



**MALAYSIAN SPACE AGENCY**  
MINISTRY OF SCIENCE,  
TECHNOLOGY AND INNOVATION

# **MALAYSIA'S GNSS INITIATIVES**

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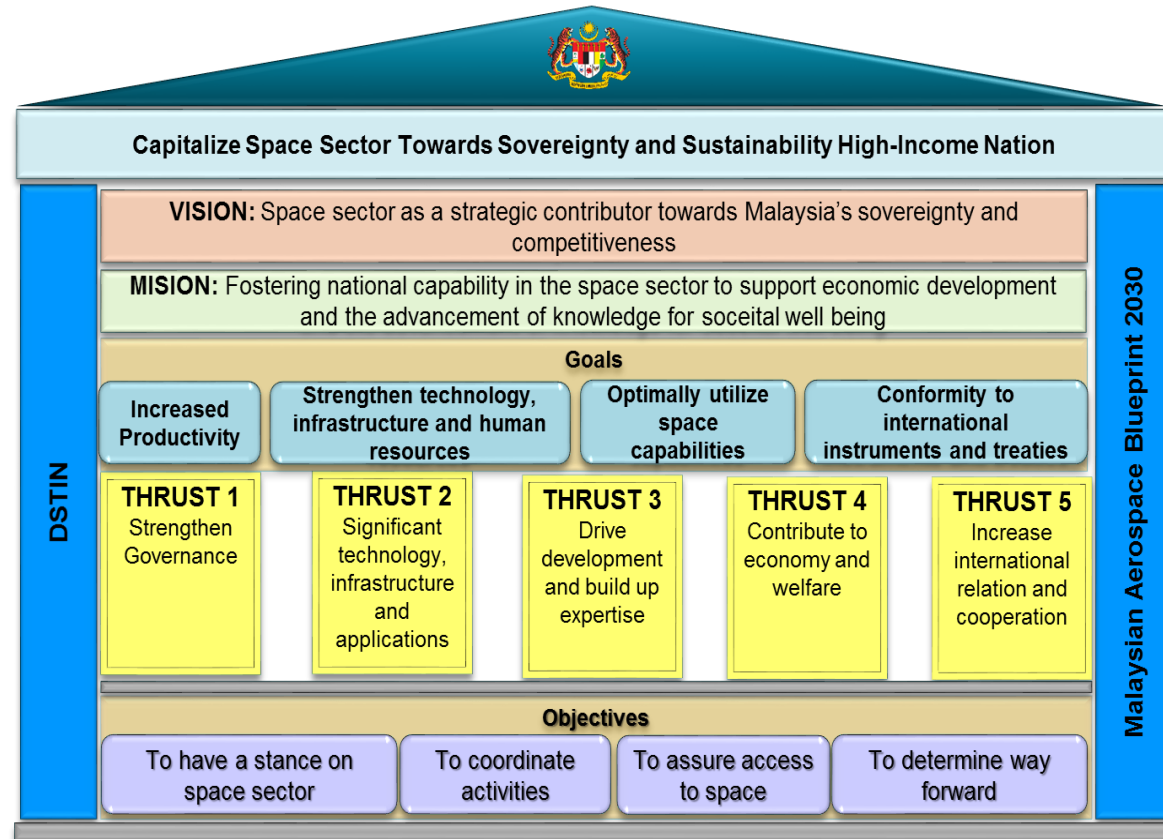
# MALAYSIA SPACE SECTOR GOVERNANCE

## MISSION

To develop the capabilities of the country's space sector to contribute the economic growth, sustainable development, knowledge generation, national sovereignty and the well-being of the people.

## MALAYSIAN SPACE AGENCY (MYSA)

In Dec 2019, the Government of Malaysia had approved the formation of MYSA through the merging of National Space Agency (ANGKASA) and Malaysian Remote Sensing Agency (MRSA).



