



Concept Note

Social Media for Crisis Communication

Addressing the challenges of using social media to
improve crisis communication and management



Abbreviations used in the text:

EMO	Emergency Management Ontario
FEMA	Federal Emergency Management Agency
IRGC	International Risk Governance Council
OECD	Organisation for Economic Co-operation and Development
PIA	Privacy Impact Assessment
PLAN	Personal Localised Alerting Network
RSS	Really Simple Syndication
SMEM	The Social Media in Emergency Management Initiative
SMS	Short Message

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Preface

IRGC is an independent organisation whose purpose is to promote the understanding and governance of systemic risks that have impacts on human health and safety, the environment, the economy and society at large. IRGC's mission includes developing concepts of risk governance, anticipating major risk issues, and providing risk governance recommendations for key decision-makers.

As with all IRGC concept notes, this document has the purpose of providing a brief overview of some of the issues that IRGC believes are important and aims to address in the course of future project work.

Communication is an essential component of risk governance, and social media is now a critical element in the broad communication space. Social media and social networking are changing the way organisations and the public communicate about, and even manage, risk and crisis. IRGC sees that social media represents an opportunity for both the public and private sectors to engage effectively with stakeholders and in particular with affected populations. There are opportunities and challenges that this concept note aims to summarise, focusing on experience-based practices and emerging policies in crisis communication.

This paper was written to provide context and suggest questions for discussion during a joint OECD-IRGC expert workshop on crisis communication by governments that was held on 29 June 2012. It was then revised and further developed, with some implications for risk governance in more general terms.

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Introduction

The invention of social media and the growing popularity of these technologies have fundamentally transformed the way that people receive and share information. This has significant implications for crisis communicators and managers as it not only offers them a whole suite of new tools with which to engage the public and reach a wider audience, but also creates a number of important new challenges related to privacy, security, information accuracy, control of the message, and more. Understanding how to manage the use of social media tools in order to effectively harness their power while minimising any attendant risks is therefore becoming increasingly important for many government agencies. Because crisis communication is not an end in itself but supports the larger emergency response (e.g. rescue, law enforcement, clean-up, recovery), and because many government agencies that deal with crisis communication are also implicated in the response, this paper will address uses of social media that affect both crisis communication and response elements.

The term '**social media**' refers to a set of internet-based tools that allow users to create content in order to share information, ideas or opinions, often in an interactive manner. These tools enable and promote mass collaboration.¹ Examples of social media tools include blogs, microblogs (such as Twitter), social networking sites (such as Facebook), and wikis (see section 2 for a more complete list). Although they are not usually considered social media tools because they are not publicly accessible and interactive, this concept note will nevertheless include mobile technologies such as smartphone applications and Short Message Service (SMS) in our discussion of social media tools because of their usefulness to the risk and crisis community as vehicles to disseminate safety and preparedness information. The key characteristics of social media are the speed at which interactions take place (instantaneous sharing of information), the reliance on user-generated content (as opposed to traditional media where content is prepared and edited by professionals), the focus on dialogue (rather than simply information broadcasting), and the low barriers to access (tools are low-cost or free for anyone with internet access).²

As general background, this paper will first briefly review how social media have come to play an increasing role in the response to crises and disasters and outline some of the most common social media tools and their various applications. It will then address the state of current government usage of social media in crisis communication and management, followed by an overview of the main opportunities and risks that these technologies present. Finally, this concept note will look at some of the possible secondary impacts of social media use for the risk and crisis management community.

¹ Clarence Wardell and Yee San Su, *2011 Social Media and Emergency Management Camp: Transforming the response enterprise*, CNA Analysis and Solutions, September 2011, downloadable from www.cna.org

² John Carlo Bertot, Paul T. Jaeger and Derek Hansen, "The impact of policies on government social media usage: issues, challenges and recommendations", *Government Information Quarterly*, 29 (2012): 30-40.

Questions:

- **Practices:** how are governments currently using social media tools?
- **Opportunities:** what possibilities do social media tools offer for improving risk and crisis communication? How can these possibilities be harnessed?
- **Risks:** what are the key issues and challenges that the advent of social media creates for crisis communicators and managers? How can these be overcome?
- **Policies:** how can existing crisis communication frameworks and policies be adapted to social media and social networking?

1. Why crisis communicators cannot afford to ignore the social media revolution

Why do crisis communicators turn their attention to the use of social media as a communication tool? The simple answer to this question is because social media, in many recent examples, has already been shown to serve as a key source of information for the public in situations of crisis, regardless of whether or not that information is coming from official channels. In the United States (US), for example, a survey carried out in 2009 by the American Red Cross found that social media sites are the fourth most popular source for emergency information (after television, radio and internet news sites). This survey also showed that, not only are more people turning to social media as a means of receiving information, but they also see social media as a vehicle to communicate with crisis managers and first responders... and there is an expectation that crisis managers monitor social media and respond quickly.³

- “69 per cent of respondents felt that emergency response organisations should regularly monitor their websites and social media sites so they can respond promptly to any requests for help posted there; and

- 49 per cent of respondents thought that their request for help posted to the social media site of an emergency response organisation meant that the organisation was probably already acting on this request.”⁴

In short, these new technologies seem to have led to changes in societal expectations of crisis communicators and emergency responders.

The popularity of social media use during a crisis has not only been demonstrated in the US but also in India following the Mumbai terrorist attacks in 2008, in Haiti, Chile and New Zealand after their respective earthquakes in 2010-2011, in Japan following the tsunami, and the list goes on. There are numerous examples of social media breaking the news of a crisis before traditional media sources and, since being first with the news is one of the key principles of crisis communication (along with being accurate and being credible), failing to make effective use of social media channels puts official government communicators on the back foot and at a disadvantage from the outset.

³ American Red Cross, “Web Users Increasingly Rely on Social Media to Seek Help in a Disaster”, 9 August, 2010, <http://www.redcross.org/portal/site/en/menuitem.94aae335470e233f6cf911df43181aa0/?vgnnextoid=6bb5a96d0a94a210VqnVCM10000089f0870aRCRD>

⁴ American Red Cross cited in Wardell and Su, p.8.

