Thales in Malaysia

- Established presence for over 40 years.
- Headquartered in Kuala Lumpur.
- Over 200 employees (including Sapura Thales Electronics and former Gemalto).
- Dedicated Naval Service & Support Centres in Lumut, Perak and Kota Kinabalu, Sabah.
- Maintenance, Repair and Overhaul (MRO) Centre for Catherine thermal imaging cameras.
- Jointly-owned Sapura Thales Electronics (STE) designs, develops and produces VHF handheld radios, complete with a range of accessories, solutions and services that are exported worldwide.

- Awarded the Most Outstanding Industrial Collaboration Programme by the Malaysian Ministry of Defence.
- Recognised as the Best Rail International Collaboration Partner and Best Aviation Technology Innovation from Malaysia Ministry of Transport.

Highlights

Defence

- Deep history of cooperation with the Royal Malaysian Air Force for Air Defence solution.
- Supplies the Malaysian Armed Forces with the ForceSHIELD integrated advanced air defence system.
- Provides an integrated and scalable vehicle electronic architecture for the Royal Malaysian Army’s AV8 programme, where Thales supplies communications, vetronics, sensors, command & control, mortar and optronics.
- Equipped the Littoral combat ship (LCS) with Thales’ SMART-S surveillance radar systems and CAPTAS-2 towed sonar systems.
- Equipped the Kasturi class corvettes Thales’ sensors, fire-control and combat management system.

- Equipped all the Royal Malaysian Navy ships with Thales’ Electronic Warfare solutions.
- Equipped the Royal Malaysian Navy submarines with Thales’ sonars.
- Revolutionising Malaysia’s soldier modernisation programme through STE’s involvement in the nation’s Future Soldier System Programme.
- Supplied the Royal Malaysian Air Force with Thales’ most advanced surveillance radar, the Ground Master 400 in Kuching.
- STE fully designed and developed in Malaysia the second-generation TRC 5200 VHF handheld radio, which is currently exported worldwide.
Digital Identity & Security
- Pioneered the first e-Scroll with University of Malaya by leveraging Thales’ hardware security modules and Time Stamp Server to generate digital degree certificates to reduce risk of counterfeit and fraud.
- Inked a Memorandum of Understanding with Cyber Security Malaysia (CSM) to develop and implement practical cybersecurity approaches and technological advancements.
- Supplies the data page for the Malaysian e-passport since 2013.
- Established the Card Personalisation Centre in Kuala Lumpur in 2003.

Aerospace
- Thales’ in-flight entertainment system flies aboard the Malaysia Airlines’ Airbus A380 aircraft.
- Equips Air Asia’s entire A320 fleet of 200 aircraft with Thales avionics systems.
- Chosen to supply Thales’ avionics system on Air Asia’s entire fleet of 304 A320neo aircraft.
- Modernised Kota Kinabalu’s Flight Information Region’s air traffic control system with Thales’ state-of-the-art TopSky ATC system, radars, ADS-B ground stations and latest DVOR-DME.
- Manufactures screens for Thales’ in-flight entertainment systems in locally Kedah for a global market.

Transportation
- Long-term technology partner of Prasarana, accomplishing successful delivery of the monorail and the updated signalling of the Ampang and Kelana Jaya LRT lines in Kuala Lumpur.
- Supplies the main rail operator in Peninsular Malaysia, Keretapi Tanah Melayu Berhad (KTMB), with axle counters.
- Provides Thales’ Integrated Control Supervisory System (ICSS) for MRT Line 2, which currently under construction.
- Established a Rail Centre of Excellence in Batu Gajah, and collaborates closely with the Technology Depository Agency (TDA) and KTMB to develop future rail expertise for Malaysia.
- Awarded a contract to provide an integrated control centre for Prasarana’s train operation in Kuala Lumpur.
Thales in Malaysia - Factsheet

Thales established its presence in Malaysia in 1981 and is today a strategic partner to key customers involved in the primary businesses of Defence & Security, Ground Transportation, Aerospace and Digital Identity & Security. Over the last four decades, Thales has played an instrumental part in supporting Malaysia’s defence ecosystem, as well as contributing high-technology solutions for the security, digital identity and transportation sectors.

