combining BAE Systems’ global support experience with HAL’s significant experience of supporting Indian customers will enable BAeHAL to design a support service focused on the IAF’s key requirements. BAeHAL will work to develop indigenous solutions for selected Hawk and Jaguar aircraft.

**Kineco Kaman Composites India**
BAE Systems supplies the Mission Computing and Display System for the P-8 Poseidon aircraft. Each P-8 aircraft has five consoles which serve as the main user interface to control and interact with sensors, communications and weapon systems on the aircraft.

As part of our commitment to help develop aerospace and defence industrial capabilities in India, we initiated the sourcing of these consoles from Kineco Kaman Composites India (KKCI) Private Limited, a joint venture company between Kineco Group of Goa and Kaman Aerospace Group USA. Our teams have been developing KKCI’s capabilities to achieve readiness for this production. KKCI is the first supplier in India developed through P-8 industrial commitments by BAE Systems.
Sharing knowledge, skills and technology across our capabilities

Dhanush, the 155mm Indian howitzer being developed by Ordnance Factory Board for the Indian Army is based on the Intellectual Property transferred from our 155mm FH-77 BO2 Bofors Gun.

Development of INS Nilgiri, a Leander-class frigate, was a result of an Indian-UK engineering collaboration.

Our assistance to Indian shipyards helped India with the integration of missiles on warships.

Series production of our 40-60 Bofors gun led to development of the L-70 gun.

Transfer of technology and capability for vehicles through the legacy BAE Systems South Africa business led to design and manufacture of the Mine Protected Vehicle, the first ever such vehicle manufactured by the private sector in India.

We are committed to transfer of technology and knowledge to Bharat Electronics Limited, the Indian prime competing for the Tactical Communications System procurement.

BAE Systems is exploring further transfer of vehicle technology for the Future Infantry Combat Vehicle programme, India’s first ‘Make India’ procurement.

Our teams have been committed to developing new technology and platforms in India, for India and from India.
Our Community

BAE Systems’ community investments in India support the efforts of the Government and the development sector.

We place great importance not only on what we do, but how and why we do it.
Our India community investment programme is a demonstration of our shared global value of investing actively in the communities in which we work.

Spreading smiles through education and healthcare

Our partnership with the Smile Foundation focused on providing comprehensive and quality education to more than 1,000 children across six locations in five Indian states of Haryana, Maharashtra, Odisha, Tamil Nadu and Uttar Pradesh. The three-year partnership successfully concluded with the programme achieving an impressive 58.3% enrolment rate of girl children and mainstreaming of more than 430 non-school going children into formal schooling.

Another pillar of the programme addressed the availability and affordability of quality primary healthcare services, which were successfully delivered through a mobile hospital in Bengaluru, Karnataka. The programme reached more than 50,000 individuals, through 1,270 mobile clinics supported by a robust referral programme.

In 2016, support was extended to Swachh Bharat mission (Clean India campaign), Digital India campaign and infrastructure through construction of toilets and access to clean drinking water.

Helping girls in school reach their potential

The next phase of our investment in the community focuses on Prime Minister Narendra Modi’s “Beti Bachao, Beti Padhao Yojana” or Save the Girl Child, Educate the Girl Child platform through our partnership with Room to Read, a non-profit organisation working for literacy and gender equality in education.

We will provide comprehensive support to 300 school-going girl children in Room To Read’s Girls Education Programme covering life skills training, mentoring and academic and material support aiding them to develop education-seeking behaviours that enable them to stay enrolled and complete their school education.

- **1,100** underprivileged children supported with comprehensive education
- **300** school-going girls to benefit from lifskills, mentoring and academic support

- **50,000** people have received treatment through mobile clinics
- **1,270** mobile clinics have been deployed throughout Karnataka
- **£11.6m** global contribution to charities and not-for-profit organisations in 2016
We search for new ways to provide our customers with a competitive edge across the air, maritime, land and cyber domains. We employ a skilled workforce of 83,100 people in over 40 countries and work closely with local partners to support economic development by transferring knowledge, skills and technology.

Our key products and services

Typhoon manufacture and development


F-35 Lightning II design and manufacture

Design and manufacture of sub-assemblies, including the aft fuselage and empennage and provision of equipment, including the electronic warfare suite. BAE Systems has a significant workshare on the world’s largest defence programme.

Air support and training

Provision of support to operational capability. We provide maintenance, support and training for Typhoon aircraft in service with the UK and Saudi Arabian air forces. Under the Saudi British Defence Co-operation Programme, we have contracts to provide manpower, logistics and training, as well as training aircraft, including Hawk and upgrades to Tornado aircraft in Saudi Arabia. We provide support for Hawk aircraft in service in 15 countries and have been selected to provide sustainment services for the F-35 Lightning II aircraft in the Europe and Pacific regions.

Defence avionics

Design, manufacture and support of avionics equipment across a range of US and other western military aircraft programmes, including a leadership position in the electronic warfare market.
BAE Systems has strong, established positions supplying defence equipment, electronics and services and cyber, intelligence and security solutions for governments. We also have a growing position in adjacent commercial markets, including avionics and cyber security.

**Unmanned and future air system capabilities**
Development of future air system capabilities, including unmanned air systems. A joint unmanned combat air system programme with France was announced in 2016.

**Complex warships**
Design and manufacture of two 65,000-tonne aircraft carriers and five Offshore Patrol Vessels and design of Type 26 frigates for the Royal Navy. The aircraft carriers are expected to complete sea trials in 2017 and 2019, respectively.

**Submarines**
Design and manufacture of seven Astute Class nuclear-powered attack submarines for the Royal Navy, with the first three already in operational service and the remaining four boats in build. The final boat is expected to enter service towards the middle of the next decade. Design and manufacture of four Dreadnought Class nuclear-powered submarines to carry the UK’s Trident ballistic missiles. Manufacture of the first Dreadnought Class boat, Dreadnought, commenced in 2016.

**Ship repair and naval support**
Provision of naval and commercial ship repair and modernisation services in the US, UK and Australia, together with support to the navies of the US, UK and Australia. In the US, BAE Systems has facilities located on the east, west and Gulf coasts, as well as Hawaii, and has invested in new dry dock facilities at its San Diego shipyard to support the US Navy’s increased focus on Asia-Pacific operations.

**Commercial avionics equipment**
Design, manufacture and support of avionics equipment across multiple commercial aircraft platforms, including engine and flight controls and cabin and cockpit systems, together with aftermarket support services. BAE Systems is a leading supplier of engine controls, including for GE engines and is a major supplier of flight control electronics for many Boeing and other aircraft platforms.

**Weapon systems and munitions**
Design and manufacture of naval gun systems, munitions, torpedoes, radars, naval command and combat systems, artillery systems, missile launchers and through a 37.5% interest in MBDA, missiles and missile systems. BAE Systems also manages complex ammunition plant operations for the US Army to produce insensitive munitions and propellant grains.

**Combat vehicles**
Products and services include: upgrade of US Army tracked vehicles, including Bradley Fighting Vehicles; design and manufacture of the US Army’s M109 self-propelled howitzer and Armored Multi-Purpose Vehicle, as well as amphibious vehicles for the US Marine Corps and international customers; design, manufacture and support of the CV90 combat vehicle for international customers; and vehicle upgrade and support to the British Army.

**Cyber security**
Delivery of a broad range of services to enable the US military and government to recognise, manage and defeat threats. Support to UK and other government agencies in their intelligence missions. Provision of defence-grade solutions for commercial cyber applications worldwide.