Joint UN-GGIM-AP and Asia-Oceania GEO

ANOND SNIDVONGS

Executive Director

GISTDA

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

Thailand's Participations in Regional Geo-Information Activities

ASIA-PACIFIC PLAN OF ACTION ON SPACE APPLICATIONS FOR SUSTAINABLE DEVELOPMENT (2018 – 2030)

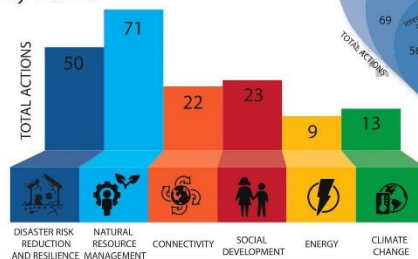*"Integrating Geospatial Dimensions for a Sustainable Asia-Pacific"*

UNITED NATIONS
ESCAP
Economic and Social Commission for Asia and the Pacific
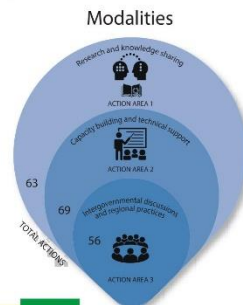
Plan of Action overview

Vision

Member States in the Asia-Pacific region can access and use space science, technology and its applications to the fullest extent at the national and regional levels to achieve the goals set out in the 2030 Agenda for Sustainable Development.

Modalities

Research and knowledge sharing
ACTION AREA 1

Capacity building and technical support
ACTION AREA 2

Intergovernmental discussions and regional practices
ACTION AREA 3

63 — 69 — 56
TOTAL ACTIONS

Priority Themes

TOTAL ACTIONS

	71				
50			23		13
		22		9	

DISASTER RISK REDUCTION AND RESILIENCE — NATURAL RESOURCE MANAGEMENT — CONNECTIVITY — SOCIAL DEVELOPMENT — ENERGY — CLIMATE CHANGE
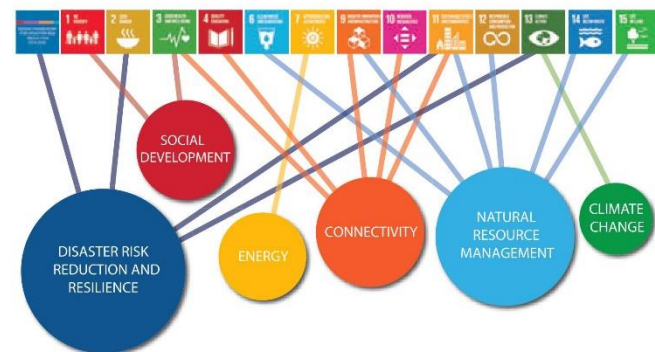
188 ACTIONS for 37 TARGETS of 14 SDGs¹ + SFDRR²

¹Sustainable Development Goals
²Sendai Framework for Disaster Risk Reduction

2

Integrating Geospatial Dimensions for a Sustainable Asia-Pacific

SOCIAL DEVELOPMENT

DISASTER RISK REDUCTION AND RESILIENCE

ENERGY

CONNECTIVITY

NATURAL RESOURCE MANAGEMENT

CLIMATE CHANGE

The Asia-Pacific region has the potential to achieve a developmental transformation that will serve as a global model on the cooperative use of innovative technologies for common good.

3

https://www.unescap.org/resources/asia-pacific-plan-action-space-applications-sustainable-development-2018-2030

2

Thailand Supports to Regional Geo-Information Activities

Sirindhorn Center for Geo-Informatics (http://scgi.gistda.or.th/)

- International Double Master Degree Program in Collaboration with Wuhan University (China) and Burapha University (Thailand)
- Scholarships for Students from Asia and the Pacific Countries
- ASEAN Regional Training Center for Space Applications (ARTSA)
- Short Courses and Customized Training Programs
- Located in Space Krenovation Park, Sri Racha, Thailand

Thailand Contributions to Regional Geo-Information Activities—Future

Geo-Informatics Applications Toward Regional Sustainability

SDG was adopt by ESCAP as a regional 'policy' and POA was created with
- 188 actions in 6 themes and 3 modalities
- 62 member and associated member states
- May be 10 to 100s agencies/projects in each state

