



NAVIGATING MALAYSIA'S SPACE FRONTIER

INDUSTRY PLAYERS AND INSIGHTS
2024/2025

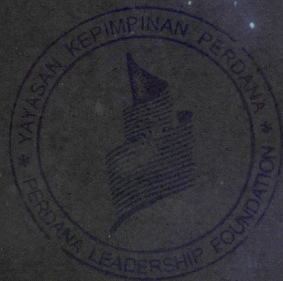
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MiGHT

*Malaysian Industry-Government Group
for High Technology.*

**NAVIGATING
MALAYSIA'S
SPACE
FRONTIER
INDUSTRY PLAYERS AND INSIGHTS
2024/2025**



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The emergence of the NewSpace movement offers an extraordinary opportunity to drive growth and innovation in the sector, thereby enabling Malaysia to play a significant role in the global space economy.”

BEYOND THE HORIZON: A NATION AMONG THE STARS

THOUGHTS FROM THE PRIME MINISTER

Although the Malaysian space industry is still in its infancy, we are on the brink of a thrilling era. The emergence of the NewSpace movement offers an extraordinary opportunity to drive growth and innovation in the sector, thereby enabling Malaysia to play a significant role in the global space economy.

This publication offers an extensive look at the current state of the Malaysian space industry and highlights the immense potential and challenges that lie ahead and the strengths we can build on. It also demonstrates the broader ecosystem of space layers and stakeholders that contribute to the sector's development.

I am optimistic that this document will inspire both industry and government to foster more robust collaborations, leverage emerging technologies and embrace the entrepreneurial mindset. This will enable us to harness the potential of space technology to boost Malaysia's GDP, spur economic expansion and fortify our global presence in the space sector.

YAB DATO' SERI ANWAR BIN IBRAHIM

Prime Minister of Malaysia



“

By supporting the development of space technology and strengthening partnerships, the Ministry of Science, Technology, and Innovation (MOSTI) remains committed to fostering an environment that supports the growth of this sector

”

FROM EARTH TO ORBIT: REACHING HIGHER, TOGETHER

FOREWORD FROM THE MINISTER OF SCIENCE, TECHNOLOGY AND INNOVATION

The space sector represents a significant opportunity for Malaysia to explore new avenues of innovation and economic growth. This publication offers valuable insights into the evolving landscape of our space industry, serving as a reference point for aligning strategies and fostering collaboration among stakeholders.

By supporting the development of space technology and strengthening partnerships, the Ministry of Science, Technology, and Innovation (MOSTI) remains committed to fostering an

environment that supports the growth of this sector, recognising its potential to drive innovation, economic development, and technological advancement.

I trust this document will serve as a valuable resource to guide stakeholders as we work together to build a robust and dynamic space ecosystem for Malaysia.

YB CHANG LIH KANG

Minister of Science, Technology & Innovation



Rushdi bin Abdul Rahim
President & CEO of MIGHT



**Dato' Gs. Haji Azlikamil
bin Napiah**
Director General
Malaysian Space Agency
(MYS)

SHAPING MALAYSIA'S JOURNEY TO THE STARS

MESSAGES FROM THE PRESIDENT & CEO OF MIGHT AND DIRECTOR GENERAL OF THE MALAYSIAN SPACE AGENCY (MYSA)

The Malaysian space industry is entering an exciting phase of growth, and this publication reflects our shared commitment to supporting its development. As the national space agency, MYSA provides the strategic direction and technical expertise needed to build a strong foundation in spearheading space activities in Malaysia. Meanwhile, MIGHT focuses on fostering industry collaboration, encouraging innovation, and bridging the gap between government and private sector stakeholders.

This document highlights the ecosystem of space players, offering a platform to showcase their contributions and capabilities while identifying areas for improvement. It also serves as a guide for stakeholders to navigate the opportunities in this emerging sector. Together, MIGHT and MYSA remain dedicated to driving Malaysia's space agenda, ensuring that the nation's space industry evolves into a sustainable and impactful contributor to our economy and technological advancement.

