



Trend of Emergency Observation Requests

**6th Joint Project Team Meeting for Sentinel Asia STEP3 (JPTM2018) ,
Awaji Island, Hyogo, Japan**

1-2, November 2018

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Asian Disaster Reduction Center (ADRC)

Sentinel Asia and its Contributions



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- Sentinel Asia is a voluntary initiative between **space agencies** and **disaster management agencies** to apply Remote Sensing and Web-GIS technologies to assist disaster management in the Asia-Pacific region.
- Sentinel Asia aims to:
 - ✓ Improve safety in society by ICT and space technology
 - ✓ Improve speed and accuracy of disaster preparedness and early warning
 - ✓ Minimize the number of victims and social/economic losses.

Members of Sentinel Asia



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- *Sentinel Asia organizes Joint Project Team (JPT), and JPT consists of **108 organizations including 92 agencies from 28 countries/region and 16 international organizations.** (as of September 2018)*
- *Sentinel Asia cooperates with ADRC and their members closely, and they are also member of Sentinel Asia as well.*

JPT
+
members



* DMO in Turkey was joined as ADRC member in Oct 2018

Framework of Sentinel Asia



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Space Community

APRSAF

Satellite Image

Promotion of Utilization

Capacity Building

SENTINEL ASIA

92 organizations from 28 countries & regions and 16 international organizations
In total: 108 organizations

Disaster Reduction Community

ADRC

**Member Countries
(31 member countries)**

Disaster Information

Utilization (User)

Joint Project Team (JPT)

International Community

**UNESCAP, UNOOSA
ASEAN, AIT and
International Disaster Charter
etc.**

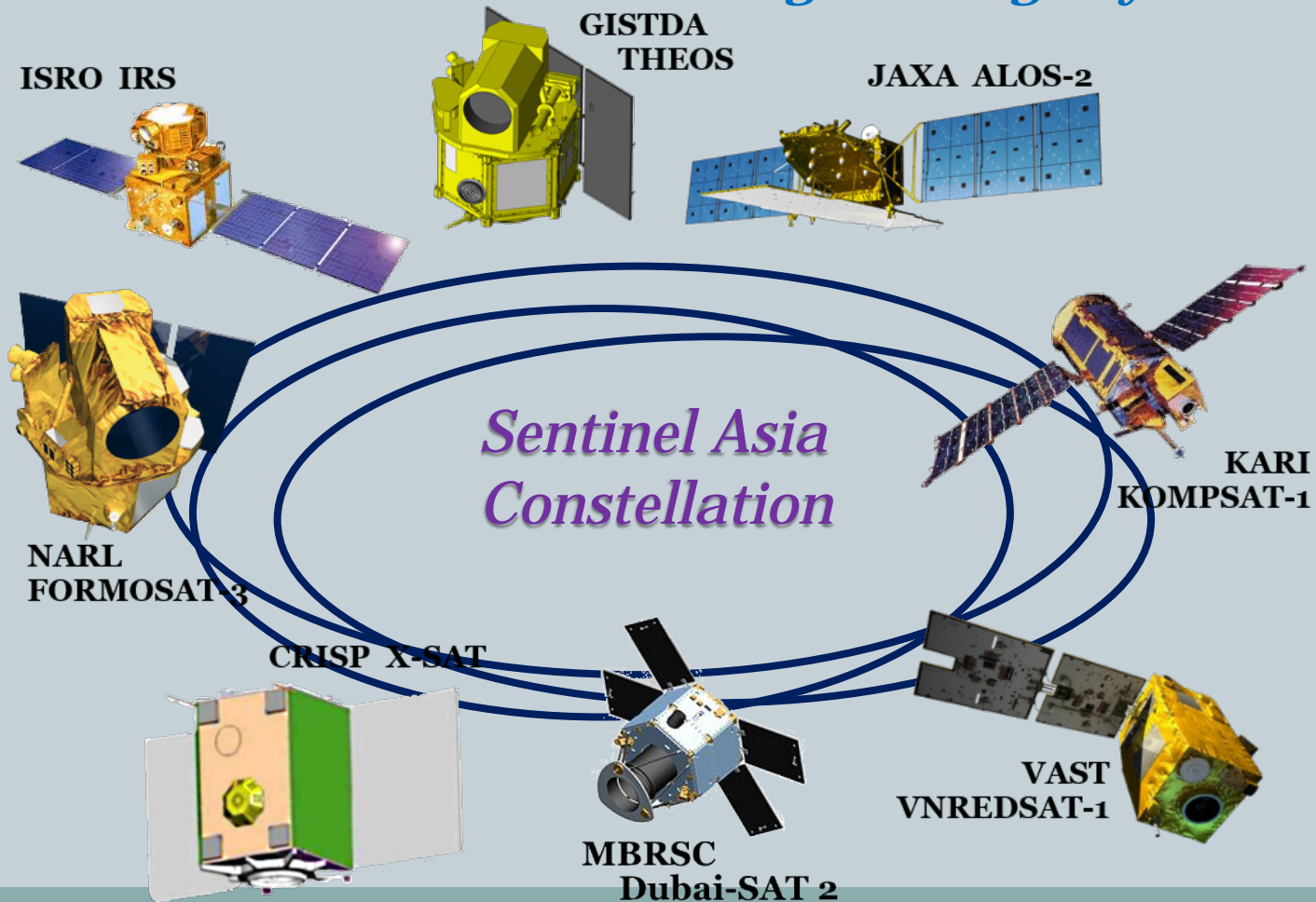
International Cooperation

Data Provider Node (DPN)