STRUCTURE OF NATIONAL SPACE POLICY 2030



# NATIONAL SPACE POLICY 2030 (DAN) 2030

## "MALAYSIA SPACE EXPLORATION 2030 (MALAYSIA SPACE-X 2030)"

STRENGTHENING  
GOVERNANCE IN  
OPTIMIZING  
NATIONAL  
ACCESS TO  
SPACE  
CAPABILITIES

FOCUSING ON  
NATIONAL SPACE  
TECHNOLOGY,  
INFRASTRUCTURE  
AND  
APPLICATIONS

DRIVING THE  
DEVELOPMENT  
OF SPACE  
SCIENCE,  
TECHNOLOGY  
AND BUILDING  
EXPERTISE

CONTRIBUTING  
TO THE ECONOMY  
AND SOCIETAL  
WELLBEING

IMPROVING AND  
STRENGTHENING  
INTERNATIONAL  
COOPERATION  
AND NETWORK



1. National Space Committee (JANGKA)
2. To formulate national space act
3. Review / formation of the Space Technology Ecosystem Blueprint



4. Development of National Remote Sensing Satellite (2021-2025)
5. GNSS Signal Monitoring and Testing System Development Programme (2021-2025)
6. Short Range Launcher Development Programme (2021-2025)
7. Space Technology Infrastructure Operation (Assembly, Integration and Testing-AIT)



8. Expertise development through space R,D,C & I activities involving academia and industry
9. Implementing the RISE programme
10. Implementing space science research, awareness and cultivation programme (Langkawi National Observatory)



11. Development of Space Industry Strategic Plan (2020-2025)
12. Industry Sector Availability Study (2021) – Space – Short Term
13. Space Technology Incubation Programme (2023-2024)
14. Commercialization of 5 space products and technologies by local companies internationally (2030)

