



## Summary of DATA Expert Group 2<sup>nd</sup> Meeting

September 29-October 2, 2013  
Columbia, South Carolina

The Second Expert Group Meeting was held September 29-October 2, 2013 in Columbia, South Carolina, USA. The meeting was hosted by the ICoE-VARM (Vulnerability and Resilience Metrics) at the Hazards & Vulnerability Research Institute at the University of South Carolina.

### Attendees:

Susana Adamo, CIESIN, Earth Institute, Columbia University, New York City, NY USA  
Regina Below, EM-DAT, Centre for Research on the Epidemiology of Disasters (CRED), University of Louvain, Brussels, Belgium  
Lucia Bevere, Sigma, SwissRe, Zurich, Switzerland  
Susan Cutter, ICoE-VARM, University of South Carolina, Columbia, SC USA  
Daniele Ehrlich, EU Joint Research Centre, Ispra, Italy  
Jan Eichner, NatCatSERVICE, MunichRe, Munich, Germany  
Julio Serje, DesInventar, UNISDR, Geneva, Switzerland  
Carlos Villacis, UNDP, Geneva, Switzerland  
Adam Smith, National Climatic Data Center/NOAA, Asheville, NC USA  
Wei-Sen Li, National S&T Center for Disaster for Disaster Reduction, Taipei, Taiwan  
Melanie Gall, SHELDUS, University of South Carolina, Columbia, SC USA

### Day 1 September 29, 2013

Early arrival participants were taken on an afternoon excursion to the Congaree National Park, located thirty minutes southeast of Columbia. The National Park contains some the largest tracts of old growth bottomland hardwood forests left in the United States. Later that evening, participants enjoyed a reception and dinner hosted by the Dean of the College of Arts and Sciences, University of South Carolina.

### Day 2 September 30, 2013

The morning session began with brief overviews of the existing databases by participants (Annex 1). The afternoon session was devoted entirely to discussing improvements of the existing natural hazards peril classification scheme (Below et al. 2009) to accommodate different databases and user

needs. The seeming inflexibility of the schema that only allowed for a one-to-one correspondence (general to specific) between the family, main event, and peril was addressed, so the option for a many to one correspondence (specific to general) was included. For example for locally-derived loss data and sub-national databases (versus global data sets), data are easier to classify by a specific peril or multiple perils first and then aggregated to the main event and family categories (e.g. many to one correspondence). The main event categories were expanded and modified to more closely resemble our scientific understanding of triggering mechanisms. Also discussed was the need for a glossary of definitions in order to provide transparency to the classification process.

***Deliverable:*** A modified peril classification template was constructed and agreed upon by all members (Annex 2).

***Action item:*** Participants will test the application of the peril classification template to their existing databases and report issues back to the group during the next three months through a discussion board set up on UNDP's "Teamworks". Carlos Villacis will set up the Teamworks account and access for all members.

***Action item:*** Produce a common accord document that includes the new peril template with definitions once the testing phase of the classification scheme concludes.

### **Day 3 October 1, 2013**

The morning session discussed the GLIDE cataloging system. There continue to be problems with the cataloging system and participants noted that some major events (e.g. Hurricane Sandy in the USA) were not in the system. A new approach and web interface is underway with a partnership between UNISDR and ADRC. Included in this cooperation are avenues for crowd-sourcing of the GLIDE numbers through a formal request system. Database owners were encouraged to request to ADRC to become a GLIDE operator. It should be noted that while invited, there was no representative from GLIDE at the meeting. The group registered concern about the sustainability of the GLIDE numbering system. There are a number of specific issues that remain: lack of an overall governance structure (there is no scientific advisory committee for example; organizational structure and personnel) and resources. Both inhibit the ability to update the GLIDE on a regular basis.

The afternoon session focused on the draft Human Impact Indicators document by CRED and UNDP. The group felt this was a very good effort to harmonize impacts and it made a few editorial suggestions and comments on indicators such as "Homeless" and "Affected". The afternoon session also began the discussion on economic loss methodologies and impacts. Given the shortness of time, this topic was postponed and will be the primary topic of the 3<sup>rd</sup> DATA group meeting.