Social media use during past crises

The popularity and effectiveness of using social media to communicate during a crisis have become increasingly apparent over the last few years, as evidenced by these examples:

The Virginia Tech University shootings, April 2007

During the crisis, there was so much traffic that mobile phone networks quickly became overloaded, but students were also using social media networking services to reach out to family and friends and to share information. The online community developed their own norms to check the accuracy of the information being posted and had soon correctly identified all of the 32 victims of the shooting – long before the names were officially released to the media.⁵

The earthquake in Sichuan province, China, May 2008

Messages began to be posted as early as one minute after the earthquake on the Tianya forum, a popular bulletin board site in China. Only 10 minutes later, there were already 56 discussion threads active, with Chinese citizens using the site to seek information about their homes and families and also to help coordinate action to assist victims.⁶

The Mumbai attacks, November 2008

Social media activity related to the Mumbai attacks exploded only moments after the drama began, with an average of 70 tweets every 5 seconds. Twitter users provided helpful advice by posting emergency phone numbers online and identifying the locations of hospitals requiring blood donations. Local blogs were used as forums where people could post to help locate family and friends or to identify victims. However, in this case, false social media posts also contributed to spreading rumours and misinformation.⁷

⁵ Lea Winerman, "Crisis Communication", *Nature*, Vol 457, 22 January 2009; Leysia Palen, "Online Social Media in Crisis Events", *Educause Quarterly*, Number 3 2008.

⁶ Winerman, "Crisis Communication".

⁷ Stephanie Busari, "Tweeting the terror: How social media reacted to Mumbai", CNN World; Claudine Beaumont, "Mumbai attacks: Twitter and Flickr used to break news", *The Telegraph*.

The 2010 Haiti earthquake

Photos sent to Twitter and Facebook were the first images to surface of the earthquake aftermath, with people on the ground providing information before the mainstream media (who also turned to social media sources to enrich their own information).⁸ Earthquake survivors were sending out their locations via text and Facebook posts to request help, information that was both useful to rescue teams and commodity distribution centres. In addition, the open-source web platform Ushahidi was used to crowd-source information in support of crisis management (i.e. information was sourced from individuals 'on the ground' who were sharing their experiences, situations, capabilities or needs via social media tools), for example by linking health care workers in need of supplies to those who had them.⁹

It is important to note, however, that the use of social media for crisis communication should not in any way replace current communication methods, only complement them. After all, despite the steadily growing number of social media users, a significant percentage of the population still prefers to get news from traditional media sources such as television, radio and newspapers. Certain demographics, such as older people, the disabled, and those in poor or remote communities might also not have access to social media tools. Therefore, traditional media outlets remain valuable for crisis communication, even if they do often have the drawback of time delays – especially the print media.¹⁰

Incorporating social media into existing communication strategies can only bolster traditional communication strategies by adding the elements of speed and interactivity to information delivery. Whilst reviewing its communication strategy, an organisation could also look into developing meaningful metrics to measure the effectiveness, accuracy and usefulness of social networks as risk and crisis communication tools.

Question:

- How can crisis and risk communicators and emergency responders manage or deal with changed societal expectations of their roles and capabilities?

⁸ Mercedes Bunz, "In Haiti earthquake coverage, social media gives victim a voice", *The Guardian*,

⁹ Ushahidi-Haiti, <http://ushahidi.com>

¹⁰ Erik Deckers, "Crisis Communication and Social Media for Government Crisis Communicators", 2010.

2. An exploration of common social media tools

The purpose of this section is to provide a brief overview of some of the more common social media tools, their different purposes and approaches, in order to gain an understanding of how they could be useful for crisis communication and management. As explained in the introduction, we will include related mobile technologies (notably SMS).

Social media tool:	Main examples:	What is it?	Useful for:
Blogs (web-based blogging platforms)	<p>Blogger www.blogger.com</p> <p>Wordpress www.wordpress.org</p> <p>Posterous www.posterous.com/</p>	<p>An electronic journal.</p> <p>Entries are posted in reverse chronological order.</p>	<p>Acting as a hub for an organisation's social media campaign – link to other social media platforms in use.</p> <p>Posting press releases, articles about new developments in the organisation or in the field of interest, the latest news, advice and statistics.</p> <p>Providing content or access to content and knowledge.</p>
Microblogs	<p>Twitter www.twitter.com Posts or 'Tweets', as they are known, are limited to 140 characters. Posts can be grouped together by topic with the use of hashtags.</p> <p>Tumblr www.tumblr.com Allows for longer posts than Twitter and the posting of multimedia content.</p> <p>Weibo www.weibo.com A Chinese microblogging website</p>	<p>Similar to a blog, but with much shorter posts.</p>	<p>Good for posting short news updates, and receiving short updates from others in the crisis communication and management community ('follow' important people and be 'followed' in return). The use of hashtags on Twitter to group posts about a single crisis event can be very useful.</p> <p>Even better for engaging in two-way interaction with followers – answer questions, have conversations and establish trusted relationships.</p>
Social networking sites	<p>Facebook www.facebook.com By far the most popular, with more than 845 million active users.</p> <p>My Space www.myspace.com More of a focus on entertainment – especially music, but also movies, TV, etc. Declined in popularity since 2008.</p> <p>Google + www.plus.google.com/ Google's attempt to rival Facebook. Integrates other Google services. Launched in 2011.</p> <p>LinkedIn www.linkedin.com/ A business-related site used for professional networking.</p> <p>Four Square www.foursquare.com/ A location-based social networking site for mobile devices with GPS. Users</p>	<p>Online platforms where individual users have profiles and can interact with their network to share ideas, interests, pictures, links, events, etc.</p> <p>Many of these networking platforms also have a micro-blogging feature – the 'status update'.</p> <p>Some have instant messaging and email capabilities.</p>	<p>As the most popular, Facebook is the social networking service chosen by most organisations as an additional means to reach their audience.</p> <p>Each government agency could have its own page, which links to any blogs, Twitter feeds, etc. As an example, see FEMA's Facebook page: www.facebook.com/FEMA</p>