5

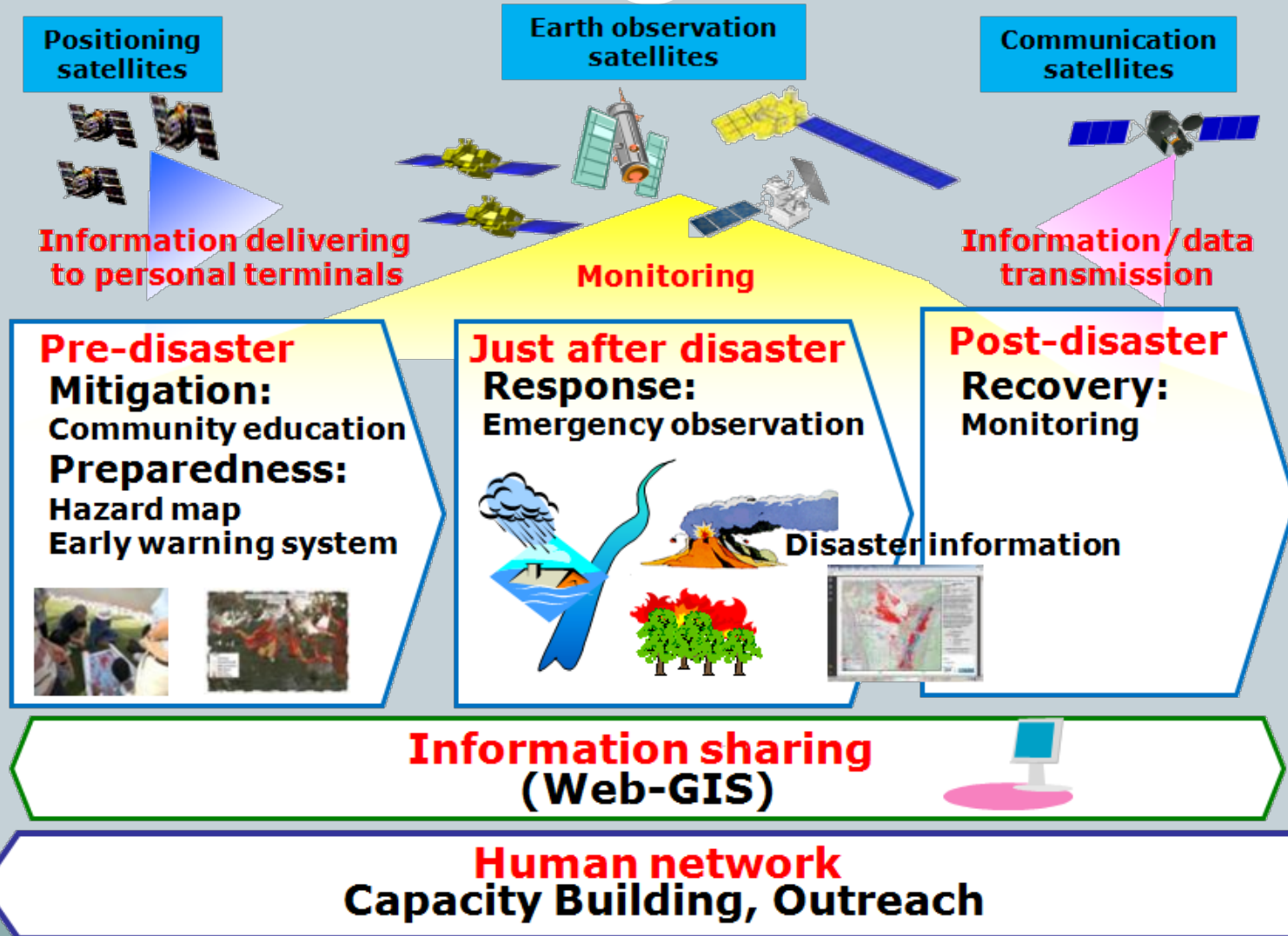
Sentinel Asia Constellation contributing to Emergency Observation



