

Thailand's National Space Strategy 2017-2036

APRSAF-24 Country Report session:



16 November 2017, Bengaluru

Dr. Ammarin Pimnoo

Researcher and Satellite Engineer of GISTDA Academy

Geo-Informatics and Space Technology
Development Agency (Public Organization)

STATUS OF DRAFT 20-YEAR NATIONAL SPACE STRATEGY

- National Committee on Space Policy (NCSP) endorsed the draft 20-year National Space Strategy on Thursday, 27th July 2017
- NCSP will submit the draft to the Cabinet for approval by the end of 2017

DRAFT NATIONAL SPACE POLICY FOR 20 YEARS PERIOD (2017 - 2036)

Strategic Issues

Strategic Goals

S1: Space Activity for National Security

Preserve the national interests, life safety and property by using the space technology

S2: Space technology for Sustainable Development

Utilize the space technology in the form of area-based management

S3: Development of Space Economy

Develop space industry and enhance value of the national space economy

S4: Administration of Space Infrastructure

Establish an integrated space-based infrastructure and promote the use of such infrastructure

S5: Space Research, Development, and Innovation

Create indigenous space research, development and to maximize its utilization while maintaining high quality standards and international recognition

S6: Human Capacity Building

Develop personnel having expertise and experiences in working with governmental and private entities to help drive the National Space Strategy

S7: International Cooperation

Play important roles in the international platform and be recognized in terms of space capabilities and potentials

S8: Administration of Space Policy and Strategy

Develop national space laws, establish National Space Agency, support cooperation among government, private, academia, and others

Updated on the Thursday, 27 July 2017

GISTDA STRATEGY 2018 - 2021

Vision

GISTDA : To be Innovative Organization in Geo-space Intelligence value deliveries by 2020.

Strategic Issues

- 1. Establish policy to be driven by Space Technology and Geo-Informatics along with the use of Actionable Intelligence Policy (AIP)**
- 2. Promote Space Economy having **THEOS-2** and SKP as bases**
- 3. Create value and worth of holistic geo-informatics**
- 4. Develop infrastructure of Earth observation satellite system**
- 5. Conduct research and development to create innovation and knowledge**

ON-GOING PROJECTS OF GISTDA

- 1. THEOS-2**
- 2. GNSS Data Services**
- 3. National Space Policy**
- 4. Space Innovation e.g. VOSSCA, OPTEMIS, EMERALD, SIPROs, etc.**
- 5. NGIS Portal**
- 6. Thailand Monitoring System (disasters, coastal management, etc.)**
- 7. National Space Exploration Project**
- 8. The Grand Geospatial Platform based on ASEAN Economic Clustering Map**

COMING ACTIVITIES IN 2018

To work with other government agencies towards holistic and integrated development in the following areas:

- **Industrial development**
- **Digital economy development**
- **Communications and logistics**
- **Research and innovation**
- **Extension of development to rural areas to strengthen and sustain country economy**

THAILAND AND INTERNATIONAL COOPERATION ON SPACE TECHNOLOGY IN ASIA AND THE PACIFIC

1. United Nations Economic and Social Commission for Asia and the Pacific (ESCAP)

- Participation in UNESCAP activities such as meeting, conferences, workshop, etc.
- Focal Point of Regional Space Application Programme for Sustainable Development-RESAP
- Provide satellite data to support the disaster management
- Provide technical advisory services on drought mechanism development
- Dispatch 1 staff to work at ESCAP to support related activities (Space Application Section, Information and Communication Technology and Disaster Risk Reduction Division, UN-ESCAP)

2. Asia Pacific Space Cooperation Organization (APSCO)

- Founding Member of APSCO (MODE)
- Participate in satellite development projects
- Set up and operate Ground receiving station for SMMS
- Carry out researches
- Dispatch staff to work at APSCO Headquarters
- Ph.D. and Master degree scholars.