Social media tool:	Main examples:	What is it?	Useful for:
	'check-in' at venues.		
Collaborative projects	Wikis e.g., Wikipedia www.wikipedia.org The internet encyclopaedia with articles created by volunteers	A wiki is a website where users can add, edit or delete content in a simple manner via their web-browser. Content is often user generated and created in a collaborative manner.	A wiki could serve as a platform to bring together individuals and organisations interested in crisis communication and management, and to build collaborative knowledge. It could be used to promote the organisation's events, describe its activities and provide links to other related content. As an example, see the CrisisCommons wiki at wiki.crisiscommons.org/wiki/Main_Page Wikis can also be useful for intra-team communication.
Content communities	YouTube www.youtube.com/ The most popular and well-known video-sharing website. Owned by Google. Ustream www.ustream.tv/ A website that allows for live video streaming of events online. Flickr and Picasa www.flickr.com/ picasa.google.com/ These are the two most popular photo-sharing sites. Flickr, the most popular, is owned by Yahoo and Picasa by Google. Pinterest pinterest.com/ A more recent photo sharing/social networking site, with pages organised as pinboards or scrapbooks.	Sites designed to share content, where users upload files such as images and videos. Other users can then comment on and further share this content.	A channel on a video-sharing site such as YouTube can be used for risk communication (raise risk awareness, increase preparedness, share safety tips) and, in the event of a crisis, for crisis communication (via video updates from the scene, interviews with first responders, etc). Photo-sharing sites can be used to share pictures of the crisis and the crisis response (show people what is being done to deal with the situation)
Mobile technologies	Mobile telephony Smartphone applications Text messaging: Short Message Service (SMS) – on mobile or smartphones	Mobile phones, smartphones with additional capabilities such as internet access, GPS, camera, portable media player, etc.	In the event of a crisis, many people turn to their smartphones to access information – to facilitate this, organisations create mobile versions of their websites that can be more easily viewed on smartphones. Organisations can design smartphone applications for crisis situations. An example is the American Red Cross's 'shelter view' for locating shelters in case of disasters, itunes.apple.com/us/app/american-red-cross-shelter/id419258261?mt=8 Safety alerts can be sent by SMS to those who have registered to receive them. SMS can also be used for 'text-to-donate' campaigns to aid crisis recovery. See for example, american.redcross.org/site/SPageServer?pagename=ntld_nolnav_text2help

3. Current and potential uses of social media by governments for crisis communication and management

It is telling to note that a search of the literature on social media in crisis communication elicits many more examples involving spontaneous community responses, ad-hoc information updates from 'citizen journalists' (such as CNN's "iReporters")¹¹ and campaigns by humanitarian organisations than examples involving organised government or official use of social media channels. While many government agencies responsible for crisis communication have recognised the need to address social media use and/or begun to integrate it into communication strategies, this is an ongoing process and is still in its early stages in most cases. This is unsurprising given the recent popularisation of social media technologies and the fact that governments must contend with a range of policy challenges related to the official use of these tools (see section 5).

Of course, the public sector is not alone in recognising the need to engage with social media tools. The private sector is arguably more advanced when it comes to employing social media tools for corporate crisis communication and brand management. However, there are some important differences between corporate crisis communication and the emergency risk and crisis communication that is our focus here. For example, the end goal of corporate communication in a situation of crisis is to preserve the company reputation and avoid financial losses. In many cases, a negative outcome will not affect public or environmental health and security but only corporate assets. In other cases, such as when a company must organise a product recall because of harmful effects on health or the environment, corporate communication also aims to protect the public or common goods. While a corporation may focus on keeping hidden any damaging information and containing the issue as much as possible, public emergency crisis communicators, who are often focused on saving lives, are expected, in contrast, to increase transparency of information and spread their message as widely as possible (to the extent that confidentiality and privacy issues allow)¹². Because of these key differences, this paper does not address corporate crisis communication practices. Nonetheless, it may be worth asking the question:

Question:

- Can private-sector experience provide useful lessons or share best practice with crisis communication in the public sector? If so, in which areas?

¹¹ <http://ireport.cnn.com>

¹² Erik Deckers, "Crisis Communication and Social Media for Government Crisis Communicators", 2010

Passive and dynamic use of social media

Returning to our focus on emergency risk and crisis communication, it is possible to distinguish between two main categories of social media use by organisations: passive and dynamic. **Passive use** of social media includes the dissemination of information and monitoring of sites in order to receive feedback from users. **Dynamic use** implies that the organisation has gone much further and has integrated social media tools into its crisis communication and management systems in such a way that they not only transmit the message in support of response but also play an integral part in response and recovery efforts. Such dynamic use could include using social media to receive victims' requests for aid; or to establish situational awareness that can help detect new threats, update safety information and determine where to direct resources to reduce damages or loss of life.

Up until now, most government agencies involved in crisis communication and management have used social media passively. However, if we accept that social media is not a fad and that its popularity, relevance and added-value will only continue to grow – as current evidence suggests – then it is more than likely that these agencies will progress from passive to dynamic use in several stages. Already there are concerted efforts in some countries from social media advocates in the risk and crisis communities to try to incorporate more dynamic uses of these technologies. This is especially the case in the US, where the Obama administration has made the use of social media technologies a priority for government.¹³

The Canadian Experience¹⁴

Canadian government agencies at both the federal and provincial levels are beginning to integrate social media into their crisis communication and emergency management systems, albeit rather slowly and not without encountering obstacles along the way.

Health Canada currently leads the way in terms of social media engagement at the federal level, with a presence on Twitter, YouTube, Facebook, RSS feeds and more (see <http://www.hc-sc.gc.ca/home-accueil/sm-ms/index-eng.php> for details).

Dissemination of health and safety information – as opposed to engaging in two-way conversations with the public – is the goal of current social media use, allowing for the transmission of timely advisories, recalls and product safety alerts, as well as the promotion of safety campaigns.

¹³ John Carlo Bertot *et al.*, "The impact of policies on government social media usage: issues, challenges and recommendations"; Bruce R. Lindsay, *Social media and disasters: current uses, future options and policy considerations*, Congressional Research Service, 6 September 2011.

¹⁴ This box contains a short summary of the main points from the following article, Patrice Cloutier, "Integrating social media into emergency management: the Canadian experience", available online at <http://www.scribd.com/doc/59990957/Crisis-Commons-Report>

Public Safety Canada, the federal agency with oversight of emergency management, uses social media in a similar manner, although its on-line presence is not as extensive. It uses Twitter and a 'safety tip' RSS feed to disseminate emergency preparedness information and has a mobile website that is designed to be accessed on smartphones and other mobile devices (<http://www.getprepared.gc.ca/index-eng.aspx>).

At the federal level, integration of social media has not surpassed this early, passive stage of information dissemination largely due to security concerns, which have been heightened following cyber attacks on Canadian government sites in January 2011 (<http://www.cbc.ca/news/politics/story/2011/02/16/pol-weston-hacking.html>). As a consequence of these attacks, severe restrictions were placed on internet access for federal civil servants, including to social media sites, thus making their further integration in official communication practices all the more problematic.

At the provincial level, certain emergency management organisations have managed to surpass the passive use of social media as an information dissemination tool. Emergency Management Ontario (EMO), for example, not only uses Facebook, Twitter and SMS alerts as part of its public warning system (<http://www.emergencymanagementontario.ca/english/home.html>), but also routinely monitors social media during crises in order to help assess the effectiveness of its response. In anticipation of blizzards in winter 2011, EMO even collaborated with the crisis mapping community (Crisis Commons Toronto) to create a crowd-sourced 'snowmap' linked to its website where people could report weather-related dangers or incidents (<https://snowintoronto.crowdmap.com>).