How can a regional body coordinate, evaluate and revise its POA
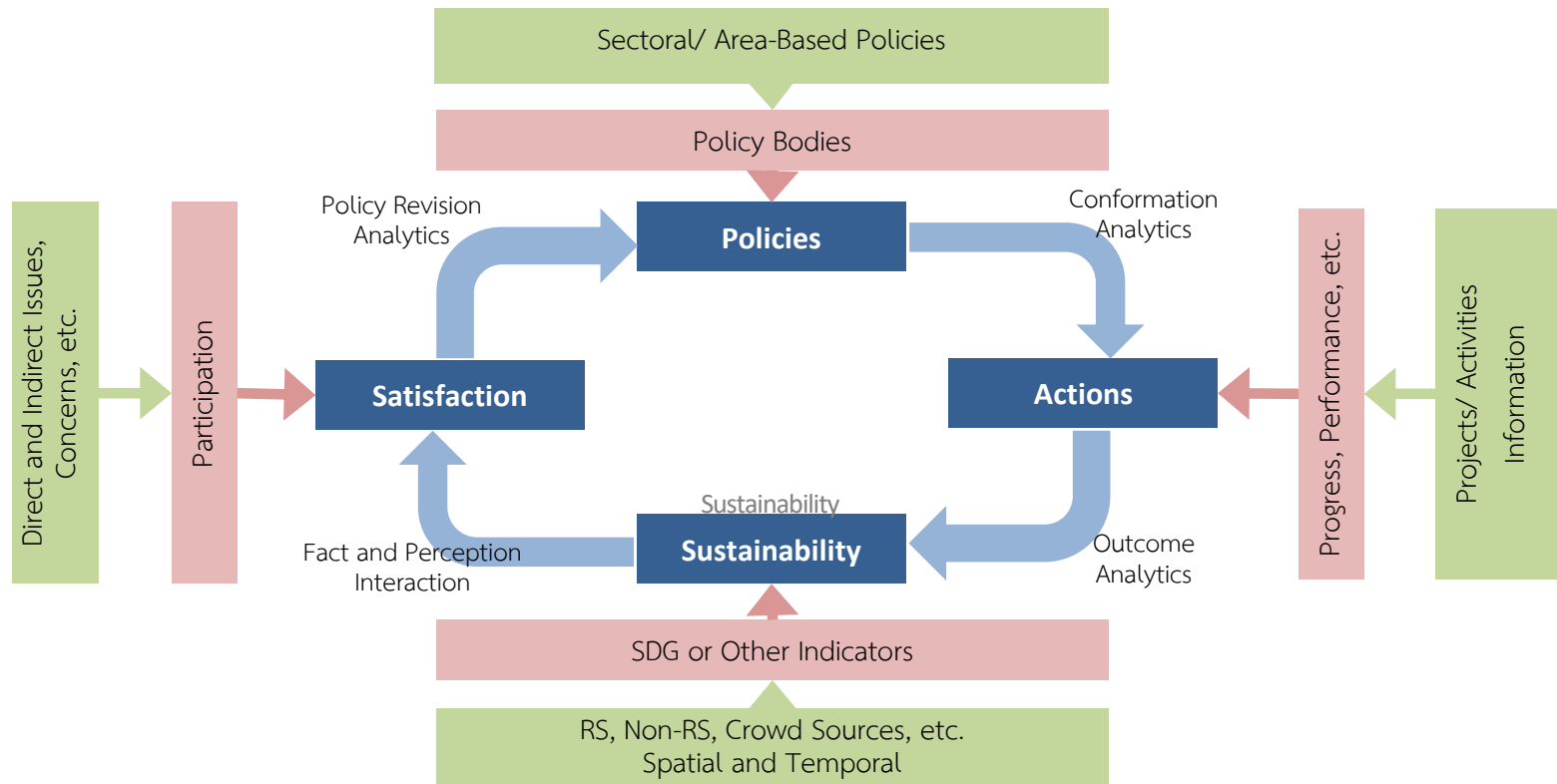
Thailand Contributions to Regional Geo-Information Activities—Future

Geo-Intelligence Platform Toward Actionable Intelligence Policy (AIP)

5-D Geo-Informatics
- Geospatial Dimension (x, y, z)
- Time Dimension (t)
- Value and Benefit Dimension (v)