THAILAND AND INTERNATIONAL COOPERATION ON SPACE TECHNOLOGY IN ASIA AND THE PACIFIC

3. Asia-Pacific Regional Space Agency Forum (APRSAF)

- Provide data and tool for Sentinel Asia Initiative: Disaster Management
- Participate in Asian Beneficial Collaboration through “Kibo” Utilization
- Conduct space education and raise awareness especially for young generation
- Organization of APRSAF annual conferences in 2004 and 2010

4. Association of Southeast Asian Nations (ASEAN)

- National Focal point of Sub-committee on Space Applications (SCOSA) (Under ASEAN Committee on Science and Technology)
- Host of ASEAN Research and Training Center for Space Technology Applications (ARTSA)
 - Short/ Long term training, Tailor made training
 - Researches
 - Building Awareness – summer camp, seminar, online learning etc.

5. Asian Disaster Preparedness Center (ADPC)

- Provide training support on space applications for disaster management
- Collaborate on implementation of projects e.g. SEVIR Mekhong

THAILAND AND INTERNATIONAL COOPERATION ON SPACE TECHNOLOGY IN ASIA AND THE PACIFIC

6. China

- Sirindhorn Center for Geo-informatics (SCGI) - Capacity Building, R&D, Technology Transfer (With WUHAN University)
- Global Navigation Satellite System (GNSS)
 - promote GNSS utilization
 - promote GNSS economy
 - building infrastructure
 - capacity building
- Geo-informatics and Remote Sensing, joint degree program, space applications for agriculture, disaster management, data services
- Polar Research
- Space Exploration and experiment
- Manned Space Program (coming soon)

7. United States of America

- Researches
- Capacity building
- Ground segment operation for Landsat
- Access to Landsat Archives

8. India

- Geo-Informatics applications for cultural studies and mapping

THAILAND AND INTERNATIONAL COOPERATION ON SPACE TECHNOLOGY IN ASIA AND THE PACIFIC

9. Japan

- Global Navigation Satellite System (GNSS)
 - building Infrastructure
 - promote GNSS utilization
- Geo-informatics and Remote Sensing,
 - research projects
- Education and Awareness
- Space Exploration and experiment (KIBO)

10. Russia

- Education and Awareness on space exploration

11. Laos PDR

- Setting up rice field monitoring system
- Provide capacity building

12. Myanmar

- Requirement analysis on space applications
- Provide capacity building

13. Cambodia

- Requirement analysis on space applications

MEMBER OF INTERNATIONAL ORGANIZATIONS

- AARS
- APSCO
- CEOS
- COSPAR
- GEO
- IAF

SPACE KRENOVATION PARK

*"WHERE WE CLUSTER, COLLABORATE & CO-CREATE VALUES
... TO DELIVER BETTER WORLD"*

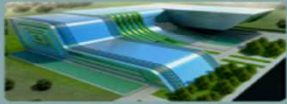


SPACE **K**RENOVATION PARK

"WHERE WE CLUSTER, COLLABORATE & CO-CREATE VALUES
... TO DELIVER BETTER WORLD"

SKP

Space Krenovation Park



พิพิธภัณฑ์เทคโนโลยีสำรวจโลก
(Visionarium)



ศูนย์ผลิตข้อมูลภาพถ่ายดาวเทียม
และภูมิสารสนเทศด้านภัยพิบัติ
(Geo Informatics Solution Delivery)



ศูนย์บ่มเพาะธุรกิจเทคโนโลยีอวกาศ
(Entrepreneurial Development Center)



สถานีควบคุมและรับสัญญาณดาวเทียม
(Satellite Operations Center)



ศูนย์พัฒนาเทคโนโลยีอวกาศ
(Space Technology
Development Center)

ที่พักอาศัยและนันทนาการ

ศูนย์วิจัยและฝึกอบรมด้านภูมิสารสนเทศ
(Geoinformatics Research & Training)



Eastern Economic Corridor of Innovation (EECi)



Wang Chan Valley

EECi is aimed at creating an innovation district within the EEC and fostering joint R&D amongst public, private sectors, universities as well as local communities