Nevertheless, at the provincial level, too, there are often technical and policy obstacles to integrating social media into crisis communication and management (e.g. restrictions on the use of or access to social media sites on work computers).

As the trend towards public participation grows and with Canadians being highly 'connected' and frequent users of social media tools, and generally early adopters of new technologies, many observers see the eventual integration of social media into crisis communication and emergency response as inevitable. Before this can occur however, government agencies at all levels must consider how best to overcome policy obstacles as well as risk-averse mentalities and a lack of knowledge by some senior officials.

US Government agencies: the Federal Emergency Management Agency (FEMA)

FEMA has one of the better reputations among government communications circles for using social media effectively in crisis communication and emergency management. Its goals with social media are: “to provide timely and accurate information related to disaster preparedness response and recovery; provide the public with another avenue for insight into the agency’s operations; and engage in what has already become a critical medium in today’s world of communications”.¹⁵ At the heart of FEMA’s emergency management framework is what is called its ‘whole community’ approach, which involves treating the public as a resource and recognising that individuals and communities are key to the organisation’s success – that is, FEMA’s use of social media aims to allow for two-way dialogue with the public, rather than just one-way dissemination of information. As FEMA administrator Craig Fugate put it: “Social media provides the tools needed to minimize the communication gap and participate effectively in an active, ongoing dialogue. Social media is an important part of the ‘Whole Community’ approach because it helps to facilitate the vital two-way communication between emergency management agencies and the public.”¹⁶

Some of the media tools in use by FEMA:

Facebook – the agency has been promoting its Facebook page since May 2009 and currently has received more than 77,500 ‘likes’. The site is used to connect with followers by posting updates on current situations and preparedness tips as text, photos or videos.

Twitter – FEMA maintains a number of Twitter accounts including a main national account, regional accounts, the Administrator’s account (Craig Fugate) and accounts for specific campaigns. These accounts all aim to provide followers with disaster preparedness tips or situational updates and engage in conversations with followers or as part of group conversations such as the #smem (social media in emergency management hashtag). Following an explosion in San Bruno, California in September 2010, FEMA Administrator Fugate used Twitter to determine the magnitude of the explosion from afar. He said, “I got better situational awareness [from Twitter] before we got official word. Four or five years ago [,] I wouldn’t have gotten that quality of information.”¹⁷

YouTube – FEMA has a YouTube page where people can watch videos with advice on how to prepare for an emergency and what to do and where to go in case of a crisis. It was extensively used to communicate with the population in

¹⁵ Federal Emergency Management Agency (US), “Use of social media tools at FEMA”, 2 November 2009.

¹⁶ Craig Fugate, Administrator, Federal Emergency Management Agency, Testimony before the Senate Committee on Homeland Security and Governmental Affairs, Subcommittee on Disaster Recovery and Intergovernmental Affairs: *Understanding the Power of Social Media as a Communication Tool in the Aftermath of Disasters*, 5 May 2011.

¹⁷ Cited in: Wardell and Su, *2011 Social Media and Emergency Management Camp*, p.28.

the areas affected by Hurricane Sandy that hit the US East coast in late October /November 2012.

Mobile phones – Recognising text messaging as a key communication stream in crises, FEMA is also now expanding its social media reach to mobile phones via the implementation of the Personal Localised Alerting Network (PLAN), allowing alerts to be sent by SMS to subscribers in specific geographic areas.

Nevertheless, although the aim to go further is clear, at the moment FEMA still overwhelmingly uses social media for informational purposes only, rather than applying social media tools to disaster response and recovery capabilities. In order to learn more about how to better harness the power of social media, FEMA Administrator Fugate works with representatives from Apple, Craigslist, Facebook, Google, Microsoft and Twitter.¹⁸

An example of how progression from passive to dynamic use of social media tools might occur:¹⁹

Passive use:

1. Use as a bottom-up information and awareness tool (e.g., monitoring social media sites and compiling relevant information)
2. Use as a one-way communications tool (e.g., dissemination of public safety and crisis information; sending out information about upcoming events or campaigns)

Dynamic use:

3. Use as a two-way communications tool (e.g., engaging with the online community by taking part in conversations via social media tools such as Twitter)
4. Use as a tool to leverage the community as a resource in response efforts, adding more of the following functions as time goes on: situational awareness and crisis mapping via crowd-sourcing; receiving requests for assistance; and mobilising citizens to achieve communal goals.

Crowd-sourced crisis mapping

The gathering of crowd-sourced information from social media to build live crisis maps is one dynamic use that is worth exploring further, as it seems to be steadily attracting more attention. Although crisis mapping is possible without recourse to social media, the rise of live crisis maps is certainly linked to the social media revolution. Mobile technologies and applications for user-generated content have made widely-distributed and crowd-sourced information collection possible. With so many people in possession of mobile phones and with access to social media tools, the general population has been compared to an “evolving network of human sensors [...] a crowd-sourced nervous system that generates a significant amount of real-time data via SMS

¹⁸ Bruce R. Lindsay, “Social media and disasters: Current uses, future options and policy considerations”.

¹⁹ Based on Clarence Wardell and Yee San Su, *2011 Social Media and Emergency Management Camp*, p.7.

and social media platforms like Twitter, Facebook, YouTube and Flickr – particularly in times of crisis”.²⁰

Add to this the increased availability of new free, open-source and easy to use mapping technologies available online (such as Ushahidi²¹) that can take this crowd-sourced information and render it into a dynamic, interactive map, and it is easy to see why crisis mapping has grown in prominence. For example, live, crowd-sourced maps were used as part of crisis communication and response in both Haiti following the 2010 earthquake (where a team at Tufts University in the US used the Ushahidi platform to create maps that helped relief and rescue teams to identify acute needs on the ground)²², and in Libya in 2011 (where the United Nations Office for the Coordination of Humanitarian Affairs created the LibyaCrisisMap.net site to get more information about how the crisis was unfolding).^{23 24}

However, the reliability of live, crowd-sourced crisis maps is only as good as the information used to create them – one major concern about using social media as an information source is that the data may be unreliable. Social networks are learning about the limitations and risks of citizen reports in general, but the verification of information crowd-sourced from social networks is crucial for efficient emergency response. When considering an effective crisis communication, government agencies may find it adequate to simply include a disclaimer along with a description of the types of sources that were tapped when compiling crowd-sourced information.

Questions:

- Should achieving dynamic uses of social media that aim to leverage the community as a resource be the goal for governments? Is it even possible just to stop at the stage of two-way communication, given changing societal expectations?
- How can government agencies facilitate progression through the stages from passive to dynamic use of social media for risk and crisis communication and management?