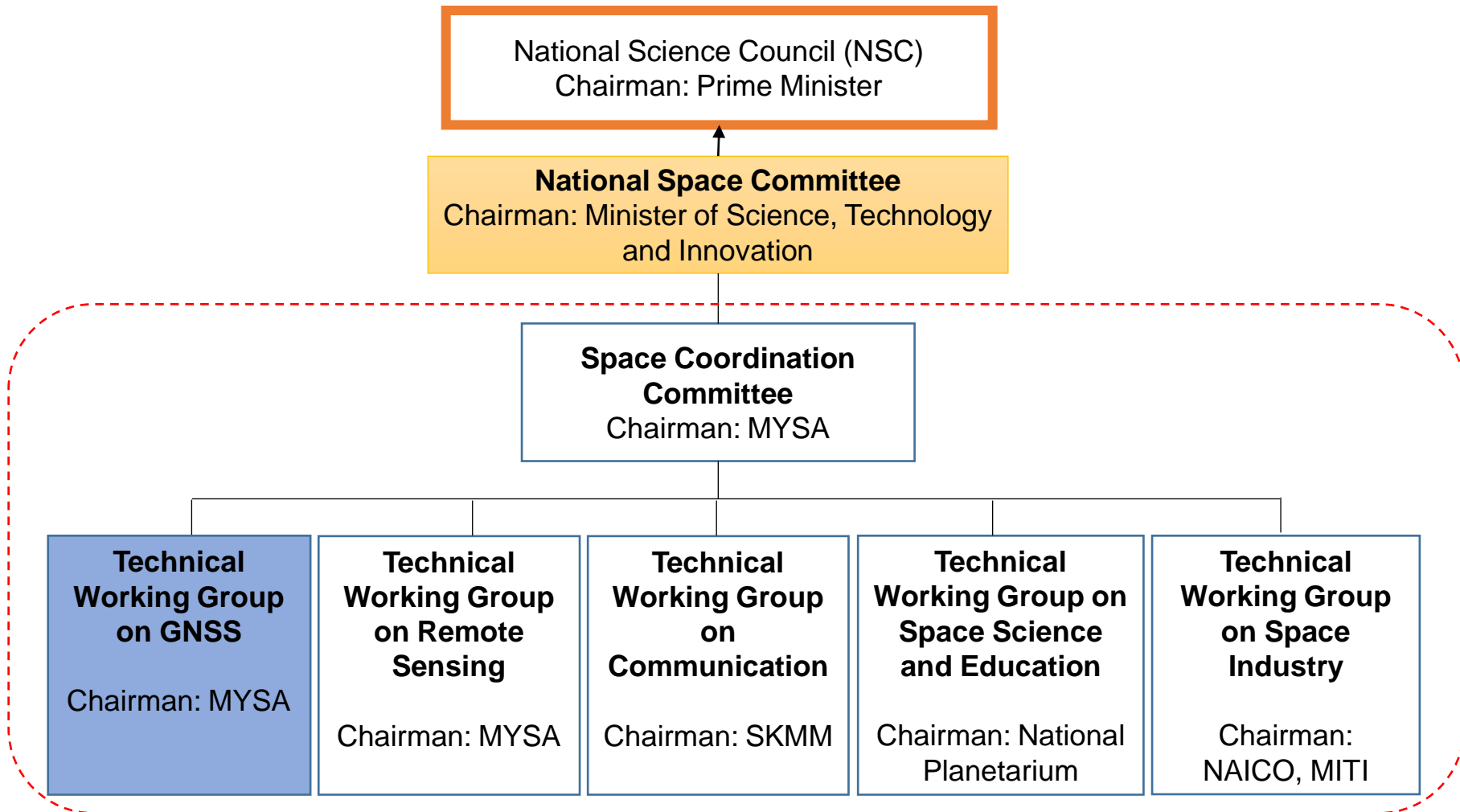


15. Strengthening international cooperation (SCOSA, APRSAF, UNOOSA, ESCAP)
16. Participate in scientific initiatives/ international cooperation programmes related to space technology (JAXA, AIRBUS, ANSI, etc.)

STRATEGIC ACTIVITIES/INITIATIVES WHICH ARE AND WILL BE IMPLEMENTED UNTIL 2030

# NATIONAL SPACE COMMITTEE

A Centralized Coordination at national level involving representatives from various ministries in order to enhance space governance.