Concept of Sentinel Asia Step 3



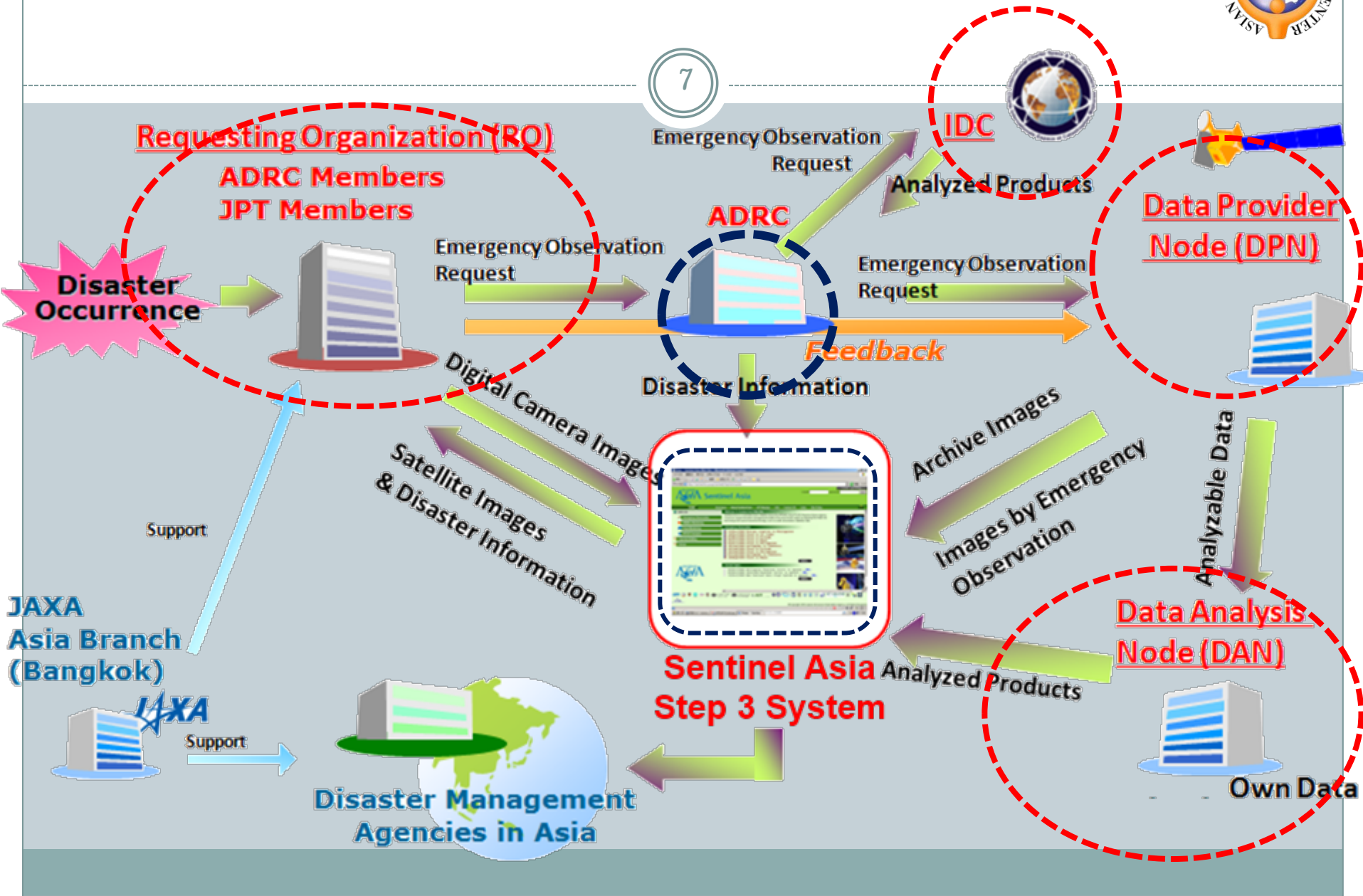
6



Emergency Observation Request



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Latest EOR Form (updated as of Jan 2018)



- The default method for the initiation of an EOR for Request Organization(RO) is to complete the online form at:

<https://sentinel.tksc.jaxa.jp/sentinel2/libraryControl.jsp>

A screenshot of the Sentinel Asia website interface. The page has a green header with the "Sentinel Asia" logo and navigation links: HOME, Announce, About Sentinel Asia, JPT Member, FAQ, Contact US, and Links. A left sidebar contains menu items: WEB GIS, Emergency Observation, Wildfire Monitoring, Flood Monitoring, MTSAT Imagery, Capacity Building, and Library. The "Library" item is highlighted with a red dashed border. The main content area is titled "Document and Archives" and lists two items: "Emergency Observation Request" (with a "Request form" link dated [16 Jan 2018]) and "Request for proposal concerning utilization in Sentinel Asia Step2 system" (with "Request for Proposal" and "Application form" links dated [05 Aug 2009]). The "Emergency Observation Request" item is also highlighted with a red dashed border.