²⁰ Patrick Meier, “Verifying Crowdsourced Social Media Reports for Live Crisis Mapping: An Introduction to Information Forensics”.

²¹ <http://ushahidi.com/>

²² Anne Nelson, “How mapping, SMS platforms, saved lives in Haiti earthquake”, 11 January 2011.

²³ IRIN, Libya: “How online mapping helped crisis response”, AlertNet, 12 May 2011.

²⁴ For more information on crisis mapping, see: Patrick Meier, “A Brief History of Crisis Mapping”; Patrick Meier, “What is Crisis Mapping? An update on the field and looking ahead”; Harvard Humanitarian Initiative, “Crisis Mapping and Early Warning”, The International Network of Crisis Mappers.

4. Potential opportunities

The integration of social media tools into the crisis communication and management strategies of government agencies offers a number of important opportunities, which can be reflected in social media policies in three main areas:

Making crisis communication more effective

Assuming that the use of social media tools for crisis communication is in addition to continued use of traditional communication outlets such as broadcast and print media, then it is safe to say that social media use can only increase the size of the receptive audience. It allows adapting to the community culture of using social media, without neglecting the part of the population not using these tools.

Even more significant, however, is that the message reaches the audience in real-time and can be updated or modified almost instantaneously as a crisis situation on the ground unfolds – and with a quickly changing safety situation, the immediacy of updates can obviously be crucial. Using social media to communicate directly with the public can also be more efficient and accurate, as it removes an extra layer of ‘information processing’ and constraints represented by, for example, press deadlines, misinformed reporters or editing of the message by a third party.²⁵ Instead, crisis communicators can control exactly when and how the information is released and even to whom it is precisely released.

Using social media is also a way to target communication according to specific populations. It is known that “perception of risk and risk-related behaviour may amplify the social, political and economic impact of disasters”.²⁶

In the same way, by monitoring responses to own posts and other social media posts related to the crisis event, crisis communicators have the opportunity to engage in two-way communication and quickly correct any false rumours or misinformation posted by others. They can also defend the ‘brand’ of the organisation in this manner by responding to negative comments, engaging constructively with detractors or clarifying the organisation’s role and capabilities. However, experience shows that this is not always an easy task.

Minimising damages and loss of life in the event of a crisis

Social media tools can and should be used to create a wide network of subscribers or followers before the event of a crisis. By promoting its presence on social media sites and ‘following’ (or ‘liking’ or ‘friending’ as it is called on Facebook) the social media updates of other individuals or organisations relevant or influential in crisis communication and response – such as journalists, bloggers, media or humanitarian organisations – a government organisation can create a large and powerful network, in particular of on-line

²⁵ Sara Prentice and Ethan Huffman, “Social Media’s New Role in Emergency Management”, Idaho National Laboratory, March 2008.

²⁶ Burns, William and Slovic, Paul, “Risk Perception and Behaviors: Anticipating and Responding to Crises”, *Risk Analysis*, Vol. 32, No. 4, 2012. p. 579.

opinion leaders as these individuals and organisations will generally reciprocate and 'follow' it in return.

This both promotes the organisation to a much wider network and propagates its message. With access to such a network, risk communicators have the opportunity to use social media as an educational tool to increase risk awareness and preparedness in the community, thereby potentially decreasing the damage and death toll in case of crisis due to people's improved knowledge of what to expect and how to react.²⁷

When known or trusted members of this network share information about their immediate surroundings during a crisis, this (more reliable) information can also be used by crisis communicators and responders to create situational awareness maps that can aid in staging a more effective response.

Enhancing government-community relations and interactions; contributing to building trust and confidence

Effective use of social media tools by government has the potential to improve general trust in public institutions and to promote democratic participation and engagement – not only in the field of crisis communication and management but across government more broadly.²⁸ The two characteristics of social media tools that make this possible are that they are inherently transparent and conversational.

One of the greatest challenges that government communicators face is when they are starting out from a situation where the public already has a poor perception of government communication and low expectations for engagement and discussion.²⁹ Posting regular updates regarding their organisation's operations on social media platforms (e.g. Twitter) can help to overcome this challenge by fostering a sense of openness and giving the public the chance to comment and interact with communicators in a very accessible way. On-line opinion leaders can be invited to write guest blog entries (with disclaimers that it is not necessarily the agency's opinion) and can participate in on-line roundtable discussions with agency management, which would further underline agencies' goal of improving transparency and public participation. Feedback received can also help to improve government services and gauge levels of public expectations and satisfaction. The participatory dialogue generated as a result can build trust between the government organisation and the people so that, in the case of a crisis, the public may be more likely to trust and follow advice coming from the government organisation and to trust in government response capacities.

²⁷ Shari R. Veil, Tara Buehner and Michael J. Palenchar, "A Work-In-Process Literature Review: Incorporating Social Media in Risk and Crisis Communication", *Journal of Contingencies and Crisis Management*, Vol. 19, no. 2 (2011): 110-122.

²⁸ Bertot *et al.*, "The impact of policies on government social media usage: issues, challenges and recommendations".

²⁹ Richard D. Waters and Jensen M. Williams, "Squawking, tweeting, cooing and hooting: analyzing the communication patterns of government agencies on Twitter", *Journal of Public Affairs*, Vol. 11, no.4 (2011): 353-363.

The eruption of Eyjafjallajökull

By monitoring social media sites, governments also have the opportunity to assess public perceptions and mood surrounding the crisis in order to better respond to public needs – for example, what are the issues the public are most concerned about? What information are they seeking?

Social media conversations following the eruption of the Eyjafjallajökull volcano in Iceland in 2010 demonstrated that the traditional media conversation does not necessarily reflect the concerns, search for independent and evidence-based information, and more generally the mood on-line and in the community. In this case, voices in the traditional media were dominated by the travel industry, marginalising the voices of scientists and those from other affected industries (whose supply chains had been disrupted). The popularity of on-line science blogs suggests that many people were looking to develop a greater understanding of the eruption event and its consequences (including associated uncertainties) wanting a more scientific explanation of what was happening and why.³⁰

Questions:

- Are there other important opportunities, aside from those mentioned above, that social media use can provide for crisis communication or management?
- Will government agencies realistically be able to take advantage of all of these opportunities? In what sort of timeframe could this be achieved?

5. Challenges and risks

Government practices and policies related to social media for emergency response will need to address at least four areas of concern.

