

Sentinel Asia Strategic Plan for the next 10 years



November 12, 2019 Steering Committee Secretariat & Co-Chairs

Vision of SA: Sentinel Asia Evolution Plan (Recommendation of APRSAF-21)

SA Step 3 (2015-2019) needs to be driven forward by:

1. Expanding Joint Activities

- Increase contribution of each participating organization; for example, to utilize existing programs/activities of participating organization,
- Collaborate with funding organizations (ADB, WB, JICA, etc.), to conduct Success Stories to address DRM/DRR activities by empowering communities,
- to collaborate with international initiatives (the International Charter, GEO, CEOS, etc.)

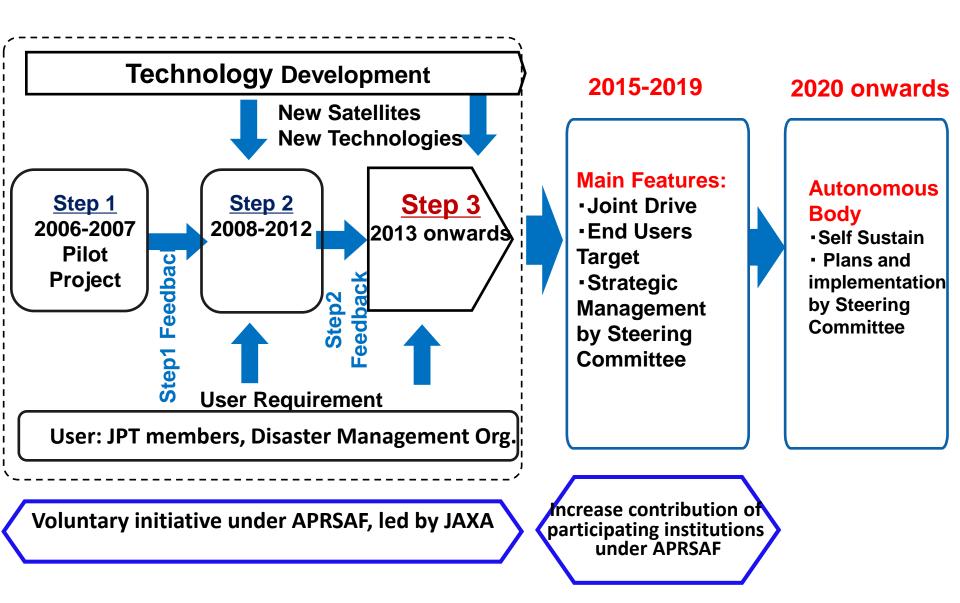
2. Enhance End User-Oriented Activities

- Introduce the product usage at community level and further increase the product usage at government level for DRM/DRR
- Establish country specific success stories to address needs of each country.

3. Strategic Management

- Establish a "Steering Committee" for collective and timely decision making, e.g., to discuss data policy, long-term strategy of SA etc.
- Provide opportunities to involve all space agencies and user agencies in strategic planning process

Sentinel Asia Evolution Plan



Concept of Sentinel Asia Step 3





Information delivering to personal terminals

Pre-disaster

Mitigation:

Community education

Preparedness:

Hazard map Early warning system





Earth observation satellites



Monitoring

Just after disaster Response: **Emergency observation**





Monitoring

Disaster information

Communication

satellites

Information/data

transmission

Post-disaster

Recovery:

Information sharing (Web-GIS)



Human network Capacity Building, Outreach

Implementation strategies to address the challenges of Sentinel Asia Step 3

- 1. Establishment of **Steering Committee**
- 2. Strengthen **cooperation** between disaster management organization (DMO) and space/GIS organization
- Evolution of the WGs activities to strengthen cooperation between DMO and space/GIS organizations to contribute to disaster preparedness, emergency disaster response and recovery
- 4. Emergency observation scenario considering **preparedness and early warning**, emergency response and recovery after disaster
- 5. Maximize utilization of performance of EOSs of DPN as well as to strengthen cooperation among DAN for rapid provision of analyzed products to end users
- 6. Improvement and active utilization of Sentinel Asia server system, WEB-portal and WINDS data transportation system and future cloud systems
- 7. Planning and implementation of "success story" by each WG with the cooperation of countries and/or the development support organizations
- 8. Trainings and capacity buildings for DAN and end users
- 9. Cooperation with **GPM/GSMaP**, **QZSS** and **MGA** (Multi-GNSS-Asia)
- 10. Maximize utilization of the WINDS's high speed internet data transportation at its terminal phase
- 11. Develop and utilize archive system of the Sentinel Asia observation data

Sentinel Operational Framework: Steering Committee

Asia Pacific Regional Space Agency Forum (APRSAF) Once a year Report: Plenary Session Joint Project Team Meeting (JPTM) Once a year **Decision-making** Report Wild Fire WG Steering Committee (SC) Tsunami WG **Strategic matters Operation:** Water related Disaster WG Face to face meetings Specific activities under JPTM Web meetings Sentinel Asia Framework