Latest EOR Form (updated as of Jan 2018)



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SENTINEL ASIA EMERGENCY OBSERVATION REQUEST (EOR) FORM (1/2)	
Requester (your name and organization)	
Your name	
Your organization	Membership: <input type="checkbox"/> JPT member <input type="checkbox"/> ADRC member
Your phone	
Your cellular phone	
Your fax	
Your E-mail	
Other E-mail(s) for notification	
Contact Person	
※Fill in below in case different from the Requester	
Name	
Organization	
Phone	
Cellular phone	
E-mail	
Other E-mail(s) for notification	
Disaster Management Organization	
ADRC is the first point of contact in the Sentinel Asia EOR process. Local information by Disaster Management Organizations (DMOs) is quite essential to undertake the first evaluation of an EOR and judges the Sentinel Asia framework is suitable to assist. To proceed the EOR process, ADRC may contact with DMOs. Please provide following information.	
Organization Name	
E-mail	
Other relevant information	
Planned end-user of the observed information	
Please provide us information, to the best of your knowledge, as to which organization (e.g. Disaster Management Organization), agency, or community will utilize the satellite image. ADRC may ask some questions to concerned organization, if needed. <input type="checkbox"/> The information/image shall be used only for our organization Please state your role in the organization during disaster response (monitoring and warning) <input type="checkbox"/> The information will be provided to other relevant organization/s. Please fill in the name of the organization ()	
Purpose of the Request	
How does your organization intend to use the satellite data?	
<input type="checkbox"/> Emergency Response (<input type="checkbox"/> Situation confirmation, <input type="checkbox"/> Rescue activity, <input type="checkbox"/> Evacuation activity, <input type="checkbox"/> Others[])	
<input type="checkbox"/> Damage and Loss Assessment(DALA) <input type="checkbox"/> Post Disaster Needs Assessment(PDNA) <input type="checkbox"/> Recovery Planning <input type="checkbox"/> Detection of an advance warning of hazardous situation <input type="checkbox"/> Others()	
Type of Disaster	
<input type="checkbox"/> Flood <input type="checkbox"/> Flash Flood <input type="checkbox"/> Landslide <input type="checkbox"/> Storm <input type="checkbox"/> Forest fire <input type="checkbox"/> Volcano <input type="checkbox"/> Earthquake <input type="checkbox"/> Ice Hazard <input type="checkbox"/> Tsunami <input type="checkbox"/> Oil Spill <input type="checkbox"/> Others()	

Analysis requirement for damages		
<input type="checkbox"/> Building Damage <input type="checkbox"/> Infra. Damage <input type="checkbox"/> Lahar <input type="checkbox"/> Others()		
Request for Data Analysis Node (DAN) (Multiple Choice Allowed)		
<input type="checkbox"/> Ourselves <input type="checkbox"/> DANs in own country <input type="checkbox"/> P-DAN <input type="checkbox"/> OTHERS () <input type="checkbox"/> No request		
Time limit for information to be uploaded on the SA WEB-portal (from date of SA activation)		
<input type="checkbox"/> Less than 24 hours <input type="checkbox"/> Not exceed 4 days <input type="checkbox"/> Not exceed 10 days <input type="checkbox"/> Others: ※Based on the expected time limit, there might be cases where the delivery of information will be difficult to meet or the product to be delivered is assessed to be not enough at a given time. In such cases, we may not trigger Sentinel Asia.		
Date of Occurrence		
Date and time(UTC)		
Details, news source		
Place of occurrence		
Country		
Request area		
Name of a place		
Please select one (If there are some AOIs, add AOI in order of priority.)	<input type="checkbox"/> Circular zone	
	<input type="checkbox"/> Rectangular zone	
Coordinates of centre point		
Latitude : []° []' []" N Longitude: []° []' []" E Radius : [] km		
Coordinates of corners		
Lat.: []° []' []" N Lon.: []° []' []" E Lat.: []° []' []" N Lon.: []° []' []" E		
Necessity for Additional Observation		
<input type="checkbox"/> Necessary <input type="checkbox"/> Not necessary <input type="checkbox"/> Don't know		
<i>The requesting organization (RO) may further ask whether to escalate this EOR to International Charter for Space and Major Disasters (ICD) when secretariat confirms its appropriateness. If RO wishes to escalate to IDC, please check the box on the right.</i>		
<table border="1"> <tr> <td>Escalate</td> </tr> </table>		Escalate
Escalate		
Please send the completed form to ADRC (Fax) +81-78-262-5546 or (E-mail) saraquest@adrc.asia		
Request ID (To be filled by ADRC)		

Sentinel Asia WEB



- WEB GIS
- Emergency Observation
- Wildfire Monitoring
- Flood Monitoring
- MTSAT Imagery
- Capacity Building
- Library
- Emergency Obs. Request

Emergency Obs. ID	Status	Occurrence Date (UTC)	Country	Disaster Type	Organ
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Login
(need your own ID and Password)