Policy and legislative requirements

Possibly the greatest challenge facing government agencies that wish to incorporate or expand their use of social media technologies is the complex policy and legislative environment. Unlike private users and much more so than private corporations or other non-governmental organisations, government agencies must contend with a range of information policies, processes, structures and frameworks that are designed to provide “safety, trust, security, ownership rights, social inclusion, participation, and record keeping”.³¹ However, due to the fast pace of development in the field of information and

³⁰ Lee, Bernice *et al.*, “Preparing for High Impact Low Probability Events: Lessons from Eyjafjallajökull”, Chatham House, London, January 2012

³¹ John Carlo Bertot, Paul T. Jaeger, Sean Munson and Tom Glaisyer, “Engaging the Public in Open Government: Social Media Technology and Policy for Government Transparency”, 12 August 2010.

communication technologies and the rapid rise of e-government, these information policies have not been able to keep up – most pre-date the existence of social media and may act as barriers to social media use if they are not adapted to be more compatible with current communication trends. Privacy and security issues are two of the top concerns for government agencies with regard to the use of social media tools.

Privacy concerns are focused around the collection and use of personal data by government agencies. Because many social networking sites encourage or require users to provide personal details, government agencies that participate in such sites may have open access to a lot of personal data through their networks and therefore must consider what kind of personal information they are legally allowed to collect, to whom this information can be disclosed and for what purposes it can be used (law enforcement? Intelligence? Monitoring?). Establishing clarity around these issues and pro-actively addressing them should facilitate the use of social media tools.

In the US, for example, government agencies are obliged by the E-Government Act of 2002 to conduct a Privacy Impact Assessment (PIA) when using new information technology systems in order to properly assess and mitigate impacts on an individual's privacy.³² Other suggestions for overcoming this challenge include the use of disclaimers when interacting with individuals via social media.³³

Security-related risks become especially relevant when, through social media use, government websites “become two-way communities” and become vulnerable to the insertion of viruses or other malware, leading to the theft or unintended release of information. As for social media tools that are hosted externally to government websites (as most of the major tools are), governments must investigate the security – and also privacy, for that matter – policies of these private social media providers to see if they meet the necessary standards.

Social media providers are private organisations. If governments do not wish to implicitly endorse security or privacy policies of private social media providers, one option is to use pop-up screens to notify users when they are navigating away from a government site to a private social media site and to use disclaimers to detail the level of moderation found on this external site.³⁴

Liability and accountability issues

There is currently a certain amount of ambiguity surrounding the question of organisational liability and social media use, to the extent that some go so far as to say that “fear of lawsuits is the number one threat preventing the adoption of social media during crisis”.³⁵ Government agencies must consider:

³² Lindsay, “Social media and disasters: Current uses, future options and policy considerations”.

³³ Wardell and Su, 2011 “Social Media and Emergency Management Camp”.

³⁴ Bertot *et al.*, “The impact of policies on government social media usage: issues, challenges and recommendations”.

³⁵ Wardell and Su, 2011 “Social Media and Emergency Management Camp”, p.22.

- Their own liability – in terms of both taking action (on the basis of potentially non-authoritative information sourced from social media) and not taking action (for example, not responding to a victim’s request for help made through a social media channel).
- The liability of private citizens or other organisations using social media – if a person or organisation posts or propagates false information on social media that affects the efficiency of crisis communication or response, are they liable? What if this was done unintentionally (i.e. they believed the information to be true), and how does one prove this?
- Liabilities created by private social media providers – how do the terms of service that govern the use of private social media providers create liabilities for the organisations that use them?

In terms of the first two questions, it may be necessary to review existing laws and to draft policy documents that clarify how these apply to social media use by government. In some cases, it may even be necessary to modify existing laws if they do not sufficiently address the above concerns. As for the third question, some government entities have already begun to address this problem by engaging directly with the social media providers to clarify their terms of use and how this affects liability.³⁶

Accountability issues relate to the ultimate responsibility of governments to be accountable to their citizens. Governments cannot engage in policies that would not respect and strengthen their responsibility to deliver effective, fair and equitable public services.

Resource and capacity constraints

The level of social media interaction that a government agency is able to achieve may depend on its own capacity and the resources that it can afford to make available for this purpose. The social media landscape is very different from the traditional media landscape and therefore crisis communicators will need to become experts in the use of these new communication tools. If they do not fully understand how social media tools function and how to leverage them during a crisis, this could leave the organisation open to many of the risks just mentioned above. Some investment in professional development and training is thus likely to be required, and it may be necessary to hire extra communication staff and/or a social media specialist.

Of course, the amount of extra resources needed is directly determined by the organisation’s goals and the contexts within which it wishes to use social media. If it only wishes to monitor social media sites during a crisis (as opposed to all the time) or to post information but not engage in two-way conversations, then obviously far fewer resources will be required. As an organisation progresses in its use of social media from passive to more dynamic use (see section 3), the resource strain will certainly become greater. However, in the event of a large-scale crisis, there are a number of organisations that have recently emerged as a source of ‘technical volunteers’ – volunteers with specialist skills in areas such as crisis mapping or information monitoring (for example, Crisis Mappers, Ushahidi, CrisisCommons, the

³⁶ Wardell and Su, 2011 “Social Media and Emergency Management Camp”.

Standby Task Force).³⁷ If resources are lacking, it may be worth investigating how this sort of skilled volunteers could be either incorporated into organisational crisis communication and management strategies or employed to train existing resources.

Investment is also needed to help the organisational challenge of overcoming the fear of engaging with the public, as is the case in most sensitive issues where values, private interest and emotions come into play.³⁸

Information: quantity, quality... and control

The large quantity of information available from social media tools, the sometimes-unverifiable quality of the information and the inability to control the information on social media platforms present yet more challenges for crisis communicators and managers.

The information that government agencies can get from social media following a crisis event can be very valuable. However, the sheer amount of information available can be overwhelming, thereby making the task of monitoring social media posts, analysing them, spotting relevant trends or patterns and extracting useful information an extremely difficult one. Fortunately, this challenge has been recognised and there are now a number of free or inexpensive on-line tools that can be effective at managing social media feeds and helping to sort through the barrage of data – for example, Hootsuite, TweetGrid and TweetChat.³⁹ Arranging meetings with software developers to discuss the sorts of tools that would be particularly useful for crisis communication and management is another means of trying to make information analysis easier.⁴⁰

The issue of the quality of information is potentially much more serious and difficult to deal with. Because it is not always possible to know who the users are (or if they really are who they claim to be), the accuracy of their information can be difficult to judge. Governments must also consider the possibility that individuals or malicious groups may set out to use social media during disasters in order to confuse or impede response efforts, and that one obvious means to do this is via posting false or misleading information.⁴¹ Information integrity is vital because the consequences of inaccurate information being propagated on social media can be severe:

- Inaccurate crowd-sourced information that is acted upon by crisis communicators and responders may hamper the effectiveness of the response, or even worse, endanger lives.
- Inaccurate, alarming information that is not contradicted in a timely manner has the potential to cause unnecessary public panic if it is

³⁷ Ibid.

