

Introduction of Sentinel Asia Steering Committee Activities



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

SA Step 3 (2015-2019) need 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 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.
- 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

The establishment and the role of Steering Committee

❖ Rolls of Steering Committee

The SC is a high-level body of Sentinel Asia to Study, Discuss and Take Decision about activities/issues for ***sustainable and autonomous*** operation of Sentinel Asia

❖ Steering Committee Members

SC members are basically 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-to-face 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- conference)

4th SC meeting: October 2017

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

Sentinel Asia Strategic Plan

- ❖ The strategic plan was proposed by the Sentinel Asia Steering Committee based on the discussion at the 2nd Steering Committee meeting in Bangkok, January 2017.
- ❖ The expected goal of the strategic plan is to develop activities, procedures, and collaboration for the improvements of SA to achieve the vision of Sentinel Asia for the next 10 years.
- ❖ The Strategic Plan is discussed and reviewed by the comments, advices and discussion from the members of Steering Committee and presented at APRSAF-24 in November 2017 receiving approval.



I. Satellite Data Provisions and Systems

End-users are requesting improvement of the system to enhance its services, for example, rapid data provision immediately after observation to use products much effectively in their operation. New data policy and data sharing guidelines should be in place to satisfy various user needs. These data/sharing policies need to be established in parallel to the development of an improved new system to make use of a system effectively addressing user needs.

- Improvement for the Emergency Observation Request (**EOR**) System
Depicting User Needs
- Consider using Observation Opportunities by OPTEMIS of GISTDA
- Consider sharing plans of Observations, Data Provisions, Data Analysis Plan by DAN and Products Availability Plan
- Improvements to satellite data and VAP sharing using Data Services
- Develop Policy Guidelines and agreements with DPN for pre/post satellite data usage, covering all the activities under Sentinel Asia

II. Value Added Product (VAP)

The Steering Committee proposed the following items for the improvement of Sentinel Asia operation based on their abundant experience.

- **Develop Standard Operation Procedure (SOP)** for each disaster type
- Explore the potential use of data analysis through a university network to augment current DAN and in-situ data collection
- Promote in-situ data collection through GNSS system
- **Standardization of VAP to avoid** user confusion; providing products in many different formats and also ambiguity in information content make the end-user perplex of the usage
- Develop a pre-disaster image repository and access to DAN members to use in VAP creation to reduce analysis time and improve accuracy
- Promote researches on urban flood mapping use of SAR
- Develop and deliver VAPs in time for end-user requirements
- Review current data policies on emergency observation data as well as archived data and use of data for R&D
- Identify the potential use of VAPs in disaster; based on type of a disaster, type of information format (raster/vector), type of information need, deliverable time frame, etc.

III. End User Enhancement

It is important to enhance the capacity of end-users for effective contribution for disaster relief operations in each user agency through Sentinel Asia. Sentinel Asia system has been evolving and the system is yet to provide all its potentials to effective end-use operations, specifically developing end-users application abilities.

- Train DRR agencies about activating the Sentinel Asia
- Empower local disaster management agencies by improving knowledge of space-based applications and simple tools
- Assist with easy and open source tools for promoting better usage of VAPs and facilitating VAP usage in local levels including evidence based decision making
- Create a reporting mechanism to report the ways VAPs are applied for DRR operations and feedback their needs, helping to identify the gaps limiting the effective use of VAP
- Develop an e-learning system for end-user training, capacity building and fostering space-based information culture .
- Develop long-term space-based application through university network
- Use Sentinel Asia Website to provide e-tools, documents on case studies, research, applications and etc.

IV. Step-3 Activities (for covering entire DRR cycle)

The Sendai Framework for Disaster Risk Reduction 2015-2030 was adopted in Sendai by global leaders with specific suggestion to use more and more space based data and GIS for Risk identification and for risk mitigation and reduction. Therefore, Sentinel Asia could consider the commitment of the initiative to the Sendai Framework by enhancing Sentinel Asia capacities for the risk assessment and establishing disaster prediction/alert systems for flooding, landslide, wildfire and tsunami and other necessary disasters using satellite images.

- Identify risk elements using Sentinel Asia Data (mapping risk elements)
- Promote disaster monitoring, post disaster monitoring and damage assessment with Sentinel Asia data
- Promote knowledge, experience and practical knowledge development through networks; user, DAN and university network
- Align with Sendai Framework to link Sentinel Asia with global forum
- Use Sentinel Asia Working Group activities to develop necessary support for Sentinel Asia activities to cover entire disaster phase.

V. Communication, collaboration and cooperation

In order to promote balanced activities of Sentinel Asia, alliance and communications among disaster management organizations, Data Provider Nodes and Data Analysis Nodes is essential. It needs to improve the communication with members in Sentinel Asia through many other means. Steering Committee discussed some ideas to improve the communication as given below.

- Organize regular meeting where possible combining various other meeting opportunities;
- Consider developing annual reports of achievements and share through websites and user forums
- Rotate major activities among the members; organizing JPTM meetings, organizing Steering Committee meetings, and other similar main functions;
- Develop various success stories and share
- Promote coordination mechanism of DANs to improve product generation and sharing
- Publish and circulate bulletin to policy makers and share in the region

Current Status of The Plan

- Currently the first draft of long-term plan is drafted,
- Action items identified during the discussions are summarized and shared with SC members to identify possible contribution of partners and the time frame of achieving them,
- Action plan was summarized into 5 main themes and supported by 5 leading agencies with their voluntary works;

I. Satellite Data Provisions and Systems: **JAXA**

II. Value Added Product (VAP): **Yamaguchi University**

III. End-user Enhancement: **GIC-AIT**

IV. Step-3 Activities (Complete DRR cycle): **Mr. Koji Suzuki**

V. Communication, Collaboration and Cooperation: **ADRC**

And Concept Paper on SDG, Sendai-framework and the relationship/benefit/usage of Sentinel Asia is being prepared by Dr. Giriraj and Dr. Manzul .

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Session 2: Sentinel Asia Strategic Plan for the next 10 Years

Each of the 5 agencies will present summarizing;
area of contribution to SA,
expected output and contribution to SA,
activities and Schedule
expectation from JPTM and SA users

Thank You