Thales today employs over 200 people in Malaysia, including personnel from its joint venture with the Sapura Group named Sapura Thales Electronics, and employees from the former Gemalto. Headquartered in Kuala Lumpur, Thales also has employees working from sites based in Perak, Pahang, Selangor and Sabah.

The acquisition of Gemalto on 2nd April 2019 brought Thales an unrivalled portfolio of solutions based on technologies such as biometry, data protection and cybersecurity. In Malaysia, Thales now serves the needs of diverse customers in the banking, telecommunications and government sectors.

Thales has a large installed base in Malaysia and consequently, a growing service organisation with Support Centres at the naval bases of Lumut and Kota Kinabalu.
Local cooperation

Thales’ presence in Malaysia is built on a strategy of building strong relationships with local partners.

Established in 1996, joint venture Sapura Thales Electronics Sdn Bhd (STE) is a private limited company registered in Malaysia. Through this active industrial partnership, STE designs, develops and produces VHF handheld radios, together with a complete range of accessories, that are being used in several Armed Forces. These state-of-the-art products developed by STE are exported from Malaysia to countries in Asia, Africa, Middle East and South America. In March 2019, STE launched its 2nd generation fully “Made-in-Malaysia” handheld radio, 20 years after the successful debut of the 1st generation radio.

Former Malaysia Prime Minister, Tun Dr. Mahathir launches the second generation of military VHF radio, TRC 5200. The radios are fully designed and developed in Malaysia by Sapura Thales Electronics, a joint venture between the Sapura Group and Thales. (Credit: Thales)

Since 2005, Thales has been operating Naval Service & Support Centres based in Lumut and Kota Kinabalu, and a systems integration laboratory in Kuantan to support systems currently in service with the Malaysian Armed Forces. Additionally, Thales is implementing a Maintenance, Repair and Overhaul (MRO) Centre for the latest generation of Catherine thermal imaging cameras together with DEITECH and Defence Services Sdn Bhd (DSSB) in Nilai.

Bolstering its presence in the country, Thales has developed partnerships with prestigious local industry players including Sapura, DETECH, Weststar, Boustead and Airod – all which are selected for expertise in their respective areas of business.

To prepare for the future, Thales has developed strong relations with Malaysian universities and research centres through formalising academic partnerships and signing Memorandum of Understandings (MoUs) with various industry partners.

Industrial Collaboration Programme for Rail Expertise:

As the world leader in urban rail and main line signalling and communications systems, Thales is involved in an Industrial Collaboration Programme with Technology Depository Agency (TDA) and rail operator, Keretapi Tanah Melayu Berhad (KTMB) where we provide a “Train-the-Trainer” programme to develop future talent in Malaysia’s rail industry via a rail Centre of Excellence in Batu Gajah. The customised railway signalling and communications module comprised of the design and development of a courseware package, training to a pool of trainers as well as coaching and follow up of trainers. Thales also provided a tailor-made fully equipped platform made of true signalling systems configured with the Malaysian signalling principles, making it a very realistic training environment. In 2017, 10 rail experts from local Malaysian institutions successfully graduated from this programme, ready to train future students.

Academic Programme for Defence Expertise:

In September 2017, Thales inked a 2nd tier agreement with the National Defence University of Malaysia (Universiti Pertahanan Nasional Malaysia – UPNM) to promote technology awareness in the nation. With this agreement, Thales’ architects bring their unique expertise to jointly develop a three-year Master of Science Degree Programme in International Technology Management for Defence and Security with Warwick Manufacturing Group at the University of Warwick and UPNM.

The programme commenced in September 2018 and aims to produce 60 next-generation trained defence and security experts by end 2021 as part of an offsets arrangement in the ForceSHIELD procurement contract between Global Komited and Thales.

Pre-Industrial Collaboration Programme for Aviation:

On July 2018, Thales and TDA signed a Pre-Industrial Collaboration Programme agreement enabling Celestica’s (strategic supplier for Thales Group) plant in Kulim, Kedah, to carry out the complete manufacturing, assembly and final testing of airborne displays for the latest generation Thales in-flight entertainment systems. The agreement, which is directed at a global market, is expected to create over 450 Malaysian job opportunities per year for Celestica and the associated industry for the next five years, in addition to generating offset credits and other business opportunities for Malaysia.
Recognition by Local Authorities:

- **March 2019**: Recognised by Malaysia’s Ministry of Defence for the Most Outstanding Industrial Collaboration Programme. The award recognises Thales’ active participation in key projects designed to modernise the defence sector, including the integrated vehicle electronic architecture for the AV8 programme, and the ForceSHIELD integrated air defence system.