“MIGHT focuses on fostering industry collaboration, encouraging innovation, and bridging the gap between government and private sector stakeholders.”

ABOUT MIGHT

Malaysian Industry-Government Group for High Technology (MIGHT), operates as a strategic think-tank, guiding industry development through the application of science and technology for socio-economic growth. Acting as a liaison between private and public sectors, MIGHT fosters partnerships, offers strategic counsel, and shapes high technology initiatives through market intelligence and foresight practices. Governed by a board led by private sector figures and senior government officials, MIGHT collaborates with local and international industries, governments, and academic partners to enhance Malaysia's high technology ecosystems, focusing on capacity building, R&D localisation, and talent development.

MIGHT PARTNERSHIP HUB

MALAYSIA'S JOURNEY INTO SPACE

CHARTING THE NATION'S ASCENT INTO THE GLOBAL SPACE ARENA

MALAYSIA'S JOURNEY INTO SPACE



Malaysia's First Satellite Earth Station in Pahang

Marked a significant step in the nation's venture into satellite technology, which laid the foundation for future advancements in space exploration and activities.



1970

Establishment of MACRES

Under the purview of Ministry of Science, Technology and Environment (MOSTE), **Malaysian Centre of Remote Sensing (MACRES)** was initiated as a research and development (R&D) agency.

1988

Establishment of the Planetarium Division

Under the Prime Minister's Department.

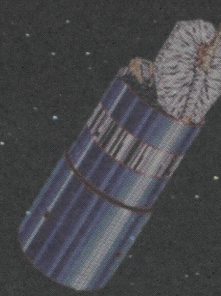
1989

Space Science Research Division (BAKSA)

Planetarium Division renamed to be Space Science Research Division (BAKSA).

Binariang Satellite Systems Sdn. Bhd., a subsidiary of **Binariang Berhad (now Maxis Berhad)**, was granted a license to develop the **Malaysia East Asia Satellite (MEASAT)** system, following initial development efforts that began in 1992.

1993



Binariang signed a contract with **Hughes Space and Communications Company (now Boeing Satellite Systems)** for two Model 376 satellites.

1994

Launch of the National Microsatellite Programme

Launch of MEASAT-1, MEASAT-2

MEASAT-1 and MEASAT-2 were launched on Ariane rockets from **Centre Spatial Guyanais in French Guiana**, providing reliable communication services across Malaysia, boosting computer networking and enabling direct-to-home television service.

1995

1996

Binariang satellite division, initially within the **Maxis Group**, became independent in 1998.

Launch of **TiungSAT-1** under the auspices of the **Russian Space Agency**, which developed through joint development and technology transfer between **Astronautic Technology Sdn. Bhd. (ATSB) Malaysia** and **Surrey Satellite Technology Ltd. (SSTL) UK**.

The satellite aimed to perform advanced remote sensing, facilitate digital communication, conduct a digital data transfer experiment, utilize GPS for positioning, and detect cosmic rays.

Binariang's satellite division holding company was renamed **MEASAT Global Berhad**, and the operating company became **MEASAT Satellite Systems Sdn. Bhd.**

Completion of **Ground Receiving Station, 'Stesen Penerima Data Satelit' (SPDS), Temerloh, Pahang.**

1998

2000

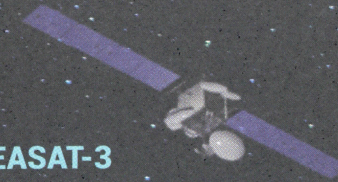
2001

2002



Establishment of Agensi Angkasa Negara (ANGKASA)

The National Space Agency was established to formulate and enforce policies and regulations that govern, implement, and monitor activities related to space.