Emergency Obs. ID:

Occurrence Date (UTC): From To

Organization:

Country:

Status:

Disaster Type:

GLIDE Number:

Reference Register Modify Delete

Emergency Obs. Request Information

Emergency Obs. ID: Same Request:

Disaster Type: Country:

Occurrence Date (UTC): Date Time GLIDE Number:

ADRC URL:

User ID: Name:

Organization: Phone:

Cellular Phone: Fax Number:

E-Mail 1: E-Mail 2:

E-Mail 3: E-Mail 4:

E-Mail 5:

Observation Term (UTC): From: To:

Emergency Obs. Request

Location

Rectangular Upper-Left(deg): (,) Upper-Right(deg): (,)
Lower-Left(deg): (,) Lower-Right(deg): (,)

Round Center(deg): (,) Radius: [km]

input the information of the EOR sheet

Escalation to the Charter, Space and Major Disasters

Request to escalate this EO to the Charter

Disaster situation

Register

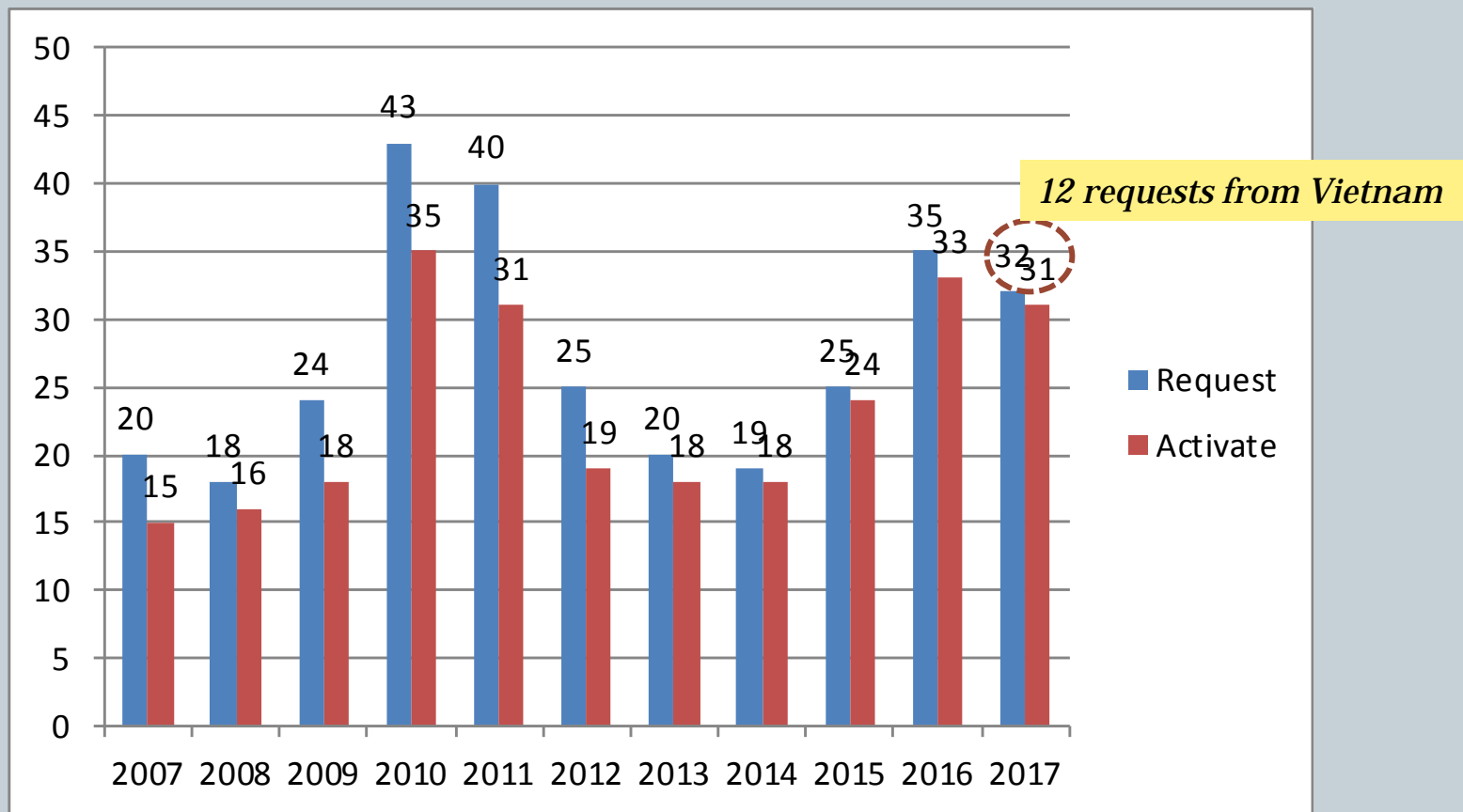
Comment



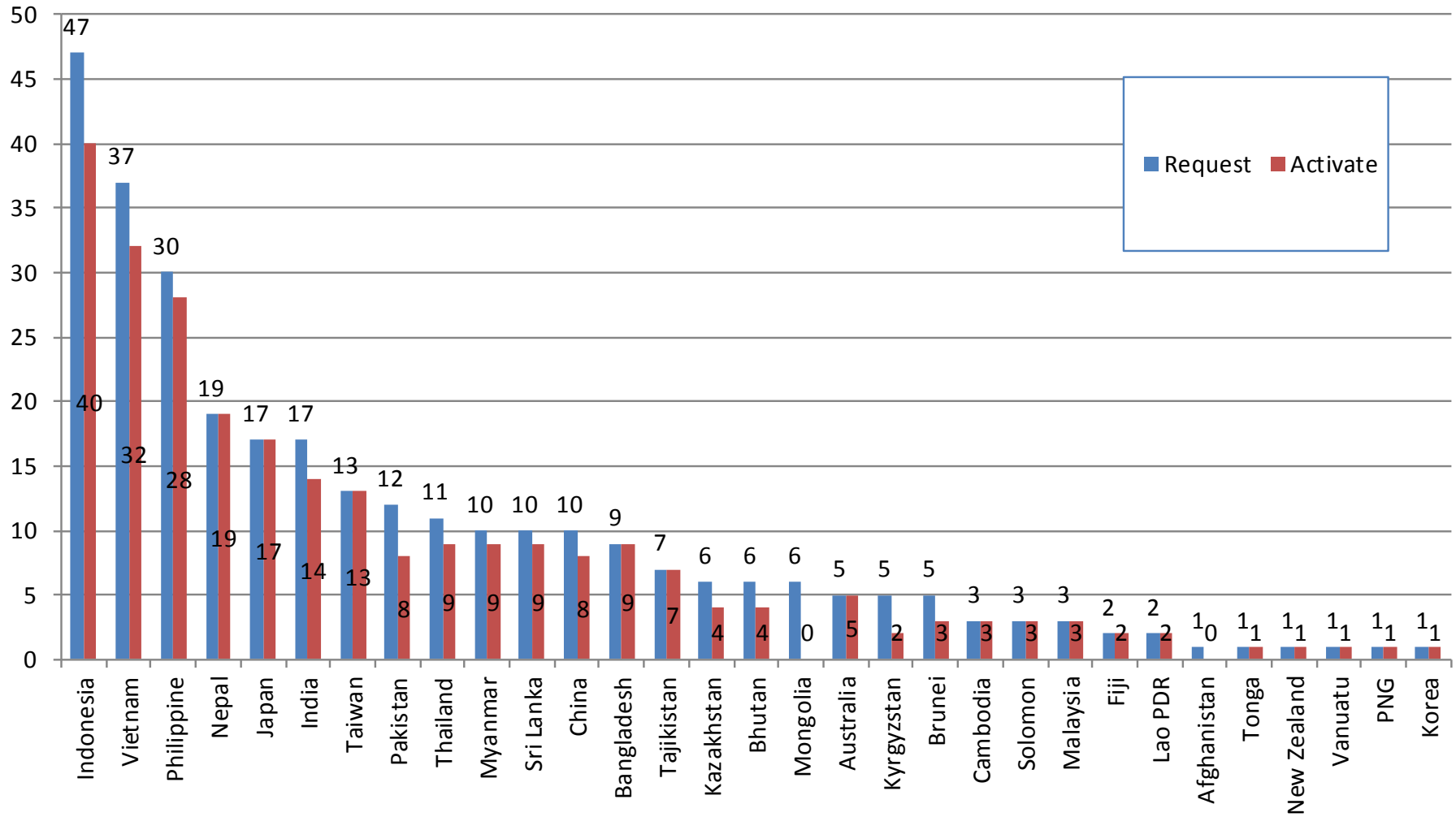
Number of EOR (2007-2017) *as of 31 Dec 2017