6" Joint Project Leam Weeting of Sentinel Asia, Bangkok,

The establishment and the role of Steering Committee

- ❖ Role of Steering Committee
 - The SC is a high-level body of Sentinel Asia to study, discuss and make decision about activities/issues for *sustainable and autonomous* operation of Sentinel Asia
- Steering Committee Members
 - SC members are primarily from the core members of JPTM (DPN, DAN, DRR community), and who have worked for the initiation of Sentinel Asia. Total number 10-15
- Secretariat of Steering Committee: JAXA (at the start)
- Operation of Steering Committee:
 - Coordinated by Co-Chairs invited from SC members Communication through e-mail, web-meeting, and face-toface meetings where possible

Steering Committee Meetings

1st SC Meeting: 13-15 October 2015 in Bangkok

2nd SC Meeting: 19-20 January 2017 in Bangkok

JPTM: 7th March Hanoi

3rd SC Meeting: 13 July 2017 (Tele.)

4th SC meeting: October 2017 (Tele.)

5th SC Meeting: 13-14 December 2017 in Bangkok

JPTM: 23-24 January 2018 in Taipei

6th SC Meeting: 3 March 2018 (Tele.)

7th SC Meeting: 12 June 2018 (Tele.)

8th SC Meeting: 04 October 2018 (Tele.)

JPTM: 1st-2nd November 2018 in Kobe

APRSAF-25: November 6-9 2018 in Singapore

9th SC Meeting: 29-30 January 2019 at GISTDA, Thailand

10th SC Meeting:1 July 2019 (Tele.)

11st SC Meeting:7 November 2019 (Tele.)

12nd SC Meeting: 21-22 January in 2020 at NRSC/ISRO, India.

Overview of the Strategic Plan

The Strategic Plan was targeted to capture inputs of all the Steering Committee members through discussion in January 2017 and subsequent web meetings. Attempt was made to address needs/gaps in all the components of SA to make an excellent decision making support system for regional, national and local DRR needs.

The plan for the next 10 years has started since 2018.

Following five areas were identified as the main themes based on the discussions;

- 1. Satellite Data Provisions and Systems
- 2. Value Added Product (VAP)
- 3. End-user Enhancement
- 4. Step-3 Activities (Complete DRR cycle)
- 5. Communication, Collaboration and Cooperation

Strategic Plan of Sentinel Asia

The Strategic Plan was discussed in the JPTM 2018 in Awaji, and endorsed by the members.



Sentinel Asia Strategic Plan: 2017 – 2027.

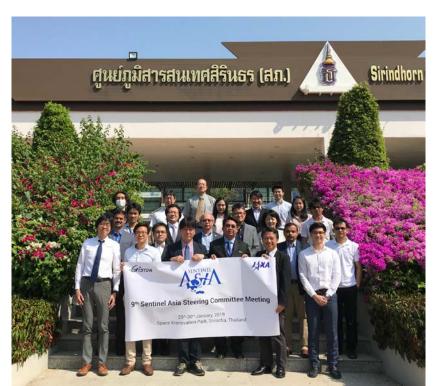


Sentinel Asia Joint Team Project Meeting in Awaji, 2018.

Participants of Siracha meeting

9th Steering Committee(SC) of Sentinel Asia was held at GISTDA Space Krenovation Park in January, 2019, chaired by Mr. K. Suzuki.

21 participants, including 12 members, observers and Sec members discussed the strategic plan status by leading agencies.



9th Steering Committee meeting at GISTDA Space Krenovation Park in 2019.

Overview of the Strategic Plan

The Strategic Plan is to capture inputs of all the Steering Committee members through discussions in January 2017 and subsequent web meetings. Attempt was made to address needs/gaps in all the components of SA to make an excellent decision making support system for regional, national and local DRR operations

Following five areas were identified as the main themes based on the discussions;

- 1. Satellite Data Provisions and Systems
- 2. Value Added Product (VAP)
- End-user Enhancement
- 4. Step-3 Activities (Complete DRR cycle)
- 5. Communication, Collaboration and Cooperation

More detail is described in JPTM--2018.

9th SC Meeting in 2019.

Review: SA Long Term Strategy Development

Discussion on how to realize SA Step3

Partnership with Private Sector

Review: SA Long Term Strategy Development

- JAXA: introduction of new system development with GISTDA.
- YU: progress report on Value Added Product(VAP).
- ADRC: introduction of SA's success story in AMCDRR and SA's achievement in the Global Assessment 2019, UNDRR.
- IWMI and GIC/AIT: progress report on item VI, Linking Step 3 to Sendai Framework for DRR incl.

Discussion on how to realize SA Step3

- Ideas for contributing entire disaster management cycle were proposed.
- JPTM as an occasion for a training of tools and software.
- The next JPTM in Thailand would be a good training opportunity for the relevant members, provided OPTEMIS be fully operated in 2019.

The training in JPTM-2019 is organized based on discussion in the SC at GISTDA.

Partnership with Private Sector

 SA Sec proposed to discuss partnership with private sector, ex. ESRI ArcGIS online service

 DMOs would have effective operation thanks to the contribution from the private sector

 Need more discussion on this issue, taking autonomous operation of SA into account