Launch of MEASAT-3

Launched from **Baikonur Cosmodrome, Kazakhstan**, the satellite aimed to provide expansion and back-up capacity for **MEASAT** to meet the increasing market demand for satellite services within the region.

MACRES upgraded as **Malaysian Remote Sensing Agency (ARSM)**

Official launching of **Malaysian Space Centre** & Completion of **Langkawi National Observatory**



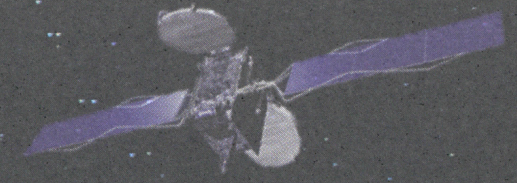
The **First Malaysian Angkasawan** was initiated to the **International Space Station (ISS)**

2006

2007

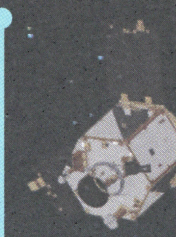
2008

2009



Launch of MEASAT-3A

Previously named **MEASAT-1R**, **MEASAT-3a** will provide high-powered C and Ku-band capacity for communication over Malaysia, Indonesia and the wider Asia-Pacific region



Launch of RazakSAT

Expanding from **TiungSAT-1's** success, Malaysia launched **RazakSAT**, an Earth Observation satellite with **high-resolution imaging**, crucial for **agriculture and environmental monitoring**, providing valuable data for informed decisions.

Approval of National Space Policy (DAN2030)

DAN2030 is Malaysia's strategic framework to develop its space sector through space technology, enhancing national sovereignty and competitiveness. Led by MOSTI via MYSA, the policy aligns with Malaysia's National Science, Technology and Innovation Policy (DSTIN) and Aerospace Industry Blueprint 2030.

Launch of UiTMSAT-1

TU education satellite built by UiTM based on **Joint Global Multi-Nation Birds Satellite project**, which is a cross-border interdisciplinary satellite project for non-space faring countries supported by Japan.

Launch of InnoSAT-2

3U nanosatellite designed to introduce a locally built satellite bus. Built by Astronautic Technology Sdn. Bhd. (ATSB), InnoSAT provides solution and opportunity for researchers to demonstrate their experiment on orbit.



Malaysian Space Agency (MYSA) Establishment

Establishment Approval of the Malaysian Space Agency (MYSA) by the Cabinet through the merger of the Malaysian Remote Sensing Agency (ARSM) and the National Space Agency (ANGKASA).

35 Application Systems have been developed since 2008

Launch of MEASAT-3b

MEASAT-3b, operated by MEASAT Satellite Systems, was launched on September 11, 2014, via an Ariane 5 ECA rocket from the Guiana Space Center. Equipped with 48 Ku-band transponders, it delivers TV and data services to Malaysia, India, Indonesia, and Australia from its 91.5° East geostationary slot alongside MEASAT-3 and MEASAT-3a.

Launch of MEASAT-3d

Communication satellite will replace the MEASAT-3/3a satellites, featuring C- and Ku-band payloads for Direct-to-Home services alongside a Ka-band system with spot beams to provide high-speed Malaysian broadband. It also hosts South Korea's KT-SAT L-band navigation payload for the KASS network.

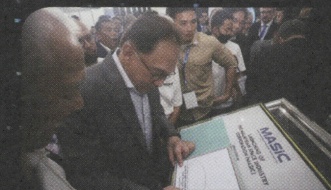


Launching of Malaysia Space Exploration (MSE2030)

National Space Policy Action Plan 2030, also known as Malaysia Space Exploration 2030 (MSE2030), is Malaysia's comprehensive strategy to advance its space sector. It outlines 15 strategies, 27 initiatives, and 76 key activities to be implemented by 2030, aiming to develop a robust and sustainable national space ecosystem that contributes to economic growth and societal well-being.

