

Panel 7

The Role of Social Media in Understanding and Managing Complex Catastrophic Events

Panel concept

- This panel will explore the use of social media (new social network technologies, NSNT) in the wake of a catastrophe and
- will discuss the potential benefits and shortcomings of relying on online venues such as Twitter and Facebook for high-value information.
- It will consider three dimensions of social media use for emergency management purposes:
 - Passive use by agencies and research institutions, analyzing citizen communication that runs through them;
 - Active use by citizens to make meaning of events;
 - Active use by agencies to communicate warnings to citizens or link up first responders in the field.

Moderation/Reporting

- ***Alexander Siedschlag*** (Leader) and ***Andrea Jerkovic*** (Scribe), Institute for Security Research, Sigmund Freud University Vienna
- Funded by the Austrian national security research programme KIRAS.
- The unit for European projects is the Center for European Security Studies (CEUSS) that coordinates the European Union-funded project FOCUS “Foresight Security Scenarios – Mapping Research to a Comprehensive Approach to Exogenous EU Roles”.

Problem

- Accessing and delivering information in transportation-related emergencies in order to focus activities of first-responders and the homeland security enterprise.

Solution

- Take advantage of new social media/network technologies (NSNT), following recent emphases on citizen resilience and disaster protocracy in both emergency management and disaster research.
- In particular exploit Twitter feeds, which contain real-time information, updated by people in various locations during the crisis while they communicate their first-hand experience.
- Take advantage of the influences of social media on the emergence social capital, in the form of information potential during a disaster situation.

Challenges

- NSNT use may complicate coordination between emergency responders and managers, as well as facilitate the diffusion of inappropriate or incorrect “facts and ideas” (Quarantelli).
- NSNT have produced a paradigm shift in the ways in which emergency response and evacuation on transport networks is co-ordinated. Information can now be controlled and disseminated by various publics, including (potentially) by terrorist groups.
- Tweets are noisy, unstructured and not ready to exploit.

Overcoming the challenges

- Understand how NSNT may be used to inform citizens' culture in action, thus contributing to grassroots resilience and self-protective behavior.
- Establish sustainable communal dialogues in support of a disaster risk reduction culture in everyday life, rather than focusing on emergencies.
- Develop technological solutions to use tweets to automatically detect crisis events in real-time and to identify newsworthy messages related to the event that can help crisis management teams monitor the unfolding event and deploy resources.

Presentations (1/3)

- *Hayley Watson*, University of Kent:

“Social Media, Transport Chaos and a Volcanic Ash Cloud”

Building on media analyses in the European Union-funded Security Research project CPSI: “Changing Perceptions of Security and Interventions”, <http://www.cpsi-fp7.eu>

Presentations (2/3)

- ***John Preston***, Cass School of Education, University of East London

“Multiple Attacks on Transport Infrastructure: an Interdisciplinary Exploration of Social Networking Technologies upon Real-Time Information Sharing, Response, and Recovery”

Project funded by the (UK) Engineering and Physical Sciences Research Council (EPSRC)

Presentations (3/3)

- ***Eduard Hovy***, University of Southern California, Command, Control, and Interoperability Center for Advanced Data Analysis (CCICADA), a DHS Center of Excellence

“Continuous Geospatial Monitoring of Catastrophic Natural Disasters Using Twitter”