- **December 2021**: Recognised as the Best Rail International Collaboration Partner and Best Aviation Technology Innovation by Malaysia’s Ministry of Transport in the inaugural Kuala Lumpur International Logistics and Transport (KiLAT) Excellence Awards. As one of the few international OEMs to be honoured for our contributions, Thales is honoured to help the government achieve its ambitions of developing a world-class transportation infrastructure in Malaysia.

**Smart Solutions at Sea**

In the Naval sector, Thales supplies the Royal Malaysian Navy with state-of-the-art above water and underwater sensors and mission systems that are installed on-board various Malaysian ships. Additionally, Thales supplies six SMART-S Mk2 naval surveillance radar systems and six CAPTAS-2 towed sonar systems for the Navy’s Second Generation Patrol Vessel (SGPV) Littoral Combat Ships (LCS). We also successfully conducted TACTICOS combat system integration work on the Kasturi corvettes.

**Industry Focus**

**Defence**

Thales offers the full scope of its defence expertise and experience in support of the modernisation plan for the Malaysian Armed Forces. Today, Thales is actively involved in three largest programmes for the Malaysian Ministry of Defence: the AV8 programme for the Army, the Gowind corvettes for the Navy, and the STARStreak air defence programme for the Malaysian Joint Forces.

**Driving Innovation on the Ground**

In the field of Communications and Command & Control systems, Thales provides the Royal Malaysian Army with its secured digital communications solutions as part of the major digitalisation programme of the Malaysian Armed Forces. STE also supports with integration on various platforms. These vehicles are part of the 257 armoured vehicle units designed, developed, manufactured and commissioned by DEFTECH under a contract awarded in 2011.

In December 2015, the first 12 units of the 8x8 Infantry Fighting Vehicle with 25mm turret (IFV25) were handed over to the Royal Malaysian Army. With expertise in C4ISR systems for land forces, Thales provides an integrated and scalable vehicle electronic architecture in the AV8 programme. This includes a wide range of Thales equipment such as communications, vetronics, sensors, command & control, mortar and optronics that meet the rigorous operational performance criteria of the Army.
In order to manage this programme in close cooperation with DEFTECH, Thales set up a system integration laboratory in Kuantan where the AV8 are manufactured. Managed by locally by Thales Malaysia Sdn Bhd and our joint venture STE, the laboratory serves as a testament to strengthen our local footprint and develop local capabilities. A Maintenance, Repair & Overhaul (MRO) centre was also established to enhance the maintenance of the Catherine thermal imaging cameras used by the Army.

In March 2019, Thales launched the second-generation military VHF radio – the TRC 5200. The launch was witnessed by former Prime Minister Tun Dr. Mahathir bin Mohamad and marked a significant milestone in the country’s local industrial capabilities. Fully designed and developed in Malaysia, the radios are produced by STE, a joint venture between Sapura Group and Thales.

Securing Evolving Skies

In the military aerospace sector, the Royal Malaysian Air Force is operationally using Thales’ AMASCO mission system on its mission aircrafts. Additionally, its SU-30 jet fighters are equipped with our optronics (Pod Damocles), aviation and navigation solutions. Thales has also supplied a wide range of air surveillance and ISR solutions to the Air Force including the Ground Master 400 radars for air surveillance and air defence.

In December 2016, Thales delivered an FNPTII (Flight and Navigation Procedures Trainer) simulator used in providing flight training for the Royal Malaysian Air Force. The simulator for the H120 helicopters is accompanied by a visual database adapted to training needs within the local environment.