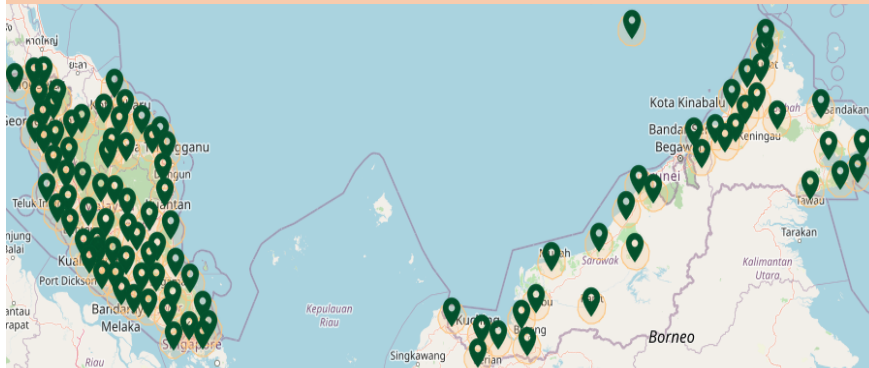




# NATIONAL GNSS INFRASTRUCTURES

## MyRTKnet (JUPEM)

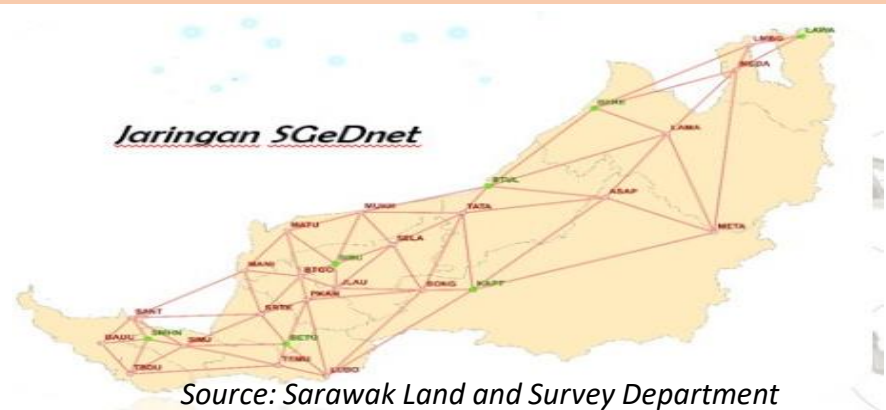
97 CORS stations as of 2021



Source: <https://www.myrtknet.gov.my/sbc>

## SGeDNet (Sarawak Land & Survey)

21 CORS stations as of 2021



Source: Sarawak Land and Survey Department

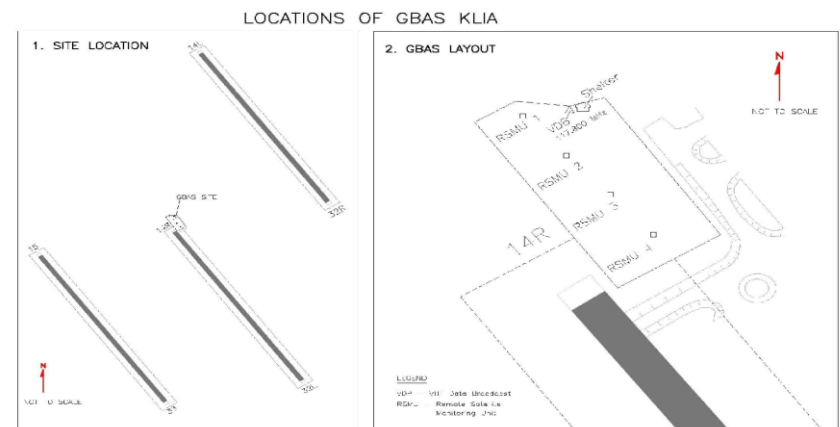
## SISPELSAT (Marine Department)