³⁸ Such as in the context of the nuclear power industry – see Fischhoff, 2011

³⁹ Hootsuite <http://hootsuite.com/>, TweetGrid <http://tweetgrid.com/>, Tweetchat <http://tweetchat.com/>

⁴⁰ Wardell and Su, 2011 “Social Media and Emergency Management Camp”.

⁴¹ Lindsay, “Social media and disasters: Current uses, future options and policy considerations”.

widely propagated through social media networks, and can occur very quickly.

- Although psychologists and sociologists seem to have a consensus that panic is actually quite rare in crises (Clarke, 2002; Quarantelli, 2008), the risk of crisis caused or amplified by panic *catalysed* by social media should be carefully considered (see section 6).

Social Media in Emergency Management Camp

The Social Media in Emergency Management Camp⁴² offers the following advice on how to improve confidence in the integrity of information gathered via social media:

1. Look for verification from multiple sources (i.e., data triangulation);
2. Ask individuals for photos and video evidence to support claims, when possible. Responders do not have to rely on what someone tells them, but can request that an individual making a claim show evidence of it, e.g., via mobile phone cameras;
3. Look for information from individuals with a good reputation [...]
4. Wait for a period of time after seeing the first mention of an event before reacting.

This last point is related to the tendency for information on social media platforms to be self-correcting – that is, if the claim is false, other members of the on-line community will soon recognise this and refute the claim. In a short amount of time, the number of people refuting the claim will grow to the point where the original information is sufficiently discredited as not to be believed.

⁴² Wardell and Su, 2011 "Social Media and Emergency Management Camp", p.29.

“Influencing” social networking platforms

The lack of control over information posted on social media platforms, and the related fear that it is much more difficult for government agencies to ‘control the message’ may have to be accepted as part of the new communication reality: an unavoidable challenge that comes alongside the many opportunities.

Nevertheless, although they may have no control over what others post on their own blogs or Facebook pages, etc, government agencies can still exert a level of control over what is posted on their own pages by, for example, stating criteria that comments must adhere to (e.g., no attacks on others, no profanities) and then deleting comments that are offensive.⁴³

The private sector has developed policies to respond to social networks when those are used to propagate information that damage their reputation. Some of these policies could possibly be used in the public sector.

Questions:

- What is the greatest challenge or risk related to the use of social media for crisis communication and management?
- Organisational resistance to change and the conservative attitudes of senior management could also prove to be serious obstacles to the integration of social media into crisis communication and management. In your experience, what is the relative importance of these obstacles?

6. Recommendations and strategies for the use of social media tools

There are numerous recommendations and suggestions in the literature for strategies to effectively use social media for crisis communication and management. Below is a list of some of the most commonly stressed elements:

- Establish goals for what the organisation hopes to achieve through the use of social media and outline clear policies and guidelines for staff on how to use social media.
- Engagement with the public via social media tools is a continuous effort and must be started early... long before the crisis occurs:
 - choose which social media channels to use and set up accounts, linking to various social media platforms;
 - identify target audiences and connect with the important influencers (including mainstream media) so that government agencies follow their posts and vice-versa;

⁴³ AM Lesperance, MA Godinez and JR Olsen, “Social Networking for Emergency Management and Public Safety”, US Department of Energy, July 2010.

- advertise your presence on social media to gain as many followers as possible;
- build relationships with followers, enter into dialogue with them and be responsive. This will help to build trust and credibility.
- Update regularly and make sure the information is relevant and timely – do not be afraid to make corrections and refinements to messages as necessary in unfolding situations.
- Be aware of what other relevant agencies and organisations are doing and learn from peers.
- In the event of a crisis, network with other official sources to make sure that the message will be consistent. The overall message, transmitted via social media and traditional media, should be unified.
- Explore all potential resources before a crisis unfolds – possibilities for engaging volunteers, partnering or sharing information with relevant private sector organisations or humanitarian organisations.
- Alongside social media tools, consider creating a dark site, a hidden website with relevant crisis response information that remains offline but ready to launch in the event of a crisis. Disseminate the link to this site via social media tools as soon as it goes online.⁴⁴
- Monitor social media sites (the 'blogosphere') to infer public opinion, follow evolving stories online and generally observe the environment in search of any warning signs > gather intelligence, but also feedback.
- When there is no on-going crisis, use social media to educate the public regarding risks; encourage preparedness.

7. Social media as a facilitator of collective action

Social media are not just tools for the sharing of information. By lowering the costs and increasing the speed by which the coordination of collective action can be accomplished, social media have increasingly played a key role in organising political and other collective actions. For example, in the United States, the Obama Campaigns have made effective use of social media to mobilise constituents to take a variety of actions. The role of social media has also been apparent in the spread of protest movements around the world, such as the demonstrations in 2004 that contributed to the ousting of Spanish Prime Minister José Maria Aznar, the 2009 Uprising of the Green Movement in Iran, the 2011 London riots, and the Occupy Wall Street movement that went global with the phrase "we are the 99%."

Such events may be viewed as a positive development by those who favour a greater role for "direct democracy" as opposed to "representative democracy." However, as experience over the past decade in the US State of California has shown, direct democracy can have serious limits and may be subject to manipulation by demagogues and private interests. Free public speech is important, but so too is socially responsible behaviour such as refraining from

⁴⁴ Shari R. Veil, Tara Buehner and Michael J. Palenchar, A Work-In-Process Literature Review: Incorporating Social Media in Risk and Crisis Communication, *Journal of Contingencies and Crisis Management*, 19, no. 2 (2011): 110-122.

yelling "fire" in a theatre when there is no fire. It is difficult or impossible to impose such behavioural norms on social media, and that fact can result in unfortunate collective consequences.