***Deliverable:*** The IRDR-DATA program concurs with the CRED/UNDP draft document and asked Regina Below to convey our concurrence to the Technical Advisory Committee of CRED.

***Action item:*** Julio Serge will generate GLIDE operator accounts for some members of the IRDR-DATA group.

**Action item:** The IRDR-DATA program will send a communique to ADRC and the Japanese Government on the importance and significance of GLIDE. In that communique we will stress our willingness to work with them to preserve and enhance this valuable product.

**Action item:** Regina Below will update the Human Impact Indicators document to incorporate the IRDR-DATA edits/comments and will circulate the revised document for IRDR-DATA endorsement.

**Action item:** The next DATA program meeting will be in May 2014 (pending the availability of resources) and will be hosted by the EU Joint Research Centre in Ispra, Italy. The meeting will be primarily devoted to discussions on measuring economic losses including methodologies and impacts. We want to insure that ECLAC, World Bank/GFDRR, ADB, and Post-Disaster Needs Assessment (PDNA) representatives are present.

**Informational item:** The US National Weather Service has a 100-page document on how to classify deaths due to natural hazards. Adam Smith provided the link <http://www.nws.noaa.gov/directives/sym/pd01016005curr.pdf>.

#### **References:**

Below, Regina, Angelika Wirtz, Debarati Guha-Sapir, 2009. Disaster category classification and peril terminology for operational purposes. Working Paper, CRED and Munich Re.



## **Annex 1: IRDR DATA Project—Second Expert Meeting**

**September 29-October 1, 2013 Columbia, SC/USA**

September 28-29, 2013 Arrival in Columbia, SC  
 Lodging: Inn at USC Wyndham Garden  
 1619 Pendleton Street  
 Columbia, SC 29201  
 Phone: 803-231-3614

\*\*\*\*\*

### **September 29, 2013 (Inn at USC)**

18:30 Reception hosted by Dean Mary Anne Fitzpatrick  
 19:00 Dinner

### **September 30, 2013 (Callcott Building Room 313)**

08:30 Welcome and Overview (S. Cutter)  
 09:00 Brief overviews of existing databases from each participant (3 slides each)  
 10:30 Coffee Break  
 10:45 Peril classification harmonization  
 The first is the need to evaluate the existing peril/hazard terminology and hierarchy established by CRED, UNDP, DesInventar, MunichRe, Swiss Re and ADRC, make any modifications, and then officially endorse and promote the framework. We are well along on this process and with an additional day of meeting such a framework can be finalized and become a public document and output from the DATA project group. Preparatory information distributed in advance of the meeting includes a briefing paper already in existence from CRED and a sample of database implementation.  
*Deliverable: Endorsed framework for peril classification for use by major data compilers.*  
 12:30 Lunch (Preston’s Dining)  
 13:30 Peril class discussion continued  
 14:15 Coffee Break  
 14:30 Question/Answer Session with Students: Environmental Hazards class  
 15:30 GLIDE numbering system  
 There are some issues on the need for enhancements in the current GLIDE unique identifier of events, and whether such a system should be a database, an informational source, or just a cataloguing system. The DATA project has some ideas on how to improve GLIDE and how it could serve as a platform for linking other data on specific disasters such as FORIN research outputs. This agenda item is to discuss the issues and

produce a proposed requirements document on what such a system should entail that would best help harmonize event data. Hopefully, such a requirements document generated by IRDR could help provide leverage for new directions and financial stability in the present GLIDE programme.