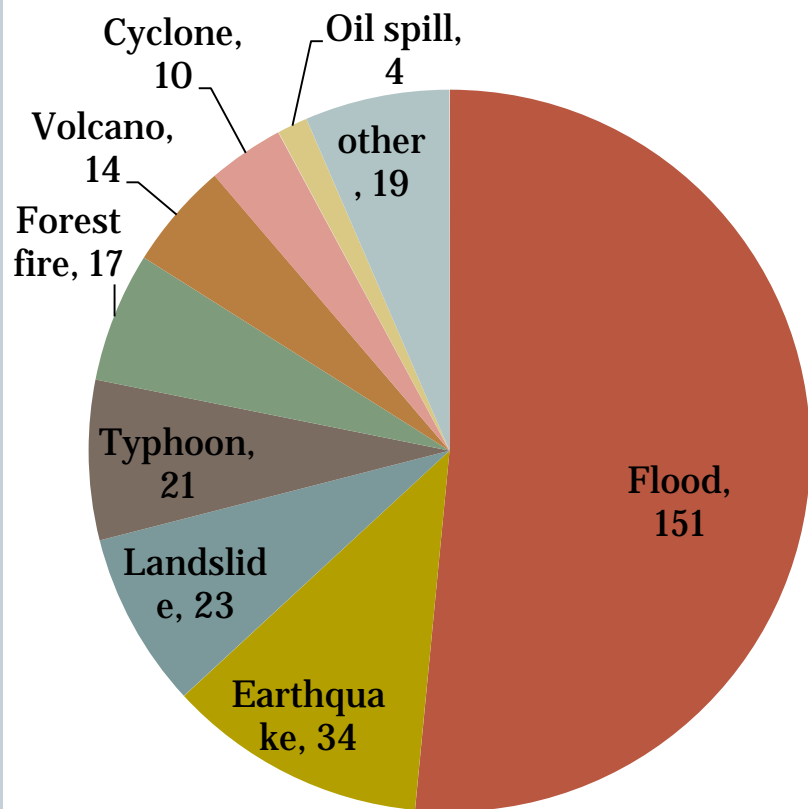
Sentinel Asia accepted 301 requests, 258 were activated.



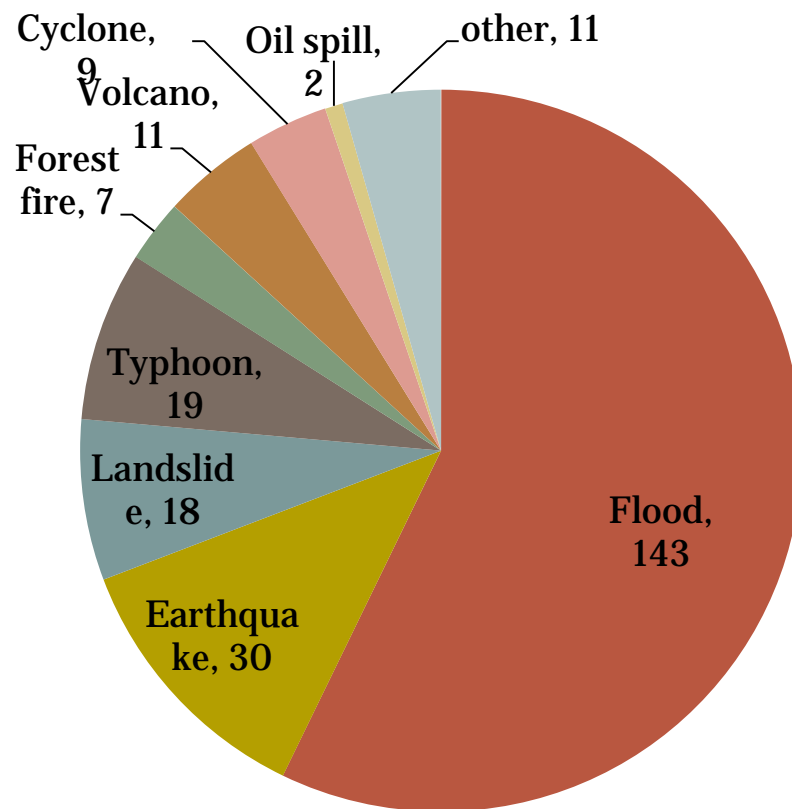
The status of implementation for each country/region (2007-2017) *as of 31 Dec 2017



Type of Disaster (2007-2017) *as of 31 Oct 2017

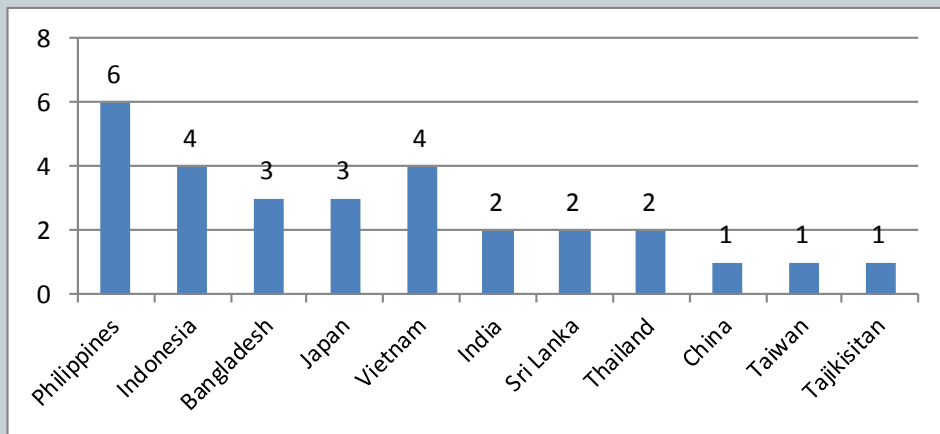
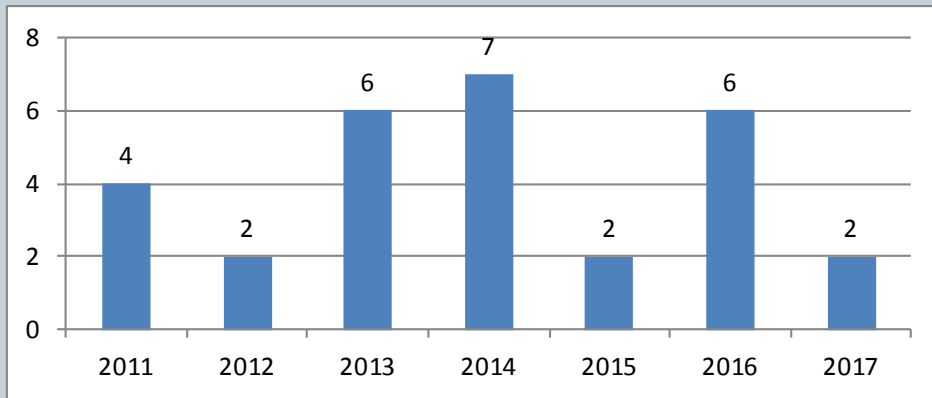