Fundamental ethical and geopolitical questions arise when social media is used by outsiders, especially other governments, to facilitate political protests and actions within a country. Some argue that such intervention is an essential tool to promote the spread of democratic institutions. Others argue that such intervention constitute a clear violation of sovereignty - a concept that is under growing stress and ambiguity in a world that is rapidly becoming more globalised. Interventions can be more subtle than direct involvement through the creation of online "content." For example, during the 2009 uprising in Iran, the US government made an unprecedented request to Twitter that it delays a scheduled network upgrade in order to keep its microblogging platform up and running during planned protests against the Iranian presidential election.⁴⁵

Government crisis communicators and managers must concern themselves with the possibility that the power of social media could be used to deliberately create, trigger or amplify social unrest and perpetrate violent acts; or that large gatherings organised via social media that are essentially undisciplined groups with only weak linkages to a central cause could get out of control and degenerate into civil unrest. The risks are highlighted by experiences such as the violence of the London riots of August 2011. Social media use was heavily implicated as a facilitator of those riots, which began as a peaceful protest against a police shooting and escalated into violence on a large scale including arson and looting.

Discussion questions:

- Are there strategies that can induce wider observance of norms of socially responsible behaviour in the use of social media?
- Can governments realistically hope to manage the public's use of social media without resorting to undemocratic actions or encroaching on human rights?
- How would restrictions on social media usage affect public trust in government institutions and their crisis communicators?
- What should the obligations of social media providers be during times of civil unrest? What could be the government's policy of engagement with these private companies that host the networked public sphere?
- How, if at all, might the objective of preserving civil order best be balanced against other legitimate social needs?
- How should the use of social media by outsiders, including other governments, be viewed in an increasingly global world?

⁴⁵ Ewen MacAskill, US confirms it asked Twitter to stay open to help Iran protesters, *The Guardian*, 17 June 2009.

8. Conclusion

What is the future of social media for crisis communication in disaster risk management? Social media is not only a tool for crisis communication, but also for crisis management. It can provide and organise prevention and response and is therefore one of the crisis management tools that crisis managers must have in their portfolio. Consensus seems to be that, because social media has brought about such a dramatic shift in communication norms and information-seeking behaviour, there is no avoiding the integration of these technologies by the crisis community – opting out of the social media discussion will simply result in the official voice not being heard or being drowned out by on-line chatter.

The utility of social media tools in past crises certainly attests to their potential as a significant source of intelligence, of organising group action, relief and rescue efforts, and even as a lifeline for victims to reach out for aid.

However, there are also valid concerns about the reliability of information on social media, the risk of malicious use, or the possibility that these tools could ignite or fuel panic or unrest. Considering past events and social unrest caused by the use of social media tools, it is relevant to consider that those tools can also act as a vector for creating or amplifying civil unrest. The situation varies in different countries of the world, but keeping in mind that it is too simplistic to attribute the cause of social unrest to social media alone, it is relevant to consider that the wide spread of misused information can trigger larger-scale events and exacerbate impacts of civil protests. Furthermore, malicious use of social media now becomes a new tool for small groups of activists who aim to spread panic and create divisions.

Governments thus have to face and overcome new challenges in terms of which policy and legislative measures to implement.

Therefore, to ensure that the use of social media tools realises its enormous potential with minimal negative secondary impacts, governments must consider carefully how to develop their social media strategies and policies – including setting clear and realistic goals (given resource constraints), closely examining the existing relevant policy issues and providing training and guidelines to staff. It is important to start at the policy level to clarify objectives, priorities and governance issues, including transparency about where changes in existing policies are needed.

As time goes by, it will become easier to manage the use of social media tools, as best practices will evolve and more studies will surely be done to empirically evaluate the capabilities and effectiveness of these tools in crisis situations, and develop strategy and policy recommendations.

Appendix: Resources

Some examples of government guidelines on the use of social media

- Guidelines for Conducting Citizen Engagement, Specific to Social Media, British Columbia Public Service, Canada. http://www.viatec.ca/sites/default/files/documents/SOME_Guidelines.pdf
- Official Use of Social Media, ICT Policy and Coordination Office, Queensland Government, December 2010 <http://www.qgcio.qld.gov.au/SiteCollectionDocuments/Architecture%20and%20Standards/QGEA%202.0/Social%20media%20guideline.pdf>
- Framework & Guidelines for Use of Social Media for Government Organisations, September 2011, Government of India. <http://unpan1.un.org/intradoc/groups/public/documents/cgg/unpan047510.pdf>
- Social Media Policy Guidelines, April 2011, Republic of South Africa http://www.gcis.gov.za/sites/default/files/docs/resourcecentre/guidelines/social_media_guidelines_final_20_april2011.pdf
- Social media guidance for civil servants, May 2012, UK http://www.cabinetoffice.gov.uk/sites/default/files/resources/Social_Media_Guidance.pdf
- UK Foreign and Commonwealth Office, Digital Diplomacy Communication Directorate, Guidance and Training <http://digitaldiplomacy.fco.gov.uk/en/guide-train/guidance/content/social-media/>
- Guidelines for Secure Use of Social Media by Federal Departments and Agencies, United States of America https://cio.gov/wp-content/uploads/downloads/2012/09/Guidelines_for_Secure_Use_Social_Media_v01-0.pdf
- ICT4peace Foundation report, 'Cross-fertilisation of UN Common Operational Datasets and Crisismapping', Sanjana Hattotuwa & Daniel Stauffacher, October 2010 <http://ict4peace.org/wp-content/uploads/2010/10/UN-and-CrisisMapping.pdf>

A list of links to social media policies

From government agencies, humanitarian organisations, media, universities, private corporations and more can be accessed here: <http://socialmediagovernance.com/policies.php#axzz1pf2LspzH>

The E-Diplomacy Hub, Twitter and Foreign Policy: digital diplomacy in action, <http://ediplomacy.afp.com/#!/>

The Social Media in Emergency Management (SMEM) Initiative

"The SMEM Initiative was conceived in late 2010 to explore best practices and to build a bridge between social media and emergency management. Using Twitter as a tool to find and host discussions among individuals with shared interests, the community has evolved around the #smem hashtag in an effort to:

- Document and share social media best practices within the practitioner field of emergency management;
- Help frame policy development, operations, and other augmentations of support within domestic crisis management systems; and
- Accelerate the incorporation of, and engagement with, social media and accessible technologies within the broader emergency management community"⁴⁶

http://wiki.crisiscommons.org/wiki/SMEM_Initiative

The CrisisCommons Community

Created in 2009, CrisisCommons is "a global community of volunteers from technology, crisis response organizations, government agencies, and citizens that are working together to build and use technology tools to help respond to disasters and improve resiliency and response before a crisis [...] CrisisCommons has coordinated crisis event responses such as the Haiti, Chile and Japan Earthquakes and the floods in Thailand, Nashville and Pakistan. Over 3,000 people have participated worldwide in over 30 cities across 10 countries including France, United Kingdom, Canada, New Zealand, Chile and Colombia."

<http://crisiscommons.org/>

⁴⁶ Wardell and Su, 2011 "Social Media and Emergency Management Camp".

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