Through an Innovative Singularity Platform (ISP) that integrate 5 M's
- Mapping (Graphic representation of Geo-spatial Data and values)
- Monitoring (Multi sources of data, including crowd sourcing)
- Modeling (Data and information integration, quanti- and qualitatively)
- Measurements (Indicators of values, benefits and impacts to economy, society and environment)
- Management (Actions, interventions and resources inputs)
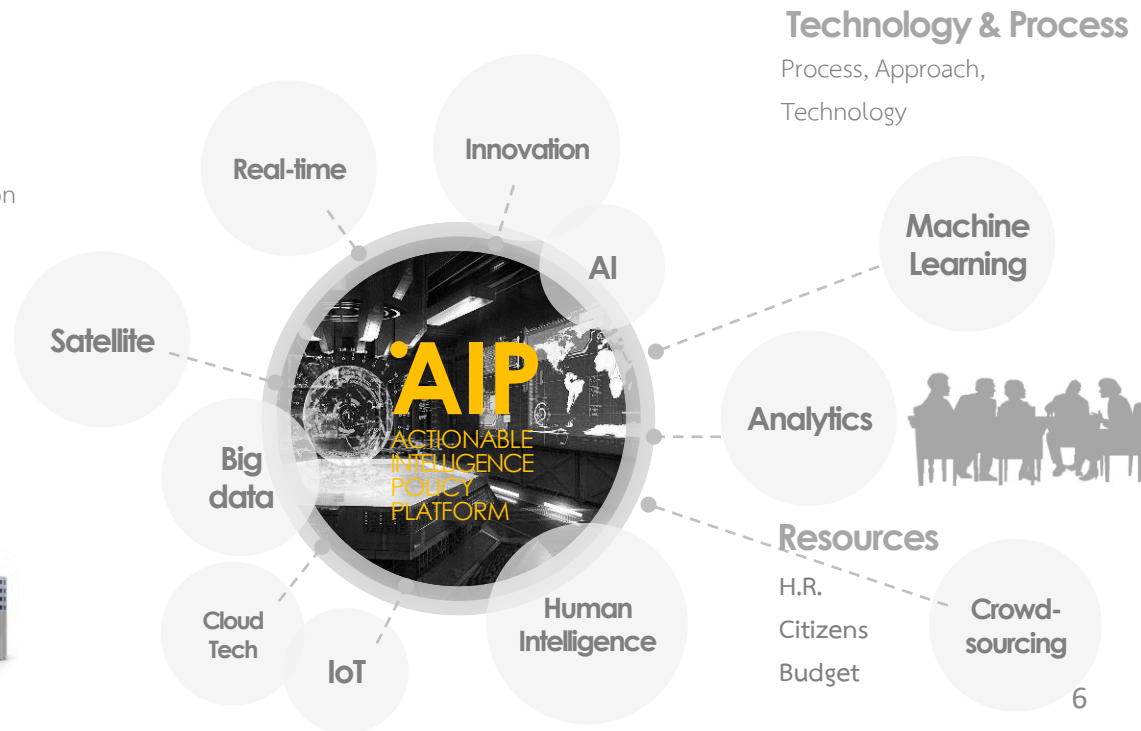
ACTIONABLE INTELLIGENCE POLICY

Establish policy to be driven by Space Technology and Geo-Informatics along with the use of
Actionable Intelligence Policy (AIP)

Institution
Policy, Measure, Mission,
Force, Duty, Project, and
Activity of related execution
agents, Participation,
Monitoring and Evaluation

Infrastructure & Data
Infrastructure,
Instruments, Tools, and
Data of each mission