6 stations as of 2021



Source: Marine Department

## GBAS (Civil Aviation Authority Malaysia, CAAM)



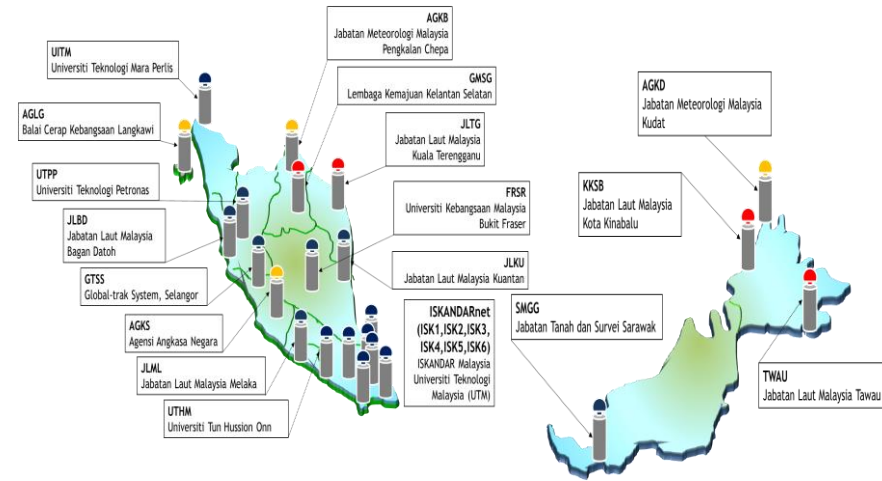
Source: <https://aip.caam.gov.my/>

# NATIONAL GNSS INFRASTRUCTURES

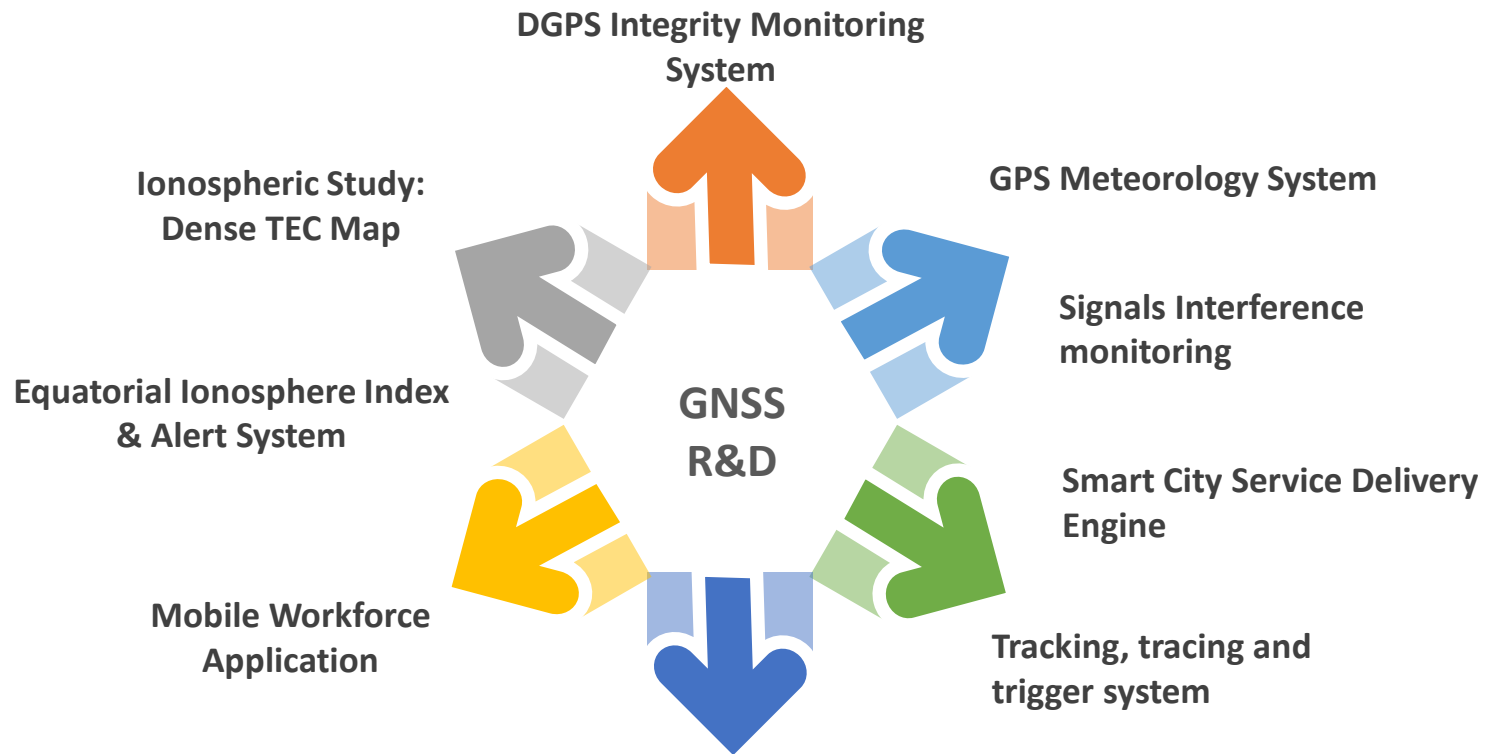
## R&D CORS Network

23 stations as of 2021

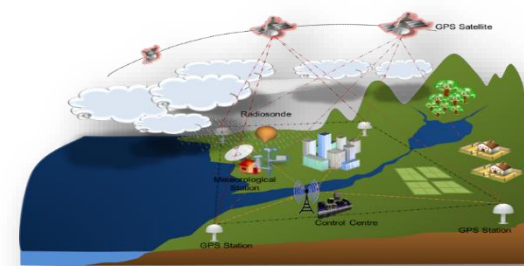
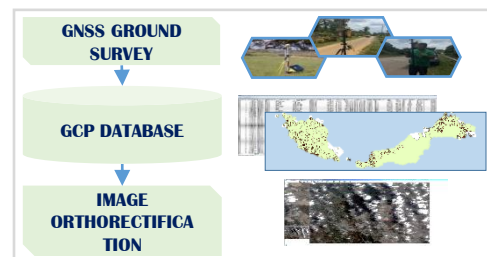
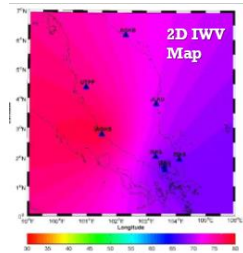
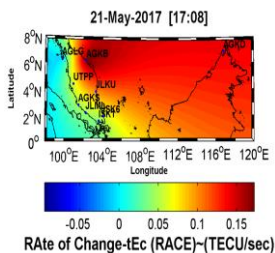
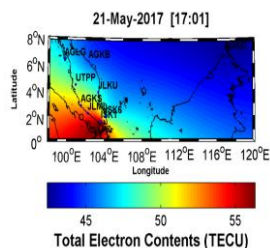
- i. A collaboration network between Government agencies, universities & industry.
- ii. Supports many research & academic activities and serve as a platform to develop space-based applications for the country.



# SCIENTIFIC ACTIVITIES



Malaysian GCP database development for image orthorectification, accuracy assessment and reference point.





# GNSS PROGRAMMES



## BELS WORKSHOP

EGNSS Solutions  
for Sustainable  
Development



# WAY FORWARD

01



## Enhancement of GNSS Positioning Infrastructure and services

- GNSS Data Centralization
- Satellite Signal Monitoring & Assessment System / Regional Monitoring station
- Satellite based Augmentation System (SBAS) payload & Control Centre

02

## GNSS R&D and Widening local applications

- Development of high accuracy applications
- GNSS Vulnerability Mitigation / counter-spoofing technology development
- Alternate PNT technology for critical application.
- GNSS interference Detection and Testing Lab



03

## GNSS Downstream Industry development

- Provide institutional support to encourage the development of the local GNSS downstream industries and start-ups to become more competitive in the global market.
- Support the Malaysia's digital economy initiative

**Thank you**