Request

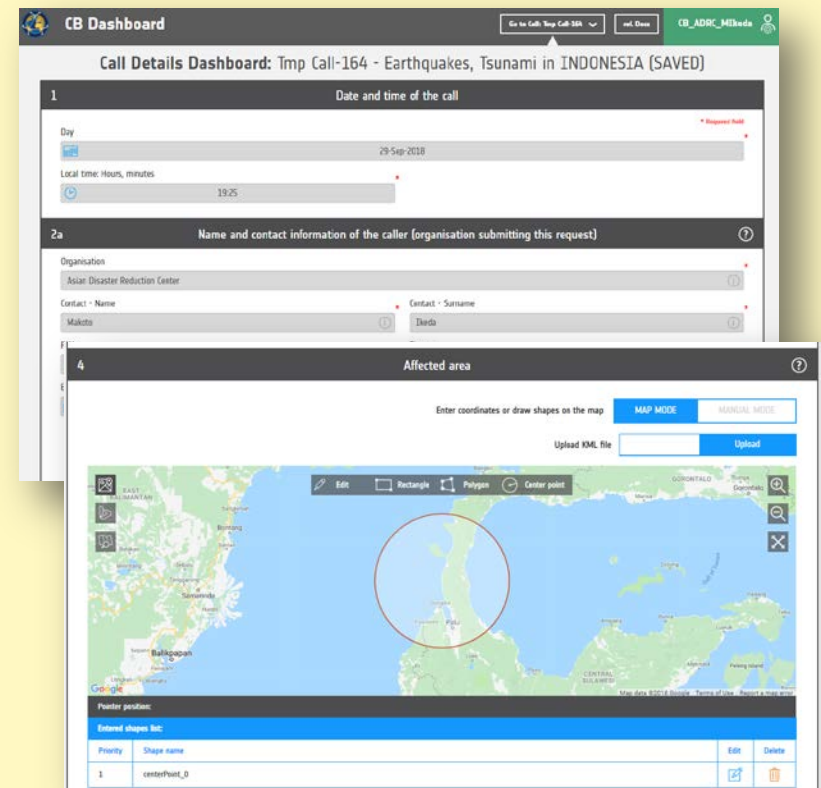


Activate

Number of Escalation to IDC (2007-2017) *as of 31 Dec 2017



ADRC already had 5 IDC escalations in 2018. It is easy to access for escalation by using new system “COS-2”.



Strengthen network between space agency and disaster management organization

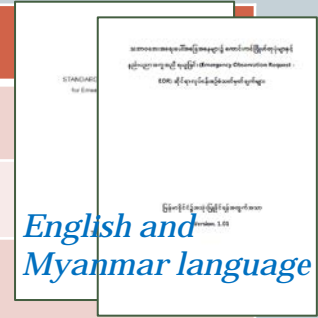


In Myanmar

Date: 30 January 2018

Venue: Horizon Lake View Resort

Participants: 39
(RRD, DMH, ADPC, MIMU, One map Myanmar, etc.)



English and Myanmar language



In Thailand

Date: 22 February 2018

Venue: Wayupak Convention Center

Participants: 21
(DDPM, GISTDA, MOI, RID, DWR, RFD, ADPC, etc.)



English and Thai language



In Vietnam

Date: 19-20 March 2018

Venue: STI building

Participants: 36
(STI, MONRE, DMPTC, etc.)



English and Vietnam language

ADRC promotes disaster risk reduction through multi-national/multi-stakeholder/multi-lateral cooperation in the Asian region.



<http://www.adrc.asia>

Thank you very much