Technology & Process
Process, Approach,
Technology

Real-time

Innovation

AI

Machine Learning

Satellite

Big data

Analytics

Cloud Tech

IoT

Human Intelligence

Resources
H.R.
Citizens
Budget

Crowd-sourcing

AIP
ACTIONABLE
INTELLIGENCE
POLICY
PLATFORM

6
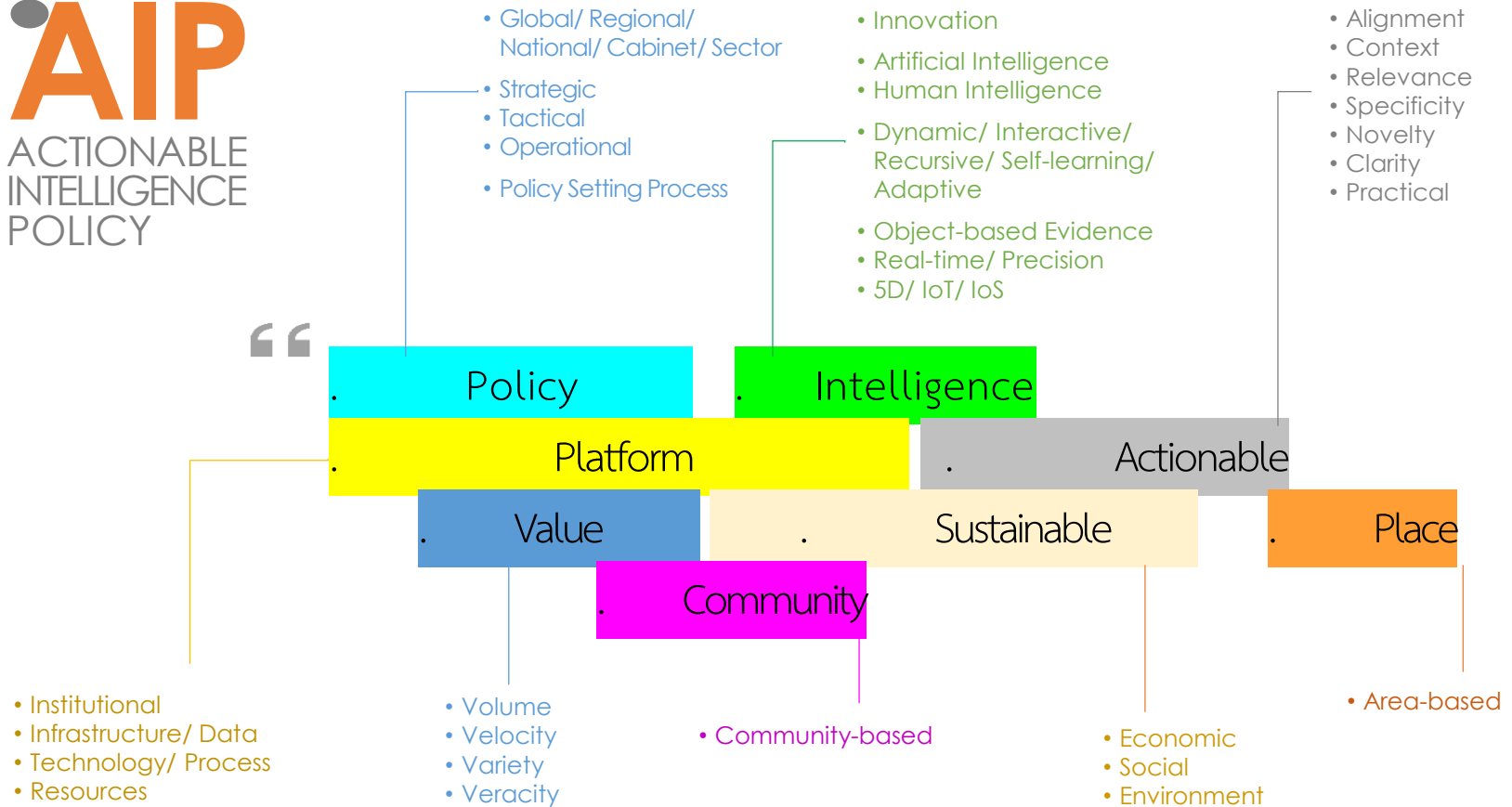
Actionable Intelligence Policy Ecosystem

- UN SDGs
- 20-Yr National Strategy
- 12th National Economic & Social Development Plan
- Cabinet Resolutions
- National Policy Committee

(Problem Identification)