- 17:00 Recap
- 17:15 Adjourn
- 18:45 Dinner at Oak Table Restaurant (meet in Inn lobby for walk to restaurant)

**October 1, 2013**

- 08:30 Debrief from Day 1
- 09:00 Assessing human impacts  
 There are longer term issues with inconsistencies in how human impact is defined and measured and some new opportunities for assessing number of people affected by disasters. We will explore these in more detail and develop an action-oriented agenda on measurement for both human impact and economic loss assessment methodologies as part of the agenda on the second day. Begin preparatory efforts to encourage the development of national and subnational disaster loss databases as part of the negotiations for the 2015 Hyogo Framework meeting. Consideration of procedures and criteria for the development of pilot national databases will be discussed.
- 10:30 Coffee break
- 10:45 Human impacts continued
- 12:30 Lunch (Docs BBQ)
- 14:00 Economic loss assessment methodologies
- 15:30 Coffee break
- 15:45 Unresolved issues and planning for 3<sup>rd</sup> expert meeting
- 17:00 Adjourn and depart for airport

\*\*\*\*\*

# Annex 2: IRDR Peril Classification

*Concurrence on October 1, 2013*

Family	Main Event	Peril
Geophysical	Earthquake	Ground Movement Fire following EQ Liquefaction Landslide following EQ Ash Fall Lahar Lava Flow Pyroclastic Flow Tsunami
Hydrological	Mass Movement	
Meteorological	Volcanic Activity	
Climatological	Flood	
Biological	Landslide	
Extraterrestrial	Wave Action	
	Convective Storm	Coastal Flood Flash Flood Ice Jam Flood Riverine Flood Avalanche: Snow, Debris Debris/Mud Flow/Rockfall Expansive Soil Sinkhole Coastal Erosion Rogue Wave Seiche
	Extratropical Storm	
	Extreme Temperature	
	Fog	
	Tropical Cyclone	Derecho Hail Lightning Rain Snow/Ice Tornado Wind Sandstorm/Dust storm Winter Storm/Blizzard Cold Wave Frost/Freeze Heat Wave Storm Surge
	Drought	
	Glacial Lake Outburst	
	Wildfire	
	Animal Incident	
	Epidemic	
	Insect Infestation	
	Airburst	
	Impact	
	Space Weather	
		Dessication/Subsidence
		Forest Fire
		Land fire: Brush, Bush, Pasture
		Viral
		Bacterial
		Parasitic
		Fungal
		Prion
		Shockwave
		Energetic Particles
		Geomagnetic Storm
		Radio Disturbance

# Annex 2: IRDR Peril Classification

*Concurrence on October 1, 2013*

*Without color coding on family type*

<i>Peril</i>	<i>Main Event</i>	<i>Family</i>
Ground Movement	Earthquake	Geophysical
Fire following EQ	Mass Movement	Hydrological
Liquefaction	Volcanic Activity	
Landslide following EQ	Flood	Meteorological
Ash Fall	Landslide	Climatological
Lahar	Wave Action	
Lava Flow	Convective Storm	Biological
Pyroclastic Flow	Extratropical Storm	
Tsunami	Extreme Temperature	Extraterrestrial
Coastal Flood	Fog	
Flash Flood	Tropical Cyclone	
Ice Jam Flood	Drought	
Riverine Flood	Glacial Lake Outburst	
Avalanche: Snow, Debris	Wildfire	
Debris/Mud Flow/Rockfall	Animal Incident	
Expansive Soil	Epidemic	
Sinkhole	Insect Infestation	
Coastal Erosion	Airburst	
Rogue Wave	Impact	
Seiche	Space Weather	
Derecho		
Hail		
Lightning		
Rain		
Snow/Ice		
Tornado		
Wind		
Sandstorm/Dust storm		
Winter Storm/Blizzard		
Cold Wave		
Frost/Freeze		
Heat Wave		
Storm Surge		
Dessication/Subsidence		
Forest Fire		
Land fire: Brush, Bush, Pasture		
Viral Epidemics		
Bacterial Epidemics		
Parasitic Epidemics		
Fungal Epidemics		
Prion Epidemics		
Shockwave		
Energetic Particles		
Geomagnetic Storm		
Radio Disturbance		