In September 2015, Thales signed a contract with Global Komited, a company within the Weststar Group, to supply the Malaysian Armed Forces with ForceSHIELD – Thales’ integrated advanced air defence system. In addition to the STARStrait missiles, the system comprises of the CONTROMaster 200 radar and weapon coordination systems, RAPIDRanger and RAPIDRover mobile systems, the Lightweight Multiple Launcher – Next Generation (LML-NGL), and associated communications. The complementary purchase of ForceSHIELD enables the Malaysian Armed Forces to modernise and enhance the previously commissioned Thales’ STARBurst missile system which has been in service since the mid 1990’s.

As a reinforcement to the ForceSHIELD contract, Thales signed a 1st tier industry collaboration agreement with the Malaysian Ministry of Defence and Global Komited in 2017. The agreement enables Thales to play an essential role in modernising the defence sector through a range of projects that will boost the nation’s military and security technological capabilities.

In 2018, the ForceSHIELD Ground Based Air Defence (GBAD) system project with the Malaysian Armed Forces reached its final milestone with full system acceptance. With this, the next generation of Short-Range Air Defence (SHORAD) will enter service with the Malaysian Armed Forces.

In less than 3 years, Thales completed its ForceSHIELD offsets obligation by helping boost local capabilities with the creation of a Master of Science degree in International Technology Management for Defence and Security with the Universiti Pertahanan Nasional Malaysia (UPNM). The one-year programme, designed by Thales in collaboration with UPNM and Warwick Manufacturing Group, commenced with its first batch of students in 2019.

Security

Public Safety and Security

With expertise and global experience in security for critical sites and infrastructure, Thales positions itself in Malaysia to address the needs of public safety and crisis management in large metropolises. Our solutions used in enhancing public safety and security cover a diverse area including citizen protection, anti-terrorism, protection of critical infrastructures, green and blue borders’ control, and information systems security.

Cyber Security and Information System Security

Thales has a strong dedicated team of cyber security experts in our Kuala Lumpur office that is responsible for the sales, marketing and consulting of our cyber solutions in Malaysia. We have over 25 years of regional presence and expertise in this domain, and are the leading global provider of data protection solutions in the region.

To address the academic institutions’ challenge with production of counterfeit degree certificates, Thales pioneered the first e-Scroll with the University of Malaya. By leveraging Thales’ NShield hardware security modules and Time Stamp Server to generate digital degree certificates, academic institutions can combat threat of counterfeit and fraud by easily issuing e-Scrolls that can be digitally signed, time-stamped and authenticated online.
In September 2015, Thales inked a Memorandum of Understanding (MoU) with Cyber Security Malaysia (CSM) to develop and implement practical cybersecurity approaches and technological advancements. The MoU enables Thales to continuously enhance the quality of the Critical Infrastructure Systems Security Assurance and deliver greater ICT benefits to internet users in Malaysia.

Thales and CSM signed a subsequent MoU in 2017 to form a Strategic Cyber Security Collaboration under the supervision of the Ministry of Science, Technology and Innovation of Malaysia (MOSTI). The collaboration seeks to stimulate activities such as the development of an advanced Security Monitoring Capability, cutting-edge consulting and ITSEF capabilities, cyber training dedicated to build local expertise, and cooperation on cyber threat intelligence and information sharing — all of which aligns with the nation’s ambition to reinforce cyber protection of its critical national assets.

Digital Identity & Security

With the acquisition of Gemalto in 2019, now known as Thales Digital Identity & Security (DIS), Thales expanded its footprint in the sector, serving a broad portfolio of government and institutional customers.

A key element of the Malaysian e-passport, the data page, is supplied by Thales DIS since 2013. The first data page was chipless and in 2016, an electronic version that meets the highest demands for security and ICAO standards was introduced in Malaysia. The current electronic data page boasts a variety of built-in security elements including the ground-breaking and exciting true-colour UV security elements which both expands design possibilities and protects the document against duplication and reproduction.

Sample data page designs for the Malaysian e-passport. (Credit: Thales)

In 2003, Thales DIS established a Card Personalisation Centre in Kuala Lumpur, enabling banks and financial institutions to personalise all means of payments via its personalisation bureaus. The centre today is based in Puchong and is supported by a strong local team of over 70 people.

Aerospace

In 2010, Malaysia Airlines chose Thales to supply our TopFlight SATCOM for its new order of Boeing 737 aircrafts. The renowned solution provides the hardware and communications software that connects the aircraft cockpit and cabin to the ground, enabling safety services in the cockpit.