Policy

Goals

E
S E
Sustainable Development

Spatial & Non-spatial
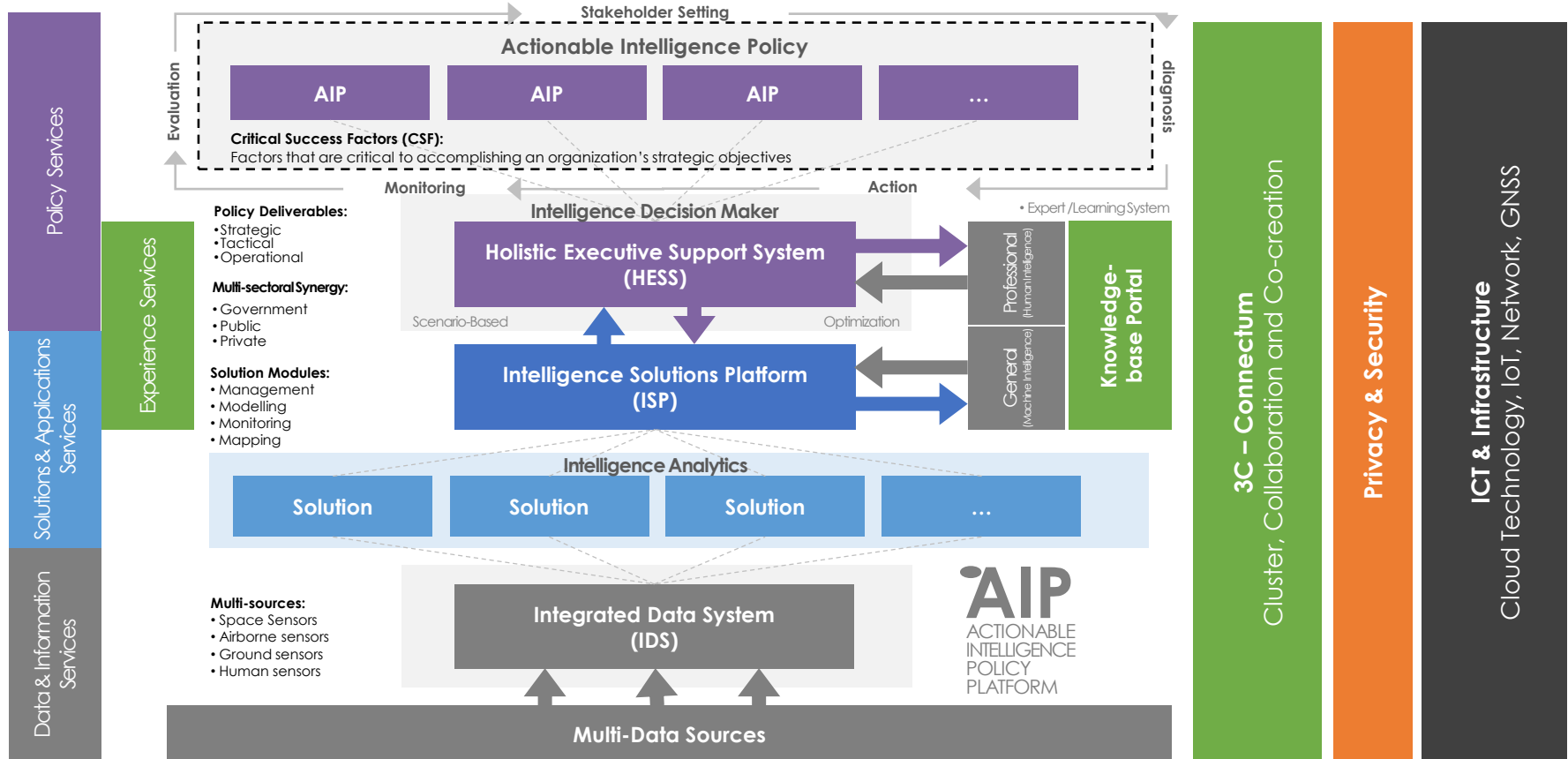
Multiple Big Data Sources
Satellite-based (e.g. THEOS-2, Constellation)
NSDI/FGDS
Crowdsourcing

❶ Agenda Setting

❶ Mapping

❷ Measurement

❹ Evaluation

4S
Policy Making Process

❷ Formulation

5M
Value Creation Mechanism

❸ Monitoring

6W

Insight

❸ **Action !**

Collaboration
Who (or By whom)

Co-Creation
Which way (or How)

3C

What | Where | When | Why
Cluster

Intelligence Policy

AIP
ACTIONABLE INTELLIGENCE POLICY

Feed back

❺ **Management**

Scenario & Forecasting

❹ **Modeling**
(Analytics)

Surveillance

❶ Objectives Definition

Cal/Val

❹ Simulation

SMCE

❷ Multi-criteria Selection

4V
(Volume, Velocity, Variety, Veracity)

Value delivery over place & people

❸ Optimization

2018.01.10