THEMATIC SESSION

Facilitating Recovery and Inclusion through Satellite EO Technology

May 14th, 2019 / 16:00 / Room 18

<table>
<thead>
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<th>Organizers</th>
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<tr>
<td>Hélène de Boissezon (CNES), Co-lead, CEOS Haiti Recovery Observatory and Generic Recovery Observatory ad hoc Team</td>
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<td>Mare Lo (GFDRR), Co-lead, Generic Recovery Observatory ad hoc Team</td>
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<th>Context</th>
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<td>It is critical to better understand how modern technology may contribute to resilient recovery as a critical step towards disaster risk reduction, including open access Earth Observation (EO) satellite systems and commercial platforms.</td>
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Despite being an impressive tool for recovery, accessing and transforming satellite EO data into relevant information is challenging, and applying it to increase inclusion in the recovery process, is yet another challenge. Satellite agencies have long been active in relation to early warning and response to disasters. The International Charter Space and Major Disaster was created two decades ago, dedicated to response phase. The Charter is regularly activated by authorized users in a range of countries around the world to access satellite data and value-added products in the immediate aftermath of disasters, typically as many as 50 times a year. Other initiatives in support to response, such as Sentinel-Asia (Jaxa), Copernicus Emergency (from European Union) and ARIA (NASA), have arisen later.

Satellites alone cannot improve recovery. The data collected must be converted to exploitable information, and then integrated into existing decision and management processes. These unique data offer a strong complementarity information source to those habitually brought to bear, but this benefit can only be enjoyed if data are easily collected in a timely fashion. Overcoming the hurdles and challenges of data access is a necessary corollary to data integration on the recovery planning and monitoring process.

Experiences in applying EO satellites to recovery issues offer a number of lessons learned, and permit the identification of challenges to be addressed as we go forward. The benefit to recovery from use of satellite EO is present at multiple levels, whether only a small amount of data is used, or whether a significant effort is made to integrate satellite data into the full recovery process. More work is required to determine where the most appropriate balance between cost and benefit is achieved, and this balance may be different according to different users or in different disaster situations. Indeed, in considering these investments, one must necessarily address capacity building issues, which are critical to long-term success and also raise inclusion issues. Importantly, the use of satellite observations for disaster risk reduction, preparedness and early warning is a critical link to identify priority actions for response and recovery. Such integration of satellite EO technology in the full spectrum of disaster risk management acts as a multiplier for the benefits from its use. For example, satellite EO technology can generate data and apply analytics to inform hazard and vulnerability mapping, scenario building, contingency planning, simulation models on disaster impact, among others; this represent critical information for early action for response and disaster recovery.
### Session Objectives and expected Outcomes

The session will have three objectives:

1. Increasing awareness on how satellite imagery has been used in the past to scale up inclusion in the recovery process;
2. Advocating for the use of satellite EO to enable inclusive recovery efforts;
3. Discussing how the use of technology can be improved to support recovery planning and monitoring.

### Key elements for the discussion

The session aims to address the following questions:

- What are the main benefits of using satellite EO for recovery?
- How has satellite imagery been used to ensure inclusion of vulnerable groups in the recovery planning and monitoring?
- How can we increase the use of EO, in order to apply the full range of EO data to recovery challenges?
- What can be expected in the future in terms of technological innovations that will facilitate recovery monitoring?
- Is there a different approach in the use of satellite EO for major disasters than for recurring or protracted crisis?
- How can satellite EO be used to better prepare for disaster recovery? How can inclusive recovery be advanced using these technologies?
- How can early action support prioritization of response and reduce the impact on vulnerable populations?

### Speakers

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<tr>
<th>SPEAKER</th>
<th>Title</th>
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<tr>
<td>Hélène de Boissezon</td>
<td>Co-chair, Generic Recovery Observatory ad hoc Team</td>
<td>CEOS/CNES</td>
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<tr>
<td>Boby Piard</td>
<td>Director General CNIGS, Co-chair Haiti RO</td>
<td>Centre national d’information géospatiale (CNIGS), Haiti</td>
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<tr>
<td>Einar Bjorgo</td>
<td>Manager</td>
<td>UNOSAT</td>
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**Moderator: Andrew Eddy**  
President, Athena Global, Secretary Haiti RO

### Discussion agenda and structure

- **Opening Remarks from the Chair**  
  00:00 min
- **Presentation of panellists by moderator**  
  00:03 min
- **Panelist speech #1**  
  00:05 min
- **Panelist speech #2**  
  00:20 min
- **Panelist speech #3**  
  00:35 min
- **Moderated panel discussion**  
  00:50 min
- **Session Ends**  
  00:90 min

### Expected number of participants

80

### Technical Equipment Required

AV system (Video projector, screen, sound, computer, lapel microphones), Panel set-up