In 2012, Malaysian Airlines once again selected Thales to provide our leading In-Flight Entertainment (IFE) and Connectivity system for its A380 fleet. This contract win hallmarks as a significant milestone, paving way for Thales as we embark on our first IFE endeavour with the national carrier. With the Thales’ IFE system flying on-board Malaysian Airlines, passengers will be able to enjoy audio video on-demand entertainment in dual languages including games, interactive Qu’ran, e-books and e-shopping. To support installation, integration and maintenance needs, a Thales workshop was established within Malaysia Airlines’ facilities in Kuala Lumpur Airport.

Celestica, a strategic supplier for Thales Group, has been manufacturing Thales’ IFE cabin video displays locally in Malaysia since 2005. The plant based in Kulim, Kedah produces the latest generation of Thales IFE displays for global leading airlines, serving a worldwide market.

In 2017, AirAsia, the leading low-cost carrier in the region, selected Thales’ avionics systems for their new fleet of 304 A320neo aircraft. Apart from supplying the TopFlight flight management system, T3CAS, low-range radio altimeter and emergency location transmitters, Thales will also provide longterm Repair-By-The-Hour support for the carrier.

In the area of Air Traffic Management, Thales has been supplying the Civil Aviation Authority of Malaysia with approach and landing systems as well as radar systems. In 2018, Thales was selected to help upgrade the Kota Kinabalu’s Flight Information Region’s air traffic control system, radars, ground station, surveillance systems and distance measurement equipment over the next three years. Additionally, Thales will supply its state-of-the-art ICAO’s ASBU-ready TopSky air traffic control system, the new
generation of primary and secondary co-mounted radars, ADS-B (automatic dependent surveillance broadcast) ground stations and latest DVOR-DME.

**Transportation**

Thales’ leading ground transportation solutions are operational in Malaysia in 1998, when the Kelana Jaya LRT line Section 1 from Subang Depot to Pasar Seni began operations using Thales SelTrac Communications-Based Train Control (CBTC) system. For years, it has been the longest automated driverless metro in the world.

In 2011, Thales was awarded a contract to upgrade Kuala Lumpur’s monorail signalling system. On this programme, Thales supplied our world-class turnkey signalling solution for the main line and a depot based on an ETCS Level 1 solution, interlocking systems and a new operational control centre.

In the same year, Thales was once again chosen to provide its leading CBTC system for the 17km extension of the Kelana Jaya Line in Kuala Lumpur, which encompassed an extension from Kelana Jaya station to Putra Heights, servicing 13 new additional stations and reaching a total length of more than 46km.

The following year in 2012, Thales won the contract to upgrade both the 27km-long Kuala Lumpur Ampang LRT Line and its 18km southwest extension to fully-automated CBTC signalling. Due to the close cooperation and teamwork between various stakeholders involved, as well as strong capabilities developed locally, both the Kelana Jaya and Ampang Line projects were successfully delivered in mid-2016.

In 2016, Thales was selected to supply its Integrated Control Supervisory System for the MRT Corp’s project – Putrajaya Line. The new 57.7km line will serve around 2 million people and will see the creation of 10 interchange stations and connecting stations for easy transfer between rail lines.

In 2022, Prasarana, one of Malaysia’s largest transport operators, chose Thales to provide Kuala Lumpur with an Integrated Control Centre (ICC) to better serve its rail passengers. Leveraging our state-of-the-art technology, the project will enable Prasarana to manage the Kelana Jaya, Sri Petaling, Ampang and Monorail lines from a new single ICC for a combined total of around 100 trains and 100km of track.

For this project, Thales will install our world-class SelTrac CBTC and AlTrac ETCS L1 train supervision technology in the new ICC, with modifications to three existing Operational Control Centres, allowing for operational synergies and providing a fully integrated view of rail operations. This will ultimately allow Kuala Lumpur commuters to enjoy service with a quick response time.

As a testimony of Thales’ long-term commitment to supporting the nation’s goals of enhancing its transportation infrastructure, Thales will involve a significant pool of young graduates under the Malaysia government’s Protégé programme so as to develop local competencies. Located at Taman Ikan Emas, the ICC is expected to be delivered by April 2023.