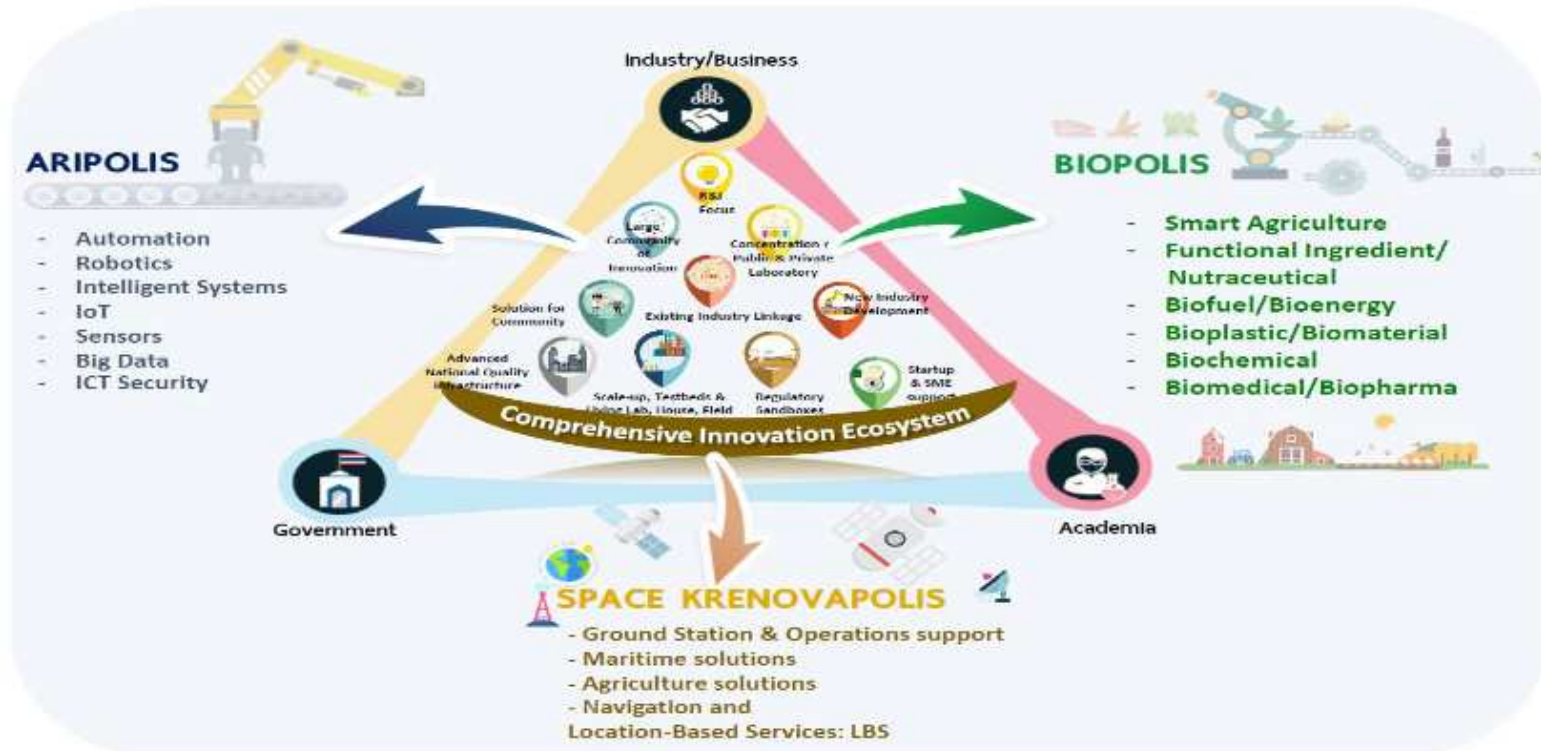
Automation



Robotic



Intelligence System



Farming and Satellite imagery



Bio-material



Food Ingredient

CONCLUSION

1. GISTDA as a secretariat of National Committee on Space Policy, has major roles to move forward the space activities through to the National Space Strategy being obtained the cabinet's approval by the end of 2017
2. Space Utilization is one of key approaches for driving the Economic growth regarding Thailand 4.0
3. Domestic and International Collaborations are our stakeholders participating in co-develop, localize technologies, capacity building, as well as investment along the 20 years of National Space Strategy

спасибо
bedankt
obrigado
dziękuję
hvala
maunuru
sagolun
sukriya
kop khun krap
terima kasih
감사합니다
ευχαριστώ
danke 謝謝
dank je
ngiyabonga
teşekkür ederim
tapadh leat
gracias
mochchakkeram
go raibh maith agat
arigatō
takk
dakujem
merci
merci