Launching of Space Industry Strategic Plan 2030 (SISP2030)

SISP 2030 is Malaysia's roadmap to boost its space sector, targeting RM10 billion contribution to GDP and 5,000 high-skilled jobs by 2030. Launched during the Langkawi International Space Forum (LISF) 2023, it outlines 12 strategic thrusts and 24 initiatives for a sustainable and competitive space industry.



Establishment of Malaysia Space Industry Consortium (MASIC)

The launch of the Malaysia Space Industry Consortium (MASIC) by YAB Dato' Seri Anwar Ibrahim, the Prime Minister, at the Mahsuri International Exhibition Centre (MIEC) during LIMA'23.

MASIC was established with the aim of positioning Malaysia as a competitive global hub and contributing to the nation's economic development through the space industry.

2014

2017

2018

2019

2022

2023



Launch of A-SEANSAT-PG-1

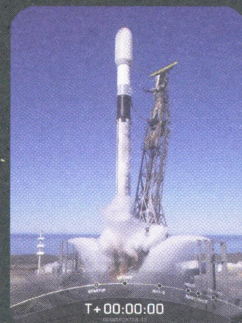
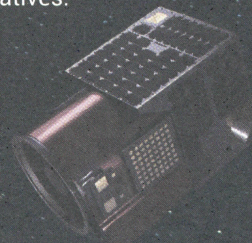
Angkasa-X Innovation's 6U CubeSAT tracks maritime vessels beyond Southeast Asian coastal zones using AIS technology, while its secondary mission conducts Earth observation with a 5-meter-resolution optical sensor in Low Earth Orbit.

Launch of UzmaSAT-1 (NuSat 45)

UzmaSAT-1, owned by UZMA Berhad through Geospatial AI Sdn. Bhd., is a first commercial high-resolution Earth observation satellite launched via SpaceX Falcon 9 on January 2025 into a 500 km Low Earth Orbit. Equipped with multispectral sensors achieving 50 cm resolution, it supports agricultural monitoring, disaster response, and environmental management across Southeast Asia while validating advanced geospatial capabilities for Malaysia's national space initiatives.

Launch of SpaceANT-D

SpaceANT-D, developed by Malaysia's Spaceln Sdn Bhd, is a 1P PocketQube-class picosatellite demonstrating LoRa-based IoT data relay capabilities for Southeast Asian monitoring systems. This orbital prototype validates store-and-forward satellite operations ahead of Spaceln's planned IoT constellation deployment.



2023

2025

INDUSTRY GOVERNANCE

NAVIGATING POLICIES
& FRAMEWORKS THAT
SHAPE MALAYSIA'S
SPACE LANDSCAPE

RELATED MINISTRIES & FEDERAL LEGISLATION



MOSTI
MINISTRY OF SCIENCE,
TECHNOLOGY & INNOVATION

Drives Malaysia's space industry through policy, funding, research, collaboration, regulation, capacity building, and public outreach.



FEDERAL LEGISLATION

Established the Malaysian Space Board through the gazettelement of the Malaysian Space Board Act 2022 (Act 834) to regulate certain space related activities.



MINDEF
MINISTRY OF DEFENCE

Defends national interest for sovereignty, integrity, and economic prosperity.



MOT
MINISTRY OF TRANSPORT

Ensures aviation safety and regulatory compliance when space operations have implications for air traffic or infrastructure.



MOF
MINISTRY OF FINANCE

Formulate and administer policies related to be the management of Government procurement.



MOC
MINISTRY OF COMMUNICATION

Strengthening digital networks and driving digital economy growth.



NRES
MINISTRY OF NATURAL RESOURCES & ENVIRONMENTAL SUSTAINABILITY

Responsible for energy, natural resources, environment, climate change, mapping, also geospatial data.



MITI
MINISTRY OF INVESTMENT, TRADE AND INDUSTRY

Enhance export ecosystem, keep Malaysian firms relevant in global market.

MIGHT

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for High Technology*

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