COSMIC
the COntribution of Social Media In Crisis management

A Support Action in the "Security" priority of FP7, jointly funded by the European Commission

www.cosmic-project.eu

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Investigating the role of social media in crises and catastrophic events

Project's data

Budget: 1 228 896 euros
EC contribution: 997 040 ευρώ

Start: 1st April 2013
End: 31st March 2015

	Participating Organisation	Acronym	Country
1	European Dynamics	ED	Greece
2	Trilateral Research & Consulting	TRI	UK
3	Radboud University Nijmegen (Crisislab)	RUN	Holland
4	KU University	KU	Turkey
5	Hellenic Rescue Team	HRT	Greece
6	Public Safety Communication Europe	PSCE	Belgium
7	Safety Region South Holland South	VZHZ	Holland

Structure

Phase 1 – New communication media during crises

> A taxonomy of crises
>
> Usage and features of new and emerging technologies for social communication
>
> Communication among the public during crises and emergencies

Phase 2 – Strategic support

> Analysis of behaviour and cooperation links among stakeholders during crises – methods for raising awareness among interested parties

Phase 3 – Dissemination and Communication

> Events and workshops throughout Europe:
>
> > 15 February 2014 – Thessaloniki - Greece
> >
> > 27 February 2014 – Nijmegen

Phase 4 – Coordination and project management

General findings

Analysis of crises
  6 basic types of high societal impact:
  Floods – extreme temperatures – storms – wildfires – earthquakes – man-made crises

Negative consequences on: citizens – businesses – critical infrastructure – government

International organisations for response:
  UN Office for the Coordination of Humanitarian Affairs – OCHA
  Community Mechanism for Civil Protection – European Union
  Global Monitoring for Environment and Security (GMES)
  Non Governmental (Civil Society) Organisations

Societal dynamics during crises
  Citizens are strongly disposed towards helping victims. Individually, citizens are rarely passive and often exhibit pro-social behaviour during crisis situations.
  Individual, organisational and societal dynamics are largely dependent on the time it takes a crisis situation to develop and on its destructive effects; not necessarily on the type of crisis.
  The role of government in the immediate aftermath of a crisis situation is often limited.
  Emergency management agencies are either not present, and may be otherwise occupied or unable to mount an effective response. Citizens deploying new technologies can be of significant help to governments' efforts under these circumstances.

Analysis of "representative" crises

Floods and storms
> **Sandy superstorm (USA 2012)**
> **Hurricane Katrina (USA 2005)**
> **Xynthia storm (France 2010)**

Extreme temperatures
> **Heat wave (France 2005, USA 2006, UK 2013)**

Forrest fires
> **Greece (2007)**
> **California (2007)**
> **Colorado (2012)**

Earthquakes
> **Athens Greece (1999)**
> **Haiti (2010)**

Man-made crises
> **Terrorist attack in London (2005)**
> **Boston Marathon bombing (2013)**
> **Gezi Park Protests in Turkey (2013)**

Luisiana Superdome

Example: Haiti 2010

A July 2012 study demonstrated that real-time monitoring of Twitter messages in Haiti could have predicted the October/November 2010 cholera outbreaks two weeks earlier than they were detected. Anonymised data, shared by Digicel, demonstrated that population movements in response to the cholera outbreak began prior to official detection of the outbreak.

Deaths from cholera are preventable and outbreaks are more easily dealt with in their early stages. This means there was a lost opportunity to save lives.

While there is no way to arrive at a precise statistic, over 200 people had died by 23 October, four days after first detection, and 900 by 16 November. Overall, more than 6 000 people died and over 400 000 became ill.

Users of Twitter reported damage and other effects of the quake only a few minutes after the first shock

- *"It's really ugly, just like in a bad dream. people need help, get out and help ! #haiti @eq"*
- *Facebook*
- *YouTube, iReport Video)*
- *Skype*
- *TwitPic (Picture sharing service of Twitter)*

The contribution was acknowledged by relief agencies such as:

- *Red Cross (US)*
- *FEMA*
- *USAID*

Journalism by the public (Crowd Sourcing)

Ushahidi map for Haiti (2010)

COSMIC: Future directions

Continuation of the project's work up to end of March 2015

- *Typical crisis evolution scenarios: among responders, among the public, between responders and the public*
- *Models and characteristics of crises*
- *Citizens' involvement in crisis communications – ethical issues*
- *Guidelines for the use of new communication media by the public and by responder agencies and bodies*
- *Future directions of research*

Workshops and conferences

- *Stakeholder engagement workshops: Greece/Holland – February 2014*
- *Political, social and industrial opportunities arising from the use of emerging technologies – Sweden, May 2014*
- *International conference in Istanbul – September 2014*
- *Final international COSMIC conference – February 2015*